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# South American Coccinellidae (Coleoptera), Part XVII: Systematic revision of the genera *Cyrea* Gordon and Canepari and *Tiphysa* Mulsant (Hyperaspidae: Brachiacanthini)

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(Hyperaspidae: Brachiacanthini)

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**Abstract.** *Cyrea* Gordon and Canepari (121 species) and *Tiphysa* Mulsant (2 species) are discussed, species are described, illustrations are provided, and a key to all recognized species is included. **New synonyms** recognized are: *Hyperaspis arrowi* var. *darwinii* Brèthes = *Cyrea arrowi* (Brèthes); *Hyperaspis trivittata* Weise, *Hyperaspis mundula* Weise = *Cyrea emiliae* (Mulsant); *Cleothera scapulata* Mulsant, *Cleothera mercabilis* Mulsant, *Hyperaspis iheringi* Weise = *Cyrea flavoguttata* (Mulsant); *Cleothera gracilis* Mulsant = *Cyrea hexastigma* (Mulsant); *Cleothera triacantha* Mulsant = *Cyrea novemsignata* (Herbst); *Cleothera distinguenda* Mulsant = *Cyrea ormanceayi* (Mulsant); *Cleothera sexnotata* Brèthes = *Cyrea quinquenotata* (Mulsant); *Cleothera schaufussi* Vogel and *Hyperaspis adelaida* Gorham = *Cyrea tessulata* (Mulsant). A total of 76 **new species** of *Cyrea* are described: *Cyrea agnes*, *C. allison*, *C. alma*, *C. annette*, *C. arlene*, *C. audrey*, *C. beatrice*, *C. bernice*, *C. bessie*, *C. brittany*, *C. carla*, *C. charlene*, *C. claudia*, *C. colleen*, *C. constance*, *C. courtney*, *C. dana*, *C. dolores*, *C. dora*, *C. eileen*, *C. ella*, *elsie*, *erica*, *georgia*, *gertrude*, *gina*, *glenda*, *heidi*, *holly*, *ida*, *jackie*, *jeanne*, *jeannette*, *jessie*, *jo*, *C. joy*, *C. june*, *C. katie*, *C. kristen*, *C. laurie*, *C. lillie*, *C. lucille*, *C. lucy*, *C. lydia*, *C. marcia*, *C. marian*, *C. marion*, *C. marlene*, *C. mattie*, *C. maureen*, *C. maxine*, *C. melanie*, *C. melinda*, *C. minnie*, *C. natalia*, *C. nellie*, *C. pearl*, *C. pseudospinalis*, *C. renee*, *C. roberta*, *C. rosemary*, *C. samantha*, *C. stacy*, *C. stella*, *C. sue*, *C. tamara*, *C. tanya*, *C. tara*, *C. terry*, *C. vanessa*, *C. vera*, *C. vicki*, *C. viola*, *C. vivian*, *C. willie*, *C. wilma*, *C. yolanda*, *C. yvonne*. **Lectotypes here designated for** *C. collaris*, *C. compta*, *C. distinguenda*, *C. exclamationis*, *C. fasciata*, *C. ferruginiceps*, *C. flavoguttata*, *C. iheringi*, *C. languida*, *C. maculosa*, *C. melaneura*, *C. mundula*, *C. noticollis*, *C. novemsignata*, *C. ormanceayi*, *C. ornaticolis*, *C. quinquenotata*, *C. renifera*, *C. schaufussi*, *C. sexguttata*, *C. spinalis*, *C. tessulata*, *C. trepida*, *C. triacantha*

**Key words** Keys, illustrations.

## Introduction

South American Coccinellidae belonging to the tribe Hyperaspidini were revised by Gordon and Canepari (2008). A revision of South American Brachiacanthini, the remaining tribe in Hyperaspidae, began with the revisions of *Cleothera* Mulsant, *Hinda* Mulsant, and *Serratitibia* by Gordon et al. (2013a), *Dilatitibialis* Duverger by Canepari et al. (2013b), and *Brachiacantha* Dejean by Gordon et al. (2014). The genera *Cyrea* Canepari and Gordon and *Tiphysa* Mulsant are revised here.

Gordon et al. (2013a) presented an overview of Brachiacanthini, including taxonomic history, current classification, diagnostic characters for the genera, type materials, and a key to tribal genera as currently understood. We refer to that publication for details on these subjects.

Changes to Coccinellidae classification were recently made by Seago et al (2011). These changes impact the status of various traditionally recognized tribes and subfamilies, as the only subfamilies now recognized are Microweisinae and Coccinellinae. The tribe Hyperaspidini is part of Coccinellinae, with Brachiacanthini as a synonym of Hyperaspidini.

**Biology.** See biology section in Gordon et al. (2013a) and remarks under *Brachiacantha octopustulata* (F.) in Gordon et al. (2014).

**Methods.** Morphological structures, both external and internal, were discussed and illustrated by Gordon (1985) and Gordon et al (2013a). Some of the same terminology is used here, but much has been modified to follow Slipinski (2007) (repeated under “Types”). Label data for all newly described taxa are transcribed as they appear on the label.

**Dissections.** Both sexes should be dissected when examining specimens of Brachiacanthini. Specific techniques consist of softening a specimen in hot water, removing the abdomen, placing it in a dilute solution of potassium or sodium hydroxide until muscle and fat are removed, rinsing abdomen and genitalic structures in clean water, and placing cleaned structures in glycerin for examination. Genitalia may be stored in several ways, but here they were stored in glycerin in microvials.

**Types.** Taxa newly described herein are authored by Canepari and Gordon. Lectotypes for many species are designated to stabilize current classification for future researchers. Lectotype and paralectotype labels were affixed to specimens so designated throughout the manuscript.

**Names.** Because of the large number of new species, traditional methods of selecting names were not used. Instead, names were formed as nouns in apposition using female given names, except where otherwise noted.

**Locality records.** Locality records listed in the text were only taken from examined specimens; published records were not accepted because genitalia, which are nearly always the defining criteria at the species level, were not examined by previous authors. All information listed for new taxa is given as it appears on the labels, with correction of obvious misspellings.

**Male genitalia.** Species of *Cyrea* are grouped according to genitalia type, based primarily on parameral form; groups are defined as: *Pav* - paramere with apical “ear” (Fig. 155); *Pem* - apex of paramere very wide, truncate or emarginate (Fig. 217); *Psc* - paramere similar in shape to a scimitar (Fig. 598); *Pvl* - paramere ventrally lobed (Fig. 246); and *Unm* - paramere unmodified, of the type predominant in Coccinellidae taxa (Fig. 361).

**Collections codens.** The following acronyms denote depositories for borrowed specimens of *Cyrea*. (BMNH) Natural History Museum, London; (CASC) California Academy of Sciences, San Francisco, California; (CSCA) California Department of Food and Agriculture; (CMNH) Carnegie Museum of Natural History, Pittsburgh, Pennsylvania; (CNC) Canadian National Collection, Ottawa, Ontario; (DEI) Deutsches Entomologisches Institut, Müncheberg, Germany; (DZUP) Universidade Federal do Paraná, Curitiba, Brazil; (GGC) Guillermo González, Santiago, Chile; (JEBC) Juan Enrique Barriga, Santiago, Chile; (MBR) Museo Argentino de Ciencias Naturales “Bernardino Rivadavia,” Buenos Aires, Argentina; (MEUNT) Museo de Entomología - Universidad Nacional de Tumbes, Tumbes, Peru; (MHNG) Muséum d’Histoire Naturelle, Geneva, Switzerland; (MHNP) Museo Nacional de Historia Natural de Paraguay, Asunción, Paraguay; (MHNS) Museo Nacional de Historia Natural, Santiago, Chile; (MIZA) Museo del Instituto de Zoología Francesco “Fernandez Yepez,” Maracay, Venezuela; (MKRB) Museo de Entomología Klaus Raven Büller, Universidad Agraria la Molina, Peru; (MNHL) Muséum d’Histoire Naturelle, Lyon, France; (MNHP) Muséum d’Histoire Naturelle, Paris; (MZSP) Museo de Zoología, Universidad de Sao Paulo, Sao Paulo, Brazil; (NHMV) Naturhistorisches Museum, Vienna, Austria; (SNSD) Staatliches Museum für Tierkunde, Dresden, Germany; (UMZC) Cambridge University Museum, Cambridge, England; (USNM) U.S. National Museum of Natural History, Smithsonian Institution, Washington, DC; (ZMHB) Zoologisches Museum, Humboldt Universität, Berlin, Germany; (ZMUC) Zoologisk Museum, Copenhagen, Denmark.

## Systematics

### *Cyrea* Gordon and Canepari

*Cyrea* Gordon and Canepari, 2013a. Type species *Cleothera (Cyra) quinquenotata* Mulsant, 1850, by previous designation of Gordon and Canepari 2013a.

**Description:** Brachiacanthini with variable form, rounded, elongate oval, or long, nearly parallel sided. Elytron usually dark with pale maculae, or pale with dark maculae, occasionally vittate (Fig. 12, 158). Head yellow in male, partially brown or black in female. Antenna with 11 articles, basal article longer than wide, antennal insertion exposed. Clypeus with apical margin weakly to deeply emarginate. Labrum rectangular. Apical maxillary palpomere securiform with sides slightly diverging. Scutellum large, wider than long. Elytral epipleuron narrow or wide, deeply excavated for reception of tibiae. Prosternal process slightly convex, usually with two carinae. Protibia narrow, usually with oblique angle or minimal to wide angle, except a few species with wide, arcuate flange or narrow, bisinuate flange (Fig. 23, 73, 84, 90). Abdomen without visible primary pores between ventrites 4 and 5. Abdominal ventrites usually lacking cusps, but cusps present in some species. Tarsal claw with subquadrate basal tooth. Male abdominal ventrites 5-6 usually unmodified except for normal apical emarginations. A few species have cusps on the male 5th or 6th abdominal ventrite. Male genitalia with basal lobe asymmetrical or often with outer borders symmetrical. Female genitalia with spermathecal capsule highly variable (Fig. 16, 48, 58, 82).

**Remarks.** Most species of *Cyrea* have protibiae at least somewhat angled on the anterior margin. This angle is referred to as the “oblique angle” rather than “flange” because it is not a true flange. However, a few species do have truly flanged protibia.

*Cyrea* and *Brachiacantha* are very similar and are separated only by the protibial tooth and consistently symmetrical male genitalia of *Brachiacantha*. One of the characteristics of *Brachiacantha* is the *Psc* form of the male parameres. However, the species of *Cyrea* belonging to the *tessulata* group also possesses *Psc* parameres. In addition, some species have distinct cusps on the male 5th or 6th abdominal ventrite, which is a character otherwise observed in certain species of *Brachiacantha*.

**Species groups** are recognized based primarily on male genitalia. The groups are defined as follows:

**tredecimguttata group** - paramere of male genitalia *Unm*, unmodified, similar to parameres possessed by many other Coccinellidae genera.

**emiliae group** - paramere of male genitalia *Pav*, anterodorsal angle of paramere with projecting “ear”, basal lobe variable from short, apex obliquely truncate, to long, apex irregularly triangular.

**hexastigma group** - paramere of male genitalia *Pem*, wide, widest at apex, apex truncate or emarginate, if emarginate, the emargination may be shallow or deep.

**devillii group** - paramere of male genitalia *Pvl*, lower margin of paramere widened, produced.

**tessulata group** - paramere of male genitalia *Psc*, form reminiscent of a scimitar, as typical of many other groups of Brachiacanthini.

### List of South American species of *Cyrea* (in order of text)

#### *tredecimguttata* group - paramere *Unm*

1. *C. mattie*, n. sp.
2. *C. ida*, n. sp.
3. *C. tredecimguttata* (Mulsant)
4. *C. andicola* (Kirsch)
5. *C. jo*, n. sp.
6. *C. eileen*, n. sp.
7. *C. gertrude*, n. sp.
8. *C. glenda*, n. sp.
9. *C. viola*, n. sp.

10. *C. melaneura* (Mulsant)

**emiliae group - paramere Pav**

11. *C. emiliae* (Crotch)  
12. *C. annette*, n. sp.  
13. *C. trepida* (Mulsant)  
14. *C. vivian*, n. sp.  
15. *C. roberta*, n. sp.  
16. *C. melanie*, n. sp.  
17. *C. holly*, n. sp.  
18. *C. brittany*, n. sp.  
19. *C. maculosa* (Mulsant)  
20. *C. mariae* (Crotch)  
21. *C. gacognii* (Mulsant)  
22. *C. pearl*, n. sp.  
23. *C. arlene*, n. sp.  
24. *C. maureen*, n. sp.  
25. *C. colleen*, n. sp.  
26. *C. crotchi* (Harold)  
27. *C. compta* (Mulsant)  
28. *C. stella*, n. sp.

**hexastigma group - paramere Pem**

29. *C. june*, n. sp.  
30. *C. hexastigma* (Mulsant)  
31. *C. natalia*, n. sp.  
32. *C. vera*, n. sp.  
33. *C. agnes*, n. sp.  
34. *C. willie*, n. sp.  
35. *C. charlene*, n. sp.  
36. *C. bessie*, n. sp.  
37. *C. serval* (Mulsant)  
38. *C. lydia*, n. sp.  
39. *C. yvonne*, n. sp.  
40. *C. renee*, n. sp.

**devillii group - paramere Pvl**

41. *C. bernice*, n. sp.  
42. *C. audrey*, n. sp.  
43. *C. devillii* (Mulsant)  
44. *C. yolanda*, n. sp.  
45. *C. jeannette*, n. sp.  
46. *C. ella*, n. sp.  
47. *C. terry*, n. sp.  
48. *C. wilma*, n. sp.  
49. *C. gina*, n. sp.  
50. *C. maxine*, n. sp.  
51. *C. jessie*, n. sp.  
52. *C. minnie*, n. sp.  
53. *C. claudia*, n. sp.  
54. *C. jackie*, n. sp.

55. *C. victoria* (Crotch)
56. *C. marcia*, n. sp.
57. *C. tanya*, n. sp.
58. *C. nellie*, n. sp.
59. *C. marlene*, n. sp.
60. *C. heidi*, n. sp.
61. *C. januarii* (Brèthes)
62. *C. spinalis* (Mulsant)
63. *C. similaris* (Mader)
64. *C. petropolitana* (Crotch)
65. *C. castelnaudii* (Mulsant)

**tessulata group - paramere *Psc***

66. *C. beatrice*, n. sp.
67. *C. dolores*, n. sp.
68. *C. erica*, n. sp.
69. *C. tessulata* (Mulsant)
70. *C. noticollis* (Mulsant)
71. *C. ornatcollis* (Weise)
72. *C. renifera* (Kirsch)
73. *C. quinquenotata* (Mulsant)
74. *C. novemsignata* (Herbst)
75. *C. samantha*, n. sp.
76. *C. marion*, n. sp.
77. *C. dana*, n. sp.
78. *C. stacy*, n. sp.
79. *C. ormanceayi* (Mulsant)
80. *C. fasciata* (F.)
81. *C. jeanne*, n. sp.
82. *C. laurie*, n. sp.
83. *C. lucille*, n. sp.
84. *C. katie*, n. sp.
85. *C. kristen*, n. sp.
86. *C. vanessa*, n. sp.
87. *C. alma*, n. sp.
88. *C. elsie*, n. sp.
89. *C. sue*, n. sp.
90. *C. collaris* (Mulsant)
91. *C. vicki*, n. sp.
92. *C. carla*, n. sp.
93. *C. tara*, n. sp.
94. *C. rosemary*, n. sp.
95. *C. flavoguttata* (Mulsant)
96. *C. ferruginiceps* (Weise)
97. *C. melinda*, n. sp.
98. *C. dora*, n. sp.
99. *C. allison*, n. sp.
100. *C. tamara*, n. sp.
101. *C. exclamationis* (Mulsant)
102. *C. joy*, n. sp.
103. *C. georgia*, n. sp.
104. *C. ruizi* (Brèthes)
105. *C. constance*, n. sp.



106. *C. lillie*, n. sp.  
 107. *C. languida* (Mulsant)  
 108. *C. arrowi* (Brèthes)  
 109. *C. courtney*, n. sp.  
 110. *C. marian*, n. sp.  
 111. *C. pseudospinalis*, n. sp.  
 112. *C. nigripennis* (Brèthes)  
 113. *C. ustulata* (Mulsant)  
 114. *C. moritzi* (Mader)

#### Females not associated with males

115. *C. lucy*, n. sp.  
 116. *C. trina* (Brèthes)  
 117. *C. suturella* (Mulsant)  
 118. *C. emmae* (Crotch)  
 119. *C. octupla* (Mulsant)  
 120. *C. flavocalceata* (Mulsant)  
 121. *C. sexguttata* (Mulsant)

#### Key to species of South American *Cyrea*

1. Elytron immaculate, entirely yellow, reddish yellow, or yellowish brown ..... 2  
 — Elytron not immaculate, vittate, or pale with dark spots or maculae, or dark with pale spots or maculae ..... 4
- 2(1). Dorsal color dark reddish brown (Fig. 215); paramere of male genitalia *Pem* (Fig. 217) ..... **39. *C. yvonne*, n. sp.**  
 — Dorsal color yellow; paramere of male genitalia not *Pem* ..... 3
- 3(2). Length 2.6 to 3.1 mm; paramere of male genitalia *Psc* (Fig. 598) ..... **107. *C. languida* (Mulsant)**  
 — Length 2.3 mm; paramere of male genitalia *Pav* (Fig. 155) ..... **8. *C. stella*, n. sp.**
- 4(1). Elytron vittate ..... 5  
 — Elytron not vittate, with spots or maculae on pale or dark surfaces ..... 15
- 5(4). Elytral vittae yellow on dark surface ..... 6  
 — Elytral vittae dark on pale surface ..... 8
- 6(5). Length 3.0 mm or less (Fig. 602); Argentina, Uruguay ..... **108. *C. arrowi* (Brèthes)**  
 — Length more than 3.5 mm; Brazil, Colombia ..... 7
- 7(6). Pronotum with diamond shaped yellow spot at middle of black basomedian macula (Fig.43); Colombia ..... **9. *C. viola*, n. sp.**  
 — Pronotum with black basomedian macula lacking pale median spot; Brazil (Fig. 608) ..... **109. *C. courtney*, n. sp.**
- 8(5). Elytron with single vitta on sutural margin, without lateral vitta, or if lateral vittae present then vitta on outer margin of elytron ..... 9  
 — Elytron with more than one vitta, lateral vitta median or lateral, always distinctly separated from lateral margin of elytron ..... 12

9(8).	Elytron with lateral vitta on outer margin of elytron (Fig. 647); length 2.3 mm .....	<b>118. <i>C. emmae</i> (Crotch)</b>
—	Elytron with single sutural vitta (Fig. 344); length 2.7 mm or more .....	<b>10</b>
10(9).	Pronotum with dark basomedian macula (Fig. 344) .....	<b>62. <i>C. spinalis</i> (Mulsant)</b>
—	Pronotum without dark basomedian macula .....	<b>11</b>
11(10).	Length 2.7 mm (Fig. 645); Brazil .....	<b>117. <i>C. suturella</i> (Mulsant)</b>
—	Length 3.4 mm (Fig. 620); Venezuela .....	<b>111. <i>C. pseudospinalis</i>, n. sp.</b>
12(8).	Pronotum yellowish red, immaculate .....	<b>13</b>
—	Pronotum yellow or brownish yellow, with basomedian macula (Fig. 644) .....	<b>14</b>
13(12).	Length 3.8 mm (Fig. 643) .....	<b>115. <i>C. lucy</i>, n. sp.</b>
—	Length 3.0 mm (Fig. 614) .....	<b>110. <i>C. marian</i>, n. sp.</b>
14(12).	Dorsal surface of elytron brownish yellow, outer vitta dark brown, widely curved (Fig. 644) .	<b>116. <i>C. trina</i>, n. sp.</b>
—	Dorsal surface of elytron yellow, outer vitta black (Fig. 53) .....	<b>11. <i>C. emiliae</i> (Crotch)</b>
15(4).	Elytron pale with dark spots or maculae .....	<b>16</b>
—	Elytron dark with pale spots or maculae .....	<b>53</b>
16(15).	Elytron with 3 or fewer dark spots or maculae .....	<b>17</b>
—	Elytron with 4 or more dark spots or maculae .....	<b>30</b>
17(16).	Elytral surface with large, median, dark macula weakly extended anteriorly outside of humeral callus (Fig. 630) .....	<b>113. <i>C. ustulata</i> (Mulsant)</b>
—	Elytral surface with multiple dark areas, or with dark area not located medially .....	<b>18</b>
18(17).	Elytron with single, median, irregularly oval spot on apical declivity (Fig. 359); male genital paramere <i>Unm</i> (Fig. 361) .....	<b>65. <i>C. castelnaudi</i> (Mulsant)</b>
—	Elytron with multiple maculae, or with macula not irregularly oval, or with macula in different location .....	<b>19</b>
19(18).	Elytron with sutural margin narrowly black, narrow yellow strip inside black sutural margin continued around apical and lateral margin of elytron; pronotum mostly black with three yellow spots, median spot diamond shaped, outer spots round (Fig. 369); male genital paramere <i>Psc</i> (Fig. 371) .....	<b>67. <i>C. dolores</i>, n. sp.</b>
—	Elytron without narrow yellow strip; pronotum without median diamond shaped spot .....	<b>20</b>
20(19).	Elytra with single median dark spot on apical declivity, spot narrowly continued anteriorly along sutural margin (Fig. 238); male genital paramere <i>Pvl</i> (Fig. 240) .....	<b>43. <i>C. devillii</i> (Mulsant)</b>
—	Elytra with differing color pattern .....	<b>21</b>
21(20).	Elytron entirely pale except sutural margin dark on apical declivity, dark border widened at apex (Fig. 49); male genital paramere <i>Unm</i> (Fig. 50) .....	<b>10. <i>C. melaneura</i> (Mulsant)</b>
—	Elytron not mostly pale with dark sutural margin on apical declivity .....	<b>22</b>
22(21).	Elytron with brown macula narrow at humeral callus, widened and curved posteriorly to sutural margin on apical declivity (Fig. 1); male genital paramere <i>Unm</i> (Fig. 3) .....	<b>1. <i>C. mattie</i>, n. sp.</b>
—	Elytron with macula not curved from humeral callus to suture .....	<b>23</b>

- 23(22). Elytron with yellow, central median area bordered with black, median area deeply indented by black projection of lateral border at apical declivity (Fig. 364); male genital paramere *Psc* (Fig. 366) ..... **66. *C. beatrice*, n. sp.**  
 — Elytron not with central yellow area bordered with black ..... **24**
- 24(23). Length more than 3.5 mm; elytron yellowish red with 3 small, brown spots, spots sometimes reduced in size, barely visible (Fig. 165); male genital paramere *Pem* (Fig. 167) ..... **30. *C. hexastigma* (Mulsant)**  
 — Length less than 3.2 mm; elytron not as described above ..... **25**
- 25(24). Elytron with lateral and sutural margins narrowly black, with 2 small median spots and slightly larger spot on sutural margin in apical 1/2 (Fig. 233); male genital paramere *Pvl* (Fig. 235) ..... **42. *C. audrey*, n. sp.**  
 — Elytron with lateral and sutural margins pale ..... **26**
- 26(24). Elytron with anterolateral spot usually narrowly connected to basal margin of elytron anterior to humeral callus, with small spot between anterolateral spot and widened area of sutural brown border, posterior spot large, transverse (Fig. 59); male genital paramere *Pav* (Fig. 61) ..... **12. *C. annette*, n. sp.**  
 — Elytron with spots or maculae differently arranged ..... **27**
- 27(26). Elytron with spots large, extremely uneven, anterior spot transverse, posterior spot often transverse; basomedian macula on pronotum short, narrow, confined to area anterior to scutellum (Fig. 374); male genital paramere *Psc* (Fig. 376) ..... **68. *C. erica*, n. sp.**  
 — Elytron with spots not transverse; basomedian pronotal macula wide, long ..... **28**
- 28(27). Elytron with short, narrow, median black sutural vitta and 1 or 2 large spots medially, anterior spot on humeral callus, posterior spot, if present, on apical declivity (Fig. 53); male genital paramere *Pav* (Fig. 55) ..... **11. *C. emiliae* (Crotch)**  
 — Elytron with small spot on each side of suture in apical 1/2, spots may be confluent with sutural margin ..... **29**
- 29(28). Male and female pronotum with long, oval or square median macula, macula same size and shape in both sexes (Fig. 158); male 5th abdominal ventrite with tubercle on each side of apical emargination; male genital paramere *Pem* (Fig. 161) ..... **29. *C. june*, n. sp.**  
 — Male pronotal macula short, apex medially emarginate with yellow (Fig. 227), female pronotal macula wide, long, apex produced anteriorly at middle; male 5th abdominal ventrite lacking tubercles; male genital paramere *Pvl* (Fig. 229) ..... **41. *C. bernice*, n. sp.**
- 30(16). Elytron with 6 or more dark spots ..... **31**  
 — Elytron with fewer than 6 dark spots or maculae ..... **33**
- 31(30). Spots on elytron pale brown, inner spot on apical declivity located on or near suture, narrowly elongate, single large spot on humeral callus (Fig. 379); male genital paramere *Psc* (Fig. 382) ..... **69. *C. tessulata* (Mulsant)**  
 — Spots on elytron dark brown, inner spot on apical declivity round, not near suture, 2 spots present in vicinity of humeral callus; male genital paramere *Pav* ..... **32**
- 32(31). Spots on elytron small, widely separated, anterior “discal” spot separated from sutural border (Fig. 102); female spermathecal capsule long, cornu apically widened (Fig. 108) ..... **19. *C. maculosa* (Mulsant)**  
 — Spots on border large, narrowly separated, anterior “discal” spot contiguous with sutural border (Fig. 109); female spermathecal capsule slightly elongate, cornu slender (Fig. 112) .  
 ..... **20. *C. mariae* (Crotch)**

- 33(30). Elytron with 5 dark spots, spots discrete or not ..... 34  
 — Elytron with 4 dark spots, humeral spot sometimes connected to base of elytron ..... 35
- 34(30). Spots on elytron large, narrowly separated; pronotum with basomedian macula broken into anterior and posterior portions (Fig. 96) ..... 18. *C. brittany*, n. sp.  
 — Spots on elytron small, widely separated; basomedian pronotal macula large, entire, not broken into anterior and posterior portions (Fig. 637) ..... 114. *C. moritzi* (Mader)
- 35(33). Humeral spot on elytron usually narrowly connected to base of elytron, scutellar spot long, curved in abrupt comma shape (Fig. 386) ..... 70. *C. noticollis* (Mulsant)  
 — Humeral spot on elytron not connected to base of elytron, humeral spot not curved ..... 36
- 36(35). Elytron with 4 discrete spots, inner spot on apical declivity weakly curved in shape of comma (Fig. 397) ..... 72. *C. renifera* (Kirsch)  
 — Elytron with 4 or 5 spots, spots discrete or not, inner spot on apical declivity not curved in shape of comma ..... 37
- 37(36). Elytron with 2 discrete spots and 2 spots confluent with sutural border ..... 38  
 — Elytron with spots differently arranged ..... 39
- 38(37). Elytron yellow, posterior spot on suture narrow, rectangular (Fig. 83); length 2.7 mm; protibia flanged; male genital paramere *Pav* (Fig. 86) ..... 16. *C. melanie*, n. sp.  
 — Elytron reddish yellow, posterior spot on suture triangular (Fig. 404); length 2.4 to 3.1 mm; protibia not flanged; male genital paramere *Psc* (Fig. 406) .....  
 ..... 73. *C. quinquenotata* (Mulsant)
- 39(37). Elytron with lateral spot long, sinuate, extended from humeral callus onto apical declivity (Fig. 77) ..... 15. *C. roberta*, n. sp.  
 — Elytron without long lateral spot ..... 40
- 40(39). Elytron with humeral spot coalesced with humeral angle, posterolateral spot coalesced with lateral margin, median apical spot with anterolateral angle obliquely emarginate (Fig. 249) ..... 45. *C. jeannette*, n. sp.  
 — Elytron with spots differently arranged ..... 41
- 41(40). Elytron with 5 spots, spots variable in placement, sometimes elytron with 3 lateral spots plus 2 coalesced with sutural border, sometimes with 4 discrete spots plus 1 coalesced with sutural border (Fig. 410) ..... 74. *C. novemsignata* (Herbst)  
 — Elytron with 4 spots variable in arrangement ..... 42
- 42(41). Elytron with 3 lateral spots and 1 spot on sutural border ..... 43  
 — Elytron with 4 lateral spots, without sutural spot ..... 45
- 43(42). Basomedian spot on pronotum with obliquely oval pale yellow spot on each side of middle (Fig. 416) ..... 75. *C. samantha*, n. sp.  
 — Pronotum lacking obliquely oval yellow spots on pronotum ..... 44
- 44(43). Pronotum with short, narrow, dark brown basomedian macula extended 1/6 distance to apical pronotal margin, pronotum medially with faint, pale brown maculae (Fig. 349) .....  
 ..... 63. *C. similaris* (Mader)  
 — Pronotum with short, wide, black basomedian macula extended about 1/4 distance to apical pronotal margin, pronotum medially with bold, black maculae (Fig. 392) .....  
 ..... 71. *C. ornaticollis* (Weise)

- 45(42). Elytron with humeral spot usually narrowly connected to base of elytron, elytral spots pale brown to dark brown, often narrowly connected, scutellar spot elongate oval (Fig. 65) ..... **13. *C. trepida* (Mulsant)**  
 — Elytron with humeral spot not connected to base of elytron, elytral spots brown or black, sometimes briefly connected, scutellar spot variable ..... **46**
- 46(45). Large species, length 3.4 mm or more ..... **47**  
 — Small species, length 3.0 mm or less ..... **49**
- 47(46). Elytral spots at least partially confluent (Fig. 17) ..... **48**  
 — Elytral spots discrete, not confluent (Fig. 7) ..... **2. *C. ida*, n. sp.**
- 48(47). Pronotum with diamond shaped yellow spot at center of black basomedian macula (Fig. 17); male 5th and 6th abdominal ventrites with cusp on each side of apical emargination ..... **4. *C. andicola* (Kirsch)**  
 — Pronotum with basomedian macula short, narrow in male (Fig. 221), large, entirely black in female, never with median diamond shaped spot; male 5th and 6th abdominal ventrites without cusps ..... **40. *C. renee*, n. sp.**
- 49(46). Spots on elytron very small, widely spaced (Fig. 431); Bolivia ..... **78. *C. stacy*, n. sp.**  
 — Spots on elytron large, narrowly spaced; Bolivia and elsewhere ..... **50**
- 50(49). Length 3.0 mm; posteromedian spot on elytron with apex obliquely emarginate (Fig. 649) .... **119. *C. octupla* (Mulsant)**  
 — Length 2.8 mm or less; posteromedian spot on elytron not obliquely emarginated ..... **51**
- 51(50). Elytral suture barely perceptibly dark, outer posterolateral spot on elytron obliquely, irregularly triangular, slightly touching posteromedian spot (Fig. 71); Paraguay ..... **14. *C. vivian*, n. sp.**  
 — Elytral suture distinctly dark, outer posterolateral spot on elytron not obliquely triangular, not contacting posteromedian spot; Bolivia, Trinidad ..... **52**
- 52(51). Pronotum with basomedian macula entire, apex deeply indented with yellow (Fig. 244); Bolivia ..... **44. *C. yolanda*, n. sp.**  
 — Pronotum with multiple spots (Fig. 89); Trinidad ..... **17. *C. holly*, n. sp.**
- 53(15). Elytron with 4 or more dark spots or maculae ..... **54**  
 — Elytron with 3 or fewer dark spots or maculae ..... **95**
- 54(53). Head with deep impression on each side posterior to clypeus; postcoxal line on basal abdominal ventrite short, extended to apex of ventrite, then abruptly bent and terminated; eye canthus 3 to 4 times width of eye facet; Argentina ..... **96. *C. ferruginiceps* (Weise)**  
 — Head without impressions posterior to clypeus; postcoxal line on basal ventrite long, not abruptly bent; eye canthus length variable; Argentina and elsewhere ..... **55**
- 55(54). Length 4.0 to 5.0 mm; body widely rounded; elytron with 5 large, yellow spots (Fig. 12) ..... **3. *C. tredecimguttata* (Mulsant)**  
 — Length less than 4.0 mm (except some examples of *flavoguttata*), if more than 4.0 mm then body not widely rounded, elytron with differing color pattern ..... **56**
- 56(55). Body parallel sided; apical spot on elytron with strongly emarginate apical margin (Fig. 436); Colombia, Venezuela, Trinidad ..... **79. *C. ormanceayi* (Mulsant)**  
 — Body rarely parallel sided; apical spot on elytron with emarginate apical margin or not; usually not known from Colombia, Venezuela, Trinidad ..... **57**

- 57(56). Dorsal surface pale, elytron with pale brown dividing lines between yellow spots, brown dividing lines extended to lateral margin of elytron (Fig. 447) ..... 58  
 — Dorsal surface rarely pale with pale brown dividing lines, if so then dividing lines not extended to lateral margin of elytron ..... 59
- 58(57). Elytron with dividing lines, narrow, sometimes disintegrating, yellow spots large (Fig. 447) .  
 ..... 81. *C. jeanne*, n. sp.  
 — Elytron with dividing lines wide, well defined, yellow spots small (Fig. 123) .....  
 ..... 23. *C. arlene*, n. sp.
- 59(57). Length 1.6 mm; elytron with median maculae coalesced into narrow, transverse band (Fig. 509) ..... 92. *C. carla*, n. sp.  
 — Length more than 1.6 mm; elytron with color pattern not as described above ..... 60
- 60(59). Pronotum with 2 large, median, obliquely oval yellow spots (Fig. 497) .....  
 ..... 90. *C. collaris* (Mulsant)  
 — Pronotum variable but never with 2 obliquely oval yellow spots ..... 61
- 61(60). Elytron with pale brown dividing lines between yellow spots, lines not extended to lateral margin of elytron, lateral margin yellow (Fig. 283) ..... 51. *C. jessie*, n. sp.  
 — Elytron with distinct, dark brown dividing lines, or differently patterned, lateral margin yellow or not ..... 62
- 62(61). Elytron with humeral spot extended posteriorly along lateral margin of elytron to mediolateral spot or onto apical declivity (Fig. 525) ..... 63  
 — Elytron with humeral spot not extended posteriorly, lateral margin of elytron dark ..... 67
- 63(62). Length 3.0 mm or more; male genital siphon with lateral alae sclerotized (Fig. 530) .....  
 ..... 95. *C. flavoguttata* (Mulsant)  
 — Length less than 3.0 mm; male genital siphon with lateral alae membranous ..... 64
- 64(63). Male and female pronotum mostly black with large, basomedian macula extended anteriorly nearly to pronotal apex, apex of macula arcuate, entire; discal spot on elytron large, elongate oval (Fig. 459); Argentina ..... 83. *C. lucille*, n. sp.  
 — Male and female pronotum with basomedian macula small, usually brown, discal spot on elytron small, not elongate oval; Argentina or elsewhere ..... 65
- 65(64). Elytron with pale spots small, widely separated; basomedian pronotal macula large, extended nearly to apical pronotal margin (Fig. 492); trochanters and metafemur brown .....  
 ..... 88. *C. sue*, n. sp.  
 — Elytron with pale spots large, narrowly separated or slightly contiguous; basomedian macula short, narrow; trochanters and metafemur rarely brown ..... 66
- 66(65). Paramere of male genitalia *Pvl* (Fig. 279); abdomen without median groove .....  
 ..... 50. *C. maxine*, n. sp.  
 — Paramere of male genitalia *Psc* (Fig. 540); abdomen with median groove .....  
 ..... 97. *C. melinda*, n. sp.
- 67(62). Elytron with 4 pale spots, mediolateral spot absent (Fig. 289) ..... 52. *C. minnie*, n. sp.  
 — Elytron with 4 or more pale spots, mediolateral spot present ..... 68
- 68(67). Elytron with 6 pale spots (Fig. 128); protibia bisinately flanged ... 24. *C. maureen*, n. sp.  
 — Elytron with 4 or 5 pale spots; protibia not flanged ..... 69

69(68).	Elytron with scutellar and discal spots weakly connected, or nearly so (Fig. 260) .....	70
—	Elytron with scutellar and discal spots distinctly separated .....	71
70(69).	Male head entirely yellow (Fig. 260); Bolivia .....	47. <i>C. terry</i> , n. sp.
—	Male head black except clypeus yellow (Fig. 503); Ecuador .....	91. <i>C. vicki</i> , n. sp.
71(69).	Paramere of male genitalia <i>Psc</i> (Fig. 471) .....	72
—	Paramere of male genitalia not <i>Psc</i> , but <i>Unm</i> (Fig. 569), <i>Pem</i> (Fig. 179), <i>Pvl</i> (Fig. 274), or <i>Pav</i> (Fig. 114) .....	80
72(71).	Length 2.0 mm or less .....	73
—	Length more than 2.0 mm .....	74
73(72).	Pronotal basomedian macula with “eyespot” on each side of middle (Fig. 470); Brazil .....	85. <i>C. kristen</i> , n. sp.
—	Pronotal basomedian macula without “eyespot” on each side of middle (Fig. 475); Colombia .....	86. <i>C. vanessa</i> , n. sp.
74(72).	Discal spot on elytron large, elongate, oval (Fig. 481) .....	75
—	Discal spot on elytron large or small, not elongate oval .....	76
75(74).	Dorsal punctures large, distinctly visible; male 5th abdominal ventrite with large cusp on each side of middle .....	87. <i>C. alma</i> , n. sp.
—	Dorsal punctures small, difficult to detect; male 5th abdominal ventrite without cusp on each side of middle .....	88. <i>C. elsie</i> , n. sp.
76(74).	Elytron with mediolateral spot rectangular, projected inward, anterior apex of apical spot deeply emarginate (Fig. 441); widely distributed in northwestern South America .....	80. <i>C. fasciata</i> (F.)
—	Elytron with mediolateral spot not rectangular, projected inward or not, anterior margin of apical spot not emarginate; northwestern South America and elsewhere .....	77
77(76).	Elytron with humeral and sutural spots narrowly connected along basal border (Fig. 453); pronotum with “eyespot” on each side of middle .....	82. <i>C. laurie</i> , n. sp.
—	Elytron with humeral and sutural spots discrete, not connected; pronotum without eyespot .....	78
78(77).	Prosternal carinae widely incomplete, not connected at apex .....	93. <i>C. tara</i> , n. sp.
—	Prosternal carinae complete, connected at apex .....	79
79(78).	Basal lobe of male genitalia longer than paramere (Fig. 520) .....	94. <i>C. rosemary</i> , n. sp.
—	Basal lobe of male genitalia shorter than paramere (Fig. 466) .....	84. <i>C. katie</i> , n. sp.
80(71).	Paramere of male genitalia <i>Pav</i> .....	81
—	Paramere of male genitalia <i>Unm</i> , <i>Pem</i> , or <i>Pvl</i> .....	83
81(80).	Elytron with pale spots small, discrete, widely separated, not coalesced (Fig. 113) .....	21. <i>C. gacognii</i> (Mulsant)
—	Elytron with pale spots large, narrowly separated, with a tendency to coalesce .....	82
82(81).	Protibia bisinuate flanged; male 6th abdominal ventrite with cusp on each side of middle ...	25. <i>C. colleen</i> , n. sp.
—	Protibia not flanged; male 6th abdominal ventrite without cusp .....	22. <i>C. pearl</i> , n. sp.

83(80).	Paramere of male genitalia <i>Pvl</i> .....	84
—	Paramere of male genitalia <i>Unm</i> or <i>Pem</i> .....	85
84(83).	Elytron with mediolateral spot small, square, widely removed from lateral margin (Fig. 271) .....	<b>49. <i>C. gina</i>, n. sp.</b>
—	Elytron with mediolateral spot, rectangular, located on lateral margin, projected inward (Fig. 254) .....	<b>46. <i>C. ella</i>, n. sp.</b>
85(83).	Paramere of male genitalia <i>Unm</i> .....	86
—	Paramere of male genitalia <i>Pem</i> .....	89
86(85).	Basomedian macula of male pronotum large, extended nearly to apical pronotal margin, with elongate oval yellow spot at middle of macula (Fig. 23) .....	<b>5. <i>C. jo</i>, n. sp.</b>
—	Basomedian macula of male pronotum smaller, widely separated from apical pronotal margin, without yellow spot at middle of macula .....	87
87(86).	Length 2.0 mm; mediolateral spot on elytron irregularly rectangular (Fig. 29) .....	<b>6. <i>C. eileen</i>, n. sp.</b>
—	Length 2.7 mm or more; mediolateral spot on elytron round or elongate, projected inward ... ..	88
88(87).	Spots on elytron small, separated by more than width of a spot, mediolateral spot round (Fig. 34); male apical tergite with lateral angle produced, rounded .....	<b>7. <i>C. gertrude</i>, n. sp.</b>
—	Spots on elytron large, separated by width of a spot or less, mediolateral spot elongate, projected inward (Fig. 265); male apical tergite with lateral angle not produced .....	<b>48. <i>C. wilma</i>, n. sp.</b>
89(85).	Length 3.3 mm or more .....	90
—	Length less than 2.5 mm .....	91
90(89).	Elytron with humeral and scutellar spots connected across base (Fig. 177); male clypeus black; prosternal process without carinae .....	<b>32. <i>C. vera</i>, n. sp.</b>
—	Elytron with humeral and scutellar spots not connected, discrete (Fig. 182); male clypeus yellow; prosternal process with carinae .....	<b>33. <i>C. agnes</i>, n. sp.</b>
91(89).	Male metaventrite and basal abdominal ventrite without setal tufts; male genital paramere with apex obliquely truncate (Fig. 173) .....	<b>31. <i>C. natalia</i>, n. sp.</b>
—	Male metaventrite and basal abdominal ventrite with setal tufts; male genital paramere with apex truncate or emarginated .....	92
92(91).	Elytron brown with yellow spots (Fig. 198); male genital paramere with apex oblique, feebly emarginate, anterior border not projected upward at apex (Fig. 200) .	<b>36. <i>C. bessie</i>, n. sp.</b>
—	Elytron black with yellow spots, if brown then male genital paramere with apex truncate, apical border widely projected upward at apex .....	93
93(92).	Elytron brown in teneral specimen; male genital paramere with lower margin nearly straight, apex broad, nearly truncate, upper margin widely projected upward at apex (Fig. 206) .....	<b>37. <i>C. serval</i> (Mulsant)</b>
—	Elytron black with yellow spots; male genital paramere with lower margin widened in anterior 1/2, upper margin not projected upward at apex .....	94
94(93).	Mediolateral spot on elytron widely separated from lateral margin, apical spot wide, apex not emarginate (Fig. 188); male genital paramere with apex weakly, briefly emarginate (Fig. 190) .....	<b>34. <i>C. willie</i>, n. sp.</b>



- Mediolateral spot on elytron narrowly separated from lateral margin, apical spot narrow, apex slightly emarginate (Fig. 193); male genital paramere with apex widely, shallowly emarginate (Fig. 195) ..... **35. *C. charlene*, n. sp.**
- 95(53). Elytron with anterior spot in apical 1/2 obliquely, irregularly triangular (Fig. 354), spot discrete, separated from all margins of elytron ..... **64. *C. petropolitana* (Crotch)**
- Elytron without anterior spot, or with spot not irregularly triangular, spot discrete or not ..  
..... **96**
- 96(95). Elytron with 3 small yellow spots, anterior spot on basal margin outside scutellum, discal spot located behind middle of elytron close to sutural margin, apical spot widely separated from sutural margin (Fig. 652) ..... **121. *C. sexguttata* (Mulsant)**
- Elytron with number of spots or maculae variable, or lacking altogether, never with pattern as described for *C. sexguttata* ..... **97**
- 97(96). Elytron entirely dark, without pale maculae except male usually with yellow humeral spot, or humeral spot narrowly continued posteriorly along lateral border ..... **98**
- Elytron with pale spots or maculae ..... **101**
- 98(97). Pronotum dark brown except for narrow, yellow lateral border in male (Fig 566); length 2.0 mm or less ..... **102. *C. joy*, n. sp.**
- Pronotum pale, or pale with basomedian macula; length more than 2.0 mm ..... **99**
- 99(98). Pronotum entirely yellowish red with small, transverse, brown spot in apical 1/2 (Fig. 590) .  
..... **106. *C. lillie*, n. sp.**
- Pronotum pale with dark basomedian macula ..... **100**
- 100(99). Eye canthus wide, rounded throughout, apex round; pronotum with basomedian macula large, extended to anterior pronotal margin, lateral margin of pronotum narrowly yellow (Fig. 651) ..... **120. *C. flavocalceata* (Mulsant)**
- Eye canthus slender, not rounded, apex acute or abruptly angulate; pronotum with basomedian macula small, not extended to anterior pronotal margin, lateral margin of pronotum broadly yellow ..... **112. *C. nigripennis* (Brèthes)**
- 101(100). Pronotum entirely yellowish red; elytron with 3 small spots in apical 1/2, discal spot narrowly elongate oval (Fig. 577) ..... **104. *C. ruizi* (Brèthes)**
- Pronotum not entirely pale; elytron with 3 spots or not, spot arrangement variable ..... **102**
- 102(101). Elytron with large, irregular, median spot extended from base of elytron nearly to apex, spot formed by connecting 3 or 4 smaller spots (Fig. 339) ..... **61. *C. januarii* (Brèthes)**
- Elytron with large median spot or not, if spot present, then differently shaped from that for *C. januarii* ..... **103**
- 103(102). Elytron black with humeral spot narrowly extended along lateral border to apical declivity, apical spot transversely oval (Fig. 549); male head mostly black ..... **99. *C. allison*, n. sp.**
- Elytron not patterned as for *allison*; male head usually mostly yellow ..... **104**
- 104(103). Elytron with lateral border narrowly yellow from humeral angle nearly to sutural margin at apex (Fig. 560) ..... **105**
- Lateral border of elytron not yellow from humeral angle to sutural margin, if part of border yellow then only in basal 1/2 of elytron ..... **107**
- 105(104). Elytron black, maculae small, widely separated (Fig. 560) .....  
..... **101. *C. exclamationis* (Mulsant)**

- Elytron brown, maculae large, narrowly separated or contiguous ..... 106
- 106(105). Scutellar and discal spot narrowly contiguous; basomedian macula on pronotum short, briefly extended anteriorly, with 2 slender, curved apical projections (Fig. 147); male 6th ventrite with small tubercle on each side of apical emargination ..... **27. *C. compta* (Mulsant)**
- Scutellar and discal spot separated; basomedian macula on pronotum large, nearly reaching anterior pronotal margin, anterior border complete (Fig. 332); male 6th ventrite lacking tubercles ..... **60. *C. heidi*, n. sp.**
- 107(104). Elytron with large, median yellow macula occupying nearly all of surface, with small humeral spot ..... **108**
- Elytron with two or more maculae ..... **109**
- 108(107). Elytron with macula narrow, widely separated from sutural margin (Fig. 319); protibia not flanged; Bolivia ..... **57. *C. tanya*, n. sp.**
- Elytron with macula wide, narrowly separated from sutural margin (Fig. 322); protibia flanged; Ecuador ..... **58. *C. nellie*, n. sp.**
- 109(107). Elytron with large yellow spot on anterior 1/2, spot curved around humeral callus to base of elytron at humeral angle (Fig. 294); apical spot present in male, absent in female ..... **53. *C. claudia*, n. sp.**
- Elytron with pattern different from that described for *C. claudia* ..... **110**
- 110(109). Elytron with discal and mediolateral spots irregularly connected (Fig. 209); apical spot transversely rectangular ..... **38. *C. lydia*, n. sp.**
- Elytron with discal and mediolateral spots, if present, not connected; apical spot variable ..... **111**
- 111(110). Elytron with large yellow spot on apical declivity, male with yellow humeral spot (Fig. 140); eye canthus short, wide, apically rounded; male genital paramere *Pav* ..... **26. *C. crotchi* (Harold)**
- Elytron with more than a single large elytral spot, usually with 2 or more maculae; eye canthus long, narrow, apically rounded or not; paramere not *Pav* ..... **112**
- 112(111). Elytron with anterior yellow spot extended posteriorly to apical declivity, small, brown, elongate spot on humeral callus isolated by apical yellow spot, apical spot transversely rectangular (Fig. 38); paramere *Unm* ..... **8. *C. glenda*, n. sp.**
- Elytron with anterior spot not extended posteriorly to apical declivity, or if so, then spot not isolating brown spot on humeral callus; paramere not *Unm* ..... **113**
- 113(112). Body parallel sided; length 3.5 mm; humeral callus with small, round, black spot (Fig. 543) .  
..... **98. *C. dora*, n. sp.**
- Body oval; length usually less than 3.5 mm; humeral callus without small, round, black spot  
..... **114**
- 114(113). Elytron pale brown, yellow discal and apical spots connected (Fig. 426) ..... **77. *C. dana*, n. sp.**
- Elytron black or dark brown, discal and apical spots not connected ..... **115**
- 115(114). Elytron with pale mediolateral spot ..... **116**
- Elytron without pale mediolateral spot ..... **117**
- 116(115). Elytron with median yellow macula extended from base of elytron nearly to apex of elytron (Fig. 421) ..... **76. *C. marion*, n. sp.**

- Elytron with median yellow macula extended from base of elytron to middle or to apical declivity (Fig. 554) ..... **100. *C. tamara*, n. sp.**
- 117(115). Discal spot on elytron widely separated from base of elytron ..... **118**  
 — Discal spot on elytron not or only narrowly separated from base of elytron ..... **119**
- 118(117). Discal spot small, round (Fig. 572); male genital paramere *Psc* (Fig. 574); Bolivia ..... **103. *C. georgia*, n. sp.**  
 — Discal spot large, irregularly, obliquely rectangular (Fig. 327); male genital paramere *Pvl* (Fig. 329); Brazil ..... **59. *C. marlene*, n. sp.**
- 119(117). Length 3.2 mm or more; French Guiana, Guyana, Trinidad ..... **55. *C. victoria* (Crotch)**  
 — Length less than 3.0 mm; Brazil ..... **120**
- 120(119). Anterior spot on elytron smoothly elongate, widened from base to apex, extended posteriorly onto apical declivity (Fig. 584); male genital paramere *Psc* (Fig. 586) ..... **105. *C. constance*, n. sp.**  
 — Anterior spot on elytron irregularly elongate, not widened from base to apex, usually not extended onto apical declivity; male genital paramere *Pvl* ..... **121**
- 121(120). Male pronotum with basomedian macula large, extended nearly to anterior pronotal margin, apex of macula not emarginate with yellow (Fig. 299); large anterior spot on elytron yellow, slender ..... **54. *C. jackie*, n. sp.**  
 — Male pronotum with basomedian macula smaller, not extended nearly to anterior pronotal margin, apex of macula emarginate with yellow (Fig. 310); large anterior spot on elytron reddish yellow, wide ..... **56. *C. marcia*, n. sp.**

### tredecimguttata group

#### 1. *Cyrea mattie* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.0 mm, width 2.3 mm; body oval, convex. Dorsal surface slightly alutaceous, shiny. Color yellow except pronotum with narrow, pale brown basomedian macula extended about 1/6 distance to anterior pronotal margin, medially with faint trace of small, triangular macula on each side of middle; elytron with narrow brown border on sutural margin, laterally with dark brown macula narrow at humeral callus, obliquely extended posteriorly to apical declivity, then curved toward suture, connected to suture on apical declivity (Fig.1); ventral surface including abdomen entirely yellow. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures larger than on elytron. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly rounded, basal margin with trace of bordering line medially. Epipleuron narrow, not grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly curved, smooth, sponda slightly extended beyond protibia. Carinae on prosternal process widely separated at apex, convergent toward base, joined at basal 1/3, single carina extended to prosternal base. Metaventricle with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened along posterior ventrite margin, extended forward at apex, ventrite with small, dense punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite not depressed medially, apical margin broadly, feebly emarginate, angle on each side of emargination with tuft of setae; 6th ventrite short, narrow, depressed medially, apical margin weakly emarginate, angle on each side of emargination abrupt. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe

3/4 as long as paramere, asymmetrical, sides convergent from base to rounded apex; paramere *Unm*, widened from base to obliquely rounded apex (Fig. 2, 3); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm elongate, narrow, apex obliquely truncate, outer arm slightly wider and longer than inner arm, with small accessory piece, basal border widely, shallowly emarginate (Fig. 4, 5).

**Female.** Similar to male except head pale brownish yellow, pronotum with median 1/2 pale brownish yellow, lateral 1/4 yellow. Genitalia with spermathecal capsule short, wide, weakly curved, widened from base to apex; bursal cap oval, with 2 sclerotized arms, apical strut long, slender, sinuate (Fig. 6).

**Variation.** Length 2.6 to 3.3 mm, width 2.0 to 2.5 mm. Elytron with brown sutural border pale brown to darker brown, often widened in basal 1/2, curved macula may be broken posterior to humeral callus, forming small anterior spot and long posterior macula, or it may be reduced to small, pale brown spot on humeral callus and large, dark brown spot on apical declivity.

**Type material.** Holotype male; Brazil, Chapada, Acc.No.2966, Nov. (CMNH). Paratypes; 14, 6, same data as holotype; 4, Brazil, Dianópolis, Go, 11-14-1962, J. Bechyné col. (DZUP); 1, Brazil, Corumbá, GO, 31.I-3,II.1962, J. Bechyné col. (DZUP); 1, Brazil, Indio do Brasil, Zona da N. O. B., Instituto Oswaldo Cruz, 17,X,938; 1, Brazil, C. Grande-MT, 9-X-61, F M Oliveira leg (MZSP); 1, Brazil, Paracatu - (MG), VII-1960-86/60, Exp. Formosa col. (MNRJ).

**Remarks.** *Cyrea mattie* has a distinctive, although somewhat variable, dorsal color pattern by which it may be usually recognized. It has male genital parameres of the type found in *Serratitibia*, and also has males with long setal tufts on both metaventricle and basal abdominal ventricle, both characters will aid in distinguishing this species.

## 2. *Cyrea ida* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.8 mm, width 2.8 mm; body oval, elongate, convex. Dorsal surface with head weakly alutaceous, slightly shiny, pronotum and elytron smooth, shiny. Color yellow except head with black vertex; pronotum with black basomedian macula extended slightly more than 1/2 distance to anterior pronotal margin, macula deeply emarginate with yellow medially; elytron with sutural margin narrowly bordered with black, with 4 elongate black spots, humeral spot elongate oval, extended posteriorly from humeral callus, discal spot elongate oval, posterolateral spot on lateral margin somewhat triangular, posteromedian spot slightly oblique with anterolateral angle truncate (Fig. 7); ventral surface with head, prosternal process, meso and metaventricle black; abdomen brownish yellow except median 1/3 of ventricle 1-4 brown. Head punctures small, separated by a diameter or less, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by about a diameter, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures larger than on elytron, separated by about a diameter, larger in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin with trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with oblique angle as wide as remainder of protibia, outer margin slightly arcuate, smooth, sponda not extended beyond oblique angle. Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/3 of prosternum, connected to prosternal base by single carina. Metaventricle without setal tuft. Basal abdominal ventricle without setal tuft. Abdomen with postcoxal line on basal abdominal ventricle rounded throughout, extended forward at apex, ventricle with sparse, long pubescence and small punctures medially becoming smaller and denser laterally; ventricle 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventricle depressed in median 1/3, apex shallowly emarginate; 6th ventricle medially depressed, apex emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe 3/4 as long as paramere,

asymmetrical, sides convergent from base to abruptly rounded apex,; paramere *Psc*, narrow at base, widened in median 1/3, narrowed to rounded apex in apical 1/3 (Fig. 8, 9); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm short, widened to rounded apex in apical 1/2, outer arm short, about as long as inner arm, with accessory piece, basal border shallowly, widely emarginate (Fig. 10, 11).

**Female.** Unknown.

**Variation.** Length 3.4 to 3.8 mm, width 2.3 to .2.8 mm.

**Type material.** Holotype male; (Brazil), Vila Monte Verde, Minas Gerais, 13.XI 1970, J. Halik, 10435. (MZSP). Paratypes; 3, 1, same data as holotype; 2, same data as holotype except dates 29.X 1970, 30.XI 1971 (MZSP).

**Remarks.** *Cyrea ida* is similar to *C. renee* in size and dorsal color pattern, but differs by having all spots on elytron distinctly separated, and paramere of male genitalia narrowed apically rather than widened as in *C. renee*.

### 3. *Cyrea tredecimguttata* (Mulsant), new combination

*Cleothera tredecimguttata* Mulsant, 1850: 599.

*Hyperaspis tredecimguttata*: Crotch 1874: 221; Korschefsky 1931:198; Blackwelder 1945: 448; Gordon 1987: 27.

**Description.** Male. Length 4.6 mm, width 3.7 mm; body elongate oval, convex. Dorsal surface with head and pronotum slightly alutaceous, shiny, elytron smooth, shiny. Color black except head yellow, pronotum yellow with long black basomedian macula extended to anterior pronotal margin, macula with elongate, apically triangular yellow spot medially, lateral 1/3 of pronotum yellow; elytron with 5 large yellow spots arranged in rows of 2 each with apical spot, humeral spot irregularly rectangular, mediolateral spot projected inward, scutellar spot broadly oval, discal spot elongate oval, apical spot transversely oval (Fig. 12); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdominal ventrites 1-4 dark brown medially, ventrites 2-6 and lateral portion of ventrites 1-4 reddish brown. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to twice a diameter; elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures as large as on elytron, separated by 1 to 3 times a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 8 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin with trace of bordering line medially. Epipleuron narrow, not grooved, strongly descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined just before base of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and coarse punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in apical 1/3, apex strongly emarginate; 6th ventrite medially depressed, apex deeply emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about 1/2 as long as paramere, asymmetrical, sides convergent from base to apical 5/6, apex emarginate; paramere *Unm*, long, sides nearly parallel to rounded apex (Fig. 13, 14); siphon curved in basal 1/2, without visible alae, basal capsule with inner arm long, wide, apex slightly curved, outer arm shorter and slightly wider than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 15).

**Female.** Similar to male except head yellow with clypeus and narrow border on inside of eye black, pronotal anterolateral angle with rounded yellow macula. Genitalia with spermathecal capsule elongate, slender, basal 1/4 slightly wider than remainder, cornu with rounded apex; bursal cap rounded, with 2 long, outer sclerotized arms and short trace of inner arm, apical strut long, widened from middle to spatulate apex (Fig. 16).

**Variation.** Length 4.0 to 5.0 mm, width 3.3 to 4.2 mm. Pronotum of some females lack a median yellow spot on the dark, basomedian macula, elytral spots subject to expansion and connection to other spots.

**Type locality.** Colombia.

**Type depository.** UMZC (lectotype designated by Gordon, 1987).

**Geographical distribution.** Colombia, Ecuador.

**Specimens examined.** 13. **Colombia.** Magdalena, San Lorenzo, S. Santa Marta; Sant. (Norte de Santander), Bucaramanga; Norte de Santander, 30 km. S. Chinacota. **Ecuador.** Quito, S. Domingo. (USNM).

**Remarks.** *Cyrea tredecimguttata* is a large, boldly marked species readily distinguishable from its congeners. Few other species approach it in size, and those few have quite different dorsal color patterns.

#### 4. *Cyrea andicola* (Kirsch), new combination

*Hyperaspis* (*Cleothera*) *andicola* Kirsch, 1883: 212.

*Cleothera andicola*: Weise 1899: 269.

*Hyperaspis andicola*: Korschefsky 1931:184; Blackwelder 1945: 446.

**Description.** Male. Length 5.0 mm, width 4.0 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum slightly alutaceous, shiny, elytron smooth, shiny. Color black except head mostly yellow, base of yellow area widely triangular anterior to vertex, pronotum mostly black except narrow anterior border, diamond shaped median spot, and anterolateral angle yellow; elytron with 5 large yellow spots arranged in rows of 2 each with apical spot, humeral spot irregularly rectangular, mediolateral spot projected inward, narrowly connected to apical spot, scutellar spot triangular, narrowly connected to discal spot, discal spot elongate oval, narrowly connected to irregularly rectangular apical spot (Fig. 17); ventral surface with head, prosternum, meso- and metaventrites black; abdominal ventrites 1-5 dark brown medially, ventrite 6 and lateral portion of ventrites 1-4 reddish brown. Head punctures small, separated by a diameter or less, each puncture about as large as 3 eye facets; pronotal punctures slightly larger than head punctures, separated by less than to twice a diameter; elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures as large as on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin with trace of bordering line medially. Epipleuron narrow, grooved, strongly descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin straight, smooth, sponda slightly extended beyond angle (Fig. 18). Carinae on prosternal process widely separated at apex, parallel, joined at basal 1/3 of prosternum, not connected to prosternal base. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and coarse punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in apical 1/3, with small cusp on each side of middle, apex weakly emarginate; 6th ventrite medially depressed, with small cusp on each side of

middle, apex deeply emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex deeply emarginate with lateral angle strongly produced. Genitalia with basal lobe about 3/4 as long as paramere, asymmetrical, sides parallel but slightly “pinched” medially, apex emarginate; paramere *Unm*, long, widened in apical 1/2 (Fig. 19, 20); siphon curved in basal 1/2, without visible alae, basal capsule with inner arm long, wide, apex slightly curved, outer arm as long as and wider than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 21).

**Female.** Similar to male except head with obliquely transverse yellow macula on each side of middle anterior to vertex. Genitalia with spermathecal capsule elongate, slender, basal 1/4 slightly wider than remainder; cornu with rounded apex; bursal cap rounded, with 2 long, outer, sclerotized arms and short trace of inner arm, apical strut long, widened from middle to spatulate apex (Fig. 22).

**Variation.** Length 4.4 to 5.0 mm, width 3.3 to 4.0 mm. Male head color varies from that described above to having the clypeus narrowly black and small black spots on apex of frons, female pronotum variable from typical to having the yellow maculae joined in single, curved macula, elytron highly variable from typical to almost entirely reddish yellow to black with sutural border and elongate, black, mediolateral spot.

**Type locality.** “Nova Granada” (Colombia).

**Type depository.** SNSD (holotype).

**Geographical distribution.** Colombia.

**Specimens examined.** 6. **Colombia.** Cnd. (Cundinamarca), Guasca; Cund., Paramo de Siberia. (SNSD) (USNM) (ZMHB).

**Remarks.** This species is similar to *C. tredecimguttata* in size, dorsal coloration, and form of female genitalia. It differs in having a slightly more elongate form, different coloration of head and pronotum, male 5th and 6th abdominal ventrites with small cusps, and male genitalia very different from those of *C. tredecimguttata*. Abdominal cusps are uncommon within *Cyrea*, and are somewhat similar to those possessed by *C. alma*.

The holotype in the SNSD is labeled “Colombia, Stübel (green paper)/43-0-3 (green paper)/Cleothera andicola K./Hyperaspis andicola Kirsch (green paper)/Typus. (red paper)/Hyperaspis (Cleothera) andicola Kirsch, det. R. Korschevsky 1944/Staatl.Museum für Tierkunde.Dresden.”

## 5. *Cyrea jo* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.4 mm, width 2.7 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except head yellow with black vertex and base of frons, anterior border of black vertex arcuate, narrowly curved anteriorly along inner eye margin; pronotum mostly black with narrow anterior border yellow, small, oval median yellow spot, and anterolateral angle narrowly yellow; elytron black with 5 yellow spots arranged in rows of 2 each with apical spot, humeral spot oval, scutellar spot round, mediolateral spot narrow, projected inward, discal spot somewhat rectangular, apical spot large, transversely oval, apical border of spot broadly, weakly emarginate (Fig. 23); ventral surface with head, prosternum, meso- and metaventrites black; abdomen black except ventrites 5-6 dark brown. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to 3 times a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, larger, denser in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, slightly descending externally,

deeply emarginate for reception of femoral apices. Protibia with oblique angle narrow, outer margin slightly arcuate, smooth, sponda not extended beyond oblique angle (Fig. 24). Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/6 of prosternum, joined to base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite with weak setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with sparse, long pubescence and coarse, sparse punctures; ventrites 3-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate, nearly truncate; 6th ventrite medially depressed, apex deeply emarginate with slight median projection, lateral angle rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 2/3 as long as paramere, asymmetrical, sides slightly convergent in basal 4/5, curved to abruptly rounded apex in apical 1/5; paramere *Unm*, wide, narrow at base, widened to rounded apex (Fig. 25, 26); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, narrow, apex rounded, outer arm longer and wider than inner arm, with accessory piece, basal border shallowly, widely emarginate (Fig. 27, 28).

**Female.** Unknown.

**Variation.** Length 3.0 to 3.4 mm, width 2.4 to 2.7 mm.

**Type material.** Holotype male; Colombia, Oroque, Santander del Norte, 8-VI-1965, J.&B. Bechyne leg. (MIZA). Paratype; 1, same data as holotype (MEUNT).

**Remarks.** This is a somewhat distinctive species because the dorsal color pattern is not matched by any known species of this group. Only males are known, so the female color pattern may differ. Male genitalia are also distinctive for *C. jo* because the paramere is very wide from base to rounded apex, unlike those of other known species in this group.

## 6. *Cyrea eileen* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.0 mm, width 1.6 mm; body elongate oval, convex. Dorsal surface with head weakly alutaceous, slightly shiny, pronotum and elytron smooth, shiny. Color yellow except head with black vertex; pronotum with small, black basomedian macula extended slightly more than 1/2 distance to anterior pronotal margin, macula deeply emarginate with yellow medially; elytron black with 5 yellow spots, humeral spot triangular, scutellar spot round, mediolateral spot separated from lateral margin, irregularly rectangular, discal spot obliquely oval, apical spot transversely oval, apical border of spot slightly emarginate (Fig. 29); ventral surface with head, prosternum, meso- and metaventrites black; abdomen brown medially, yellowish brown toward lateral margin. Head punctures small, separated by a diameter or less, each puncture about as large as 2-3 eye facets; pronotal punctures larger than head punctures, separated by about a diameter, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, larger, denser in lateral 1/3. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with oblique angle nearly as wide as remainder of protibia, outer margin sinuate, smooth, sponda not extended beyond oblique angle. Carinae on prosternal process widely separated at apex, convergent, joined at base of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened medially, extended forward at apex, ventrite with sparse, long pubescence and coarse punctures medially becoming smaller and denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex emar-



ginate. Genitalia with basal lobe slightly more than 1/2 as long as paramere, asymmetrical, sides convergent in basal 3/4, curved to abruptly rounded apex in apical 1/4; paramere *Unm*, narrow at base, widened to rounded apex (Fig. 30, 31); siphon strongly curved in basal 1/2, without visible alae, bursal cap with inner arm long, narrow, apex slightly rounded, outer arm longer and wider than inner arm, with accessory piece, basal border shallowly, widely emarginate (Fig. 32, 33).

**Female.** Similar to male except head with clypeus black and base of frons with median black macula. Genitalia with spermathecal capsule elongate, slightly wider in basal 1/4, apex of cornu rounded; bursal cap rectangular, 2 outer arms sclerotized, apical strut short, widened from base to spatulate apex (Fig. 33).

**Variation.** None observed.

**Type material.** Holotype male; Ecuador, Sucumbios, San Rafael Falls, 1100m, 00° 06.24'S/077° 35.31'W, VIII-5/6-1998, Fred G. Andrews. (CSCA). Paratypes; 2, 1, same data as holotype (CSCA); 1, Peru, Rio Charape, 15.Sept. 11, CHT Townsend Collector (USNM).

**Other specimen.** 1. Bolivia, Cochabamba, Carmen Pampa, 16 37'06 S 66 28'50 W, 1820m, 27.vii.2001, malaise trap, coll. A.C. Hamel L. & A. Pascall. (BMNH).

**Remarks.** This is a mostly unremarkable species, but this and *C. gertrude*, are the only 2 very small taxa with 4 or more dark spots on each elytron within the tredecimguttata group. The mediolateral spot distinctly separated from the lateral elytral margin is somewhat unusual in the genus, and is the only external character worthy of comment. A male specimen from Bolivia is recognized as possibly this species under "other specimen." Male genitalia appear to be identical, but the mediolateral elytral spot located on the lateral elytral border, and the somewhat disjunct geographic locality, make the identification doubtful. See remarks under *C. gertrude*.

## 7. *Cyrea gertrude* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.8 mm, width 2.3 mm; body oval, somewhat rounded, convex. Dorsal surface with head weakly alutaceous, slightly shiny, pronotum and elytron smooth, shiny. Color yellow except head with black vertex; pronotum with small, black basomedian macula extended slightly more than 1/2 distance to anterior pronotal margin, macula deeply emarginate with yellow medially; elytron dark brown with 5 small yellow spots, humeral spot irregularly rounded, scutellar spot round, mediolateral spot on lateral margin irregularly rounded, discal spot slightly oval, apical spot irregularly rectangular (Fig. 34); ventral surface with head black, prosternum, meso- and metaventrites brown; abdomen brownish yellow. Head punctures large, separated by a diameter or less, each puncture about as large as 3 eye facets; pronotal punctures slightly larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures smaller than on elytron, separated by about a diameter medially, larger, denser in lateral 1/3. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with oblique angle as wide as remainder of protibia, outer margin curved, smooth, sponda not extended beyond oblique angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/6 of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened medially, extended forward at apex, ventrite with sparse, long pubescence and coarse punctures medially becoming smaller and denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed,

apex weakly emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex deeply, widely emarginate, lateral angle broadly produced, rounded. Genitalia with basal lobe short, 1/2 or less length of paramere, asymmetrical, sides convergent from base to rounded apex; paramere *Unm*, wide throughout, widened from base to abruptly rounded apex (Fig. 35, 36); siphon strongly curved in basal 1/2, without visible alae, apex with long, slender, anterior sclerotized filament about 1/5 as long as remainder of siphon; bursal cap with inner arm short, narrow, apex slightly rounded, outer arm longer and wider than inner arm, with accessory piece, basal border shallowly, widely emarginate (Fig. 37).

**Female.** Unknown.

**Variation.** Background color of elytron varies from dark brown to almost black.

**Type material.** Holotype male; Colombia, Las Tibayas, O. Thieme (printed). (ZMHB). Paratype: 1, same data as holotype (hand written) (ZMHB).

**Remarks.** Males of this species are quite distinct because of the somewhat rounded body form, dark brown elytral background, yellow and pale brown ventral surface, widely expanded outer protibial margin; apical tergite with apex widely, deeply emarginate with broadly expanded, rounded lateral angle; and siphon of male genitalia with long, slender, apical extension.

### 8. *Cyrea glenda* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.5 mm, width 1.9 mm; body rounded, convex. Dorsal surface with head, pronotum and elytron smooth, shiny. Color yellow except pronotum with brown basomedian macula extended 3/4 distance to anterior pronotal margin, macula projected medially, apex faintly emarginate with yellow, side sinuate; elytron brown with 3 yellow spots, yellow lateral vitta extended from base to apical declivity, vitta widely connected at middle with large yellow spot occupying most of elytron, apical spot irregularly oval (Fig. 38); ventral surface with head, prosternum, metaventrite dark brown, mesoventrite reddish brown; abdomen yellowish brown except median 2/3 of ventrites 1-3 dark brown. Head punctures small, separated by a diameter or less, each puncture about as large as 2 eye facets; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures larger than on elytron, separated by less than a diameter medially, larger and separated by less than a diameter in lateral 2/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin arcuate, smooth, sponda extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/3 of prosternum, single carina extended to base. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex. Ventrites 1-3 with dense, long pubescence and coarse, dense punctures; ventrites 4-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex emarginate; 6th ventrite deeply depressed medially, apex shallowly emarginate. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe slender, about 5/6 as long as paramere, asymmetrical, sides convergent from base to obliquely truncate apex; paramere *Unm*, slender, widened from base to rounded apex (Fig. 39, 40); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, square, apex feebly emarginate, outer arm narrowed from base to apex, narrower and slightly longer than inner arm, with accessory piece, basal border broadly, shallowly emarginate (Fig. 41, 42).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Brazil, Bowring.63.47, jocosus Muls. (BMNH).

**Remarks.** This species may be recognized by the unique dorsal color pattern, which is not shared with any other in the tredecimguttata group.

### 9. *Cyrea viola* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.7 mm, width 2.8 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except head with clypeus black and triangular macula at base of eye black; pronotum black with large, diamond shaped yellow spot medially, anterolateral angle deeply emarginate by yellow spot; elytron black with 3 yellow vittae, sutural vitta widened at base, slender posteriorly to apical 1/10, connected to median and lateral vittae at apex, median vitta slightly enlarged basally, extended posteriorly to apical 1/10, vitta on lateral margin of elytron narrow throughout, extended from humeral angle posteriorly to connection with other elytral vittae (Fig. 43); ventral surface with head, prosternum, meso- and metaventrites black; abdomen dark brown except slightly paler laterally and apically. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to twice a diameter; elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures smaller than on elytron, separated by about a diameter medially, larger, denser in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin curved, smooth, sponda not extended beyond oblique angle. Carinae on prosternal process widely separated at apex, slightly convergent medially, apex rounded and joined at basal 1/6 of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex. Ventrites 1-2 with sparse, long pubescence and coarse punctures medially becoming smaller and denser laterally; ventrites 3-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate, nearly truncate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex deeply, widely emarginate, lateral angle broadly produced, rounded. Genitalia with basal lobe 3/4 as long as paramere, wide, asymmetrical, sides parallel to bifid apex; paramere *Unm*, wide throughout, widened from base to rounded apex (Fig. 44, 45); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, narrow, apex slightly rounded, outer arm curved, longer and wider than inner arm, with accessory piece, basal border shallowly, widely emarginate (Fig. 46, 47).

**Female.** Similar to male except head entirely black with median, apically bifid yellow macula at base of frons. Genitalia elongate, about same width throughout, apex of cornu rounded; bursal cap oval with 2 sclerotized arms, apical strut long, apical 1/3 abruptly widened to racket shape (Fig. 48).

**Variation.** None observed.

**Type material.** Holotype male; Colombia, Boy (Boyaca), 2520, Santa Rosa, Dec.18.1941, Murillo No 5427. (USNM). Paratype; 1, Colombia, Boy, Santa Rosa, Alt. 1520m., 18-XII-47, Murillo No 5427 (USNM).

**Remarks.** This handsome species is readily recognized by the large size, vittate elytron, and Colombian type locality.

### 10. *Cyrea melaneura* (Mulsant), new combination

*Cleothera melaneura* Mulsant, 1850: 562.

*Hyperaspis melaneura*: Crotch 1874: 216; Korschefsky 1931:192; Blackwelder 1945: 447.

**Description.** Male lectotype. Length 3.1mm, width 2.1 mm; body oval, convex. Color yellow except clypeal apex narrowly brown; pronotum black except anterolateral 1/3 and narrow anterior margin yellow; scutellum black; elytron with suture narrowly black on apical declivity, black area widened at apex and extended laterally along elytral apex (Fig. 49), ventral surface with head, prosternum, meso- and metaventrites, metafemur, and abdomen black. Head punctures large, separated by a diameter or less, each puncture as large as 4 eye facets; pronotal punctures equal in size to head punctures, separated by 1 to 2 times a diameter; elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures twice as large as on elytron, separated by a diameter or more medially, becoming larger and contiguous toward lateral margin. Clypeus weakly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus short, about 4 eye facets long, angled forward, abruptly rounded apically, yellow. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded, basal margin without bordering line. Epipleuron narrow, grooved, deeply foveolate for reception of femoral apices. Protibia with narrow oblique angle 1/2 width of protibia, outer margin smooth (Fig. 49); sponda deep, as wide as angle. Carinae on prosternal process widely separated at apex, convergent, joined before prosternal base, single carina extended to base. Metaventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded, extended to apical margin of ventrite at middle, then broadly forward to lateral 1/5 of ventrite; ventrites 1-4 with sparse, long pubescence, punctures sparse medially becoming dense laterally; 5th ventrite not depressed medially, medially grooved, groove with short, dense setae, apical margin deeply emarginate medially, surface densely punctate; 6th ventrite short, narrow, not depressed in apical 1/2, apical margin slightly emarginate, densely pubescent, surface smooth, glabrous. Apical tergite finely, densely punctured. Genitalia with basal lobe shorter than paramere, asymmetrical, narrowed to rounded apex; paramere *Unm*, wide (Fig. 50); siphon robust, strongly curved, without lateral alae, basal capsule large, inner arm short, wide, apically truncate, outer arm longer than inner arm, with large accessory piece, basal border deeply sinuate (Fig. 51, 52).

**Female.** Unknown.

**Variation.** Unknown.

**Type locality.** Colombia.

**Type depository.** BMNH. (lectotype here designated).

**Geographical distribution.** Known only from the Colombian type.

**Specimens examined.** 1. The lectotype specimen

**Remarks.** The dorsal color pattern is somewhat similar to that of *C. languida*, but that species is entirely pale dorsally and lacks the black scutellum and apical sutural area of *C. melaneura*.

The male lectotype is the only specimen examined, and is labeled "Type (orange bordered disc)/Colombie (green disc) 5171 (blue disc)/Melaneura. Muls. Colombie (green paper)/Named by Mulsant." The Buquet collection (BMNH) is the only one listed by Mulsant (1850). This specimen may be the only one Mulsant had, but it is not possible to be certain. Therefore it is designated the lectotype.

## **emiliae group**

### **11. *Cyrea emiliae* (Crotch), new combination**

*Hyperaspis emiliae* Crotch, 1874: 215; Korschefsky 1931:188; Blackwelder 1945: 447; Gordon 1987:27.

*Hyperaspis trivittata* Weise, 1902: 172; Korschevsky 1931:198; Blackwelder 1945: 448. NEW SYNONYM.  
*Hyperaspis mundula* Weise, 1922: 34; Korschevsky 1931:192; Blackwelder 1945: 447. NEW SYNONYM.

**Description.** Male. Length 2.6 mm, width 2.1 mm; body rounded, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with narrow, black basomedian macula extended about 2/3 distance to anterior pronotal margin, macula with apical border curved, weakly indented with yellow medially; sutural margin of elytron with black border in most of median 1/2, 3 black maculae fused into a single irregular median spot on each elytron (Fig. 53); ventral surface with head, prosternum meso- and metaventrites dark brown; abdomen yellow. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures larger than on elytron, separated by 1-3 times a diameter medially, becoming larger and separated by less than a diameter in lateral 1/5. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, slightly angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly rounded, basal margin without trace of bordering line medially. Epipleuron wide, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin straight, smooth, sponda slightly extended beyond oblique angle. Carinae on prosternal process narrowly separated at apex, convergent toward base, joined slightly anterior to middle of prosternum, single carina extended to prosternal base. Metaventrite without setal tuft. Basal abdominal ventrite with sparse setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened along posterior ventrite margin, extended forward at apex, ventrite with small, dense punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 4th ventrite depressed in median 1/3, apex deeply emarginate; 5th ventrite depressed medially, apical margin broadly, feebly emarginate; 6th ventrite short, narrow, depressed medially, apical border emarginate, angle on each side of emargination abrupt. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about 3/4 as long as paramere, asymmetrical, sides parallel in basal 5/6, apex asymmetrically triangular; paramere *Pav*, widened from base to obliquely rounded apex, upper margin with sclerotized projection, or "ear" slightly posterior to apex (Fig. 54, 55); siphon strongly curved in basal 1/2, with trace of visible alae at apical 1/10, basal capsule with inner arm short, wide, apex widened, dorsally rounded, outer arm about as wide as and longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 56, 57).

**Female.** Similar to male except head with clypeus and apex of frons brown, pronotum with basomedian macula extended to anterior pronotal margin. Genitalia with spermathecal capsule short, wide, weakly curved, basal 1/2 wide, apical 1/2 narrow; bursal cap oval, without visible arms, apical strut short, spatulate in apical 1/2 (Fig. 58).

**Variation.** Length 2.3 to 2.7 mm, width 1.7 to 2.2 mm. Elytron sometimes with black sutural border long, wide, widened at apex on apical declivity, spot in anterior 1/2 extended posteriorly onto apical declivity (*C. trivittata*) or with sutural border and spot on anterior 1/2 very long, wide (*C. munda*).

**Type locality.** Of *emiliae*, Brazil; of *trivittata*, Brazil, Rio Grande do Sul; of *mundula*, Argentina, Gobernación Misiones.

**Type depository.** Of *emiliae*, UMZC (holotype); of *trivittata*, ZMHB (lectotype here designated); of *mundula*, MBR (lectotype here designated).

**Geographical distribution.** Argentina, Brazil, Paraguay.

**Specimens examined.** 53. **Argentina.** Gobernación, Misiones. **Brazil.** Curitiba; Minas Gerais, V. Monte Verde; PR, San Jose dos Pinheiros, Sao Paulo; SC, Nova Teutonia. **Paraguay.** Caaguazú, Repatriación; Hohenau. (BMNH) (CNC) (DZUP) (GGC) (MNHNP) (MNRJ) (UMZC) (USNM) (ZMHB).

**Remarks.** *Cyrea emiliae* has a somewhat variable elytral color pattern paired with highly distinctive male genitalia. Although variable, the dorsal color pattern will usually serve for identification purposes. Three names have been proposed for this species, but examination of male genitalia of each of the types indicates that only one species is involved.

The lectotype of *C. trivittata* in the ZMHB is labeled “Rio grande do sul (green paper, handwritten)/*Cleothera trivittata* m. (handwritten)/ex. coll. J. Weise/SYNTYPUS *Hyperaspis trivittata* Weise, 1902 labeled by MNHUB 2004 (red paper).” The lectotype of *C. mundula* in the MBR is labeled “Misiones/female sign/ TYPUS/*Cleothera mundula* Weise.”

## 12. *Cyrea annette* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.8 mm, width 2.3 mm; body rounded, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with short, narrow, dark brown basomedian macula extended 1/6 distance to anterior pronotal margin, macula with short median projection and larger angulate projection at each end, comma shaped spot present on each side of middle at midpoint of pronotum; elytron with dark brown sutural border from scutellum nearly to apex, border triangularly widened anterior to middle of elytron, 3 large, dark brown spots present, 2 connected spots in anterior 1/2, and irregularly transverse spot on apical declivity (Fig. 59); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen yellowish brown. Head punctures small, separated by less than to about a diameter, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures as large as on pronotum, separated by 1 to 2 times a diameter; metaventral punctures about as large as on elytron, separated by 1 to 3 times a diameter medially, larger and separated by less than a diameter in lateral 2/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron wide, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent, joined just before prosternal base, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and small punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex weakly emarginate, nearly truncate. Genitalia with basal lobe 1/2 as long as paramere, asymmetrical, sides parallel from base to apex, apex obliquely truncate; paramere *Pav*, widened from base to rounded apex, upper margin with sclerotized projection, or “ear” slightly posterior to apex (Fig. 60, 61); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, angled forward, outer arm wider and longer than inner arm, with accessory piece, basal border shallowly, abruptly emarginate (Fig. 62, 63).

**Female.** Similar to male except head with apex of clypeus brown. Genitalia with spermathecal capsule short, wide, weakly curved, basal 1/2 wide, apical 1/2 narrow; bursal cap oval, without visible arms, apical strut short, spatulate in apical 1/2 (Fig. 65).

**Variation.** Length 2.7 to 3.0 mm, width 2.2 to 2.7 mm. Pronotum may have brown maculae widened with anterior spots curved and reaching mediobasal spot, elytron sometimes with anterior spot divided into two spots, anterolateral angle of outer spot narrowly connected to base of elytron, or with posterior spot narrowed medially but not divided into two spots.

**Type material.** Holotype male; Venezuela, Caracas, 18 July II.34, Korschevsky Collection 1952. (USNM). Paratypes; 4, 1, Trinidad, St. Benedict, July 1 - 15, 62, J. Maldonado C (USNM). 1, Trinidad, Mt. Tucuche.,

vii.1905., F.Birch., B.M.1927-540, Brit. Mus. 1934-56 (BMNH); 1, Trinidad, Curepe, 27-3-1961, N. Gopaul Coll. (USNM); 1, Aranguez, Trinidad, 7-5-1961, N. Gopaul Coll. (USNM); 1, Saugre-Grande, Trinidad, Oct. 1959 (USNM).

**Remarks.** The dorsal color pattern is somewhat useful for identification, but the male genitalia are completely diagnostic.

### 13. *Cyrea trepida* (Mulsant), new combination

*Cleothera trepida* Mulsant, 1850: 590.

*Hyperaspis trepida*: Crotch 1874: 219; Korschefsky 1931:198; Blackwelder 1945:448.

**Description.** Male. Length 2.7 mm, width 2.3 mm; body rounded, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with short, narrow, dark brown, sinuate basomedian macula extended about 1/8 distance to anterior pronotal margin, macula with short median projection and larger angulate projection at each end, triangular spot with emarginate posterior border present on each side of middle at midpoint of pronotum; elytron with dark brown sutural border from scutellum nearly to apex, border triangularly widened anterior to middle of elytron, 4 large, dark brown spots present, humeral spot irregularly elongate oval, narrowly connected to base of elytron anterior to humeral callus, inner margin of spot medially emarginate, discal spot broadly elongate oval, posterior lateral spot small, widely separated from lateral margin, posteromedian spot obliquely elongate oval (Fig. 65); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen yellowish brown except median 1/3 of ventrites 1-3 brown. Head punctures small, separated by less than to about a diameter, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures as large as on pronotum, separated by 1 to 2 times a diameter; metaventral punctures larger than on elytron, separated by a diameter medially, becoming denser and larger in lateral 1/2. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin nearly straight, basal margin without trace of bordering line medially. Epipleuron wide, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/4 of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite with sparse, long setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and small punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex weakly emarginate, nearly truncate. Genitalia with basal lobe 1/2 as long as paramere, asymmetrical, sides parallel from base to apex, apex obliquely truncate; paramere *Pav*, widened from base to rounded apex, upper margin with sclerotized projection, or "ear" slightly posterior to apex (Fig. 66, 67); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, angled forward, outer arm wider and longer than inner arm, with accessory piece, basal border shallowly, broadly emarginate (Fig. 68, 69).

**Female.** Similar to male except head with clypeus and apex of frons faintly brown, pronotum with dark maculae wider, more pronounced than in male. Genitalia with spermathecal capsule short, slender, wide in basal 1/2, abruptly narrowed before cornu, cornu widened with apical beak; bursal cap with 2 slender outer arms, apical strut long, slender, apex slightly widened (Fig. 70).

**Variation.** Length 2.4 to 2.8 mm, width 1.8 to 2.3 mm. Pronotum often with maculae reduced in size, sometimes with basomedian macula reduced to 3 spots, elytron may have spots in anterior 1/2 narrowly

connected, and humeral spot sometimes not connected to elytral base.

**Type locality.** l'Amérique méridionale.

**Type depository.** MNHP (lectotype here designated).

**Geographical distribution.** Colombia, Surinam, Trinidad, Venezuela.

**Specimens examined.** 52. Frequently collected and widely distributed from Surinam and Trinidad south through most of Colombia. (BMNH) (CMNH) (USNM) (ZMHB).

**Remarks.** This species is easily identified because it has a distinctive dorsal color pattern with a pronotum strongly marked with maculae, elytron with 4 dark spots, humeral spot usually connected to elytral base and emarginate with yellow on the interior margin.

Mulsant (1850) had material only from the Dupont collection, and a female type specimen in the MNHP labeled "Type/coll. Mniszech/Trepida" is designated the lectotype. Another female type with identical labels is designated a paralectotype.

#### 14. *Cyrea vivian Canepari* and Gordon, new species

**Description.** Male holotype. Length 2.7 mm, width 2.1 mm; body oval, convex. Dorsal surface with head alutaceous, feebly shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with long, narrow, black basomedian macula extended 2/3 distance to anterior pronotal margin, macula with apical margin deeply indented with yellow, projection on each side of indentation irregular; elytron with narrow, black sutural border from scutellum to apex, with 4 large, black spots present, humeral spot elongate, irregularly oval, discal spot elongate, rectangular, posteromedian spot on apical declivity irregularly oval, posterolateral spot obliquely oval, feebly connected to posteromedian spot (Fig. 71); ventral surface with head, prosternum, meso- and metaventrites black; abdomen yellowish brown except median 1/3 of ventrites 1-4 brown. Head punctures small, separated by a diameter or less, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by a diameter or less; metaventral punctures larger than on elytron, separated by a diameter medially, larger and separated by less than a diameter in lateral 2/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 8 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, slightly descending externally, deeply foveolate??? for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda extended beyond angle (Fig. 72). Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/6 of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and large, coarse punctures medially, punctures becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex deeply emarginate with lateral angle abruptly rounded. Apical tergite finely, densely punctured, apex distinctly emarginate medially. Genitalia with basal lobe 3/4 as long as paramere, asymmetrical, sides parallel from base to apex, apex obliquely truncate; paramere *Pav*, widened from base to rounded apex, upper margin with sclerotized projection, or "ear" slightly posterior to apex (Fig. 73, 74); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, outer arm narrower and slightly longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 75, 76).

**Female.** Unknown.



**Variation.** Unknown.

**Type material.** Holotype male; Paraguay, Caaguazú, Repatriacion, 22-I-2001. (MNHNP).

**Geographical distribution.** Paraguay.

**Remarks.** The dorsal color pattern is useful for identification among all *Cyrea* species, but is unique within the emiliae group.

### 15. *Cyrea roberta* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.5 mm, width 2.0 mm; body rounded, convex. Dorsal surface with head weakly alutaceous, shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with 7 brown spots, large, triangular spot on basal border on each side of middle, 1 short, oval spot on basal margin anterior to scutellum, 1 obliquely oval spot on each side of middle of pronotum, and 1 small, round spot near lateral pronotal margin; elytron with brown sutural border from scutellum to apex, border widened in median 7/8, widest anterior to middle, with 3 brown spots present, lateral spot narrow, irregular, extended from humeral callus onto apical declivity, discal spot oval, feebly connected to brown sutural border, apical spot obliquely oval (Fig. 77); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen brown except median 2/3 of ventrites 1-4 darker brown. Head punctures small, separated by a diameter or less, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures as large as on elytron medially, separated by about a diameter, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/6 of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and large, coarse punctures medially, punctures becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite deeply depressed in median 1/3, apex emarginate, lateral angle with dense tuft of setae; 6th ventrite deeply depressed medially, apex deeply emarginate with lateral angle abruptly rounded. Apical tergite finely, densely punctured, apex deeply, widely, sinuately emarginate medially, with lateral angle strongly projected, apically hooked. Genitalia with basal lobe slender, slightly shorter than paramere, asymmetrical, sides convergent from base to apex, apex abruptly rounded; paramere *Pav*, slightly widened from base to truncate apex, curved upward, upper margin with sclerotized projection, or "ear" slightly posterior to apex (Fig. 78, 79); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, narrow, outer arm wider and longer than inner arm, with accessory piece, basal border weakly emarginate (Fig. 80, 81).

**Female.** Similar to male except clypeus and apex of frons brown, pronotum with spots widened, somewhat fused, extended to anterior pronotal margin. Genitalia with spermathecal capsule short, slender, basal 1/4 widened, apical 3/4 narrow; bursal cap oval, with 3 sclerotized arms, apical strut long, slender (Fig. 82).

**Variation.** Length 2.3 to 2.8 mm, width 1.8 to 2.1 mm. Pronotal spots vary in size and width, female pronotum sometimes with median spots entirely fused except for narrow yellow vitta at middle, elytron

with elongate lateral spot variable in shape and length, sometimes nearly connected to discal spot, discal spot either narrowly connected to sutural border or entirely discrete.

**Type material.** Holotype male; Brazil, Chapada, Acc.No.2966, Nov. (CMNH). Paratypes; 26; 20, same data as holotype except additional dates Feb, Apr, Oct., Dec. (CMNH); 2, Brazil, Goiás, Corumbá, Fazenda Monjolinho, 14.VI.1942, F. Lane (MZSP); 1, Brazil, Faz. Nova Orlandia, Jatai, Go - Brasil, I.964 - Martins, Morgane & Silva (MZSP); 1, Itú - S. Paulo, 13-XI - 960, col: U. Martins (MZSP); 1, Brazil, C. Grande - MT, 9-X-61, F M Oliveira leg (MZSP); Paraguay, Villaricca, Aug. 1934, Coll. Koller (ZMHB).

**Geographical distribution.** Brazil; Paraguay.

**Remarks.** The dorsal color pattern is unique to this species. In addition, males are recognized by the setal tuft on the 5th basal abdominal ventrite, and apical tergite with lateral angle strongly projected, projection apically hooked.

### 16. *Cyrea melanie* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.7 mm, width 2.3 mm; body rounded, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with brown basomedian macula extended slightly more than 1/2 distance to apical pronotal margin, apex of macula deeply, widely emarginate with yellow medially; elytron with 4 brown spots, humeral spot broadly oval, extended from humeral callus posteriorly to middle of elytron, discal spot narrowly elongate on sutural margin, posterolateral spot on apical declivity small, transversely oval, posteromedian spot on apical declivity narrowly elongate on sutural margin (Fig. 83); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen brownish yellow. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron medially, separated by about a diameter, larger and separated by less than a diameter in lateral 1/2. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron wide, grooved, slightly descending externally, deeply foveolate?? for reception of femoral apices. Protibia with wide flange, outer margin with a strongly arcuate, bisinuate, smooth flange, sponda extended beyond flange (Fig. 84). Carinae on prosternal process narrowly separated apically, convergent toward prosternal base, incomplete, not joined apically, extended less than 1/2 distance to prosternal base. Metaventrite without setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and large, coarse punctures medially, punctures becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite deeply depressed in median 1/3, apex emarginate, lateral angle with dense tuft of setae; 6th ventrite deeply depressed medially, apex deeply emarginate with lateral angle abruptly rounded. Apical tergite finely, densely punctured, apex deeply emarginate medially, with lateral angle strongly projected, apically hooked. Genitalia with basal lobe slender, 3/4 as long as paramere, asymmetrical, sides convergent from base to apex, apex rounded; paramere *Pav*, slightly widened from base to truncate apex, feebly sinuate, curved upward, upper margin with sclerotized projection, or "ear" slightly posterior to apex (Fig. 85, 86); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm long, wide, outer arm slightly wider and longer than inner arm, with accessory piece, basal border weakly emarginate (Fig. 87, 88).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; (Brazil) Corumba, Matt. Grosso, Nunenmacher Collection. (CAS).

**Geographical distribution.** Brazil.

**Remarks.** This species has male abdominal and genitalic structures very similar to those of *C. roberta*, but the dorsal color pattern differs widely between the two species. The protibia of *C. melanie* is unusual in having a widely expanded, bisinuate outer flange. That structure is rarely found elsewhere in the genus.

### 17. *Cyrea holly* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.6 mm, width 2.2 mm; body rounded, convex. Dorsal surface with head weakly alutaceous, slightly shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with 5 brown maculae, basomedian macula short, wide, extended about 1/5 distance to apical pronotal margin, anterior margin of macula sinuate, 1 triangular spot present on each side of middle of pronotum, 1 small, oval spot present medially near lateral pronotal margin; elytron with brown sutural border from scutellum to apex, border widened anterior to middle, remaining margins of elytron narrowly bordered with brown, 4 brown spots present, humeral spot large, irregularly oval, discal spot large, curved, an inside out comma shape, 2 small, rounded spots on apical declivity (Fig. 89); ventral surface with head, anterior and median portions of prosternum, meso- and metaventrites dark brown; abdomen yellowish brown except median 1/3 of ventrites 1-4 brown. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures larger than on elytron medially, separated by about a diameter, larger and separated by less than a diameter in lateral 2/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin arcuate, smooth, sponda extended beyond angle (Fig. 90). Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/8 of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, weakly extended forward at apex, ventrite with sparse, long pubescence and coarse punctures medially, punctures becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex emarginate; 6th ventrite deeply depressed medially, apex deeply emarginate with lateral angle abruptly rounded. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe slender, about 2/3 as long as paramere, asymmetrical, sides slightly convergent from base to apex, apex rounded; paramere *Pav*, widened from base to obliquely truncate apex, upper margin with shallow, median emargination and large, sclerotized projection, or "ear" slightly posterior to apex (Fig. 91, 92); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm long, wide, apex rounded, outer arm narrower and slightly longer than inner arm, with accessory piece, basal border distinctly emarginate (Fig. 93, 94).

**Female.** Similar to male except head with large, elongate, median brown spot, pronotum with median spots extended to anterior brown border. Genitalia with spermathecal capsule short, slender; bursal cap oval, with 2 weakly sclerotized arms, apical strut short, slender (Fig. 95).

**Variation.** Elytron with discal spot weakly connected to brown sutural border and narrowly connected to humeral spot, or with 5 dark spots, anterolateral spot divided into 2 spots.

**Type material.** Holotype male; Trinidad, W. I., Morne Bleu, 2700', Aug. 15, 1969, H.&A. Howden. (USNM). Paratypes; 7, 1, same data as holotype except date "Aug.6, 1969 (USNM); 2, "Venezuela;" (ZMHB) 4, "Central amer." (ZMHB).

Geographical distribution. Trinidad, Venezuela

**Remarks.** The general dorsal color pattern is similar to that of several members of the *emiliae* group, but similar only to that of *C. brittany* within that group. This species apparently occurs also in Central America as evidenced by 4 paratypes in the ZMHB labeled as being from there. See remarks under *C. brittany*.

### 18. *Cyrea brittany* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.6 mm, width 2.2 mm; body rounded, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with 5 dark brown maculae, basomedian macula short, wide, extended about 1/5 distance to apical pronotal margin, anterior margin of macula sinuate, 1 triangular spot present on each side of middle of pronotum, 1 small, oval spot present medially near lateral pronotal margin; elytron with brown sutural border from scutellum to apex, border widened anterior to middle, 5 brown spots present, humeral spot small, irregularly triangular, discal spot small, elongate, curved, an inside out comma shape, 2 elongate oval spots on apical declivity (Fig. 96); ventral surface with head, anterior and median portions of prosternum, meso- and metaventrites black; abdomen yellow except median 2/3 of ventrites 1-4 dark brown. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures larger than on elytron, separated by less than a diameter, larger in lateral 2/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin arcuate, smooth, sponda extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, not joined, ended just anterior to middle of prosternum. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and coarse punctures medially, punctures becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex emarginate; 6th ventrite deeply depressed medially, apex shallowly emarginate with lateral angle abruptly rounded. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe slender, about 3/4 as long as paramere, asymmetrical, sides slightly convergent from base to apex, weakly notched on one side just before apex, apex rounded; paramere *Pav*, widened from base to obliquely rounded apex, upper margin with shallow, median emargination and large, sclerotized projection, or "ear" slightly posterior to apex (Fig. 97.98); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm long, wide, apex rounded, outer arm about as wide and as long as inner arm, with accessory piece, basal border distinctly emarginate (Fig. 99, 100).

**Female.** Similar to male except head with small, oval, median brown spot on clypeus and apex of frons. Genitalia with spermathecal capsule short, slender; bursal cap oval, with 2 weakly sclerotized arms, apical strut short, wide, apically curved (Fig. 101).

**Variation.** Length 2.4 to 3.9 mm, width 2.0 to 2.4 mm. Pronotal and elytral spots slightly variable in size.

**Type material.** Holotype male; Colombia, Cnd, nr Gacheta, 20.II.42, altitude 1900 m, Murillo No 5509. (USNM). Paratypes; 7, 1, same data as holotype (USNM); 3, Colombia, Guasca-Gacheta, Feb 20' 42, Puente Licio (USNM); 1, Colombia, Cnd, Cáqueza, 8-XII-'40, Murillo No 5436 (USNM); 2, Colombia, Monterredondo, Cundinamarca, 16.7, Kolomb., 1400 m, leg. Schneble 1961 (USNM).

**Geographical distribution.** Colombia.

**Remarks.** This species and *C. holly* have many similarities in spite of a seemingly wide disparity in distribution. However, *C. brittany* is distinguished from *C. holly* by incomplete prosternal carinae that are complete and connected to the basal prosternal margin by a single carina in *C. holly*. Male genitalia of these two species are nearly identical, and the dorsal color pattern is also very similar.

### 19. *Cyrea maculosa* (Mulsant), new combination

*Cleothera maculosa* Mulsant, 1850:576.

*Hyperaspis maculosa*: Crotch 1874:220; Korschefsky 1931:192; Blackwelder 1945:447.

**Description.** Female lectotype. Length 2.5 mm, width 2.0 mm; body rounded, convex. Color yellow except head with clypeus and apex of frons faintly brown; pronotum with 7 spots, 5 mostly round spots on base, 2 subtriangular spots at middle; elytron with all margins narrowly brown, with 7 large brown spots arranged in 3 rows of 2 each plus 1 spot on suture in anterior 1/2 of elytron, 2 near humeral callus, 1 obliquely oval near outer margin of elytron, 1 discal spot round, 2 mostly round spots in apical 1/3 (Fig. 102); venter of head, prosternum, meso- and metaventrites black except mesosternal ala yellow, legs yellowish brown. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal and elytral punctures about same size as on head. Clypeus weakly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Pronotum narrowed from base to apex, sides straight, anterior angle abruptly rounded, posterior angle broadly rounded, basal margin without bordering line. Epipleuron narrow, grooved, deeply foveolate????for reception of femoral apices, descending externally. Protibia narrowly oblique, outer margin weakly curved. Basal abdominal ventrite without setal tuft (Fig. 103). Postcoxal line on basal abdominal ventrite angled to ventrite apex, rounded along border, then rounded forward. Genitalia with spermathecal capsule long, slender, weakly curved, cornu enlarged, apically rounded; bursal cap oval with 2 sclerotized outer arms, apical strut long, apically widened (Fig. 108).

**Male.** Similar to female except abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and coarse punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex slightly emarginate, nearly truncate. Apical tergite finely, densely punctured, lateral angle abrupt, apex emarginate. Genitalia with basal lobe 3/4 as long as paramere, asymmetrical, sides parallel from base to obliquely widened apex; paramere *Pav*, wide, widened from base to rounded apex, widest in apical 1/2, anterolateral angle with long projection "ear" (Fig. 104, 105); siphon strongly curved in basal 2/3, with visible alae at apical 1/12, basal capsule with inner arm short, narrow, apex truncate, with short basal projection, outer arm straight, slightly wider and longer than inner arm, with accessory piece, basal border shallowly, broadly emarginate (Fig. 106, 107).

**Variation.** Length 2.5 to 2.7 mm, width 2.0 to 2.3 mm.

**Type locality.** Colombia?

**Type depositary.** MNHP (lectotype here designated).

**Geographical distribution.** Known only from the type locality.

**Specimens examined.** 5. Colombia. V. de Medellin (Valle de Medellin).

**Remarks.** *Cyrea maculosa* has a dorsal color pattern very similar to that of *C. mariae*, male genitalia place them in the same groups, and the dorsal color pattern is very similar. It is possible that these are the same species, but *C. mariae* has the prosternal carinae complete, and male genital paramere much wider than in *C. maculosa*, the siphonal capsules and spermatheca of the female genitalia also differ.

Mulsant (1850) listed the type locality as “Colombia?”, but the lectotype does not bear a locality label. The lectotype in the MNHP is labeled “154/*Cleothera maculosa* Muls., Auct. det.”

## 20. *Cyrea mariae* (Crotch), new combination

*Hyperaspis mariae* Crotch, 1874:220; Korchefsky 1931:192; Blackwelder 1945:447; Gordon 1987:27.

**Description.** Male. Length 2.8 mm, width 2.4 mm; body rounded, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with 5 dark brown maculae, basomedian macula short, wide, extended about 1/4 distance to apical pronotal margin, anterior margin of macula sinuate, 1 obliquely oval spot present on each side of middle of pronotum, 1 small, irregularly round spot present medially near lateral pronotal margin; elytron with brown sutural border from scutellum to apex, border widened anterior to middle, apical margin narrowly bordered with brown, 7 discrete brown spots present, humeral spot small, round, scutellar spot elongate oval, discal spot oval, spot on middle of elytron irregularly square, mediolateral spot irregularly, obliquely oval, lateral spot on apical declivity irregularly rectangular, inner spot on apical declivity oval (Fig. 109); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen yellow except median 1/3 of ventrites 1-4 brown. Head punctures small, separated by a diameter or less, each puncture smaller than an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter; elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, slightly larger, nearly contiguous in lateral 1/2. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin arcuate, smooth, sponda extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined just before prosternal base, connected to prosternal base by single, short carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and coarse punctures medially, punctures becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex emarginate; 6th ventrite deeply depressed medially, apex shallowly emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe slender, about 2/3 as long as paramere, asymmetrical, sides slightly convergent from base to apex, apex rounded; paramere *Pav*, widened from base to obliquely rounded apex, upper margin with shallow, median emargination and large, sclerotized projection, or “ear” slightly posterior to apex; siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm long, slender, apex slightly rounded, outer arm about as wide and slightly longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 110, 111).

**Female.** Similar to male except head with clypeus brown. Genitalia with spermathecal capsule slightly elongate, slender, widened anterior to base, narrowed to narrowly rounded apex of cornu; bursal cap oval, with 2 weakly sclerotized arms, apical strut long, narrow, slightly widened apically (Fig. 112).

**Variation.** None observed.

**Type locality.** Colombia.

**Type depository.** UMZC (holotype).

**Geographical distribution.** Colombia.

**Specimens examined.** 2. **Colombia.** The holotype; 1 specimen lacking locality data. (UMZC) (ZMHB).

**Remarks.** The dorsal color pattern of *C. mariae* with 7 brown spots on each elytron distinguishes it from other species in the emiliae group except *C. maculosa*, as well as most other species of *Cyrea*. These spots are small and discrete in *C. mariae*, larger and with a tendency to coalesce in *C. maculosa*. The short prosternal carinae extended just past the middle of the prosternal process is also distinctive for this species. See remarks under *C. maculosa*.

## 21. *Cyrea gacognii* (Mulsant), new combination

*Cleothera gacognii* Mulsant, 1850:611.

*Hyperaspis gacognii*: Crotch 1874:221; Korchevsky 1931:189; Blackwelder 1945:447; Gordon 1987:28.

**Description.** Male. Length 2.6 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with large, black, basomedian macula extended slightly more than 2/3 distance to apical pronotal margin, apex of macula projected, weakly emarginate with yellow medially; elytron black with 5 small, yellow spots arranged in rows of 2 each with apical spot, humeral spot triangular, discal spot round, mediolateral spot projected inward, discal spot round, apical spot transversely oval (Fig. 113); ventral surface with head, prosternum, meso- and metaventrites black; abdomen yellowish brown. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to slightly more than a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, slightly larger, nearly contiguous in lateral 1/2. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin nearly straight, smooth, sponda extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/4 of prosternum, connected to base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with sparse, long pubescence and coarse punctures medially, punctures becoming denser laterally; ventrites 3-6 pubescent throughout, punctures fine; 5th ventrite depressed in median 1/3, apex widely, shallowly emarginate; 6th ventrite deeply depressed medially, apex widely, deeply emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe slender, nearly as long as paramere, asymmetrical, sides parallel in basal 4/5, apex triangular with triangular, acute projection on one side, paramere *Pav*, widened from base to rounded apex, upper margin with slender, apically forked "ear" posterior to anterolateral angle (Fig. 114); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, apex obliquely truncate, outer arm narrower and longer than inner arm, with accessory piece, basal border widely, abruptly emarginate (Fig. 115, 116).

**Female.** Similar to male except head with clypeus irregularly dark brown, pronotum entirely black except minute, median yellow spot present in anterior 1/3, lateral 1/4 irregularly yellow. Genitalia with spermathecal capsule long, slender, briefly narrowed anterior to middle, apex of cornu rounded; bursal

cap oval, with 2 barely perceptibly sclerotized arms, apical strut short, narrow, widened in apical 1/3 (Fig. 117).

**Variation.** Length 2.2 to 2.7 mm, width 1.6 to 2.2 mm. Female head with clypeus dark brown or black, pronotum with or without minute median spot, size and shape of elytral spots somewhat variable for both sexes, but remarkably consistent given the number of specimens examined. Male genitalia sometimes with dorsal margin of paramere somewhat broadly emarginate.

**Type locality.** Brazil.

**Type depository.** UMZC (lectotype designated by Gordon, 1987).

**Geographical distribution.** Brazil.

**Specimens examined.** 53. **Brazil.** Chapada; Minas Gerais, Serra do Caraca; Minas Gerais, Vicosa; Rio de Janeiro; Rio de Janeiro, Guanabara; Santa Catarina, Nova Teutonia; Sao Paulo, horto flor. (T.C.). (BMNH) (CAS) (CMNH) (DZUP) (MZSP) (USNM) (ZMHB).

**Remarks.** The dorsal color pattern of *C. gacognii* is similar to that of many other *Cyrea* species, and male genitalia are needed for positive identification. The mostly yellow female head with a dark clypeus is of some slight identification help.

This is a frequently collected species in southeastern Brazil, and seems to have its distribution limited to that area.

In addition to the UMZC lectotype, there is a paralectotype (by present designation) in the BMNH, and a paralectotype in the MNHL labeled "Museum Paris, Rio Janeiro, de Castelnau 117-47/162/Cleothera gacognii Muls., auc. det."

## 22. *Cyrea pearl* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.7 mm, width 2.3 mm; body somewhat rounded, oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with short, wide, dark brown basomedian macula extended 2/3 distance to anterior pronotal margin, macula with wide projection on each side of middle, projections widely separated; elytron dark brown with 5 large yellow spots arranged in rows of 2 each with apical spot, humeral spot rectangular, scutellar spot irregularly rounded, mediolateral spot projected inward, feebly connected to apical spot, discal spot somewhat oval, apical spot transversely rectangular, anterior border of spot slightly emarginate (Fig. 118); ventral surface with head, prosternum, meso- and metaventrite dark brown; abdomen yellowish brown. Head punctures small, separated by a diameter or less, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to a diameter; metaventral punctures larger than on elytron, separated by less than a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, descending externally, deeply foveolate for reception of femoral apices. Protibia with wide oblique angle, outer margin arcuate, smooth, sponda slightly extended beyond angle (Fig. 119). Carinae on prosternal process widely separated apically, convergent, joined at base of prosternum. Metaventrite with setal tuft. Basal abdominal ventrite with indistinct setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with dense, short pubescence and coarse, sparse punctures; ventrites 3-6 with long, dense pubescence throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about 3/4 as long as paramere,



asymmetrical, sides slightly convergent to apical 1/4, apical 1/4 curved to rounded apex; paramere *Pav*, widened from base to apex, upper margin broadly emarginate medially, obliquely truncate in apical 1/3, with wide projection “ear” based on truncate area, apex of projection narrowly, heavily sclerotized (Fig. 120, 121); siphon strongly curved in basal 1/2, apical 1/2 lost, basal capsule with inner arm wide, slightly elongate, apex truncate, inner arm about as long and as wide as inner arm, with accessory piece (Fig. 122), basal border widely, shallowly emarginate.

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Colombia, 10mi. S. Cali, Valle, Feb. 23, 1970, H. F. Howden. (USNM).

**Geographical distribution.** Colombia.

**Remarks.** *Cyrea pearl* differs from the other similarly marked species in this group by pronotum with basomedian macula reduced to a narrow, basal brown band with large, brown anterior extensions; and paramere of male genitalia having a wide anterolateral projection.

### 23. *Cyrea arlene* Gordon and Canepari, new species

**Description.** Male holotype. Length 2.4 mm, width 2.0 mm; body somewhat rounded, oval, convex. Dorsal surface with head weakly alutaceous, slightly shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with short, narrow, pale brown basomedian macula with short, anterior projection at each end and at middle, lateral projection feebly connected to narrow, semicircular macula on each side of middle of pronotum, semicircular macula extended slightly more than 1/2 distance to anterior pronotal margin; elytron pale yellowish brown with 6 indistinctly defined yellow spots arranged in rows of 2 each with apical spot, humeral spot triangular, scutellar spot large, oval, connected at base to elongate intermediate spot, intermediate spot between humeral and scutellar spot elongate, mediolateral spot seemingly absent, discal spot somewhat oval, apical spot transversely rectangular, anterior border of spot slightly emarginate (Fig. 123); ventral surface with head, prosternum, meso- and metaventrite yellowish brown; abdomen yellow. Head punctures small, separated by less than a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures larger than on elytron, separated by less than to twice a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron wide, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated apically, convergent, joined at base of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with dense, short pubescence and coarse, sparse punctures; ventrites 3-6 with long, dense pubescence throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about 3/5 as long as paramere, asymmetrical, sides parallel to apex, apex obliquely truncate; paramere *Pav*, widened from base to apex, upper margin arcuate with anterolateral impression, large, apically bifid “ear” based on emargination (Fig. 124, 125); siphon strongly curved in basal 1/2, apex lost, basal capsule with inner arm somewhat elongate, wide, outer arm about as wide as and longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 126, 127).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Colombia, Columb., Thieme, *Cleothera luteoguttata?* (illegible) Chevr. (ZMHB).

#### **Geographical distribution Colombia.**

**Remarks.** If the obscure elytral color pattern is consistent this species it is readily differentiated from other members of the group. The paramere of the male genitalia is unique because the anterolateral “ear” or projection is very large, and the basal lobe is apically obliquely truncate.

#### **24. *Cyrea maureen* Canepari and Gordon, new species**

**Description.** Male holotype. Length 2.3 mm, width 1.8 mm; body somewhat rounded, oval, convex. Dorsal surface with head slightly alutaceous, weakly shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with short, narrow, dark brown basomedian macula extended slightly more than 1/2 distance to anterior pronotal margin, macula with wide, oblique projection on each side of middle, projections widely separated; elytron dark brown with 6 yellow spots arranged in rows of 2 each with apical spot plus intermediate spot at middle posterior to humeral and scutellar spots, humeral spot rectangular, scutellar spot widely triangular, mediolateral spot irregularly oval, discal spot oval, apical spot transversely rectangular, anterior border of spot entire, intermediate spot small, oval (Fig. 128); ventral surface with head, prosternum, meso- and metaventrite dark brown; abdomen yellowish brown. Head punctures small, separated by less than a diameter, each puncture about as large as 2 eye facets; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron, separated by less than to twice a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow, bisinuate flange, outer margin sinuate, smooth, sponda slightly extended beyond angle (Fig. 129). Carinae on prosternal process narrowly separated apically, convergent, joined at basal 1/6 of prosternum, connected to base with single carina. Metaventrite without setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with dense, short pubescence and fine, dense punctures; ventrites 3-6 with long, dense pubescence throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex widely, shallowly emarginate; 6th ventrite medially depressed, apex deeply, abruptly emarginate. Apical tergite finely, densely punctured, apex emarginate, lateral angle widely, strongly projected. Genitalia with basal lobe nearly as long as paramere, asymmetrical, sides convergent to narrowly rounded apex; paramere *Pav*, sinuate, apically truncate, widened from base to apex, upper margin broadly emarginate medially, with large, almost membranous projection terminating in small, apically acute, sclerotized “ear” (Fig. 130, 131); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, slender, apex slightly rounded, outer arm slender, curved, slightly longer and wider than inner arm, with accessory piece (Fig. 132, 133), basal border sinuate.

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Surinam, Paramaribo, 20-vii-1980, M.I. Russell, general sweeping. (BMNH).

**Geographical distribution** Surinam.

**Remarks.** This species differs from most other *Cyrea* taxa by having 6 spots on each elytron, the 6th spot medially in anterior 1/2 posterior to humeral and scutellar spots. It shares with *C. colleen* protibiae with bisinuate flange, apex of male 6th abdominal ventrite abruptly, deeply emarginate, and apical tergite with wide, large projection on lateral angle.

*Cyrea maureen* and *C. colleen* share similar protibial flanges, but have nothing else in common. The sinuate paramere of the male genitalia of *C. maureen* is slightly similar to that of *C. agnes*, but that species does not have an apical “ear.”

### 25. *Cyrea colleen* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.4 mm, width 1.9 mm; body somewhat rounded, oval, convex. Dorsal surface with head, pronotum and elytron smooth, shiny. Color yellow except pronotum with short, wide, dark brown basomedian macula extended 1/4 distance to anterior pronotal margin, macula deeply emarginate medially, with angulate anterior projection on each side of middle, small, pale brown projection on each side of middle extended from basomedian macula toward pronotal apex; elytron brown with 5 large yellow spots arranged in rows of 2 each with apical spot, humeral spot rectangular, scutellar spot slightly oval, mediolateral spot irregularly rounded, discal spot oval, apical spot transversely rectangular, anterior border of spot not emarginate (Fig. 134); ventral surface with head, prosternum, meso- and metaventrite dark brown; abdomen yellow except median 1/3 of ventrites 1-3 yellowish brown. Head punctures small, separated by less than a diameter, each puncture about as large as 2 eye facets; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to slightly more than twice a diameter; metaventral punctures larger than on elytron, separated by less than a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus slightly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with wide flange, outer margin bisinuate, smooth, sponda slightly extended beyond angle (Fig. 135). Carinae on prosternal process narrowly separated apically, convergent, joined at basal 1/6 of prosternum, connected to base by single carina. Metaventrite with setal tuft. Basal abdominal ventrite with small setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with dense, short pubescence and coarse, sparse punctures; ventrites 3-6 with long, dense pubescence throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex widely, shallowly emarginate; 6th ventrite medially depressed, with cusp on each side of middle, apex weakly emarginate with rounded projection at middle of emargination. Apical tergite finely, densely punctured, apex widely emarginate, lateral angle produced with large, slightly hooked projection. Genitalia with basal lobe about 3/4 as long as paramere, asymmetrical, sides convergent from base to rounded apex; paramere *Pav*, widened from base to truncate apex, upper margin straight, with small, acute, sclerotized projection “ear” at anterolateral angle (Fig. 136, 137); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm narrow, elongate, apex rounded, inner arm slightly longer than and as wide as inner arm, with accessory piece (Fig. 138, 139), basal border widely, shallowly emarginate.

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Colombia, Cnd (Cundinamarca), Rio Negro below Pacho, 26 II'42, Chapin No664. (USNM).

**Geographical distribution.** Colombia.

**Remarks.** This species and *C. maureen* share similar protibial flanges and lateral projections of the male apical tergite. They are immediately distinguished from each other by the number of spots on each elytron, cusps on the 6th abdominal ventrite present or absent, and form of the male genitalia. See remarks under *C. maureen*.

## 26. *Cyrea crotchi* (Harold), new combination

*Hyperapis crotchi* Harold, 1875: 213; Korschefsky 1931: 186 (replacement name for *Hyperaspis carolinae* Crotch, 1874: 223).

*Hyperaspis carolinae* Crotch, 1874: 223; Korschefsky 1931: 186; Gordon 1987: 28 (preoccupied by *Hyperaspis carolinae* Crotch, 1874: 220, now *Dilatitibialis carolinae*).

**Description.** Male. Length 3.3 mm, width 2.7 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with black, basomedian macula extended 3/4 distance to apical pronotal margin, apex of macula widely projected, weakly emarginate with yellow medially; elytron black with 2 yellow spots, humeral spot small, triangular, spot on lateral apical declivity elongate oval (Fig. 140); ventral surface with head, prosternum, meso- and metaventrites black, metafemur brown; abdomen dark brown except ventrite 6 yellowish brown. Head punctures small, separated by a diameter or less, each puncture as large as 2-3 eye facets; pronotal punctures larger than head punctures, separated by less than to about a diameter; elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures larger than on elytron, separated by less than a diameter medially, larger, nearly contiguous in lateral 1/2. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, wide, rounded throughout, pale yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron wide, weakly grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin arcuate, smooth, sponda extended beyond angle (Fig. 141). Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/4 of prosternum, connected to base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with sparse, long pubescence and coarse punctures; ventrites 3-6 pubescent throughout, punctures fine; 5th ventrite depressed in median 1/3, apex widely, shallowly emarginate; 6th ventrite deeply depressed medially, apex widely, deeply emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe slender, slightly more than 1/2 as long as paramere, sides slightly convergent from base to obliquely truncate apex, paramere *Pav*, widened from base to rounded apex, upper anterior angle with almost membranous projection terminated with apically forked "ear" (Fig. 142, 143); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, apex rounded, outer arm slightly wider and longer than inner arm, with accessory piece, basal border widely, abruptly emarginate (Fig. 144, 145).

**Female.** Similar to male except head black, pronotum black except narrow anterolateral angle yellow, elytron with humeral spot absent. Genitalia with spermathecal capsule slightly elongate, slender, narrowed at middle, apex of cornu rounded; bursal cap rounded, with 2 feebly sclerotized arms, apical strut short, slender, apex abruptly widened (Fig. 146).

**Variation.** Length 3.4 to 3.8 mm, width 2.7 to 3.2 mm. Size and shape of apical spot on elytron somewhat variable.

**Type locality.** Not stated, but almost certainly Brazil.

**Type depository.** UMZC (lectotype designated by Gordon, 1987).

**Geographical distribution.** Brazil.

**Specimens examined.** 6. **Brazil.** Corupa, (Hansa Humboldt), S. Cath.; Nova Teutonia; Rio de Janeiro. (BMNH) (CAS) (CMNH) (DZUP) (ZMHB).

**Remarks.** The dorsal color pattern of *C. crotchi* is distinctive on its own, but the species is positively identified by the wide, rounded (fat), pale yellow eye canthus. The shape of the canthus is similar only to that of *C. flavocalceata*.

Crotch (1874) described *Hyperaspis carolinae* on page 220, then repeated the same name on page 223. Harold (1875) replaced the latter name with *H. crotchi*. *Hyperaspis carolinae* Crotch (1874, p. 220) was transferred to *Dilatitibialis* by Canepari and Gordon (2013).

## 27. *Cyrea compta* (Mulsant), new combination

*Cleothera compta* Mulsant, 1850:594.

*Hyperaspis compta*: Korschefsky 1931:186; Blackwelder 1945:446.

**Description.** Male lectotype. Length 2.9 mm, width 2.4 mm; body rounded, somewhat oval, convex. Color yellow except pronotum with wide, short, black basomedian macula, basomedian macula with median anterior projection, projection divided into slender, curved extension on each side of middle; elytron black with 2 yellow maculae, lateral margin unevenly bordered with yellow from humeral angle to apex, median yellow vitta unevenly extended from base near scutellum to apical yellow area (Fig. 147); ventral surface with meso-, metaventrite, and abdomen brown. Head punctures small, separated by about a diameter, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by about a diameter, elytral punctures smaller than on pronotum, separated by about twice a diameter; metaventral punctures small, widely spaced medially, larger, narrowly spaced laterally. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, wide, rounded throughout, pale yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin arcuate, smooth (Fig. 148). Carinae on prosternal process narrowly separated at apex, convergent, joined at base. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with sparse, long pubescence and coarse punctures; ventrites 3-6 with setal tufts on each side of middle, punctures fine; 5th ventrite depressed in median 1/3, apex widely, shallowly emarginate; 6th ventrite deeply depressed medially, apex widely, deeply emarginate with small tubercle on each side of emargination. Genitalia with basal lobe slender, slightly more than 1/2 as long as paramere, sides parallel from base to obliquely truncate apex, paramere *Pav*, widened from base to rounded apex, upper margin with apically forked "ear" (Fig. 149, 150); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, apex rounded, outer arm narrower and longer than inner arm, with accessory piece, basal border widely, abruptly emarginate (Fig. 151, 152).

**Female.** Unknown.

**Variation.** Unknown.

**Type locality.** Colombia.

**Type depository.** MNHP (lectotype here designated).

**Geographical distribution.** Colombia.

**Specimens examined.** 1. The lectotype. (MNHP)

**Remarks.** The dorsal color pattern of *C. compta* is not dissimilar from that of some other *Cyrea* species, but is distinctive within the emiliae group. A combination of dorsal color pattern and abdominal setal tufts on each side of male ventrites 3-6 will characterize this species.

A type specimen in the MNHP labeled "Type/Coll. Mniszech./compta Muls. Colombia. Type." is designated as the lectotype.

## 28. *Cyrea stella* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.3 mm, width 1.7 mm; elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with M-shaped, pale brown median macula; elytron entirely yellowish brown with 5 large yellow spots arranged in rows of 2 each with apical spot, humeral spot rectangular, scutellar spot slightly oval, mediolateral spot irregularly rounded, discal spot oval, apical spot transversely rectangular, anterior border of spot not emarginate (Fig. 153); ventral surface with head, prosternum pale brownish yellow, meso- and metaventrite dark yellowish brown; abdomen brownish yellow except paler laterally and apically. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus slightly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia narrowly oblique, outer margin arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated apically, convergent, joined at basal 1/6 of prosternum, connected to base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without small setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with dense, short pubescence and coarse, sparse punctures; ventrites 3-6 with short, dense pubescence throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about 2/3 as long as paramere, asymmetrical, sides slightly convergent from base to obliquely truncate apex; paramere *Pav*, widened from base to rounded apex, upper margin slightly curved, with small, apically blunt "ear" at anterolateral angle (Fig. 154, 155); siphon strongly curved in basal 2/3, apical 1/2 lost, basal capsule with inner arm short, narrow, projected forward, apex rounded, outer arm longer and wider than inner arm, with accessory piece (Fig. 156, 157), basal border abruptly, deeply emarginate.

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; (Colombia) Columb Pehlke, R. Korschevsky cum typ. comp., Korschevsky Collection 1952, *Hyp. luteola* Muls., det. R. Korschevsky 1945. (USNM).

**Geographical distribution.** Colombia.

**Remarks.** This species has the appearance of a very small *C. languida* although the male genitalia are completely different.

### hexastigma group

#### 29. *Cyrea june* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.6 mm, width 2.0 mm; body oval, convex. Dorsal surface with head alutaceous, dull, pronotum weakly alutaceous, weakly shiny, elytron smooth, shiny. Color yellow except pronotum with long, narrow, black basomedian macula extended 3/4 distance to anterior pronotal margin, macula with apical border entire; elytron with 3 black spots, discal spot on sutural margin anterior to middle of elytron short, narrow median anterior spot irregularly rectangular, apical spot irregularly rounded (Fig. 158); ventral surface with prosternum, meso- and metaventrites dark brown; abdomen yellow except median 1/3 of ventrites 1-4 dark brown. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures about as large as on elytron, separated by about a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, weakly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/3 of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and small punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex medially emarginate with tuft of setae and tubercle on each side of emargination; 6th ventrite medially depressed, apex deeply, widely emarginate with lateral angle produced, rounded. Apical tergite finely, densely punctured, apex deeply emarginate. Genitalia with basal lobe longer than paramere, asymmetrical, sides slightly curved in basal 3/4, apical 1/4 abruptly bent to one side, apex obliquely truncate, outer angle acute; paramere *Pem*, strongly widened from base to emarginate apex, upper margin apically acute, lower margin rounded (Fig. 159, 160, 161); siphon curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, apically truncate, outer arm wider and longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 162, 163).

**Female.** Similar to male except head with large, black median macula on frons narrowly surrounded by yellow. Genitalia with spermathecal capsule long, slender, cornu bulbous; bursal cap oval, with 3 sclerotized arms, apical strut long, base with short, slender projection posterior to short, enlarged area, remainder of strut slender, widened from base to apex (Fig. 164).

**Variation.** Length 2.5 to 3.0 mm, width 1.8 to 2.4 mm. Pronotum with basomedian black macula rarely with apex slightly emarginate with yellow, discal spot on elytron slightly variable in size, many specimens with discal spot separated from sutural margin.

**Type material.** Holotype male; Brazil, Nova Teutonia, lat.27° 11'S, lon.52° 23'W, VIII-23-1945, F. Plaumann. (USNM). Paratypes 15, 3, same data as holotype (USNM); 9, Brasiliën, Nova Teutonia, 27° 11'B. 52° 23' L, 3.12.1935, 2.9.1935, 22.8.1935, 11.4.1935, Jan. 1939, 23.II.1939, X. 1962, XI.1980 (BMNH) (DZUP) (MNRJ) (USNM); 2, Nova Teutonia, SC, Brasil, IX.1966, F. Plaumann col. (DZUP); 1 (Brazil) P. Grossa (illegible), Colecao F. Justus Jor (DZUP).

**Geographical distribution.** Brazil.

**Remarks.** *Cyrea june* has a dorsal color pattern quite similar to that of *C. emiliae*, but the short, narrow discal spot on each elytron is characteristic of the former species. Male genitalia and abdomen with a tubercle and setal tuft on each side of the middle of the 5th abdominal ventrite are unusual and unique to *C. june*, but are similar to those of the *thelma* group in *Serratitibia*. Presence of tubercles on the male 5th ventrite is a primary defining character for members of *Serratitibia* Gordon and Canepari, but *C. june* lacks primary abdominal pores, and male genitalia are not of the type found in that genus.

### 30. *Cyrea hexastigma* (Mulsant), new combination

*Cleothera hexastigma* Mulsant, 1850:556.

*Hyperaspis hexastigma*: Crotch 1874:217; Korschefsky 1931:190; Blackwelder 1945:447; Gordon 1987:27.

*Cleothera gracilis* Mulsant, 1850:558. NEW SYNONYM.

*Hyperaspis gracilis*: Crotch 1874:219; Korschefsky 1931:189; Blackwelder 1945:447.

**Description.** Male. Length 3.8 mm, width 3.0 mm; body rounded, slightly oval, convex. Dorsal surface with head weakly alutaceous, feebly shiny, pronotum and elytron smooth, shiny. Color reddish yellow except pronotum with darker reddish basomedian macula extended 2/3 distance to anterior pronotal margin, apex of macula deeply, narrowly emarginate with reddish yellow, small, dark brown spot on each side of middle in basal 1/3; elytron reddish yellow with 3 small, dark brown spots, humeral spot elongate, extended from humeral callus posteriorly, discal spot near suture in anterior 1/2 rounded, apical spot on apical declivity irregularly transversely oval. (Fig. 165); ventral surface reddish yellow except metaventrite dark brown; abdomen yellow except median 1/3 darker reddish brown. Head punctures small, separated by a diameter or less, each puncture about as large as 2 eye facets; pronotal punctures slightly larger than head punctures, separated by a diameter or less, elytral punctures as large as on pronotum, separated by 1 to 2 times a diameter; metaventral punctures larger than on elytron, separated by less than a diameter medially, becoming larger and separated by a diameter or less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, slightly angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly rounded, basal margin without trace of bordering line medially. Epipleuron wide, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly curved, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent toward base, joined at basal 1/4 of prosternum, single carina extended to prosternal base. Metaventrite with sparse setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with small, dense punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite weakly depressed medially, apical margin broadly, feebly emarginate; 6th ventrite short, narrow, depressed medially, apical margin weakly emarginate, angle on each side of emargination rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe longer than paramere, asymmetrical, sides convergent in basal 7/8, apical 1/8 rounded to abruptly curved apex; paramere *Pem*, widened from base to apex, apex deeply, broadly emarginate, upper margin with apex broadly rounded, lower margin apically curved to rounded apex (Fig. 166, 167); siphon strongly curved in basal 2/3, with trace of visible alae at apical 1/10, basal capsule with inner arm short, narrowed medially, apex widened, obliquely truncate, outer arm wider and slightly longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 168, 169).

**Female.** Similar to male except head with clypeus dark brown, pronotum lacking dark brown spots. Genitalia with spermathecal capsule long, slender; bursal cap oval, with 2 sclerotized arms, apical strut short, apically spatulate (Fig. 170).



**Variation.** Length 3.5 to 3.8 mm, width 2.7 to 3.0 mm. Pronotum with dark brown spots present or absent, elytron sometimes with dark brown spots reduced to faint, brownish traces difficult to see.

**Type locality.** Of *hexastigma* and *gracilis*, Brazil.

**Type depository.** Of *hexastigma*, UMZC (lectotype designated by Gordon 1987); of *gracilis*, ZMHB (holotype).

**Geographical distribution.** Brazil.

**Specimens examined.** 6. **Brazil.** “Brasil;” Rio de Janeiro. (BMNH) (ZMHB).

**Remarks.** This large species, usually with 3 dark brown spots on a pale elytron, is easily recognized, although the color pattern is somewhat variable. The only other species with which it might be confused is *C. gracilis* which has a black head and mostly black pronotum. Only 2 specimens of *C. gracilis* were available for examination, the female holotype and another female specimen in the ZMHB collection. These two names seem to refer to the same species because female genitalia do not differ between them. Therefore *C. gracilis* is considered a junior synonym. Both *C. june* and *C. hexastigma* are placed in the same group because of the similar male genitalia, but they differ widely in structure of the terminalia of the male abdominal ventrites, so may not be closely related.

In addition to the UMZC lectotype, additional type specimens have been examined and are designated as paralectotypes. These are a male in the DEI labeled “Brasil Schaum (handwritten)/Coll. Haag/Syntypus (pink paper)/hexastigma Mls Typ (handwritten)/Coll. DEI Müncheberg.”, and 2 specimens, male and female, in the ZMHB labeled “55696/hexastigma Muls. Bras. (handwritten)/Hist.-Coll. (Coleoptera), Nr. 5696, Exochomus hexastigma Muls., Brasil, Zool. Mus. Berlin.”

### 31. *Cyrea natalia* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.5 mm, width 2.1 mm; body rounded, somewhat elongate, convex. Dorsal surface with head slightly alutaceous, weakly shiny, pronotum slightly alutaceous, shiny, elytron smooth, shiny. Color yellow except pronotum with black basomedian macula extended 4/5 distance to anterior pronotal margin, macula protruding medially, anterior border narrowly, deeply emarginate with yellow medially, anterolateral 2/5 of pronotum yellow; elytron black with 5 small, yellow spots arranged in rows of 2 each with apical spot, humeral spot small, triangular, scutellar spot rounded, mediolateral spot projected inward, discal spot oval, apical spot transversely rectangular with anterior border slightly emarginate (Fig. 171); ventral surface with head, prosternum, meso- and metaventrite black; abdomen yellowish brown except median portions of ventrites 1-3 dark brown. Head punctures small, separated by less than a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than twice a diameter, elytral punctures larger than on pronotum, separated by less than twice a diameter; metaventral punctures much larger than on elytron, separated by less than to about a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus slightly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron wide, weakly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/3, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened medially, extended forward at apex, ventrite and ventrite 2 with sparse, long pubescence and coarse, dense punctures; ventrites 3-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe nearly as long as paramere, asymmetrical, sides parallel from base to rounded apex; paramere *Pem*, widened from nar-

row base to wide apex, lower margin curved, apex appearing truncate but with faint trace of emargination (Fig. 172, 173); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm short, slender, outer arm long, slender, sinuate, wider and longer than inner arm, with accessory piece, basal border broadly, shallowly emarginate (Fig. 174, 175).

**Female.** Similar to male except head black with median yellow spot at base of frons, pronotum entirely black except anterolateral angle triangularly yellow. Genitalia with spermathecal capsule short, weakly curved, slightly widened from base to rounded apex; bursal cap lost (Fig. 176).

**Variation.** Length 2.4 to 2.5 mm. The Rio de Janeiro paratype has apex of basomedian macula very slightly emarginate with yellow, yellow pronotal spots about 2/3 the size of spots on the holotype.

**Type material.** Holotype male; (Brazil), Sitio Bananal, Guarulhos, S. Paulo, 6.X.1957, J. Halik, 4544. (USNM). Paratypes; 3, 1, same data as holotype except date 19.IX.1957, J. Halik, 3104 (USNM); 1, (Brazil) 4268, Fry Rio Jan., Fry Coll. 1905.100.(BMNH); 1, Fry, Rio Jan, Fry Coll, 1905.100., *Cleothera trivialis* Muls. (BMNH).

**Geographical distribution.** Brazil.

**Remarks.** This species has a dorsal color pattern identical to that of many other species of *Cyrea*, and only male genitalia will differentiate it from those species as well as others in the hexastigma group.

The specific name honors Natalia Vandenberg, fellow researcher in Coccinellidae systematics, in recognition of her fellowship and help in constructing this and many previous manuscripts.

### 32. *Cyrea vera* Canepari and Gordon, new species

**Description.** Male. Length 4.0 mm, width 3.4 mm; body rounded, somewhat oval, convex. Dorsal surface with head alutaceous, dull, pronotum faintly alutaceous, shiny, elytron smooth, shiny. Color yellow except head reddish yellow with clypeus black and base of frons with black macula on each side of middle; pronotum with wide, short, black basomedian macula extended slightly more than 1/2 distance to anterior pronotal margin, macula protruding medially, anterior border widely, deeply emarginate with yellow medially; elytron black with 6 large, yellow spots arranged in rows of 2 each with humeral and scutellar spots connected, mediolateral spot projected inward, discal spot irregularly round, apicolateral spot and apical spot near suture connected (Fig. 177); ventral surface with head, prosternum, meso- and metaventrite black, legs yellow except tarsi, protibia, mesotibia, and entire metaleg dark brown; abdomen yellow except median portion of ventrites 1-3 dark brown. Head entirely pubescent, punctures small, separated by less than a diameter, each puncture about as large as 2 eye facets; pronotal punctures as large as head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures much larger than on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus slightly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, nearly straight, basal margin without trace of bordering line medially. Epipleuron wide, slightly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle (Fig. 178). Carinae on prosternal process apparently entirely absent. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-3 with dense, long pubescence and coarse, dense punctures; ventrites 4-6 with long, dense pubescence throughout, punctures fine, dense; 5th ventrite not depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about as long as paramere, asymmetrical, sides convergent from base to apical 1/5, apical 1/5 narrowed to rounded apex; paramere *Pem*, widened from narrow

base to extremely wide apex, lower margin curved, apex truncate (Fig. 179); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm short, wide, outer arm wider and longer than inner arm, with accessory piece, basal border broadly, shallowly emarginate (Fig. 180, 181).

**Female.** Unknown.

**Variation.** None observed.

**Type material.** Holotype male; Peru, July 28, 1936, F. Woytkowski, No. 3755, San Ildefonso Hills, 1900-4000m asl, Dept. Amazonas. (USNM). Paratype; 1, same data as holotype (USNM).

**Geographical distribution.** Peru.

**Remarks.** *Cyrea vera* is an easily recognized species because of the large size; rounded body form; black clypeus of male; lack of prosternal carinae; and elytron with 6 yellow spots, humeral and scutellar spots connected, and apicolateral and inner spot near suture connected.

### 33. *Cyrea agnes* Canepari and Gordon, new species

**Description.** Male. Length 3.4 mm, width 2.8 mm; body elongate oval, convex. Dorsal surface with head weakly alutaceous, slightly shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with black basomedian macula extended slightly more than 2/3 distance to anterior pronotal margin, macula protruding medially, anterior border widely, deeply emarginate with yellow medially; elytron black with 5 large, yellow spots arranged in rows of 2 each plus apical spot, humeral spot irregularly rectangular, scutellar spot round, mediolateral spot projected inward, discal spot irregularly oval, apical spot transversely rectangular with apical border weakly emarginate (Fig. 182); ventral surface with head, prosternum, meso- and metaventrite black; abdomen yellow except median portion of ventrites 1-3 brown. Head punctures small, separated by less than a diameter, each puncture about as large as 2 eye facets; pronotal punctures larger than head punctures, separated by less than to about a diameter; elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron wide, slightly grooved, weakly descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent toward base, carinae joined just before basal prosternal margin. Metaventrite with dense setal tuft. Basal abdominal ventrite with dense setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with coarse, dense punctures; ventrites 3-5 with long, dense pubescence throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, surface with long, dense setae, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe shorter than paramere, asymmetrical, sides weakly convergent from base to rounded apex; paramere *Pem*, sinuate, widened from narrow base to wide apex, lower margin curved, upper margin sinuate, apex obliquely truncate (Fig. 183, 184); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, wide, outer arm narrower and slightly longer than inner arm, with accessory piece, basal border broadly, shallowly emarginate (Fig. 185, 186).

**Female.** Similar to male except head black with frons medially and basally yellow, pronotum entirely black except anterolateral angle triangularly yellow. Genitalia with spermathecal capsule short, weakly

curved, slightly widened from base to rounded apex; bursal cap oval with 2 slender, sclerotized arms, apical strut short, slender, apical 1/3 spatulate (Fig. 187).

**Variation.** Length 3.3 to 3.6 mm, width 2.4 to 2.0 mm. Female head varies from that described above to entirely black with median, yellow triangular macula on frons, female pronotum may have a central, diamond shaped macula, and elytron rarely with apical and discal spots narrowly connected.

**Type material.** Holotype male; Peru, Callanga, ex. Coll. J. Weise (ZMHB). Paratypes; 12, 10, same data as holotype (ZMHB); 1, (Peru) Tingo Maria, 21.8.64, J. Lamas Coll., S.N.A., 784-64 (JEBC); 1, Peru, Satipo, x-xii.1935., F. Waytkowski(sic), B.M.1936-732 (BMNH).

**Geographical distribution.** Peru.

**Remarks.** *Cyrea agnes* is not easily recognized by external appearance alone except that it is larger than most of the similarly patterned species. It is distinctive by males having dense setal tufts on the metaventrite and basal abdominal ventrites. Male genitalia are also extremely distinctive and diagnostic.

### 34. *Cyrea willie* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.0 mm, width 2.4 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum faintly alutaceous, shiny, elytron smooth, shiny. Color yellow except pronotum with large black basomedian macula extended 5/6 distance to anterior pronotal margin, macula with anterior border smoothly arcuate; elytron black with 5 large, yellow spots arranged in rows of 2 each with apical spot, humeral spot triangular, scutellar spot irregularly rounded, mediolateral spot widely separated from lateral margin of elytron, triangular, discal spot triangular, apical spot transversely oval, anterior border of spot entire (Fig. 188); ventral surface with head, prosternum, meso- and metaventrite black; abdomen yellowish brown except median portion of ventrites 1-3 dark brown. Head punctures small, separated by less than a diameter, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, weakly descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated apically, convergent, jointed at basal 1/3 of prosternum, connected to base by single carina. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-3 with dense, long pubescence and fine, dense punctures; ventrites 4-6 with long, dense pubescence throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about as long as paramere, asymmetrical, sides parallel from base to apical 1/4, apical 1/4 abruptly projected on one side; paramere *Pem*, widened from narrow base to wide apex, upper and lower margins weakly curved, apex weakly emarginate (Fig. 189, 190); siphon strongly curved in basal 3/4, without visible alae, basal capsule with inner arm long, slender, outer arm wider and about as long as inner arm, with accessory piece, basal border broadly, shallowly emarginate (Fig. 191, 192).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; (Brazil) Fry, Rio Jan., Fry Coll., 1905.100. (BMNH).

**Geographical distribution.** Brazil.

**Remarks.** This species is not easily distinguished on external characters, but the mediolateral spot widely separated from the lateral elytral margin, and presence of setal tufts on both metaventrite and basal abdominal ventrite are somewhat distinctive within this group.

### 35. *Cyrea charlene* Canepari and Gordon, new species

**Description.** Male. Length 2.7 mm, width 2.2 mm; body elongate oval, convex. Dorsal surface with head, pronotum, and elytron smooth, shiny. Color yellow except pronotum with black basomedian macula extended 3/4 distance to anterior pronotal margin, macula with anterior border projected medially, apical margin of macula entire; elytron black with 5 yellow spots arranged in rows of 2 each with apical spot, humeral spot triangular, scutellar spot irregularly rounded, mediolateral spot narrowly separated from lateral margin of elytron, irregularly rounded, discal spot somewhat oval, apical spot transversely rectangular, anterior border of spot slightly emarginate (Fig. 193); ventral surface with head, prosternum, meso- and metaventrite dark brown; abdomen yellowish brown except median portion of ventrites 1-3 dark brown. Head punctures small, separated by less than a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated apically, convergent, jointed at basal 1/4 of prosternum, connected to base by single carina. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with dense, long pubescence and coarse, sparse punctures; ventrites 4-6 with long, dense pubescence throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe slightly longer than paramere, asymmetrical, sides nearly parallel from base to apical 1/4, apical 1/4 curved to rounded apex; paramere *Pem*, widened from narrow base to extremely wide apex, upper margin straight, apically acute, lower margin abruptly curved before middle, apex abruptly rounded, entire apex broadly emarginate (Fig. 194, 195); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, slender, apex obliquely truncate, outer arm wider and longer than inner arm, curved, with accessory piece, basal border broadly, shallowly emarginate (Fig. 196, 197).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Bolivia, Mapiri (ZMHB).

**Geographical distribution.** Bolivia.

**Remarks.** *Cyrea charlene* is similar to several other species externally, but male genitalia distinguish it from other members of this group. It is quite similar to the preceding *C. willie*, but the smaller black pronotal macula and mediolateral spot much closer to the lateral elytral margin will separate *C. charlene* from that species.

**36. *Cyrea bessie* Canepari and Gordon, new species**

**Description.** Male. Length 2.3 mm, width 1.7 mm; body elongate oval, convex. Dorsal surface with head weakly alutaceous, slightly shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with narrow, light brown basomedian macula with rectangular anterior projection on each side of middle extended 2/3 distance to anterior pronotal margin, small, obscure rounded spot present on each side near lateral pronotal margin; elytron pale brown with 5 large, yellow spots arranged in rows of 2 each with apical spot, humeral spot elongate triangular, nearly reaching mediolateral spot, scutellar spot rounded, mediolateral spot oval, slightly projected inward, discal spot oval, apical spot transversely rectangular, anterior border of spot entire (Fig. 198); ventral surface with head, prosternum, meso- and metaventrite pale reddish brown; abdomen yellow. Head punctures small, separated by less than a diameter, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures slightly larger than on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated apically, convergent, jointed at basal 1/6 of prosternum, connected to base by single carina. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with dense, long pubescence and coarse, dense punctures; ventrites 3-6 with long, dense pubescence throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about as long as paramere, asymmetrical, sides slightly convergent from base to apical 1/4, apical 1/4 curved to abruptly rounded apex; paramere *Pem*, widened from narrow base to wide apex, upper margin nearly straight, lower margin strongly curved, apex slightly oblique, weakly emarginate (Fig. 199, 200); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm long, slender, abruptly narrowed medially, apex obliquely truncate, outer arm wider and longer than inner arm, with accessory piece, basal border broadly, shallowly emarginate (Fig. 102, 202).

**Female.** Similar to male except head with clypeus and apex of frons yellowish brown, pronotum with rectangular anterior projections extended to apical pronotal margin. Genitalia with spermathecal capsule short, slightly bent medially, narrowed from base to acute apex of cornu; bursal cap oval with 2 slender, sclerotized arms, apical strut short, slender, slightly widened in apical 1/3 (Fig. 203).

**Variation.** Length 2.0 to 2.4 mm, with 1.6 to 1.8 mm. Female pronotum may have the rectangular anterior arms of basomedian macula wide, leaving only a narrow, elongate yellow median spot.

**Type material.** Holotype male; Brazil, Chapada, ACC.No.2966, April. (CMNH). Paratypes; 4, same data as holotype except additional month of "Nov." (CMNH).

**Geographical distribution.** Brazil.

**Remarks.** This species is the only pale brown and yellow taxon within this group, and quite distinctive on that basis. The paramere of the male genitalia is not as highly modified as in most of the other species, but distinctive to *C. bessie*.

**37. *Cyrea serval* Mulsant, new combination**

*Cleothera serval* Mulsant, 1850:633.

*Hyperaspis serval*: Crotch 1874:222; Korschevsky 1931:195; Blackwelder 1945:448; Gordon 1987:28.

**Description.** Male lectotype. Length 2.2 mm, width 1.7 mm; body oval, convex. Dorsal surface feebly alutaceous, shiny. Color yellow except pronotum dark brown with lateral 1/6 yellow; elytron with 5 yellow spots arranged in rows of 2 each and 1 at apex, spots large, apical spot occupying 1/2 of apical declivity (Fig. 204); ventral surface with lateral 1/3 of metaventrite pale yellowish brown. Head punctures small, separated by a diameter or less, each puncture as large as 2 eye facets; pronotal punctures larger than on head, separated by less to a diameter; elytral punctures slightly larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on pronotum, separated by less than to twice a diameter medially, becoming very large and separated by less than a diameter toward lateral margin. Clypeus weakly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as about 6 eye facets, strongly angled forward, abruptly rounded apically, brown. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded, basal margin without trace of bordering line. Epipleuron narrow, grooved, deeply emarginate for reception of femoral apices. Protibia narrowly oblique, outer margin smooth; sponda shallow. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/4, with single stem extended to prosternal margin. Metaventrite with prominent setal tuft on each side of middle. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite angled to ventrite apex, rounded along base, then rounded forward to lateral 1/4 of ventrite; ventrites 1-4 with sparse, short pubescence, punctures dense throughout, somewhat denser laterally; 5th ventrite with apical margin weakly emarginate medially, surface densely punctate; 6th ventrite with apical emargination shallow, lateral angle pronounced, rounded; apical tergite short, narrow, finely, densely pubescent. Genitalia with basal lobe 3/4 as long as paramere, narrow, parallel sided; paramere long, *Pem*, basal 2/3 almost parallel sided, abruptly widened into paddle shape in apical 1/3, apex nearly truncate (Fig. 205, 206); siphon long, slender, curved in basal 1/2, without apparent lateral alae, basal capsule with inner arm narrow, apically truncate, outer arm short, wide, without accessory piece, basal border deeply emarginate (Fig. 207, 208).

**Female.** Unknown.

**Variation.** Unknown.

**Type locality.** Cayenne (French Guiana).

**Type depository.** UMZC (lectotype designated by Gordon, 1987).

**Geographical distribution.** French Guiana.

**Specimen examined.** 1. The lectotype.

**Remarks.** *Cyrea serval* has male genitalia with the paramere not exactly typical of the hexastigma group, but similar enough to be placed there. Dorsal color is a commonly found pattern, but the male pronotum with a large, median brown macula extended to anterior pronotal border is not often seen. Males of *Cyrea* usually have the pronotal macula not extended to the anterior border. The setal tufts on the metaventrite and basal abdominal ventrite are useful recognition characters within the group.

The lectotype is a very teneral specimen, misshapen, elytron “wrinkled,” right elytron damaged, and genitalia nearly transparent. Therefore length and width as recorded from this specimen are probably inaccurate, a fully hardened specimen would be significantly larger.

### 38. *Cyrea lydia* Canepari and Gordon, new species

**Description.** Male. Length 2.5 mm, width 2.0 mm; body oval, convex. Dorsal surface with head and pronotum slightly alutaceous, shiny, elytron smooth, shiny. Color yellow except head with clypeus brown and frons between eyes irregularly brown; pronotum with large dark brown basomedian macula ex-

tended 7/8 distance to anterior pronotal margin, macula with anterior border projected medially, apical margin of macula entire, truncate; elytron dark brown with 2 yellow spots, spot at middle of elytron irregularly extended from lateral margin nearly to sutural margin, apical spot transversely rectangular, anterior margin of spot slightly emarginate (Fig. 209); ventral surface with head, prosternum, meso- and metaventrite pale brown; abdomen yellow. Head punctures small, separated by less than a diameter, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures as large as on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron wide, shallowly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated apically, convergent, joined at basal 1/3 of prosternum, connected to base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrites 1-2 with dense, long pubescence and coarse, sparse punctures; ventrites 4-6 with long, dense pubescence throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate, lateral angle abruptly rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe slightly longer than paramere, asymmetrical, sides convergent from base to rounded apex; paramere *Pem*, widened from narrow base to extremely wide apex, upper margin straight, apically acute, lower margin widely curved, apex abruptly rounded, entire apex broadly emarginate medially (Fig. 210, 211); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, slender, apex truncate, outer arm about as wide as and slightly longer than inner arm, with accessory piece, basal border broadly, shallowly emarginate (Fig. 212, 213).

**Female.** Similar to male except head reddish brown, basomedian pronotal macula extended to anterior pronotal border medially. Genitalia with spermathecal capsule short, wide, basal 1/3 slightly widened, apex of cornu rounded; bursal cap with two weakly sclerotized arms, apical strut long, nearly as long as an arm, slender (Fig. 214).

**Variation.** Length 2.4 to 2.9 mm, width 2.0 to 2.3 mm. Median spot on elytron may be divided medially, giving each elytron 3 yellow spots, ventral surface varies from meso- and metaventrite pale brown to dark brown.

**Type material.** Holotype male; Brasiliën, Nova Teutonia, 27° 11' B 52° 23' L, .4.4.1931, Fritz Plaumann. (DZUP). Paratypes 13, 6, same data as holotype except dates II.1960, IV.1960, IX.1962, X.1962; 7, Brasil, SC, Nova Teutonia, X.1965, I.1966, II.1966, IV.1966, V.1966, IX.1966, Fritz Plaumann col. (DZUP).

**Remarks.** The typical color form of *Cyrea lydia* is distinctive within the genus, but if the median spot is broken into two parts it is slightly similar to some other species. However, regardless of color form, this species is unique within the hexastigma group.

### 39. *Cyrea yvonne* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.8 mm, width 2.4 mm; body rounded, somewhat oval, convex. Dorsal surface with head, pronotum weakly alutaceous, shiny, elytron smooth, shiny. Color yellowish red except pronotum with barely perceptible M-shaped mark medially; elytron with barely perceptible yellow lateral border from base to sutural margin at apex (Fig. 215); ventral surface yellowish red with antenna, mouthparts, legs yellow; abdomen yellowish red. Head punctures small, separated by less than to about a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head



punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by less than to about 2 times a diameter; metaventral punctures larger than on elytron, separated by a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/4, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened medially along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and small punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate with lateral angle abrupt. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe 2/3 as long as paramere, asymmetrical, sides convergent in basal 7/8, apical 1/8 curved to rounded apex; paramere *Pem*, strongly widened from base to weakly emarginate apex (Fig. 216, 217); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, narrow medially, apex widened, truncate, outer arm wider and slightly longer than inner arm, with accessory piece, basal border shallowly, broadly emarginate (Fig. 218, 219).

**Female.** Similar to male externally. Genitalia with spermathecal capsule short, slender, basal 1/4 slightly wider than apical 3/4; bursal cap oval with 2 slender, sclerotized arms, apical strut short, slender, spatulate in apical 1/2 (Fig. 220).

**Variation.** Length 2.8 to 3.0 mm.

**Geographical distribution.** Brazil.

**Type material.** Holotype male; (Brazil) V. Monte Verde, Minas Gerais, F. Halik, 17.IX.1962, 20198, Brasil, Halik 1966 Collection. (USNM). Paratypes; 2, same data as holotype (USNM).

**Remarks.** The dorsal surface appears to be immaculate, but the elytron has a barely perceptible yellow lateral border. For practical purposes, *C. yvonne* is considered immaculate, and will key out accordingly.

#### 40. *Cyrea renee* Canepari and Gordon, new species

**Description.** Male holotype. Length 4.0 mm, width 3.0 mm; body oval, elongate, convex. Dorsal surface with head and pronotum weakly alutaceous, slightly shiny, elytron smooth, shiny. Color yellow except pronotum with short, dark brown basomedian macula extended 1/4 distance to anterior pronotal margin, macula widened at outer end, with slender, dark brown macula on each side of middle extended from basomedian macula anteriorly to about middle of prosternum, apex of each macula curved laterally; elytron with sutural margin widely bordered in black, apical margin narrowly bordered in black, sutural border widened at middle and weakly widened on apical declivity, with 4 black, elongate spots, humeral and anteromedian spot connected posterior to humeral callus, posterolateral spot elongate oval, posteromedian spot irregularly oval (Fig. 221); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen yellow except median 1/3 of ventrites 1-4 dark brown. Head punctures small, separated by less than to about a diameter, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures larger than on elytron, separated by less than a diameter, larger in lateral 2/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved,

basal margin with trace of bordering line medially. Epipleuron wide, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda extended beyond oblique angle (Fig. 222). Carinae on prosternal process short, convergent, joined just anterior to middle of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and small punctures medially becoming smaller and denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe about as long as paramere, asymmetrical, sides mostly parallel from base to apex, but sides medially "pinched," apex broadly rounded; paramere *Pem*, strongly widened from base to broadly rounded apex (Fig. 223, 224); siphon strongly curved in basal 2/3, with short, visible alae posterior to apex, basal capsule with inner arm long, slender, apically rounded, outer arm curved, wider and longer than inner arm, with accessory piece, basal border shallowly, widely emarginate (Fig. 225).

**Female.** Similar to male except head with pair of small, brown spots at apex of frons, spots feebly connected, pronotum with basomedian macula widely extended to anterior pronotal margin medially. Genitalia with spermathecal capsule long, slender, equal in width from base to apex; bursal cap widely rounded with 2 sclerotized arms, slightly projected at middle, apical strut short, widened from base to apex (Fig. 226).

**Variation.** Length 3.6 to 4.0 mm, width 2.8 to 3.0 mm. Female head varies from yellow to reddish yellow, spots in anterior 1/2 of elytron may be narrowly or broadly connected, if narrowly connected then posterior margin of outer spot curved inward.

**Type material.** Holotype male; Brasil, Est. Biol. Boraceia, Salesópolis - S. P., 16-18.IV.1962, Reichardt col. (DZUP). Paratypes; 12, 1, Est. Biol. Boraceia, Salesópolis, S.P. Brasil, 23.III.1961, Reichardt col. (DZUP); 1, Est. Biol. Boraceia, Salesópolis, Sp, 14.VIII.1963, F. Lane col. (MZSP); 1, Est. biol. Boraceia, Salesópolis, SP, 14-18.XI.1973, Exp.Mus Zool. (DZUP); 3, Est. Bio. Boraceia, Salesópolis, SP, 30.IV.1973, Jorge & Vanin col. (MZSP); 1, Boraceia, 5.II.1960, F. Lane col. (MZSP); 2, S. Paulo, Cantareira, IX-955 (DZUP); 1, (Brazil) Cabeceiras (Lagoa Formosa) GO, 24-27.X.1964, Exp. Dep. Zool. (DZUP); 2, Brazil, Est. Biol. Boraceia, Salesópolis, SP, ZII-17-26-1969, JM & BA Campbell (CNC).

**Geographical distribution.** Brazil.

**Remarks.** Large size and unique dorsal color pattern suffice to identify this species.

### *devilli* group

#### 41. *Cyrea bernice* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.0 mm, width 2.3 mm; body elongate oval, convex. Dorsal surface with head weakly alutaceous, shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with large, black basomedian macula extended 2/3 distance to anterior pronotal margin, macula with anterior margin narrowly, deeply emarginate with yellow; elytron with sutural and apical margins narrowly bordered with black and 3 black spots, anterolateral spot irregularly oval, extended posteriorly from humeral callus, discal spot narrow, elongate, posterior spot on apical declivity large, irregularly rounded (Fig. 227); ventral surface with head, prosternum, and metaventrite black, mesoventrite reddish brown; abdomen yellow except median 1/3 of ventrites 1-4 brown. Head punctures small, separated by less than to about a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by about a diameter, elytral punctures larger than on pronotum, sepa-

rated by less than to slightly more than a diameter; metaventral punctures larger than on elytron, separated by 1 to 2 times a diameter medially, larger and separated by less than a diameter in lateral 2/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/3, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and small punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate with lateral angle abrupt. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe about as long as paramere, asymmetrical, sides parallel in basal 7/8, apical 1/8 curved to rounded apex; paramere *Pvl*, lower margin widely produced, apex acute (Fig. 228, 229); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm short, wide, apex weakly rounded, outer arm slightly wider and slightly longer than inner arm, with accessory piece, basal border shallowly, broadly emarginate (Fig. 230, 231).

**Female.** Similar to male except head entirely reddish black, pronotum with mediobasal macula extended nearly to anterior pronotal margin. Genitalia with spermathecal capsule short, slender, basal 1/4 slightly wider than apical 3/4; bursal cap oval with 2 slender, sclerotized arms, apical strut short, slender, widened in apical 1/2 (Fig. 232).

**Variation.** Length 2.6 to 3.2 mm, width 2.0 to 2.3 mm. Elytron with anterior spot near suture often connected to black sutural border.

**Type material.** Holotype male; (Brazil) Brasilien, Nova Teutonia, 27° 11' B. 52° 23' L, 10.4.1935, Fritz Plaumann, Korschevsky Collection 1952. (USNM). Paratypes; 17, 1, same data as holotype except date 9.10.1937 (DZUP); 1, (Brazil) P. Grossa, Faz. Andre, illegible line, Justus, 10-45, Colecao Justus Jor (DZUP); 2, (Argentina) Dique Lujan, XI.1955, Daguerre (USNM); 1, (Argentina) BsAs (Buenos Aires), Escobar, I.1964, Daguerre (USNM); 8, (Argentina) BsAs (Buenos Aires), San Fernando, X-1954, XII-1954, 20.XI.1962, Daguerre (USNM); 2, Bs. Aires, Argentina, S. Fernando, 2.XII.53, J. B. Daguerre (USNM); 3, (Argentina) BsAs (Buenos Aires), Tigre, XII. 1955, XI.1958, Daguerre (USNM).

**Remarks.** The dorsal color pattern and somewhat elongate body form are diagnostic for this species, but extremely similar to those of *C. audrey*. See remarks under that species for comparisons.

#### 42. *Cyrea audrey* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.8 mm, width 2.1 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron slightly alutaceous, shiny. Color yellow except pronotum with short, wide, black basomedian macula extended 1/4 distance to anterior pronotal margin, macula with anterior margin irregularly sinuate; elytron with sutural, lateral and apical margins narrowly bordered in black, sutural border wide anterior to middle, lateral border triangularly widened on apical declivity, and 2 small black spots, anterolateral spot irregularly oval, posterior to humeral callus, posterior spot at apical declivity small, elongate oval (Fig. 233); ventral surface with head, prosternum, meso- and metaventrite black; abdomen entirely dark brown. Head punctures small, separated by less than to about a diameter, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures much larger than on elytron, separated by less than a diameter throughout. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubes-

cence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, not grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin straight, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, short, convergent, joined at middle of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and small punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite slightly depressed in median 1/3, apex weakly emarginate; 6th ventrite not medially depressed, apex slightly emarginate, nearly truncate, lateral angle broadly rounded. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe about 3/4 as long as paramere, slightly asymmetrical, sides slightly convergent in basal 7/8, apical 1/8 curved to rounded apex; paramere *Pvl*, lower margin narrowly, strongly produced medially, apex abruptly rounded (Fig. 234, 235); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, apex truncate, outer arm as long as and as wide as inner arm, without visible accessory piece, basal border weakly, broadly emarginate (Fig. 236, 237).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; (Brazil) P. Grossa, 22-55 (remainder of label illegible), 6572, Colecao F. Justus Jor (DZUP).

**Remarks.** The dorsal color pattern is similar to that of *C. bernice*, but *C. audrey* has the lateral elytral margin with a black border, basomedian pronotal macula restricted to basal 1/4 of pronotum, and prosternal carinae not extended anterior to middle of prosternum.

#### 43. *Cyrea devillii* (Mulsant), new combination

*Cleothera devillii* Mulsant, 1850:560.

*Hyperaspis devillii*: Crotch 1874:215; Gordon 1987:27.

*Hyperaspis devillei*: Korschefsky 1931:187; Blackwelder 1945:446.

**Description.** Male. Length 2.5 mm, width 2.0 mm; body rounded, convex. Dorsal surface smooth, shiny. Color yellow except pronotum with black basomedian macula extended about 5/6 distance to anterior pronotal margin, apical margin of macula not emarginate, lateral 1/5 of pronotum irregularly yellow; elytron reddish yellow with small, pale brown spot on humeral callus, sutural margin irregularly reddish brown from scutellum to wide, dark brown oval spot on apical declivity (Fig. 238); ventral surface with head, prosternum, meso- and metaventrites brownish yellow; abdomen yellow except median 1/3 of ventrites 1-4 brownish yellow. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to 2 times a diameter, elytral punctures larger than on pronotum, separated by less than to about 2 times a diameter; metaventral punctures larger than on elytron, separated by about a diameter medially, separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, slightly angled forward, nearly straight, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly rounded, basal margin without trace of bordering line medially. Epipleuron narrow, not grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly curved, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent toward base, joined at basal 1/3 of prosternum, single carina extended to prosternal base. Metaventrite with trace of sparse setal tuft. Basal abdominal

ventrite with sparse setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened along posterior ventrite margin, extended forward at apex, ventrite with small, dense punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed medially, apical margin broadly, feebly emarginate; 6th ventrite short, narrow, depressed medially, apical margin weakly emarginate, angle on each side of emargination abrupt. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe  $\frac{3}{4}$  as long as paramere, asymmetrical, sides sinuate, convergent from base to rounded apex; paramere *Pvl*, lower margin broadly produced, apex abruptly rounded (Fig. 239, 240); siphon strongly curved in basal  $\frac{2}{3}$ , without visible alae, basal capsule with inner arm elongate, narrow, apex widened, obliquely truncate, outer arm slightly narrower and about as long as inner arm, with small accessory piece, basal border widely, shallowly emarginate (Fig. 241, 242).

**Female.** Similar to male except head dark brown, pronotum dark brown except lateral  $\frac{1}{5}$  yellowish brown. Genitalia with spermathecal capsule short, slender, weakly curved, widened from base to acute apex; bursal cap oval, with 2 small, sclerotized arms, apical strut short, slender (Fig. 243).

**Variation.** Length 2.2 to 2.7 mm, width 1.7 to 2.2 mm. Elytron with dark brown spot on apical declivity variable in shape, sometimes extended to apex of elytron, then widened along posterior elytral margin, sutural margin from scutellum to apical declivity may lack dark border, or border color may vary from brown to black.

**Type locality.** Brazil.

**Type depository.** UMZC (lectotype designated by Gordon 1987).

**Geographical distribution.** Brazil.

**Specimens examined.** 16. **Brazil.** MG (Minas Gerais), Mar de Espanha; MG, Serra Caraca MG, Vicosia; Minas Gerais, Vile Monteverde; RJ, Petrópolis; Sao Paulo; Sao Paulo, Pau d' Alho Itú; SP, Ribiero Pires; S. Paulo, Sitio Bananal, Guarulhos; St. Joao d. R. (BMNH) (DZUP) (MZSP) (USNM) (ZMHB).

**Remarks.** *Cyrea devillii* has a distinctive dorsal color pattern by which it may be recognized. It is apparently a frequently collected Brazilian species, at least from the southeastern portion of the country.

Mulsant (1850) stated that he had type material from the Chevrolat and Paris Museum collections. Therefore, in addition to the UMZC lectotype, a type specimen in the MNHP labeled "Museum Paris, Bresil, Minas-Geraes a Gayaz, de Castelnau 19-47/150/Cleothera devillei Muls., auct. det." is designated a paralectotype.

#### 44. *Cyrea yolanda* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.6 mm, width 1.9 mm; body somewhat elongate, convex. Dorsal surface with head weakly alutaceous, shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with long, dark brown basomedian macula extended more than  $\frac{1}{2}$  distance to apical pronotal margin, apex of macula deeply, widely emarginate with yellow; elytron with sutural and apical margins narrowly bordered with brown, sutural border slightly widened anterior to middle, 4 elongate, dark brown spots present, humeral spot elongate oval, discal spot elongate, somewhat rectangular, lateral spot on apical declivity small, irregularly rounded, nearly reaching lateral elytral margin, median spot on apical declivity large, elongate oval (Fig. 244); ventral surface with head, prosternum, meso- and metaventrite black; abdomen yellowish brown except median  $\frac{1}{2}$  of ventrites 1-4 brown. Head punctures small, separated by a less than to about a diameter, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures larger than on elytron, separated by a diameter or less. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum

narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process short, widely separated at apex, not convergent, incomplete, extended less than 1/2 distance to anterior pronotal margin. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened medially along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and small punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe almost as long as paramere, asymmetrical, sides convergent to rounded apex; paramere *Pvl*, lower margin strongly produced medially, apex rounded (Fig. 245, 246); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, narrow, apex rounded, outer arm wider and longer than inner arm, with accessory piece, basal border shallowly, broadly emarginate (Fig. 247, 248).

**Female.** Unknown.

**Variation.** Unknown.

**Geographical distribution.** Bolivia.

**Type material.** Holotype male; Bolivia, Santa Cruz Amboro National Park, Los Volcanes. c. 1000m, S18° 06': W63° 36', 20/xi-12/xii/2004, General collecting, Mendel, H. & Barclay, M.V.L., BMNH(E)2004-280. (BMNH).

**Remarks.** The dorsal color pattern is unique to *C. yolanda*, but is quite similar to that of several other species of *Cyrea* having dark maculation on a pale surface. The short, widely spaced, incomplete prosternal carinae is a character rarely found in other species of the genus.

#### 45. *Cyrea jeannette* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.4 mm, width 1.0 mm; body rounded, convex. Dorsal surface with head weakly alutaceous, shiny, pronotum and elytron smooth, shiny. Color yellow except head with clypeus and vertex brown, pronotum dark brown with anterolateral angle broadly yellow; elytron with complete brown border, sutural border wide, 4 dark brown spots present, humeral spot large, extended from base of elytron posteriorly beyond humeral callus, connected to both elytral base and lateral margin, discal spot narrow, triangularly oval, posterolateral spot on lateral margin triangularly oval, posteromedian spot oval with anterolateral angle emarginate (Fig. 249); ventral surface with head, prosternum, meso- and metaventrite dark brown; abdomen yellow except median 2/3 of ventrites 1-4 brown. Head punctures small, separated by a less than to about a diameter, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures larger than on elytron, separated by about a diameter medially, larger and separated by less than a diameter in lateral 2/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/8 of prosternum. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened medially along posterior ventrite margin, ex-

tended forward at apex, ventrite with sparse, long pubescence and small punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate, lateral angle rounded. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe almost as long as paramere, asymmetrical, sides convergent to rounded apex, sides weakly "pinched" medially; paramere *Pvl*, lower margin strongly produced medially, apex rounded (Fig. 250, 251); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm long, narrow, apex obliquely truncate, outer arm about as wide as and slightly longer than inner arm, with accessory piece, basal border deeply, broadly emarginate (Fig. 252, 253).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; (Brazil) Barueri, S. Paulo, 11.XI.1955, K. Lenko, Colegio M. Alvarenga. (DZUP).

**Geographical distribution.** Brazil.

**Remarks.** *Cyrea jeannette* has a distinct dorsal color pattern by which it may be recognized.

#### 46. *Cyrea ella* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.0 mm, width 2.4 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with long, wide, black basomedian macula extended 5/6 distance to anterior pronotal margin, macula protruding medially, anterior border entire, anterolateral 1/3 of pronotum yellow; elytron black with 5 large yellow spots arranged in rows of 2 each with apical spot, scutellar spot rounded, mediolateral spot slightly removed from lateral margin, projected inward, apical spot transversely oval with anterior border feebly emarginate (Fig. 254); ventral surface with head, prosternum, meso- and metaventrite black; abdomen dark brown, paler toward lateral margin. Head punctures small, separated by less than to about a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by about a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures larger than on elytron, separated by less than to a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin straight, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, weakly convergent, joined at basal 1/3, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and small punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 3/4 as long as paramere, asymmetrical, sides parallel in basal 5/6, apical 1/6 curved to rounded apex; paramere *Pvl*, lower margin produced in apical 5/6, apex rounded in lower 1/2, with minute apical projection medially, upper portion rounded (Fig. 255, 256); siphon strongly curved in basal 3/4, without visible alae, basal capsule with inner arm short, narrow, outer arm wider and longer than inner arm, with accessory piece, basal border deeply, broadly emarginate (Fig. 257, 258).

**Female.** Similar to male except head with clypeus narrowly brownish yellow and median yellow spot at base of frons, pronotum entirely black except small anterolateral area yellow. Genitalia with spermathecal capsule short, bent medially, narrowed in basal 1/3, cornu apically acute; bursal cap oval, apparently without visible sclerotized arms, apical strut long, robust, widened in apical 1/3 (Fig. 259).

**Variation.** Length 2.5 to 3.0 mm, width 2.0 to 2.4 mm. Shape of mediolateral spot variable from elongate, strongly projected inward, to short, somewhat oval.

**Type material.** Holotype male; (Brazil) Brasilia, Rio Jan, Fry Coll. 1905.100., *Cleothera gacognei* Muls. (BMNH). Paratypes; 4, 3, same data as holotype (BMNH); 1, (Brazil) 254, 60.23, *Cleothera levratii*, m., Brasil, Named by Mulsant (BMNH).

**Geographical distribution.** Brazil.

**Remarks.** The dorsal color pattern is typical of many species of *Cyrea* and other Brachacanthini, but male genitalia with a ventrally projected paramere place it in the devillii group.

#### 47. *Cyrea terry* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.2 mm, width 2.3 mm; body elongate oval, convex. Dorsal surface with head slightly alutaceous, weakly shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with long, wide, dark brown basomedian macula extended 4/5 distance to anterior pronotal margin, macula protruding medially, anterior border entire, anterolateral 1/3 of pronotum yellow; elytron dark brown with 5 yellow spots arranged in rows of 2 each with apical spot, humeral spot small, triangular, scutellar spot irregularly rounded, apex "ragged," mediolateral spot slightly removed from lateral margin, irregularly oval, discal spot round, apical spot transversely oval with anterior border entire. Margins of all spots somewhat "ragged," not clearly defined (Fig. 260); ventral surface reddish yellow except meso- and metaventrite reddish brown; abdomen yellow. Head punctures small, separated by less than a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to 3 times a diameter, elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures larger than on elytron, separated by less than to about a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/4, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened medially, extended forward at apex, ventrite with sparse, long pubescence and coarse, dense punctures medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 3/4 as long as paramere, asymmetrical, sides slightly convergent in basal 3/4, apical 1/4 curved to rounded apex; paramere *Pvl*, lower margin produced in apical 5/6, lower margin of paramere curved upward to rounded apex (Fig. 261, 262); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, narrow, narrowed before widened apex, outer arm wider and about as long as inner arm, with accessory piece, basal border deeply, broadly emarginate (Fig. 263, 264).

**Female.** Unknown.

**Variation.** Unknown.



**Type material.** Holotype male; Bolivia, Mapiri. (ZMHB).

**Geographical distribution.** Bolivia.

**Remarks.** The elytral spots are not crisply defined as is usual in species of *Cyrea*, borders are hazy or appear “ragged.” Male genitalia have the paramere comparatively slender, but still distinctly produced on the lower margin.

#### 48. *Cyrea wilma* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.0 mm, width 2.4 mm; body elongate oval, convex. Dorsal surface with head slightly alutaceous, weakly shiny, pronotum slightly alutaceous, shiny, elytron smooth, shiny. Color yellow except pronotum with dark brown basomedian macula extended slightly more than 1/2 distance to anterior pronotal margin, macula with anterior border widely, deeply emarginate with yellow, entire lateral 1/3 of pronotum yellow; elytron brown with 5 yellow spots arranged in rows of 2 each with apical spot, scutellar spot rounded, mediolateral spot projected inward, discal spot oval, apical spot transversely oval with anterior border feebly emarginate (Fig. 265); ventral surface with head, prosternum brown, meso- and metaventrite dark brown; abdomen yellow except median portion of ventrites 1-3 brown. Head punctures small, separated by less than a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by a diameter or less; metaventral punctures slightly larger than on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/3, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and coarse, dense punctures medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite not depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 3/5 as long as paramere, slightly asymmetrical, sides convergent from base to rounded apex; paramere *Pv*l, lower margin produced medially, curved upward to rounded apex (Fig. 266, 267); siphon strongly curved in basal 3/4, without visible alae, basal capsule with inner arm short, narrow, outer arm slightly wider and longer than inner arm, with accessory piece, basal border broadly emarginate (Fig. 268, 269).

**Female.** Similar to male except head with basomedian macula extended to anterior pronotal margin. Genitalia with spermathecal capsule slightly elongate, curved medially, wide in basal 1/2, then narrowed to acute apex of cornu; bursal cap oval with 3 faintly sclerotized arms, apical strut long, slender except apical 1/4 spatulate (Fig. 270).

**Variation.** Length 2.7 to 3.0 mm, width 2.1 to 2.4 mm. Shape of mediolateral spot variable from elongate, strongly projected inward, to short, somewhat oval.

**Type material.** Holotype male; Paraguay, Hohenau. Alto-Parana. J. Jacob. B.M. 1945-814. (BMNH). Paratypes; 2, same data as holotype (BMNH); 1, Brasilien, Nova Teutonia, 27° 11' B. 52° 23' L., Jan. 1939, Fritz Plaumann, Brit. Mus. 1946-191 (BMNH).

**Geographical distribution.** Brazil, Paraguay

**Remarks.** The brown elytron, crisply defined elytral spots, and male genitalia are the only somewhat distinctive criteria for this species.

#### 49. *Cyrea gina* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.7 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head, pronotum and elytron smooth, shiny. Color yellow except pronotum with black basomedian macula extended 3/4 distance to anterior pronotal margin, macula protruding medially, anterior border narrowly, deeply emarginate with yellow medially, anterolateral 1/4 of pronotum yellow; elytron black with 5 small, pale spots arranged in rows of 2 each with apical spot, humeral spot yellow, small, triangular, scutellar spot reddish yellow, irregularly rounded, apex slightly “ragged,” mediolateral spot reddish yellow, square, widely removed from lateral margin, discal spot reddish yellow, irregularly triangular, apical spot yellow, transversely oval with anterior border entire (Fig. 271); ventral surface with head, prosternum, meso- and metaventrite black; abdomen yellowish brown, paler toward lateral margins. Head punctures small, separated by less than a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures much larger than on elytron, separated by less than to about a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle (Fig. 272). Carinae on prosternal process widely separated at apex, weakly convergent, joined at basal 1/3, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and fine, dense punctures medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 3/4 as long as paramere, asymmetrical, sides weakly convergent from base to rounded apex; paramere *Pvl*, lower margin produced in apical 1/2, lower margin curved upward to rounded apex (Fig. 273, 274); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, wide, outer arm short and about as long as inner arm, with accessory piece, basal border broadly emarginate (Fig. 275, 276).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Bolivia, Mapiri. (ZMHB).

**Geographical distribution.** Bolivia.

**Remarks.** This species has male genitalia very similar to those of *C. wilma*, but differs from that species by the black elytral surface; spots on elytron small, pale, humeral and apical spots yellow, all other spots reddish yellow; mediolateral spot on elytron small, square, widely removed from lateral margin, not projected inward; prosternal carinae widely separated at apex; and head smooth, shiny, not alutaceous. In spite of similar male genitalia, these 2 species present strikingly differing appearances.

**50. *Cyrea maxine* Canepari and Gordon, new species**

**Description.** Male holotype. Length 2.6 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head alutaceous, weakly shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with narrow, wide, dark brown basomedian macula extended almost 1/3 distance to anterior pronotal margin, small, curved brown spot present on each side of middle anterior to basomedian spot; elytron brown with 5 large yellow spots arranged in rows of 2 each with apical spot, humeral spot elongately triangular, feebly connected to mediolateral spot, scutellar spot rounded, mediolateral spot strongly projected inward, discal spot oval, apical spot transversely oval with anterior border entire (Fig. 277); ventral surface with head, prosternum brown, meso- and metaventrite black; abdomen with median 2/3 of ventrites 1-3 dark brown, lateral 1/3 of ventrites 1-3 and ventrites 3-6 reddish brown. Head punctures small, separated by less than a diameter, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to twice diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures much larger than on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, abruptly convergent, joined at prosternal base. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and coarse, dense punctures medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 3/4 as long as paramere, asymmetrical, sides convergent from base to obliquely truncate apex; paramere *Pv1*, slender, lower margin weakly produced medially in apical 1/2, lower margin curved upward to rounded apex (Fig. 278, 279); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm short, narrow, apex truncate, outer arm wider and longer than inner arm, with accessory piece, basal border broadly, shallowly emarginate (Fig. 280, 281).

**Female.** Similar to male except head yellowish red with faint, dark brown border along eye, pronotum with basomedian macula extended nearly to anterior pronotal margin. Genitalia with spermathecal capsule elongate, slightly curved medially, slightly wider in basal 1/4, cornu with rounded apex; bursal cap oval with 3 sclerotized arms, apical strut long, slender except apical 1/8 weakly spatulate (Fig. 282).

**Variation.** Length 2.4 to 2.6 mm, width 1.9 to 2.0 mm. Pronotal macula subject to minor change in size and shape.

**Type material.** Holotype male; Brazil, Faz. Pau d'Alho Itú, 27-XII-959, Col: U. Martins. (MZSP). Paratypes; 2, 1, (Brazil) Vila Monte Verde, Minas Gerais., 10.XII 1969, J. Halik 9280 (MZSP); 1, V. Monte Verde, Minas Gerais., 19.XI.1966, J. Halik 5364 (MZSP).

**Geographical distribution.** Brazil.

**Remarks.** *Cyrea maxine* has the male paramere slender, with ventral projection limited to the apical 1/2. Within this group it has the least modified paramere. It is distinguished from other group members by the patterned male pronotum; reddish female head; and elytron with humeral and mediolateral spots weakly connected along the lateral border.

**51. *Cyrea jessie* Canepari and Gordon, new species**

**Description.** Male holotype. Length 2.6 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head, pronotum and elytron smooth, shiny. Color yellow except pronotum with faint, obscure, difficult to define pale brown maculae; elytron brown with 5 pale brown, mostly connected spots, humeral spot connected to apical spot along lateral margin of elytron, scutellar spot discrete but feebly separated from humeral and discal spots, discal spot narrowly connected to apical spot (Fig. 283); ventral surface with head, prosternum, meso- and metaventrite yellowish brown; abdomen yellow. Head punctures small, separated by less than a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures slightly larger than on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 2/5 of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and coarse, dense punctures; ventrites 2-3 with coarse, dense punctures medially, punctures finer laterally, ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 3/4 as long as paramere, slightly asymmetrical, slender, sides convergent from base to nearly acute apex; paramere *Pvl*, lower margin produced in apical 1/2, lower margin curved upward to rounded apex (Fig. 284, 285); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm long, slender, apex feebly rounded, outer arm as wide as and longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 286, 287).

**Female.** Similar to male except head with clypeus and apex of frons obscurely darkened. Genitalia with spermathecal capsule elongate, slightly curved medially, slightly wider in basal 1/4, cornu with abruptly rounded apex; bursal cap oval with 2 sclerotized arms, apical strut long, slender (Fig. 288).

**Variation.** Paratype with pronotum and ventral surface reddish yellow.

**Geographical distribution.** Argentina, Paraguay.

**Type material.** Holotype male; (Argentina) Argentine, J.M. Bosq, # F.C.C.109. (USNM). Paratype; 1, Paraguay, Febrig, 24.III (remainder of handwritten label illegible) (ZMHB).

**Remarks.** The large, mostly connected elytral spots and primarily pale coloration of *C. jessie* are distinctive within this genus. The male genitalia have a paramere very similar to that of *C. gina*, but basal lobes differ as do the dorsal color patterns.

**52. *Cyrea minnie* Canepari and Gordon, new species**

**Description.** Male holotype. Length 2.4 mm, width 1.8 mm; body elongate oval, convex. Dorsal surface with head, pronotum and elytron smooth, shiny. Color yellow except pronotum with large, dark brown basomedian macula extended 4/5 distance to anterior pronotal margin, anterior margin of macula arcuate, entire, macula occupying most of pronotum, only anterior 1/5 and lateral 1/5 yellow; elytron brown with 4 small, yellow spots, without mediolateral spot, humeral spot small, triangular, scutellar spot

round, discal spot round, apical spot obliquely triangular (Fig. 289); ventral surface with head, prosternum, meso- and metaventrite yellowish brown; abdomen yellowish brown, paler toward lateral margins. Head punctures coarse, separated by a diameter or less, each puncture about as large as 2 eye facets; pronotal punctures larger than head punctures, separated by less than to about a diameter; elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures much larger than on elytron, separated by less than to about a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus slightly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/4, connected to prosternal base by single carina. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite and ventrites 2-3 with dense, long pubescence and coarse, dense punctures medially becoming denser laterally; ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 3/4 as long as paramere, asymmetrical, sides weakly convergent from base to rounded apex; paramere *Pvl*, slender, lower margin produced in apical 1/2, lower margin curved upward to rounded apex (Fig. 290, 291); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, wide, apex slightly rounded, outer arm short and about as long as inner arm, with accessory piece, basal border broadly, shallowly emarginate (Fig. 292, 293).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Brazil, Rio de Jan., Acc.No.2966, Oct. (CMNH).

**Geographical distribution.** Brazil.

**Remarks.** This species is similar to many other *Cyrea* species in dorsal color pattern, but is the only species in the *devillii* group with a combination of pronotal macula large, apically arcuate, occupying most of pronotal surface; elytron lacking mediolateral spot; and setal tufts on metaventrite and basal abdominal ventrite.

### 53. *Cyrea claudia* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.6 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head smooth, shiny, pronotum slightly alutaceous, shiny, elytron smooth, shiny. Color yellow except pronotum with long, wide basomedian macula extended 5/6 distance to anterior pronotal margin, macula projected medially, apex not indented with yellow, lateral borders sinuate; elytron black with 2 yellow spots, apical spot large, occupying most of anterior 1/2 of elytron, spot narrowly emarginate with black from base posterior to humeral callus, apical spot small, narrow, transversely oval (Fig. 294); ventral surface with head, prosternum, meso- and metaventrites black, metafemur dark brown; abdomen dark brown medially, yellowish brown laterally. Head punctures fine, separated by a diameter or less, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by less than to 3 times a diameter; metaventral punctures larger than on elytron, separated by 1 to 2 times a diameter medially, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior

angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin weakly arcuate, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/5 of prosternum, connected to base with single carina. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened medially, extended forward at apex. Ventrites 1-3 with sparse, long pubescence and coarse, dense punctures; ventrites 4-6 densely pubescent, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate with lateral angle produced, apically rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about as long as paramere, narrow, asymmetrical, sides parallel in basal 1/2, apical 1/5 curved to rounded apex; paramere *Pvl*, wide, lower margin produced, widely arcuate to obliquely truncate apex (Fig. 295); siphon robust, curved in basal 7/8, apical 1/8 bent downward, without visible alae, basal capsule with inner arm long, slender, apex widened, truncate, outer arm curved, slightly wider and longer than inner arm, with accessory piece, basal border deeply, widely emarginate (Fig. 296, 297).

**Female.** Similar to male except head black with median yellow spot at base of frons, pronotum with black basomedian macula extended to anterior pronotal border. Genitalia with spermathecal capsule short, wide, about same width from base to apex except basal 1/4 slightly widened, apex of cornu rounded; bursal cap oval with 2 faintly sclerotized arms, apical strut short, narrow (Fig. 298).

**Variation.** Length 2.5 to 2.6 mm, width 1.9 to 2.0 mm.

**Type material.** Holotype male; (Brazil) V. Monte Verde, M. Gerais, 8.IX.1963, Halik 2272. (USNM). Paratype; 1, (Brazil) C. Jordao, S. Paulo, 12.X.1954, Halik 13464 (USNM).

**Geographical distribution.** Brazil.

**Remarks.** The dorsal color pattern of this species is distinctive and is not repeated elsewhere within the genus.

#### 54. *Cyrea jackie* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.4 mm, width 1.8 mm; body elongate oval, convex. Dorsal surface with head, pronotum and elytron smooth, shiny. Color yellow except head with clypeus black; pronotum black except lateral 1/6 yellow; elytron black with 3 yellow spots, basal spot long, sinuate, oblique from near scutellum nearly to outer middle of elytron, discal spot small, irregularly triangular, apical spot large, transversely rectangular (Fig. 299); ventral surface with head, prosternum, meso- and metaventrite black, metafemur brown; abdomen dark brown except lateral 1/3 yellowish brown. Head punctures small, separated by a diameter or less, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to about twice a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures much larger than on elytron, separated by a diameter or less medially, larger and separated by less than a diameter in lateral 1/3. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 2/5 of prosternum, connected to prosternal base by single carina. Metaventrite with setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and coarse, dense punctures; ventrites 2-3 with coarse, dense punctures medially, punc-

tures finer laterally, ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex weakly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe slightly shorter than paramere, slightly asymmetrical, slender, sides parallel to apical 4/5, curved to rounded apex in apical 1/5; paramere *Pvl*, lower margin widely produced in apical 1/2, lower margin curved upward to rounded apex (Fig. 300, 301); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, slender, apex truncate, outer arm wider and slightly longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 302, 303).

**Female.** Unknown.

**Variation.** Elytron of paratype with 2 spots, basal spot not sinuately straight from near scutellum onto apical declivity, spot absorbing the discal spot.

**Type material.** Holotype male; (Brazil) C. Jordao, S. Paulo, 17.X.1959, J. Halik, 13470. (USNM). Paratype; 1, (Brazil) C. Jordao, S. Paulo, 9.X.1959, J. Halik 13469 (USNM).

**Geographical distribution.** Brazil.

**Remarks.** The two male type specimens have slightly differing elytral color patterns, both patterns unique within the genus. They are considered the same species because all other characters are identical, including male genitalia, and they were collected at the same locality.

### 55. *Cyrea victoria* (Crotch), new combination

*Hyperaspis victoria* Crotch, 1874:223; Korschefsky 1931:199; Blackwelder 1945:448; Gordon 1987:28.

**Description.** Male. Length 3.6 mm, width 2.6 mm; body elongate oval, convex. Dorsal surface with head, pronotum and elytron smooth, shiny. Color reddish yellow except pronotum with long, wide basomedian macula extended 2/3 distance to anterior pronotal margin, macula medially indented with deep yellow emargination nearly dividing macula; elytron black with 3 yellow spots, humeral spot small, triangular, basal spot large, irregularly rectangular from base near scutellum posteriorly to apical declivity, apical spot large, irregularly oval (Fig. 304); ventral surface with head, prosternum reddish yellow, meso- and metaventrite dark brown; abdomen reddish yellow except median portions of ventrites 1-4 dark brown. Head punctures coarse, separated by a diameter or less, each puncture about as large as 3 eye facets; pronotal punctures smaller than head punctures, separated by less than to twice a diameter; elytral punctures smaller than on pronotum, separated by 1 to 4 times a diameter; metaventral punctures larger than on head medially, separated by a diameter or less medially, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, outer margin weakly arcuate, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent to basal 1/5 of prosternum, connected to base by single carina. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite curved throughout, very slightly extended forward at apex. Ventrites 1-3 with sparse, short pubescence and coarse, sparse punctures; ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about 4/5 as long as paramere, narrow, asymmetrical, sides nearly parallel from base to rounded apex; paramere *Pvl*, wide, lower margin widely produced medially, apex rounded (Fig. 305, 306); siphon robust, strongly curved in basal 1/2, without lateral alae, basal capsule with inner arm

short, wide, apex truncate, outer arm wider, longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 307, 308).

**Female.** Similar to male except head with clypeus brown and frons mostly black, apex of black area on frons triangularly emarginate, pronotum with basomedian macula extended to apical pronotal border, macula entire, without median yellow emargination. Genitalia with spermathecal capsule short, wide, about same width throughout except basal 1/4 slightly enlarged, apex of cornu rounded; bursal cap oval, with 2 sclerotized arms, apical strut long, widened from base to apex (Fig. 309).

**Variation.** Length 3.2 to 3.6 mm, width 2.2 to 2.6 mm. Elytron with 2 reddish yellow spots, without humeral spot.

**Type locality.** Cayenne.

**Type depository.** UMZC (lectotype designated by Gordon, 1987).

**Geographical distribution.** Brazil, French Guiana, Guyana, Trinidad.

**Specimens examined.** 5. **Brazil.** Corumba, Matto Grosso. **French Guiana.** "Cayenne." **Guyana.** Mazaruni-Potaro Dist., Kartabo Pt. **Trinidad.** Morne Bleu, 2700'. (UMZC) (USNM).

**Remarks.** *Cyrea victoria* is another large, distinctively marked species with an elytral color pattern similar to that of *C. tamara*. However, male genitalia place them in different groups. In addition to a distinctive dorsal color pattern, *C. victoria* differs from other similar appearing species by its distribution in northern South America as opposed to Andean countries.

### 56. *Cyrea marcia* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.6 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head, pronotum and elytron smooth, shiny. Color yellow except pronotum with narrow, dark brown basomedian macula extended about 2/3 distance to anterior pronotal margin, macula with apex deeply, widely indented with yellow, lateral borders sinuate; elytron dark brown with 3 yellow spots, humeral spot small, triangular, discal spot large with irregular borders, apical spot somewhat rounded (Fig. 310); ventral surface with head, prosternum yellowish brown, meso- and metaventrites dark brown; abdomen yellowish brown except median portion of ventrites slightly darker. Head punctures fine, separated by less than a diameter, each puncture 2-3 times as large as an eye facet; pronotal punctures slightly larger than head punctures, separated by less than to twice a diameter; elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures smaller than on elytron medially, separated by 1 to 3 times a diameter, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, weakly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin weakly arcuate, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/3 of prosternum, connected to base with single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened medially, extended forward at apex. Ventrites 1-3 with sparse, long pubescence and coarse, dense punctures; ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about 3/4 as long as paramere, slender, asymmetrical, sides mostly parallel from base to rounded apex; paramere *Pvl*, wide, widest medially, lower margin strongly curved from base to rounded apex (Fig. 311, 312); siphon robust, strongly curved in basal 2/3, without visible alae, basal capsule with



inner arm long, slender, apex feebly rounded, outer arm curved, narrowed from base to apex, wider and longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 313, 314).

**Female.** Similar to male except head dark brown, pronotum dark brown except lateral 1/7 yellowish brown, elytron with 2 pale spots, humeral spot lacking. Genitalia with spermathecal capsule short, wide, basal 1/4 slightly widened, cornu slightly enlarged with rounded apex; bursal cap oval, with 2 faintly sclerotized arms, apical strut fine, short, apical 1/3 spatulate (Fig. 315).

**Variation.** Length 2.5 to 2.9 mm, width 2.0 to 2.3 mm. Elytron with discal spot slightly differently shaped in every specimen from highly irregular to somewhat triangular.

**Type material.** Holotype male; Brazil, Santarem, Acc.No.2966. (CMNH). Paratypes; 2,1, same data as holotype; 1, Brazil, Taperina, Acc.No.2966, June (CMNH).

**Geographical distribution.** Brazil.

**Remarks.** *Cyrea marcia* may be recognized by the dorsal color pattern and lack of setal tufts on metaventrite and basal abdominal ventrite. In size and elytral color pattern it most resembles the single paratype of *C. jackie*, but males of *C. marcia* have a pale humeral spot that is lacking in males of *C. jackie*.

### 57. *Cyrea tanya* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.7 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head weakly alutaceous, shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with long, wide, black basomedian macula extended about 5/6 distance to anterior pronotal margin, macula with apex faintly emarginate with yellow medially, lateral borders sinuate; elytron black with 2 yellow spots, humeral spot small, triangular, center of elytron with wide vitta extended from base nearly to apex (Fig. 316); ventral surface with head, prosternum, meso- and metaventrites black; abdomen yellowish brown except median portions of ventrites 1-3 dark brown. Head punctures fine, separated by a diameter or less, each puncture 2-3 times as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures larger than on elytron medially, separated by less than a diameter, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, weakly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin weakly arcuate, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/4 of prosternum, connected to base with single carina. Metaventrite with setal tuft. Basal abdominal ventrite without apparent setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened medially, extended forward at apex. Ventrites 1-3 with dense, long pubescence and coarse, dense punctures; ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 3/4 as long as paramere, slender, asymmetrical, sides weakly convergent from base to abruptly rounded apex; paramere *Pvl*, wide, widest medially, lower margin strongly curved to rounded apex (Fig. 317, 318); siphon robust, strongly curved in basal 1/2, without visible alae, basal capsule with inner arm short, wide, apex feebly rounded, outer arm curved, slightly wider and longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 319, 320).

**Female.** Similar to male except head black with large, yellow macula on frons posterior to clypeus, apex of macula slightly projected medially, pronotum with basomedian macula extended to anterior pronotal margin. Genitalia with spermathecal capsule short, widened in basal 1/3, apex of cornu abruptly rounded;

bursal cap with 2 sclerotized arms, apical strut slender, slightly widened in apical 1/2, apex bent to one side (Fig. 321).

**Variation.** None observed.

**Type material.** Holotype male; Bolivia, Santa Cruz, Amboro National Park, Los Volcanes. C.1000m, S18° 06'; W63° 36', 20/xi-12/xii/2004, Flight Interception Trap, Mendel, H. & Barclay, M.VI. BMNH(E)2004-280. (BMNH) Paratype; 1, same data as holotype except MV Light Sheet on stream beach, Barclay, M.VI. & Mendel, H. BMNH(E)2004-280. (BMNH)

**Geographical distribution.** Bolivia.

**Remarks.** This species is readily distinguished from all other *Cyrea* species except *C. nellie* by the bright yellow median vitta on each elytron sharply contrasted with the black background. The holotype of *C. nellie* is nearly identical externally, but the protibial and siphonal structures of the two species are quite different, and they are widely separated geographically. See remarks under *C. nellie*.

### 58. *Cyrea nellie* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.8 mm, width 2.1 mm; body elongate oval, convex. Dorsal surface with head, pronotum and elytron smooth, shiny. Color yellow except pronotum with long, wide, black basomedian macula extended about 7/8 distance to anterior pronotal margin, macula with apex truncate, not emarginate with yellow medially, lateral borders arcuate; elytron black with 2 yellow spots, humeral spot minute, triangular, reddish brown, center of elytron with wide vitta extended from base nearly to apex (Fig. 322); ventral surface with head, prosternum, meso- and metaventrites black, trochanters dark brown, base of mesofemur and basal 1/2 of metafemur dark brown; abdomen yellowish brown except median portions of ventrites 1-3 dark brown. Head punctures fine, separated by a diameter or less, each puncture 2-3 times as large as an facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures much larger than on elytron medially, separated by a diameter or less, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with wide, arcuate flange, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/3 of prosternum, connected to base with single carina. Metaventrite with setal tuft. Abdomen lost. Genitalia with basal lobe about as long as paramere, slender, asymmetrical, sides weakly convergent from base to abruptly rounded apex; paramere *Pvl*, moderately wide, widest medially, lower margin curved to obliquely truncate apex (Fig. 323, 324); siphon robust, strongly curved in basal 2/3, without visible alae, abruptly bent at apical 1/8, basal capsule with inner arm long, slender, apex obliquely truncate, outer arm curved, slightly wider and longer than inner arm, with accessory piece, basal border widely, deeply emarginate (Fig. 325, 326).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Ecuador, Zamora-Chinchipec. 8km NW Zamora, mouth Rio Sabanilla. 1420m., 1 November 1987, C. Young, R. Davidson, J. Rawlins, Wet forest. (CMNH).

**Geographical distribution.** Ecuador.

**Remarks.** This species is similar in dorsal color pattern to *C. tanya*, but distinguished by the arcuately flanged protibia, partly dark brown meso- and metafemur, differently formed male siphon, and Ecuadorean distribution. See remarks under *C. tanya*.

### 59. *Cyrea marlene* Canepari and Gordon

**Description.** Male holotype. Length 2.6 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head, pronotum and elytron smooth, shiny. Color yellow except pronotum with large, wide, black basomedian macula extended about 4/5 distance to anterior pronotal margin, projected medially, macula with apex truncate, entire, lateral borders rectangular; elytron black with 3 yellow spots, humeral spot small, triangular, discal spot large, irregularly, obliquely rectangular, apical spot somewhat rounded (Fig. 327); ventral surface with head, anterior 1/3 of prosternum, and metaventrite black, posterior 2/3 of prosternum, mesoventrite, and median spot on metaventrite yellowish red; abdomen yellow except median portions of ventrites 1-4 yellowish brown, middle of basal ventrite with large, yellow spot. Head punctures fine, separated by less than a diameter, each puncture about as large as 2 eye facets; pronotal punctures slightly larger than head punctures, separated by less than to about a diameter, elytral punctures slightly smaller than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures larger than on elytron medially, separated by 1 to 3 times a diameter, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin weakly arcuate, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/3 of prosternum, connected to base with single carina. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex. Ventrites 1-2 with dense, long pubescence and coarse, dense punctures; ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about 3/4 as long as paramere, slender, asymmetrical, sides slightly convergent from base to rounded apex; paramere *Pvl*, wide, widest in anterior 1/2, lower margin strongly curved to rounded apex (Fig. 328, 329); siphon robust, strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, apex truncate, outer arm curved, narrower and longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 330, 331).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Brazil, Para, Boa Vista, 18-IX-1964, A. Mones, 18, UNICO, Pres by Com Inst Ent B M 1974-1, C.I.E. Coll. A. 7175, *Hyperaspis muhni* Brethes mlt., det. E.A.J. Duffy, 1974. (BMNH).

**Geographical distribution.** Brazil.

**Remarks.** *Cyrea marlene* may be identified by dorsal color pattern alone, but if the ventral color pattern proves to be consistent then it may also serve as an excellent identification character. Of particular interest is the yellowish red prosternal process and median reddish yellow metaventrite spot.

**60. *Cyrea heidi* Canepari and Gordon, new species**

**Description.** Male holotype. Length 3.2 mm, width 2.3 mm; body elongate oval, convex. Dorsal surface with head slightly alutaceous, weakly shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with large, brown, rounded basomedian macula extended about 5/6 distance to anterior pronotal margin, not projected medially, macula with apex arcuate; elytron brown with 3 large yellow spots, all spots narrowly connected except scutellar spot discrete, humeral spot irregularly connected to apical spot along lateral margin of elytron, scutellar spot triangular, discal spot triangular, apical spot transversely oval (Fig. 332); ventral surface with head, prosternum, meso- and metaventrite brownish yellow; abdomen yellow except median portions of ventrites 1-3 faintly yellowish brown. Head punctures fine, separated by less than a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to 3 times a diameter; metaventral punctures larger than on elytron medially, separated by 1 to 3 times a diameter, becoming larger and separated by less than a diameter toward lateral margin. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, weakly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin weakly arcuate, basal tooth absent, sponda slightly extended beyond protibial margin (Fig. 333). Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/5 of prosternum, connected to base with single carina. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex. Ventrites 1-3 with dense, long pubescence and coarse, dense punctures; ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about 4/5 as long as paramere, slender, asymmetrical, sides convergent from base to abruptly rounded apex; paramere *Pvl*, wide, widest at middle, lower margin somewhat truncate medially, strongly curved to rounded apex (Fig. 334, 335); siphon robust, strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, apex truncate, outer arm curved, slightly narrower and longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 336, 337).

**Female.** Similar to male except pronotum entirely yellow. Genitalia with spermathecal capsule short, wide, slightly narrowed from base to apex, apex of cornu rounded; bursal cap oval with 2 faintly sclerotized arms, apical strut short, slender (Fig. 338).

**Variation.** None observed.

**Type material.** Holotype male; (Argentina) Colonia Progreso, B. Vista (Ctes.), 22/iv/64, s/citrus, ex. Coleccion M. Viana ARG.033301, Coleccion J.E. Barriga Chile 076980. (JEBC). Paratype; 1, Argentina, prov. Misiones, Posadas, Martires, 14 ago 1965, leg. D. Carpintero, Coleccion J.E. Barriga Chile 128665 (JEBC).

**Geographical distribution.** Argentina.

**Remarks.** *Cyrea heidi* has a distinctive dorsal color pattern unlike any other in the devillii group. It is an unusual species in that the male pronotum has a large, basomedian macula, while the female pronotum is immaculate. In other species of the genus that pattern is reversed.

**61. *Cyrea januarii* (Bréthes), new combination.**

*Cleothera januarii* Bréthes, 1925b:161

*Hyperaspis januarii*: Korschefsky 1931:192; Blackwelder 1945:447.

**Description.** Male holotype. Length 3.0 mm, width 2.4 mm; body oval, convex. Color black except head yellow; pronotum black except anterior margin and anterolateral 1/5 yellow; elytron yellow bordered with black, suture broadly black with lateral expansion in basal 1/2 and minor expansion at apical 1/4, base narrowly black, lateral margin unevenly black except humeral angle yellow with extension of black area at apical 1/4, apex narrowly black (Fig. 339); ventral surface with mouthparts, antennae, legs reddish yellow. Head punctures small, separated by a diameter or less, each puncture as large as 2 eye facets; pronotal punctures smaller than on head, separated by 1 to 3 times a diameter; elytral punctures larger than on pronotum, separated by less than to about 3 times a diameter; metaventral punctures much larger than on pronotum, separated by a diameter or more medially, becoming larger and contiguous toward lateral margin. Clypeus strongly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as 6 eye facets, angled forward, abruptly rounded apically, yellow. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded, basal margin without bordering line. Epipleuron narrow, grooved, deeply emarginate for reception of femoral apices. Protibia without angle, outer margin smooth; sponda shallow. Carinae on prosternal process widely separated at apex, convergent before prosternal base, single carina extended to base. Metaventrite with median setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded, extended to apical margin of ventrite at middle, then broadly forward to lateral 1/5 of ventrite; ventrites 1-4 with sparse, long pubescence, punctures sparse medially becoming dense laterally; 5th ventrite weakly depressed medially in apical 1/2, apical margin weakly emarginate medially, surface densely punctate; 6th ventrite short, narrow, not depressed in apical 1/2, apical margin slightly emarginate, densely pubescent, surface smooth, glabrous. Apical tergite finely, densely punctured. Genitalia with basal lobe shorter than paramere, asymmetrical, narrowed to rounded apex; paramere *Pvl*, wide (Fig. 340, 341); siphon slender, strongly curved, without obvious lateral alae, basal capsule large, inner arm long, wide, apically obliquely truncate, outer arm slightly longer than inner arm, with large accessory piece, basal border deeply emarginate (Fig. 342, 343).

**Female.** Unknown.

**Variation.** Unknown.

**Type locality.** Brazil, Rio de Janeiro.

**Type depository.** BMNH (holotype).

**Geographical distribution.** Known only from the type locality in Brazil.

**Specimens examined.** 1. The holotype.

**Remarks.** The dorsal color pattern is diagnostic for this species.

The male holotype is labeled "Type (orange bordered disc)/type (handwritten)/Brasilia Rio Jan. (handwritten)/Fry. Coll. 1905. 100./Cleothera januarii Brethes (handwritten)." From the original description it is apparent that Brèthes described only one specimen.

## 62. *Cyrea spinalis* (Mulsant), new combination

*Cleothera spinalis* Mulsant, 1853:74.

*Hyperaspis spinalis*: Crotch 1874:216; Korschefsky 1931:197; Blackwelder 1945:448.

**Description.** Male lectotype. Length 3.5 mm, width 2.8 mm; body broadly rounded, somewhat flattened. Color yellow except pronotum with median dark brown area extended from base to anterior 5/6; elytron with suture narrowly dark brown from base to apical declivity (Fig. 344); ventral surface with head,

prosternum, meso-, and metaventrite black, abdomen dark brown medially, bordered with yellow. Head punctures large, separated by a diameter or less, each puncture as large as 4 eye facets; pronotal punctures smaller than on head, separated by 1 to 3 times a diameter; elytral punctures larger than on pronotum, separated by 2 to 3 times a diameter; metaventral punctures much larger than on pronotum, nearly absent medially, becoming larger and widely spaced toward lateral margin. Clypeus strongly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as about 6 eye facets, angled forward, abruptly rounded apically, yellow. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded, basal margin without bordering line. Epipleuron wide, strongly descending externally, weakly grooved, deeply emarginate for reception of femoral apices. Protibia weakly oblique, flange 1/2 width of tibia, outer margin smooth; sponda shallow. Carinae on prosternal process weak, nearly invisible, no apparent extension to base. Metaventrite without median setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded, extended to apical margin of ventrite at middle, then broadly forward to lateral 1/5 of ventrite; ventrites 1-4 with sparse, long pubescence, punctures sparse medially becoming dense laterally; 5th ventrite weakly depressed medially in apical 1/2, apical margin weakly emarginate medially, surface densely punctate; 6th ventrite short, narrow, not depressed in apical 1/2, apical margin nearly truncate, densely pubescent, surface smooth, glabrous. Apical tergite finely, densely punctured. Genitalia with basal lobe longer than paramere, asymmetrical, narrowed to rounded apex; paramere *Pvl*, wide (Fig. 345, 346); siphon slender, strongly curved, without obvious lateral alae, basal capsule large, inner arm short, wide, apically truncate, outer arm longer than inner arm, with small accessory piece, basal border deeply emarginate (Fig. 347, 348).

**Female.** Unknown.

**Variation.** Unknown.

**Type locality.** Brazil.

**Type depository.** BMNH (lectotype here designated).

**Geographical distribution.** Bolivia, Brazil.

**Specimens examined.** 1. The lectotype.

**Remarks.** This species has a comparatively distinctive color pattern vaguely resembling that of *C. melanura*, it also has an unusual, dorso-ventrally flattened habitus, an epipleuron with a strongly descending external margin, and an apparent lack of prosternal carinae. All of which set it apart from other known species of *Cyrea*.

The lectotype is labeled "Type (orange bordered disc)314/80.23 (handwritten)/*Cleothera spinalis*, Muls, T Brazil (blue paper, handwritten)/Named by Mulsant." Mulsant (1853) had specimens from both Bolivia and Brazil.

### 63. *Cyrea similaris* (Mader), new combination

*Hyperaspis* (*Cleothera*) *similaris* Mader, 1957: 84.

**Description.** Male holotype. Length 2.8 mm, width 2.2 mm; body oval, convex. Color yellow except pronotum with narrow, basal, medially emarginate brown macula; elytron with lateral and sutural margins narrowly dark brown, 4 large brown spots arranged in two rows, one lateral and one near suture, anterior sutural spot joined to dark sutural margin (Fig. 349); ventral surface with apicomedian portion of prosternum, metaventrite, median portion of abdominal ventrites 1-4 dark brown, mesoventrite reddish yellow medially, dark reddish brown laterally. Head punctures small, separated by a diameter or less, each puncture as large as 2 eye facets; pronotal punctures as large as on head, separated by less

than to twice a diameter; elytral punctures slightly smaller than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures larger than on elytron, separated by several times a diameter medially, becoming larger and separated by less than to twice a diameter toward lateral margin. Clypeus weakly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as about 4 eye facets, angled forward, abruptly rounded apically, yellow. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded, basal margin without bordering line. Epipleuron narrow, grooved, deeply emarginate for reception of femoral apices. Protibia narrowly oblique, outer margin smooth; sponda shallow. Carinae on prosternal process widely separated at apex, converging before prosternal base, single carina extended to base. Metaventricle without median setal tuft. Abdomen with postcoxal line on basal abdominal ventrite angled to ventrite apex, rounded along base, then rounded forward to lateral 1/4 of ventrite; ventrites 1-4 with sparse, short pubescence, punctures sparse medially becoming dense laterally; 5th ventrite weakly depressed medially in apical 1/2, apical margin weakly emarginate medially, surface densely punctate; 6th ventrite short, narrow, not depressed in apical 1/2, apical margin nearly truncate, densely pubescent, surface smooth, glabrous. Apical tergite finely, densely punctured. Genitalia with basal lobe shorter than paramere, slender, asymmetrical; paramere *Pvl*, wide (Fig. 350, 351); siphon slender, strongly curved, without obvious lateral alae, basal capsule small, inner arm long, narrow, apically rounded on inner margin, outer arm shorter than inner arm, with very small accessory piece, basal border broadly emarginate (Fig. 352, 353).

**Female.** Unknown.

**Variation.** Length 2.7 to 2.8 mm; width 1.9 to 2.2 mm (from Mader, 1957).

**Type locality.** Bolivia, Yungas La Paz, Irupana (Siquiljara).

**Type depository.** MHNS.

**Geographical distribution.** Known only from the type locality in Bolivia.

**Specimens examined.** 1. The holotype.

**Remarks.** Mader (1957) described this species from two specimens, one of which he retained in his collection and not examined here. The dorsal color pattern is distinctive for *C. similaris* and closely resembles that of *C. ornaticollis* Weise, a Venezuelan species. *Cyrea ornaticollis*, as the name indicates, has a highly patterned pronotum quite unlike the mostly unadorned pronotum of *C. similaris*. Male genitalia are completely unlike in these two species, placing them in different groups.

#### 64. *Cyrea petropolitana* (Crotch), new combination

*Hyperaspis petropolitana* Crotch, 1874: 223; Korschefsky 1931: 194; Blackwelder 1945: 448; Gordon 1987: 28.

**Description.** Female lectotype. Length 2.2 mm, width 1.7 mm; body oval, convex. Dorsal surface with head slightly alutaceous, feebly shiny, pronotum and elytron smooth, shiny. Color dark brown except lateral 1/3 of pronotum yellow; elytron with 2 yellow spots, discal spot large, occupying median 1/3 of elytron, apical spot small, transversely elongate (Fig. 354); ventral surface with mouthparts, prothoracic hypomeron, and legs except basal 3/4 of femur yellow. Head punctures small, separated by less than a diameter, each puncture as large as 4 eye facets; pronotal punctures as large as on head, separated by less than to twice a diameter; elytral punctures as large as on pronotum, separated by less than to 3 times a diameter; metaventral punctures larger than on pronotum, separated by a diameter or less medially, becoming very large and separated by less than a diameter toward lateral margin. Clypeus weakly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye

canthus as long as about 6 eye facets, strongly angled forward, abruptly rounded apically, brown. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded, basal margin with faint trace of bordering line. Epipleuron narrow, flat, deeply emarginate for reception of femoral apices. Protibia narrowly oblique, outer margin smooth; sponda barely visible. Carinae on prosternal process widely separated at apex, converging before prosternal base, single carina extended to base. Abdomen with postcoxal line on basal abdominal ventrite angled to ventrite apex, rounded along base, then rounded forward to lateral 1/4 of ventrite. Genitalia with short spermatheca slightly curved at middle; bursal cap with 2 arms, median strut apically paddle shaped (Fig 358).

**Male.** Similar to female except head yellow. Abdominal ventrite 5 broadly, feebly emarginate apically; ventrite 6 broadly, deeply emarginate apically, laterally angulate. Genitalia with basal lobe about 3/4 as long as paramere, narrow, sides strongly convergent, apex acute; paramere wide, ventral margin lobed, apex obliquely truncate (Fig. 355, 356); siphon long, slender, curved in basal 3/4, apical 1/4 recurved, basal capsule with inner arm long, slender, apically truncate, outer arm about as long as inner arm, slender, with accessory piece, basal border broadly, shallowly emarginate (Fig. 357).

**Variation.** None observed.

**Type locality.** “Petropolis” (Brazil).

**Type depository.** UMZC (lectotype designated by Gordon, 1987).

**Geographical distribution.** Brazil.

**Specimens examined.** 2. **Brazil.** Petropolis; Rio de Janeiro (type series). (BMNH) (UMZC).

**Remarks.** This species has a dorsal color pattern similar to a few other Brazilian species, but none of these match the type specimens exactly, either in color pattern or male genitalia.

The female lectotype is in the Crotch collection (UMZC). The male paralectotype in the BMNH is labeled “Type (orange bordered disc)/3750 (handwritten)/Fry Rio Jan/Fry Coll. 1905.100/Petropolitana (handwritten)/Hyperaspis Petropolitana Crotch, Brazil, Rio J. Type (handwritten).”

### 65. *Cyrea castelnaudii* (Mulsant), new combination

*Cleothera castelnaudii* Mulsant, 1850: 559.

*Hyperaspis castelnaudi*: Crotch 1874: 217; Korschefsky 1931:186; Blackwelder 1945: 446; Gordon 1987: 27.

**Description.** Male lectotype. Length 2.2 mm, width 1.7 mm; body oval, convex. Color yellow except pronotum reddish brown; elytron light brownish yellow with large, irregularly shaped dark brown spot on apical declivity (Fig. 359). Genitalia with basal lobe 4/5 as long as paramere, sides narrowed from base to apical 3/4, apical 1/4 rounded, apex slightly notched on one side, paramere large, wide, lower margin projected at middle, truncate medially, obliquely angled to rounded apex (Fig. 360, 361); siphon robust, abruptly curved in basal 1/2, without visible alae, basal capsule with inner arm short, narrow, apex obliquely truncate, outer arm longer and slightly wider than inner arm, with accessory piece, basal margin widely emarginate (Fig. 362, 363).

**Female.** Unknown.

**Variation.** Unknown.

**Type locality.** Brazil, “Matto-Grosso.”



**Type depository.** MNHP (lectotype).

**Geographical distribution.** Brazil.

**Specimens examined.** 1. The lectotype.

**Remarks.** Mulsant (1850) did not state how many type specimens he had, but did list the MNHP as type repository. The specimen in the MNHP collection labeled “Museum Paris, Matto-Grosso, de/13-47/149/Cleothera castelnaudii Muls., auct. det.” is designated as the lectotype. No specimens other than the lectotype were available for examination.

### tessulata group

#### 66. *Cyrea beatrice* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.8 mm, width 2.4 mm; body rounded, convex. Dorsal surface with head alutaceous, feebly shiny, pronotum and elytron slightly alutaceous, shiny. Color yellow except pronotum with narrow, black basomedian macula extended 5/6 distance to anterior pronotal margin, not apically emarginate with yellow; elytron yellow with basal margin broadly black, black border extended laterally nearly to lateral margin, sutural margin with black border triangularly widened on apical declivity, apical and lateral margins narrowly black, black spot on apical declivity extended obliquely forward from lateral margin in lateral 1/3 of elytron (Fig. 364). Head punctures small, separated by less than to about a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures as large as on pronotum, separated by about a diameter. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Abdomen with 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate with lateral angle abrupt. Apical tergite finely, densely punctured, apex deeply emarginate. Genitalia with basal lobe slightly shorter than paramere, asymmetrical, slightly narrowed from base to apex, apex emarginate; paramere *Psc*, wide, slightly widened from base to apex, apex truncate, lower anterior angle projected (Fig. 365, 366); siphon strongly curved in basal 2/3, with visible alae at apical 1/12, basal capsule heavily sclerotized, inner arm long, narrow, apex rounded, with short, wide basal projection, outer arm curved, wider and longer than inner arm, with small accessory piece, basal border deeply, broadly emarginate (Fig. 367, 368).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; (Brazil) Corumbá de Goiás, GO, Brasil, 31.I-3.II.1962, J. Bechyné col. (DZUP).

**Geographical distribution.** Brazil.

**Remarks.** The dorsal color pattern is characteristic, as are the male genitalia. This species and *C. dolores* share the same type of male paramere, and are placed in a group based on that structure. The holotype of *C. beatrice* has the ventral surface obscured by glue, concealing some features such as the prosternal carinae and protibial structure.

**67. *Cyrea dolores* Canepari and Gordon, new species**

**Description.** Male holotype. Length 2.6 mm, width 1.8 mm; body elongate, oval, convex. Dorsal surface with head feebly alutaceous, shiny, pronotum and elytron smooth, shiny. Color reddish yellow except pronotum mostly black with anterior 1/6 and lateral 1/8 yellow, median portion of black area with 3 small, yellow spots, median spot elongate, triangular on each end, lateral spot round; elytron reddish yellow with basal, sutural, and apical margins narrowly black, basal border narrowly projected posteriorly onto humeral callus, sutural border slightly widened anterior to middle, a narrow, yellow border present inside black border, yellow border widest laterad of scutellum (Fig. 369); ventral surface with head, prosternum, meso- and metaventrites dark brown, proleg with dark brown femur, meso- and metalegs entirely dark brown; abdomen dark brown. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures slightly larger than head punctures, separated by 1 to 3 times a diameter; elytral punctures as large as pronotal punctures in inner 1/3, outer 1/3 with punctures much larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures fine, sparse medially, as large as outer pronotal punctures and separated by a diameter or less in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin feebly rounded, basal margin without trace of bordering line medially. Epipleuron narrow, not grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin straight, smooth, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/10, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened medially along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and small punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate. Apical tergite medially grooved, finely, densely punctured, apex emarginate. Genitalia with basal lobe as long as paramere, slightly asymmetrical, widened from base to abruptly rounded apex; paramere *P<sub>sc</sub>*, wide, widened from base to truncate apex, lower anterior angle projected (Fig. 370, 371); siphon strongly curved in basal 2/3, with visible alae at apical 1/12, basal capsule heavily sclerotized, inner arm long, narrow, apex rounded, with short basal projection, outer arm straight, slightly wider and longer than inner arm, with accessory piece, basal border deeply, broadly emarginate (Fig. 372).

**Female.** Similar to male except head black, black area of pronotum extended to anterior pronotal margin. Genitalia with spermathecal capsule long, slender medially, basal 1/4 widened, apex of cornu bulbous; bursal cap oval, with 3 sclerotized arms, apical strut short, slender (Fig. 373).

**Variation.** Length 2.6 to 3.3 mm, width 1.8 to 2.6 mm. Elytron with black border variable in width from very narrow to as described for the holotype to wide, projection of basal border onto humeral callus present or absent, yellow border outside of black border variable in width and distinctness.

**Type material.** Holotype male; (Brazil) Vila Monte Verde, Minas Gerais, I.III 1971, F. Halik, 11378 (MZSP). Paratypes; 3, same data as holotype except additional dates 18.XI.1966, 18.II 1969, 2.II 1970 (MZSP).

**Geographical distribution.** Brazil.

**Remarks.** The dorsal color pattern is highly diagnostic for this species, especially the unique pronotal pattern of 3 small, yellow spots on a black background. This is a handsome species with its contrasting reddish yellow, black, and yellow dorsal pattern.

**68. *Cyrea erica* Canepari and Gordon, new species**

**Description.** Male holotype. Length 2.7 mm, width 2.1 mm; body rounded, somewhat oval, convex. Dorsal surface smooth, shiny. Color yellow except pronotum with short, narrow, dark brown basomedian macula, macula with anterior margin broadly, deeply emarginate with yellow; elytron with sutural margin narrowly bordered in black, and 2 large, black spots, 1 spot in anterior 1/2 of elytron, 1 spot on apical declivity, spots narrowly connected near lateral margin, anterior spot irregularly transverse, approaching sutural border, posterior spot obliquely transverse (Fig. 374); ventral surface with head, median 1/3 of prosternum, meso- and metaventrites dark brown; abdomen yellow except median 1/4 of ventrites 1-3 dark brown. Head punctures small, separated by less than to about a diameter, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter; elytral punctures larger than on pronotum, separated by less than to slightly more than a diameter; metaventral punctures larger than on elytron, separated by 1 to 2 times a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/3, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and small punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex emarginate with lateral angle abrupt. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe about as long as paramere, asymmetrical, slightly widened in basal 1/2, narrowed to obliquely truncate apex; paramere *Psc*, slender, sides parallel in median 1/3, then narrowed to rounded apex, lower anterior angle projected (Fig. 375, 376); siphon strongly curved in basal 1/2, without visible alae, basal capsule with inner arm long, narrow, apex rounded, outer arm wider and longer than inner arm, with accessory piece, basal border deeply, broadly emarginate (Fig. 377, 378).

**Female.** Unknown.

**Variation.** Length 2.6 to 3.0 mm, width 2.0 to 2.4 mm. Elytron with anterior and posterior spots not laterally connected.

**Type material.** Holotype male; Peru, Satipo, V-VI, 1942, Paprzycki. (USNM). Paratypes; 2, Peru, Satipo, XI, 1942, Paprzycki (USNM).

**Geographical distribution.** Peru.

**Remarks.** The dorsal color pattern is diagnostic for this species, especially the irregular shape of the anterior spot on each elytron.

**69. *Cyrea tessulata* (Mulsant), new combination**

*Cleothera tessulata* Mulsant, 1850: 578, 1037.

*Hyperaspis tessulata*: Crotch 1874: 220; Korschefsky 1931:197; Blackwelder 1945: 448.

*Cleothera schaufussi* Vogel, 1865: 235. NEW SYNONYM.

*Hyperaspis schaufussi*: Crotch 1874: 220; Korschefsky 1931:195; Blackwelder 1945: 448; Gordon 1987:27.

*Hyperaspis adelaida* Gorham, 1894: 201; Korschefsky 1931:184; Blackwelder 1945: 446. NEW SYNONYM.

**Description.** Male. Length 2.8 mm, width 2.5 mm; body rounded, convex. Dorsal surface smooth, shiny. Color yellow except pronotum with 4 brown spots, 1 spot on basal pronotal margin on each side of middle, 1 spot on basal pronotal margin anterior to scutellum, 1 spot at center of pronotum; elytron with 7 small, brown spots arranged as in Fig. 379; ventral surface with head, prosternum, meso- and metaventrites yellowish brown; abdomen yellow except median 1/3 of ventrites 1-2 brownish yellow. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures slightly larger than head punctures, separated by 1 to 2 times a diameter, elytral punctures larger than on pronotum, separated by 1 to about 2 times a diameter; metaventral punctures much larger than on elytron, separated by less than a diameter medially, becoming nearly contiguous in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, slightly angled forward, nearly straight, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron wide, slightly grooved, strongly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly curved, smooth, sponda extended beyond angle (Fig. 380). Carinae on prosternal process narrowly separated at apex, convergent toward base, joined at basal 1/3, single carina extended to prosternal base. Metaventrite without trace of sparse setal tuft. Basal abdominal ventrite without sparse setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened along posterior ventrite margin, extended forward at apex, ventrite coarsely punctured medially, with small, dense punctures laterally; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed medially, apical margin feebly emarginate; 6th ventrite short, narrow, slightly depressed medially, apical margin weakly emarginate, angle on each side of emargination rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 2/3 as long as paramere, asymmetrical, sides convergent from base nearly to apex, apex rounded, slightly emarginate on one side; paramere *Psc*, narrowed from base to rounded apex (Fig. 381, 382); siphon strongly curved in basal 2/3, without visible alae, basal capsule with inner arm long, narrow, apex obliquely rounded, outer arm wider and shorter than inner arm, with small accessory piece, basal border widely emarginate (Fig. 383, 384).

**Female.** Similar to male externally. Genitalia with spermathecal capsule long, slender, weakly narrowed medially; bursal cap oval, with 3 sclerotized arms, median arm faint, apical strut long, slender, apical 1/3 slightly spatulate (Fig. 385).

**Variation.** Length 2.5 to 3.0 mm, width 2.1 to 2.5 mm. Size of pronotal spots slightly variable, sometimes spots weakly connected, elytron often with humeral spot and spot on humeral callus connected and extended to basal pronotal margin, reducing number of spots on each elytron to 6, discal and apical spots sometimes reaching sutural margin.

**Type locality.** Of *tessulata*, Colombia; of *schaufussi*, Colombia; of *adelaida*, Mexico.

**Type depository.** Of *tessulata*, MNHP (lectotype by present designation); of *schaufussi*, DEI, (lectotype by present designation); of *adelaida*, BMNH (lectotype not designated).

**Geographical distribution.** Colombia.

**Specimens examined.** 54. **Colombia.** Antioquia,; Medellin. Cundinamarca; Colegio, Melgar, Pacheco, Sasaima. Rio Magdalena. Valle; Buenaventura. (BMNH) (CAS) (DEI) (USNM) (ZMHB).

**Remarks.** *Cyrea tessulata* has a distinctive dorsal color pattern by which it may be recognized. Many specimens are in collections, partly because it is apparently attracted to light, as evidenced by moth scales on the surface of several specimens examined. Examination of the types of both *C. schaufussi* and *C. adelaida* indicates that they are junior synonyms of *C. tessulata*.

The lectotype of *C. tessulata* in the MNHP is labeled "155/Cleothera tessulata Muls., auct. det." The lectotype of *C. schaufussi* in the DEI is labeled "Schaufuss 1932/Neu Granada (handwritten) Syntypus (pink label)/Cleothera schaufussi Vogel (handwritten)/coll. DEI Müncheberg." Three paralectotypes bear identical labels without the handwritten name label.

The lectotype should be in ZMHB but is not there, so the above DEI specimens that were obviously among those seen by Vogel (1865) are designated as the types. Gordon (1987) mistakenly designated a specimen in the Crotch collection (UMZC) as the lectotype of *C. schaufussi*, a mistake hereby corrected.

### 70. *Cyrea noticollis* (Mulsant), new combination

*Cleothera noticollis* Mulsant, 1850: 588.

*Hyperaspis noticollis*: Korschefsky 1931:192; Blackwelder 1945:447; Gordon 1987: 27.

**Description.** Male. Length 2.7 mm, width 2.3 mm; body oval, convex. Dorsal surface with head slightly alutaceous, shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with short, dark brown basomedian macula extended 1/4 distance to anterior pronotal margin, macula widely emarginate with yellow medially, each end projected anteriorly, 2 dark brown, somewhat triangular spots present at middle of pronotum, 1 spot on each side of middle; elytron with dark brown basal, sutural, and apical borders, sutural border wide, slightly widened anterior to middle of elytron, 4 dark brown spots present, humeral spot narrowly connected to pronotal base, discal spot J-shaped, narrowly connected to humeral spot, lateral spot on apical declivity irregularly elongate oval, inner spot on apical declivity elongate oval (Fig. 386); ventral surface with head, prosternum, meso- and metaventrites brown; abdomen yellow except median 1/3 of ventrites 1-3 brown. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures slightly larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures larger than on elytron, separated by less than a diameter, becoming larger in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin curved, smooth, sponda extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent toward base, joined at basal 1/3, single carina extended to prosternal base. Metaventrite without trace of sparse setal tuft. Basal abdominal ventrite without sparse setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened along posterior ventrite margin, extended forward at apex, ventrite coarsely, sparsely punctured medially, with small, dense punctures laterally; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed medially, apical margin feebly emarginate; 6th ventrite short, narrow, slightly depressed medially, apical margin weakly emarginate, angle on each side of emargination rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 2/3 as long as paramere, asymmetrical, sides curved from base nearly to apex, apex obliquely truncate; paramere *Psc*, narrowed from base to abruptly rounded apex (Fig. 387, 388); siphon strongly curved in basal 2/3, with lateral alae at apical 1/6, basal capsule with inner arm long, narrow, apex obliquely rounded, outer arm wider and shorter than inner arm, with small accessory piece, basal border widely emarginate (Fig. 389, 390).

**Female.** Similar to male except head with clypeus and margin near eye dark brown, pronotum with median basal spots narrowly connected to anterior pronotal margin. Genitalia with spermathecal capsule long, slender, basal 1/3 widened, median 1/3 narrow, cornu widened with small, bulbous apex; bursal cap nearly rectangular, with 3 heavily sclerotized arms, apical strut long, slender, widened from base to apex (Fig. 391).

**Variation.** Length 2.4 to 3.0 mm, width 1.7 to 2.5 mm. Size of pronotal and elytral spots slightly variable, pronotal spots sometimes narrowly connected, color of all spots varies from brown to black,

elytron with humeral and discal spots narrowly connected or discrete, discal spot occasionally divided into 2 spots, dark brown areas on ventral surface sometimes black.

**Type locality.** Colombia.

**Type depository.** MNHL (lectotype here designated).

**Geographical distribution.** Colombia, Peru, Venezuela.

**Specimens examined.** 152. **Colombia.** Nearly all Colombian specimens were from various localities in the Department of Cundinamarca. **Peru.** One specimen from Cuzco, Machu Picchu. **Venezuela.** One specimen labeled “Maracay.” (BMNH) (MNHL) (ZMHB) (USNM).

**Remarks.** *Cyrea noticollis* has a distinctive dorsal color pattern that will nearly always suffice for identification. Both male and female genitalia will also distinguish this species.

The lectotype of *C. noticollis* in the MNHL is labeled “Colombia, Reiche.” A single specimen in the MNHP lacking data of any kind is probably a paralectotype because Mulsant (1895) listed the Paris Museum as having one of his types. Because this specimen lacks data it is not so designated. One type specimen in the BMNH labeled “Syntype (blue bordered disc)/Colomb. (green disc, handwritten)/5771 (blue disc)/Noticollis Dej. Muls./Colombie/Named by Mulsant” is designated a paralectotype. Mulsant (1850) had examples of *C. noticollis* from several collections which indicates it is or was a frequently collected taxon. Gorham (1894) recorded this species from Central America. Specimens seen by Gorham were borrowed from the BMNH and proved to be a species belonging to the emiliae group, a species not known to occur in South America.

### 71. *Cyrea ornaticollis* (Weise), new combination

*Cleothera ornaticollis* Weise 1902:173.

*Hyperaspis ornaticollis* Korschefsky 1931:193; Blackwelder 1945:448.

**Description.** Male. Length 3.0 mm, width 2.4 mm; body oval, convex. Dorsal surface with head alutaceous, dull, pronotum weakly alutaceous, shiny, elytron smooth, shiny. Color yellow except pronotum with short, black basomedian macula extended 1/5 distance to anterior pronotal margin, apex of macula widely emarginate medially, with each end anteriorly projected, 2 black, comma shaped spots at middle of pronotum, 1 spot on each side of middle; elytron with sutural margin black, slightly wider in median 7/8, 4 black spots present, humeral spot widely elongate oval, discal spot small, connected to sutural border in apical 1/2 of elytron, posteromedian spot large, elongate oval (Fig. 392); ventral surface with head, prosternum, meso- and metaventrites black; abdomen dark brown. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by 1 to about 3 times a diameter; metaventral punctures as large as on elytron, separated by less than twice a diameter medially, becoming larger, separated by less than a diameter in lateral 1/3. Clypeus slightly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 8 eye facets long, straight, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin with trace of bordering line medially. Epipleuron wide, slightly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin curved, smooth, sponda extended beyond angle. Carinae on prosternal process widely separated at apex, convergent toward base, joined slightly anterior to middle of prosternum, single carina extended to prosternal base. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened along posterior ventrite margin, extended forward at apex, ventrite coarsely punctured medially, with small, dense punctures laterally; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed medially, apical margin feebly emarginate; 6th ventrite short, narrow,

slightly depressed medially, apical margin weakly emarginate, angle on each side of emargination rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe  $\frac{3}{4}$  as long as paramere, asymmetrical, sides slightly convergent from base to abruptly rounded apex; paramere *Psc*, sides slightly widened from base to rounded apex (Fig. 393, 394); siphon strongly curved in basal  $\frac{1}{2}$ , with visible alae at apical  $\frac{1}{6}$ , basal capsule heavily sclerotized, inner arm short, wide, apex bifid, outer arm slightly wider and longer than inner arm, with accessory piece, basal border broadly shallowly emarginate (Fig. 395).

**Female.** Similar to male except head brown with large, yellow median spot in basal  $\frac{1}{2}$  of frons, pronotum with large, brown basomedian spot extended from basal margin to middle of pronotum spot with posterior margin triangularly projected medially. Genitalia with spermathecal capsule long, slender, slightly narrower in median  $\frac{1}{3}$ ; bursal cap rectangular, with 3 sclerotized arms, apical strut elongate, widened from base to apex, bat shaped (Fig. 396).

**Variation.** Length 2.4 to 3.0 mm, width 1.8 to 2.4 mm. Male pronotum with mediobasal macula and median spot often connected, elytron with size of black spots variable, discal spot on suture sometimes large, square.

**Type locality.** Venezuela.

**Type depository.** ZMHB (lectotype here designated).

**Geographical distribution.** Venezuela.

**Specimens examined.** 6. **Venezuela.** Merida; Tach (Tachira), San Antonio; Merida, Timotes. (MIZA).(USNM) (ZMHB).

**Remarks.** *Cyrea ornaticollis* is distinguished from similar species by the unique dorsal color pattern, and unusually long, slender spermathecal capsule of the female genitalia.

The lectotype in the ZMHB is labeled "Venezuela, second word illegible (green paper, handwritten/ex.coll. J. Weise/TYPUS (pink paper) *Cleothera ornaticollis* m. (handwritten)/SYNTYPUS *Hyperaspis ornaticollis* Weise, 1902 labeled by MNHB 2004 (red paper)."

## 72. *Cyrea renifera* (Kirsch), new combination

*Cleothera renifera* Kirsch, 1876:122.

*Hyperaspis renifera*: Korschefsky 1931:195; Blackwelder 1945:448.

**Description.** Male. Length 3.0 mm, width 2.6 mm; body rounded, convex. Dorsal surface smooth, shiny. Color yellow except pronotum with short, wide, dark brown basomedian macula extended  $\frac{1}{5}$  distance to anterior pronotal margin, apex of macula widely emarginate medially, with lateral  $\frac{1}{3}$  anteriorly widened, 2 dark brown, triangular spots at middle of pronotum, 1 spot on each side of middle; elytron with outer margin narrowly brown, sutural border slightly widened in median  $\frac{1}{3}$ , 4 small, elongate brown spots present, spot on humeral callus elongately triangular, discal spot elongate oval, posterolateral spot triangular, posteromedian spot comma shaped (Fig. 397); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen yellow except median  $\frac{1}{3}$  of ventrites 1-4 brown. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by 1 to about 2 times a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, becoming nearly contiguous in lateral  $\frac{1}{3}$ . Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron wide, slightly grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia

with narrow oblique angle, outer margin nearly straight, smooth, sponda extended beyond angle (Fig. 398). Carinae on prosternal process narrowly separated at apex, convergent toward base, joined anterior to middle of prosternum, single carina extended to prosternal base. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened along posterior ventrite margin, extended forward at apex, ventrite coarsely punctured medially, with small, dense punctures laterally; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed medially, apical margin feebly emarginate; 6th ventrite short, narrow, slightly depressed medially, apical margin weakly emarginate, angle on each side of emargination rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe  $2/3$  as long as paramere, asymmetrical, sides convergent from base nearly to apex, apex rounded,; paramere slightly *Psc*, sides nearly parallel from base to weakly rounded apex, apex nearly truncate (Fig. 399, 400); siphon strongly curved in basal  $1/2$ , without visible alae, basal capsule weakly sclerotized, with inner arm long, wide, apex irregularly obliquely truncate, outer arm slightly wider and about as long as inner arm, with small accessory piece, basal border deeply, widely emarginate (Fig. 401, 402).

**Female.** Similar to male except genitalia with spermathecal capsule long, slender, of uniform size; bursal cap weakly rounded, with 2 narrow sclerotized arms, apical strut short, narrow, narrowed from base to apex (Fig. 403).

**Variation.** Length 3.0 to 3.1 mm, width 2.5 to 2.6 mm. Size of pronotal and elytral spots slightly variable.

**Type locality.** Peru.

**Type depository.** SNSD (lectotype here designated).

**Geographical distribution.** Brazil, Peru.

**Specimens examined.** 7. **Brazil.** Para; Santarem. **Peru.** Satipo. (SNSD) (USNM).

**Remarks.** *Cyrea renifera* is characterized by the dorsal color pattern having each elytron with 4 small spots, the anteromedian spot distinctly comma shaped.

The Kirsch type specimen in the SNSD collection labeled "Poznz Coll Kirsch(green paper/renifera Kschn(handwritten)/Hyperaspis renifera Kirsch(handwritten)(green label)/Typus(red label)/Hyperaspis (Cleoth)renifera Kirsch det. R. Korschefsky 1944/Staatl. Museum für Tierkunde, Dresden" is here designated the lectotype.

### 73. *Cyrea quinquenotata* (Mulsant), new combination

*Cleothera quinquenotata* Mulsant, 1850:548.

*Hyperaspis quinquenotata*: Crotch 1874:215; Korschefsky 1931:195; Blackwelder 1945:448.

*Cleothera sexnotata* Brèthes, 1925b:3. NEW SYNONYM.

*Hyperaspis sexnotata*: Korschefsky 1931:196; Blackwelder 1945:448.

**Description.** Male. Length 3.1 mm, width 2.7; body rounded, convex. Dorsal surface smooth, shiny. Color yellow except pronotum with short, dark brown basomedian macula extended  $1/6$  distance to anterior pronotal margin, macula widely emarginate with yellow medially, middle of emargination with short, dark brown projection, each end projected anteriorly, 2 dark brown, somewhat triangular spots present at middle of pronotum, 1 spot on each side of middle; elytron reddish yellow, sutural margin of elytron with narrow, dark brown border, border triangularly widened on apical declivity, 3 small spots present, humeral spot on callus round, discal spot broadly triangular, connected to sutural border, posterolateral spot transversely oval (Fig. 404); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen reddish yellow except median  $1/3$  of ventrites 1-4 brown. Head



punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures larger than on elytron, separated by less than a diameter. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin with trace of bordering line medially. Epipleuron wide, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly curved, smooth, sponda extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent toward base, joined at basal 1/6, single carina extended to prosternal base. Metaventrite without trace of sparse setal tuft. Basal abdominal ventrite without sparse setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened along posterior ventrite margin, extended forward at apex, ventrite coarsely punctured medially, with small, dense punctures laterally; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed medially, apical margin feebly emarginate; 6th ventrite short, narrow, depressed medially, apical margin weakly emarginate, angle on each side of emargination rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 2/3 as long as paramere, asymmetrical, sides convergent from base nearly to apex, apex rounded with slight emargination on one side; paramere *Psc*, equal in width from base to rounded apex (Fig. 405, 406); siphon strongly curved in basal 2/3, without visible lateral alae, basal capsule with inner arm long, wide, apex obliquely rounded, outer arm slightly narrower than and about as long as inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 407, 408).

**Female.** Similar to male except head with clypeus and apex of frons brown, pronotum with small black spot posterior to eye, median spots fused into triangular spot narrowly connected to median spot of basomedian macula. Genitalia with spermathecal capsule somewhat elongate, narrow, cornu narrowed in apical 1/6; bursal cap broadly oval, with 2 sclerotized arms, apical strut short, widened from base to spatulate apex (Fig. 409).

**Variation.** Length 2.4 to 3.2 mm, width 1.7 to 2.7 mm. Degree of fusion of pronotal spots varies greatly, background color of elytron varies from yellow to reddish yellow.

**Type locality.** Of *quinquenotata*, Brazil; of *sexnotata*, Rio de Janeiro, Brazil.

**Type depository.** Of *quinquenotata*, DEI (lectotype here designated); of *sexnotata*, BMNH (holotype).

**Geographical distribution.** Brazil, Surinam.

**Specimens examined.** 68. This is a frequently encountered species occurring in southern Brazil. (BMNH) (CMNH) (DZUP) (MNSP) (USNM).

**Remarks.** *Cyrea quinquenotata* has a distinctive dorsal color pattern very similar to that of *C. novemsignata*, which has one more spot on each elytron. *Cyrea quinquenotata* has one spot on the apical declivity while the *C. triacantha* form has two spots. See remarks under *C. novemsignata*. Examination of the holotype of *C. sexnotata* Brethès indicated that it is the same species as *C. quinquenotata*. The type specimen of *C. quinquenotata* in the DEI is labeled "Brasil Schaum (handwritten)/Coll. Haag/Syntypus (pink paper/5 notata Typ Mls. (handwritten)/coll. DEI Müncheberg." Mulsant (1850) had specimens from several sources, specifically stating that the type was in the "Germar et Schaum" collection that was deposited in the ZMHB, but there are no type specimens there, so the single type specimen in the DEI is selected as the lectotype. A specimen in the BMNH is not labeled or designated a type, but bears the same blue disc with number "5171" as do the other BM Mulsant types from the Buquet collection. Mulsant (1850) listed his specimens as from "Dejean, Germar et Schaum, etc.", the Buquet collection was probably included in the "etc." (R. Booth, pers. comm.). The male holotype of *C. sexnotata* is labeled "Type (orange bordered disc)/type./Rio de Janeiro, Wagner. 1903-180/Cleothera sexnotata Brèthes (handwritten)." Brèthes specifically stated that he had one specimen of this species, the holotype.

**74. *Cyrea novemsignata* (Herbst), new combination**

*Coccinella novemsignata* Herbst, 1793:268; Mulsant 1850:1047; Crotch 1874:308; Korschefsky 1931:581. *Cleothera triacantha* Mulsant, 1850:546; Crotch 1874:215; Korschefsky, 1931:198; Blackwelder 1945:448; Gordon 1987:27. NEW SYNONYM.

**Description.** Male. Length 3.0 mm, width 2.5; body rounded, convex. Dorsal surface smooth, shiny. Color yellow except pronotum with 5 small, dark brown mediobasal spots, 1 short spot anterior to scutellum, 1 slightly larger, triangular spot on each side of middle, and 1 elongate spot on each side of middle of pronotum; elytron reddish yellow, sutural margin of elytron without dark border, with 5 dark spots, humeral spot irregularly triangular, discal spot triangular, connected to sutural margin, 1 small, round posterolateral spot on lateral margin, 1 small round spot at middle of apical declivity, 1 small, triangular spot connected to sutural margin on apical declivity (Fig. 410); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen brownish yellow except median 1/3 of ventrites 1-4 slightly darker brownish yellow. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to 2 times a diameter; metaventral punctures larger than on elytron, separated by less than a diameter. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly curved, smooth, sponda extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent toward base, joined at basal 1/6, single carina extended to prosternal base. Metaventrite without trace of sparse setal tuft. Basal abdominal ventrite without sparse setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened along posterior ventrite margin, extended forward at apex, ventrite coarsely punctured medially, with small, dense punctures laterally; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed medially, apical margin feebly emarginate; 6th ventrite short, narrow, depressed medially, apical margin weakly emarginate, angle on each side of emargination rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 2/3 as long as paramere, asymmetrical, sides convergent from base nearly to apex, apex rounded with slight emargination on one side; paramere *Psc*, equal in width from base to rounded apex (Fig. 411, 412); siphon strongly curved in basal 2/3, without visible lateral alae, basal capsule with inner arm long, wide, apex obliquely rounded, outer arm slightly narrower than, and about as long as inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 413, 414).

**Female.** Similar to male except head with clypeus and apex of frons brown. Genitalia with spermathecal capsule somewhat elongate, narrow, basal 1/6 widened, cornu narrowed in apical 1/6; bursal cap broadly oval, with 2 sclerotized arms, apical strut short, weakly widened from base to apex (Fig. 415).

**Variation.** Length 2.3 to 3.1 mm, width 1.7 to 2.6 mm. Female head varies from typical to entirely dark brown with reddish yellow basal spot on frons, elytron sometimes with narrow, dark brown border on sutural margin, occasionally with all 3 spots on apical declivity weakly connected.

**Type locality.** Of *novemsignata*, Surinam; of *triacantha*, Cayenne (French Guiana).

**Type depository.** Of *novemsignata*, ZMHB (lectotype here designated); of *triacantha*, BMNH (lectotype here designated).

**Geographical distribution.** Brazil, Ecuador, Paraguay, Peru, Surinam.

**Specimens examined.** 58. **Brazil.** Amazonas, Tabatinga; Amazonas, Leticia; Mosqueira, Rio de Parana; Itaituba; Para; R. Madeira, St. Antonio; Santarem; Rio de Janeiro. **Ecuador.** Napo, Yasuní; Orellana,

Payamino Research Station; Pompeya. **Paraguay.** "Paraguay." **Peru.** Depto. Loreto, Puerto Almendra. **Surinam.** Marowijne nr. Langatabbetje; Paramaribo. (BMNH) (CMNH) (GGC) (MKRB) (ZMHB) (USNM).

**Remarks.** *Cyrea novemsignata* has a dorsal color pattern very similar to that of *C. quinquenotata*, but differs by having an additional posterolateral spot on the apical declivity, humeral spot often discrete, not connected to sutural margin, and often with sutural margin lacking a dark border. However, both male and female genitalia of these species are nearly identical, so it is possible that only one species is involved.

The generic status of *Coccinella novemsignata* Herbst has remained unknown until the type specimen was recently examined and proved to be a member of *Cyrea*. This specimen, a female in the ZMHB labeled "4450/9signata Hbst, Surinam, rest illegible (green paper, handwritten)/SYNTYPUS Coccinella novemsignata Herbst, 1793 labeled by MNHUB 2004 (red paper)" is designated as the lectotype. A male type in the BMNH labeled "Type (red bordered disc)/5171 (blue disc)/Triacantha.Buq. Muls. Cayenne.(green paper)/Named by Mulsant/Syntype (blue bordered disc)" is designated as the lectotype of *C. triacantha*.

### 75. *Cyrea samantha* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.3 mm, width 1.7 mm; body oval, convex. Dorsal surface with head alutaceous, dull, pronotum weakly alutaceous, feebly shiny, elytron smooth, shiny. Color yellow except pronotum with long, black basomedian macula extended 3/4 distance to anterior pronotal margin, with apical border entire, and with obliquely oval yellow spot on each side of middle; elytron with dark brown border on basal, sutural, and apical margins, with 4 dark brown spots, humeral spot large, oval, connected to basal margin anterior to humeral callus, discal spot rectangular, connected to sutural border, mediolateral spot obliquely oval, narrowly connected to apical spot, apical spot large, obliquely oval, nearly reaching sutural margin (Fig. 416); ventral surface with head, prosternum, meso- and metaventrites dark reddish brown; abdomen brownish yellow except median 1/3 of ventrites 1-4 brown. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by about a diameter, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures about as large as on elytron, separated by about a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, weakly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/8 of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and large punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex weakly emarginate; 6th ventrite medially depressed, apex slightly emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex feebly emarginate. Genitalia with basal lobe 3/4 as long as paramere, asymmetrical, sides slightly curved, convergent from base to rounded apex; paramere *Psc*, slightly widened from base to apex, lower angle of apex produced (Fig. 417, 418); siphon curved in basal 1/2, with visible alae at apical 1/6, basal capsule with inner arm short, wide, apically emarginate, outer arm about as wide and as long as inner arm, with accessory piece, basal border shallowly emarginate (Fig. 419, 420).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Colombia, Aposentos, NST 1936, Murillo No 41. (USNM).

**Geographical distribution.** Colombia.

**Remarks.** *Cyrea samantha* has a unique dorsal color pattern by which it may be recognized. Male genitalia are typical of the tessulata group, not particularly distinctive.

#### 76. *Cyrea marion* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.5 mm, width 2.0 mm; body oval, convex. Dorsal surface with head alutaceous, dull, pronotum weakly alutaceous, feebly shiny, elytron smooth, shiny. Color yellow except pronotum with long, black basomedian macula extended 2/3 distance to anterior pronotal margin, macula with apical border entire; elytron with dark brown border on all margins, sutural border wide, sinuate, widened area at basal 1/4 and on apical declivity, lateral margin with large, triangular spot on humeral angle and small, oval spot at middle (Fig. 421); ventral surface with head, prosternum, meso- and metaventrites black; abdomen brownish yellow except median 1/3 of ventrites 1-4 brown. Head punctures small, separated by a diameter or less, each puncture slightly larger than an eye facet; pronotal punctures slightly larger than head punctures, separated by 1 to 2 times a diameter, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures larger than on elytron, separated by about a diameter medially, larger and separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron wide, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin straight, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/6 of prosternum, connected to prosternal base by single carina. Metaventrite with setal tuft. Basal abdominal ventrite with sparse setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and large punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex weakly emarginate; 6th ventrite medially depressed, apex emarginate with lateral angle produced, abruptly rounded. Apical tergite finely, densely punctured, apex broadly emarginate. Genitalia with basal lobe slightly shorter than paramere, asymmetrical, wide in basal 2/3, sides curved, apical 1/3 narrowed, apex obliquely truncate; paramere *Psc*, slightly widened from base to apex, lower angle of apex produced (Fig. 422, 423); siphon curved in basal 1/2, without visible alae, basal capsule with inner arm short, slender, apex curved, outer arm wider and longer than inner arm, with accessory piece, basal border broadly, deeply emarginate (Fig. 423, 424).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Brazil, Chapada, Acc.No.2966, Nov. (CMNH).

**Geographical distribution.** Brazil.

**Remarks.** This species has an unusual dorsal color pattern that is quite distinctive. Male genitalia are not exactly typical of the tessulata group in that the basal lobe is narrowed near apex and the apex is apically truncate.

**77. *Cyrea dana* Canepari and Gordon, new species**

**Description.** Male holotype. Length 2.4 mm, width 1.8 mm; body oval, convex. Dorsal surface with head alutaceous, dull, pronotum weakly alutaceous, shiny, elytron smooth, shiny. Color yellow except pronotum with short, pale brown basal macula extended 1/6 distance to anterior pronotal margin, with pale brown, triangular spot on each side of middle; elytron with large, pale brown macula medially, basal 1/5 of elytron irregularly yellow, apical 1/4 irregularly yellow with median projection of brown macula (Fig. 426); ventral surface with head, prosternum, meso- and metaventrites pale brownish yellow; abdomen yellow. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by a diameter or less to twice a diameter; metaventral punctures larger than on elytron, separated by less than a diameter medially, slightly larger and separated by less than a diameter in lateral 1/3. Clypeus apically truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, weakly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin straight, smooth, sponda not extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/5 of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and large punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex weakly emarginate; 6th ventrite medially depressed, apex slightly emarginate with lateral angle abruptly rounded. Apical tergite finely, densely punctured, apex widely, feebly emarginate. Genitalia with basal lobe 2/3 as long as paramere, asymmetrical, sides slightly curved, convergent from base to abruptly rounded apex; paramere *Psc*, same width from base to apex, lower angle of apex produced (Fig. 427, 428); siphon curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, apically emarginate, outer arm short, narrower and about same length as inner arm, with accessory piece, basal border shallowly emarginate (Fig. 429, 430).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Colombia, Minca, Acc.No.1990, June. (CMNH).

**Geographical distribution.** Colombia.

**Remarks.** This species has a dorsal color pattern that is difficult to recognize because the yellow background and pale brown macula are not well differentiated. Thus far, that pattern seems to be unique within the genus and may serve to identify *C. dana*. Male genitalia are not particularly distinctive, although the basal lobe is unusually short.

**78. *Cyrea stacy* Canepari and Gordon, new species**

**Description.** Male holotype. Length 2.8 mm, width 2.4 mm; body rounded, convex. Dorsal surface smooth, shiny. Color yellow except pronotum with 5 small dark brown spots, 1 triangular spot on each side of middle near base, 1 elongate oval basal spot anterior to scutellum, and 1 small, triangular spot on each side just anterior to middle; elytron with 4 small, round, dark brown spots, 1 spot on humeral callus, 1 discal spot near suture anterior to middle of elytron, 1 mediolateral spot near lateral margin at apical declivity, and 1 spot at middle of apical declivity (Fig. 431); ventral surface with head, median 1/3 of prosternum, meso- and metaventrites dark brown; abdomen yellow except median 1/3 of ventrites 1-4

yellowish brown. Head punctures small, separated by a diameter or less, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to 2 times a diameter, elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures larger than on elytron, separated by less than a diameter medially, slightly larger and nearly contiguous in lateral 1/3. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, weakly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin arcuate, smooth, sponda extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent, apical 1/2 not visible. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and large punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite with anterior margin oblique, widely separated from posterior margin of ventrite 4, depressed in median 1/3, apex weakly emarginate; 6th ventrite medially depressed, apex slightly emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex feebly emarginate. Genitalia with basal lobe 3/4 as long as paramere, asymmetrical, sides curved, not convergent from base to broadly rounded apex; paramere *Psc*, equal in width from base to apex, lower angle of apex produced (Fig. 432, 433); siphon curved in basal 1/2, without visible alae, basal capsule with inner arm long, slender, inner margin sinuate, apex rounded, outer arm narrower and about as long as inner arm, with accessory piece, basal border broadly, shallowly emarginate (Fig. 434, 435).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Bolivia, Las Juntas, Steinbach Coll., C. M. Acc. 5053, Dec. 1913. (CMNH).

**Geographical distribution.** Bolivia.

**Remarks.** *Cyrea stacy* has a unique dorsal color pattern that will serve to distinguish it from other *Cyrea* species. It also has a Bolivian type locality which is somewhat unusual.

### 79. *Cyrea ormanceayi* (Mulsant), new combination

*Cleothera ormanceayi* Mulsant, 1850: 621.

*Hyperaspis ormanceayi*: Crotch 1874: 221; Korschefsky 1931:193; Blackwelder 1945:448.

*Cleothera distinguenda* Mulsant, 1850: 622.

*Hyperaspis distinguenda*: Crotch 1874: 221; Korschefsky 1931:187; Blackwelder 1945:447; Gordon 1987: 28. NEW SYNONYM.

**Description.** Male. Length 2.0 mm, width 1.4 mm; body elongate, rectangular, sides parallel. Dorsal surface with head alutaceous, dull, pronotum slightly alutaceous, weakly shiny, elytron smooth, shiny. Color black except head yellow, pronotum yellow with long, narrow black basomedian macula extended 2/3 distance to anterior pronotal margin, macula with apical border narrowly emarginate with yellow; elytron with 5 yellow spots arranged in rows of 2 each with apical spot, humeral spot small, triangular, mediolateral spot small, projected inward, apical spot transversely oval with apical border weakly emarginate (Fig. 436); ventral surface with antenna, mouthparts, hypomeron, and legs yellow; abdominal ventrites 3-6 dark brown. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter;

metaventral punctures smaller than on elytron, separated by a diameter or less medially, separated by less than a diameter in lateral 1/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, not grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at base of prosternum. Metaventricle without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and large punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex weakly emarginate; 6th ventrite medially depressed, apex emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 2/3 as long as paramere, externally symmetrical, oval, sides slightly curved, narrowed to rounded apex in apical 1/3; paramere *Psc*, narrowed from base to rounded apex, lower angle of apex produced (Fig. 437, 438); siphon curved in basal 1/2, with visible alae at apical 1/6, basal capsule with inner arm short, narrow, apically emarginate, outer angle projected, inner angle with apex rounded, outer arm slightly wider and longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 439, 440).

**Female.** Similar to male except head yellow with clypeus and lateral 1/4 of frons brown, pronotum with basomedian macula extended 5/6 distance to anterior pronotal margin. Genitalia with spermathecal capsule long, slender, basal 1/4 wide, cornu with bulbous apex; bursal cap rectangular, with 3 sclerotized arms, apical strut long, widened from middle to spatulate apex.

**Variation.** Length 1.7 to 2.4 mm, width 1.3 to 1.7 mm. Female head may have only clypeus brown, size of basomedian pronotal macula slightly variable, males may have apical emargination of macula shallow, abdomen varies from typical to entirely brown, or medially black with outer 1/3 dark or light brown.

**Type locality.** *Of ormanceayi*, Colombia; of *distinguenda*, Colombia.

**Type depository.** *Of ormanceayi*, ZMHB (lectotype here designated); of *distinguenda*, MNHL (lectotype here designated).

**Geographical distribution.** Central America (Costa Rica), and South America. Colombia, Trinidad, Venezuela.

**Specimens examined.** 348. Specimens of *C. ormanceayi* are frequently collected from Trinidad to Colombia. (BMNH) (CNC) (MNHL) (USNM) (ZMHB).

**Remarks.** This species has genitalia closely similar to several other species in the tessulata group, but small size and oblong, parallel sided body shape distinguish it from those species. Gorham (1894) listed specimens of "*distinguenda*" from Panama, and specimens of this species from Costa Rica have been observed in the course of the current study.

A female in the ZMHB labeled "55700/ Ormanceayi Muls Columb (pale green label)/Hist.Coll. (Coleoptera), Nr. 55700, Hyperaspis Ormanceayi Muls., Columb. Coll. Schaum, Zool. Mus. Berlin (dark green paper)/SYNTYPUS, Cleothera ormanceayi Mulsant, 1851, labeled by MNHUB 2008" is designated the lectotype of *C. ormanceayi*. Mulsant (1850) had specimens from the collections of Germar and Schaum and Trobert. Specimens from the latter collection cannot be found. A male type specimen of *C. distinguenda* in the MNHL labeled "Carthagena, Lebas, Cleothera distinguenda" is designated the lectotype of that species.

**80. *Cyrea fasciata* (F.), new combination**

*Coccinella fasciata* F., 1801:382.

*Cleothera fasciata*: Mulsant 1850:625.

*Hyperaspis fasciata*: Crotch 1874:222; Korschefsky 1931:188; Blackwelder 1945:447.

**Description.** Male. Length 1.7 mm, width 1.4 mm; body oval, somewhat rounded. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color dark brown except head yellow, pronotum yellow with long, narrow, dark brown basomedian macula extended 3/4 distance to anterior pronotal margin, macula with apical border weakly emarginate with yellow, small, obliquely triangular yellow spot present on each side of middle; elytron with 5 large yellow spots arranged in rows of 2 each with apical spot, humeral spot triangular, mediolateral spot rectangular, projected inward, apical spot transverse with apical border deeply emarginate (Fig. 441); ventral surface with antenna, mouthparts, hypomeron, and legs yellow; abdominal ventrites brownish yellow laterally, dark brown medially except ventrites 4-6 yellow. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by about a diameter; metaventral punctures smaller than on elytron, separated by 1 to 3 times a diameter medially, larger, separated by less than a diameter in lateral 2/3. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, slightly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, smooth, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/6 of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened along posterior ventrite margin, extended forward at apex, ventrite with sparse, long pubescence and large punctures sparse medially becoming denser laterally; ventrites 2-6 pubescent throughout, punctures fine, sparse medially, becoming denser laterally; 5th ventrite depressed in median 1/3, apex weakly emarginate; 6th ventrite medially depressed, apex emarginate with lateral angle rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 2/3 as long as paramere, nearly symmetrical externally, weakly oval, sides slightly curved, narrowed to rounded apex in apical 1/2; paramere *Psc*, equal in width throughout (Fig. 442, 443); siphon curved in basal 1/2, with visible alae at apical 1/6, basal capsule with inner arm short, narrow, apically emarginate, outer angle strongly projected, inner angle with apex acute, outer arm slightly wider and longer than inner arm, with accessory piece, basal border widely emarginate (Fig. 444, 445).

**Female.** Similar to male except head brown with yellow triangular spot at base of frons, pronotum with basomedian macula extended to anterior pronotal margin. Genitalia with spermathecal capsule long, slender, basal 1/4 wide, cornu weakly enlarged at apex; bursal cap rectangular, with 3 sclerotized arms, apical strut long, widened from middle to spatulate apex (Fig. 446).

**Variation.** Length 1.7 to 2.6 mm, width 1.4 to 1.9 mm. Pronotal and elytral color patterns vary in size of markings. Basal lobe of the male genitalia varies from slender, triangular, to wider and somewhat oval.

**Type locality.** "Am. mer." (America meridionale) (South America).

**Type depository.** ZMUC (lectotype here designated).

**Geographical distribution.** Brazil, Colombia, Guyana, Surinam, Trinidad, Venezuela.

**Specimens examined.** 146. This is another frequently collected species known from northern and western South America (BMNH) (CMNH) (DZUP) (MIZA) (MZSP) (USNM) (ZMHB).



**Remarks.** *Cyrea fasciata* is here considered to be widespread and extremely variable because neither male nor female genitalia allow discrimination into more than one species. It is probable that more than one species is involved, but molecular study will be needed to completely resolve the taxonomy.

This species is very similar to *C. ormanceayi* in most characteristics except body shape and form of the apical spot on each elytron. A distinctive character for recognizing those specimens of *C. fasciata* having elytra with dark backgrounds is the shape of the apical yellow spot on each elytron which is transverse with a strongly emarginate apical border.

A male in the ZMUC labeled "TYPE (red paper) *C. fasciata*, ex. Am. mer. Schmidt (handwritten)" is designated the lectotype. One other female specimen labeled "TYPE" without further labels is designated a paralectotype.

### 81. *Cyrea jeanne* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.6 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron weakly alutaceous, shiny. Color yellow except pronotum with narrow, short, brown basomedian macula with sinuate anterior margin, middle of pronotum with small, brown, comma shaped spot on each side of middle; elytron yellow with 5 large, more or less oval yellow spots occupying most of elytron, spots divided by narrow brown bands, scutellar spot narrowly connected to discal spot, discal spot connected to apical spot (Fig. 447); ventral surface yellow except meso- and metaventrite pale reddish brown; abdomen yellow except ventrites 2-3 yellowish brown medially. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less; elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron, separated by about a diameter medially, becoming coarser, separated by less than a diameter laterally. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, slightly angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin rounded, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with slight oblique angle, basal tooth absent, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent toward base, joined at basal 3/8 of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, short pubescence and coarse, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite not depressed in median 1/3, apex shallowly emarginate; 6th ventrite slightly depressed medially, apex shallowly emarginate. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe slightly shorter than paramere, asymmetrical, sides weakly convergent from base to rounded apex; paramere *Psc*, slightly widened toward apex, apex rounded (Fig. 448, 449); siphon robust, strongly curved in basal 1/2, with visible alae in apical 1/6, basal capsule slightly sclerotized, inner arm short, wide, apically truncate, outer arm straight, narrower and longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 450, 451).

**Female.** Similar to male except clypeus slightly darker than head, with narrow posterior projection from each side of clypeus. Genitalia with spermathecal capsule long, slender, basal 1/3 enlarged, widened, cornu bulbous; bursal cap narrowly rectangular, with 3 sclerotized arms, apical strut long, narrow, slightly curved (Fig. 452).

**Variation.** Length 2.4 to 2.7 mm, width 1.8 to 2.0 mm. Pronotum with median dark area sometimes enlarged with basomedian macula and anterior comma shaped spot united by narrow, dark vitta, elytron varies from nearly entirely yellow because of reduction of dark separating bands, or with bands dark brown, distinct, and completely separating all 5 yellow spots.

**Type material.** Holotype male; Colombia, Honda, Tolima, 13 Jun 1965, J.A. Ramos Collector. (USNM). Paratypes; 37, 1, same data as holotype (USNM); 1, Columbien, Antioquia, 700m, Rio Cauca, VI..63, leg. P. Schneble (USNM); 1, Colombia, Tol., Armero, malaise trap, 26-30 I 1977, Peyton&Suarez (USNM); 1, Colombia, Anolaima, Cund., 14 Aug 1965, J.A. Ramos Collector (USNM); 1, Colombia, Espinal, Tol, 17.II.41, alt. 438 m, Murillo No 5419 (USNM); 3, Colombia, Fusagasuga, Cund., 6 Jun 1965, 11 Sept 1965, 11 Oct 1965, J.A. Ramos Collector (USNM); 1, Colombia, Garzon, Huila, 26.III.39, alt. 888, Murillo No 5075 (USNM); 5, Colombia, Girardot, Cund., 8 Aug 1965, J.A. Ramos Collector (USNM); 5, (Colombia) V. Medellin, en citrus, en maiz, Oct. 1942, ene 1943, Jun 1943, Gallego (USNM); 8, Colombia, Melgar, Cund., 6 Jun 1965, 12 Jun 1965, J.A. Ramos Collector (USNM); 1, Colombia, Villeta, Cund., 28 Aug 1965, J.A. Ramos Collector (USNM); 8, Columbien, Honda, Am Magdalena, O. Thieme (ZMHB); 1, Columbien, Rio Magdalena, O. Thieme S. (ZMHB).

**Geographical distribution.** Colombia.

**Remarks.** This pale species is similar in most regards except color to *C. fasciata* and *C. laurie*, but male genitalia differ somewhat among the 3 species. That and the consistently pale color of *C. jeanne* causes the species differentiation.

## 82. *Cyrea laurie* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.4 mm, width 1.8 mm; body elongate oval, convex. Dorsal surface with head and pronotum weakly alutaceous, slightly shiny, elytron smooth, shiny. Color yellow except pronotum with brown basomedian spot deeply divided medially with yellow, lateral projecting arm of spot with reddish yellow “eyespot”, basomedian macula extended 3/4 distance to anterior pronotal border, macula with anterior margin divided medially with long anterior projection; elytron black with 5 large yellow spots, humeral spot weakly connected to discal spot, median lateral spot projected inward, discal spot oval, apical spot transversely oval with truncate anterior margin (Fig. 453); ventral surface with prosternum, meso- and metaventrites black; abdomen dark brown, slightly paler toward lateral margin. Head punctures small, separated by a diameter or less, each puncture about as large as 2 eye facets; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by 2 to 3 times a diameter; metaventral punctures larger than on elytron, separated by less than to 2 times diameter. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 8 eye facets long, slightly angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin rounded, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia without oblique angle, basal tooth absent, sponda slightly extended beyond protibia. Carinae on prosternal process widely separated at apex, convergent toward base, joined at basal 1/8 of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and small, dense punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe about as long as paramere, symmetrical, sides smoothly rounded and narrowed from base to rounded apex; paramere strongly *Psc*, short, wide, slightly widened medially, apex rounded (Fig. 454, 455); siphon robust, strongly curved in basal 1/2, with visible alae in apical 1/6, basal capsule slightly sclerotized, inner arm short, narrow, with small, median projection, outer arm straight, wider and longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 456, 457).

**Female.** Similar to male except head black with large, reddish yellow spot medially, pronotum with large, black median macula extended nearly to anterior pronotal border. Genitalia with spermathecal capsule long, slender, basal 1/4 enlarged, widened, cornu enlarged; bursal cap narrowly rectangular, with 3

sclerotized arms, apical strut long, about as long as bursal cap, widened from base to spatulate apex (Fig. 458).

**Variation.** Length 2.3 to 2.8 mm, width 1.6 to 2.0 mm. Female head color variable from that described above to having the central pale area reduced in size or with head entirely black. Male pronotum varies from mostly yellow with narrow, basomedian black spot, to entirely dark brown or black with median reddish yellow vitta.

**Type material.** Holotype male; Colombia, Valle de Medellin, on *Crotolarias*, FIGallego, M, Lett. 12.17'38, usnm #177 (USNM). Paratypes; 16, 2, same data as holotype; 1, Medellin, Colombia, on citrus, June, 1945, F.L. Gallego; 4, V. Medellin, en citrus, Agt. 1943; 1, V. Medellin, en citrus, Jun. 1943 Gallego; 1, V. Medellin, en Raiza, Ago. 1944, Gallego; 1, V. Medellin, en citrus, Feb. 1942, Gallego; 2, V. Medellin, en citrus, Ene. 1943, Gallego; Venecia (A), Ago. 1945, Colombia, Villavicencio, Meta, 2 Oct 1965, J. A. Ramos Collector. (USNM).

**Other specimen.** Armero, Colombia, Tol, 14.VI.40, Murillo No 86. (USNM).

**Geographical distribution.** Colombia.

**Remarks.** This species is most similar to *C. fasciata*, but differs by having “eyespot” on the pronotum and has an apical elytral spot with a transverse apical border. See remarks under *C. lucille*.

### 83. *Cyrea lucille* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.6 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head and pronotum alutaceous, dull, elytron smooth, shiny. Color yellow except pronotum with large, black basomedian macula extended 5/6 distance to anterior pronotal border, macula with anterior margin evenly semicircular except for slight anterolateral projection; elytron black with 4 large, yellow spots, humeral spot extended posteriorly along lateral margin of elytron to apical 3/4, widened medially and at apical declivity, scutellar spot elongate posteriorly, discal spot oval, apical spot transversely oval (Fig. 459); ventral surface with head, prosternum, meso- and metaventrites black; abdomen dark brown, slightly paler toward lateral margin. Head punctures small, separated by a diameter or less, each puncture as large as 2 eye facets; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by 2 to 3 times a diameter; metaventral punctures larger than on elytron, separated by less than to twice diameter. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 8 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin rounded, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia without oblique angle, basal tooth absent, sponda slightly extended beyond protibia. Carinae on prosternal process widely separated at apex, convergent toward base, joined at basal 1/3 of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and small, dense punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe 3/4 as long as paramere, symmetrical, sides smoothly rounded and narrowed from base to rounded apex; paramere strongly *Psc*, short, wide, slightly widened medially, apex rounded (Fig. 460, 461); siphon robust, strongly curved in basal 2/3, with visible alae in apical 1/10, basal capsule slightly sclerotized, inner arm short, narrow, apex bifid, outer arm curved, as wide as and longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 462, 463).

**Female.** Similar to male except head black, pronotum with large, black median macula extended to anterior pronotal border. Genitalia with spermathecal capsule long, slender, basal 1/4 enlarged, widened, cornu apically narrowed; bursal cap narrowly rectangular, with 3 sclerotized arms, apical strut narrowed from base to spatulate apex (Fig. 464).

**Variation.** Length 2.4 to 2.8 mm, width 1.6 to 2.1 mm. Elytron with long lateral spot sometimes broken into a humeral and median spot, creating an elytron with 5 spots, discal and apical spots are sometimes slightly connected.

**Type material.** Holotype male; (Argentina) Bs As (Buenos Aires), DiqueLujan, 20.XI.1952, Daguerre. (USNM). Paratypes; 15, 7, Bs As, San Fernando, III.1954, VIII.1954, X.1954, X.1955, Daguerre (USNM); 2, Argentina, Isla Los Cisnes, Parana Delta, V-XI 1920, H. E. Box (BMNH); 1, Argentina, Misiones, Dep Concep. - Sta Mari, V-1960 M.J. Viana, ex Coleccion M. Viana, ARG. 032605, Coleccion J.E. Barriga CHILE -76337 (JEBC); 1, Argentina, Tucuman, XI-1960, M.J. Viana, Ex Coleccion M. Viana, ARG. 035318, Coleccion J. E. Barriga CHILE 077543 (JEBC); 1. Argentina, prov. Buenos Aires, Tigre, ene 1961, leg: M. Viana, Coleccion J.E. Barriga CHILE 138885 (JEBC); 3, Argentina, Buenos Aires, Tigre, VI-1959, X-1959, ex Coleccion M. Viana ARG. 034388, Coleccion J.E. Barriga CHILE 076381 (JEBC).

**Geographical distribution.** Argentina.

**Remarks.** The dorsal color pattern is similar to several other species within this genus, and male genitalia must be examined to place *C. lucille* in the correct group. Within the tessulata group *lucille* has genitalia most similar to those of *C. fasciata*, *C. laurie*, and *C. katie*, but the complete, or nearly complete, black pronotal discal spot, long, yellow lateral elytral spot, and Argentina type locality seem to distinguish *C. lucille*. See remarks under *C. katie*.

#### 84. *Cyrea katie* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.5 mm, width 2.1 mm; body elongate oval, convex. Dorsal surface with head and pronotum alutaceous, slightly shiny, elytron smooth, shiny. Color yellow except pronotum black with narrow anterior and lateral borders yellow, apex of black area entire, not emarginate; elytron black with 5 small yellow spots, humeral spot triangular, median lateral spot elongate oval, discal spot narrowly oval, apical spot transversely oval (Fig. 465); ventral surface with head, prosternum, meso- and metaventrites black; abdomen dark brown, slightly paler toward lateral margin. Head punctures small, separated by a diameter or less, each puncture about as large as 1.5 eye facets; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures smaller than on elytron medially, separated by 1 to 3 times a diameter, becoming larger and separated by a diameter or less toward lateral margin. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin rounded, basal margin without trace of bordering line medially. Epipleuron narrow, feebly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with weak oblique angle, basal tooth absent, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent toward base, joined at middle of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and small, dense punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex rounded. Genitalia with basal lobe shorter than paramere, symmetrical, sides smoothly rounded and slightly convergent from base to rounded apex; paramere *Psc*, wide, same width from base to apex, apex rounded (Fig. 466, 467); siphon robust, strongly curved in basal 1/2, with visible alae in apical 1/6, basal capsule distinctly sclerotized, inner arm long, narrow, apex bifid, outer arm widest at base,

narrowed toward apex, apex with small projection on inner and outer margin, wider and longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 468, 469).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Brasil, Sellow, Hist.-Coll. (Coleoptera) Nr. 4428, *Hyperaspis* spec.var.?, Zool. Mus. Berlin. (ZMHB).

**Geographical distribution.** Brazil.

**Other specimens.** Five additional specimens are considered as possibly *C. katie*. Two of these bearing the same labels as the type specimen are females, one lacks an abdomen and one lacks a head and pronotum. One male has a single distinctly toothed protibia which would place it in *Brachiacantha*, but the opposite protibia lacks a tooth. These specimens are property of the ZMHB. Two other specimens labeled "Brasil, S. Bocaina 1600 m, S. J. Barreiros S.P., XI-1967, Alvarenga e Seabra, Colegao m. Alvarenga" (DZUP) are probably *C. katie*, but differ sufficiently from the holotype so as not to be designated as paratypes.

**Remarks.** *Cyrea katie* is similar to *C. lucille*, especially by the male genitalia. But the former species has much smaller elytral spots, the humeral spot is not connected to other lateral spots, and the central pronotal black area is more extensive.

### 85. *Cyrea kristen* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.0 mm, width 1.7 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with dark brown basomedian macula extended 2/3 distance to anterior pronotal margin, apex of macula narrowly incised with yellow, anterior brown projection on each side with indistinct, reddish yellow "eyespot", lateral 1/4 of pronotum yellow; elytron dark brown with 5 small yellow spots, humeral spot short, oval, median lateral spot projected inward, discal spot irregularly oval, apical spot transversely oval, with apical border weakly emarginate (Fig. 470); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen yellowish brown, slightly paler toward lateral margin. Head punctures small, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by less than to twice diameter; metaventral punctures smaller than on elytron medially, separated by 1 to 3 times a diameter, becoming larger and separated by a diameter or less toward lateral margin. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron narrow, feebly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia without oblique angle, basal tooth absent, sponda slightly extended beyond protibia. Carinae on prosternal process narrowly separated at apex, convergent toward base, joined just before base of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, long pubescence and coarse, dense punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex very shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about as long as paramere, slightly asymmetrical, sides convergent from base to abruptly rounded apex; paramere *Psc*, wide, same width from base to apex, apex rounded (Fig. 471, 472); siphon robust, strongly curved in basal 1/2, without visible alae, basal capsule weakly sclerotized, inner arm short, narrow, apex bifid, outer arm slender,

long, as wide as and longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 473, 474).

**Female.** Unknown.

**Variation.** Mediobasal brown area of pronotum variable in size, in both paratypes it is slightly larger than in holotype, and the lateral “eyespot”, although present, is indistinct in both paratypes. Male genitalia of each type specimen has a basal lobe that differs slightly from the others.

**Type material.** Holotype male; (Brazil) Santar Cm (handwritten Santarem?), *Cleothera gacognii* Muls. (BMNH). Paratypes; 2, 1, Brazil, Santarem, Acc.No.2966 (CMNH); 1, (Brazil) Santarem, June 1919, S. M. Klages, Acc.6324 (CMNH).

**Geographical distribution.** Brazil.

**Remarks.** This is one of the very small species in the difficult *tessulata* group. It has pronotal eyespots similar to those of the much larger *C. laurie*, and is distinguished from other species by a combination of small size, pronotal “eyespot”, and median lateral spot on elytron projecting inward. All 3 specimens bear labels with the same type locality, and all male genitalia slightly differ from each other. These slight differences are attributed to variation within species.

One specimen of another species is mounted on the same pin below the holotype. This is an unrecognized female not dealt with herein.

### 86. *Cyrea vanessa* Canepari and Gordon, new species

**Description.** Male holotype. Length 1.8 mm, width 1.4 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except pronotum with large, dark brown basomedian spot extended more than 1/2 distance to anterior pronotal border, apex of dark brown area narrowly incised with yellow; elytron black with 5 small yellow spots, humeral spot triangular, median lateral spot narrowly elongate, projected inward, discal spot irregularly round, apical spot transversely oval, anterior border of apical spot emarginate (Fig. 475); ventral surface with head, prosternum, meso- and metaventrites black; abdomen brown, paler toward lateral margin. Head punctures small, separated by a diameter or slightly more, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures smaller than on elytron medially, separated by 1 to 3 times a diameter, becoming larger and separated by a diameter or less toward lateral margin. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin straight, basal margin without trace of bordering line medially. Epipleuron narrow, feebly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia without angle, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process narrowly separated at apex, convergent toward base, joined at basal 1/5 of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened medially, rounded elsewhere, extended forward at apex, ventrite with sparse, short pubescence and coarse, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex slightly projecting medially. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe slightly more than 1/2 as long as paramere, slightly asymmetrical, sides smoothly rounded and slightly convergent from base to nearly acute apex; paramere *Psc*, wide, same width from base to apex, apex rounded (Fig. 476, 477); siphon robust, strongly curved in basal 1/2, with visible alae in apical 1/10, basal capsule distinctly sclerotized, inner arm short, narrow, apex bifid, outer arm slender, longer and narrower than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 478, 479).

**Female.** Similar to male except head black, pronotum with broad median area black macula from base to apex. Genitalia with spermathecal capsule long, slender, basal 1/4 widened, apex of cornu bulbous; bursal cap rectangular, with 3 arms, apical strut very large, long, apical 5/6 paddle shaped (Fig. 480).

**Variation.** Length 1.7 to 2.1 mm, width 1.4 to 1.5 mm.

**Type material.** Holotype male; Colombia, Cundinamarca, Monterredondo, 1400 m, 15.4, leg. Schneble. (USNM). Paratypes; 2, 1, Colombia, Cund (Cundinamarca), La Union, 1900m, June 28, 1938, Murillo No 5065 (USNM); 1, Colombia, Cnd (Cundinamarca), La Union, alt. 1900 m., 29-VI-'39 (USNM).

**Geographical distribution.** Colombia.

**Remarks.** *Cyrea vanessa* is relatively distinctive within the tessulata group because of its small size, dorsal color pattern, short basal lobe of the male genitalia, and Colombian type locality.

### 87. *Cyrea alma* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.5 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum slightly alutaceous, feebly shiny, elytron smooth, shiny. Color yellow except pronotum with basomedian black spot broken medially, forming 2 anterior eyebrow shaped parts, basal portion of spot narrow, wide, sinuate, feebly connected to anterior parts; elytron black with 5 large, yellow spots, humeral spot elongate, median lateral spot rounded, slightly projected inward, discal spot elongate oval, apical spot transversely oval, apical border entire (Fig. 481); ventral surface with head, prosternum, meso- and metaventrites black; abdomen with ventrites 2-4 dark brown medially, yellowish brown laterally, ventrites 5-6 yellowish brown. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures as large as on elytron, separated by about a diameter medially, becoming coarser and denser laterally, separated by less than a diameter. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly rounded, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with weak oblique angle, basal tooth absent, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated at apex, parallel toward base, joined at basal 1/6 of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite slightly depressed medially with short, dense pubescence and small, dense punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3 with large cusp on each side of middle, apex deeply emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia heavily sclerotized with basal lobe short, slightly more than 1/2 as long as paramere, symmetrical, sides parallel in basal 2/3, curved to abruptly rounded apex in apical 1/3; paramere strongly *Psc*, short, wide, widened in apical 1/3 (Fig. 482, 483); siphon robust, strongly curved in basal 2/3, with visible alae in apical 1/6, basal capsule sclerotized, inner arm short, narrow, apex bifid, outer arm slightly curved, as wide as and longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 484, 485).

**Female.** Similar to male except head black with median, triangular yellow spot on frons, pronotum with large, black basomedian macula extended almost to anterior pronotal border, macula deeply incised with yellow medially, large anterolateral angle yellow. Genitalia with spermathecal capsule long, slender, basal 1/4 enlarged, widened, cornu apically narrowed to acute apex; bursal cap oval, with 3 irregular sclerotized arms, median arm apically triangular, apical strut elongate, somewhat rectangular (Fig. 486).

**Variation.** Length 2.3 to 2.6 mm, width 1.7 to 2.0 mm. Pronotum varies as described for male and female above.

**Type material.** Holotype male; Ecuador, Guayllabamba, 2106 m. alt., Jan. 30, 1959, J. Molineros. (USNM). Paratypes; 11, same data as holotype (USNM).

**Geographical distribution.** Ecuador.

**Remarks.** This is a distinctive species because of an elytral color pattern with an extremely elongate discal spot, male 5th abdominal ventrite with large cusp on each side of middle, and heavily sclerotized male genitalia with short basal lobe and paramere enlarged in apical 1/3. The dorsal color pattern and male genitalia are very similar to those of *C. elsie*, but the latter species has no trace of cusps on the male 5th abdominal ventrite.

### 88. *Cyrea elsie* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.8 mm, width 2.2 mm; body elongate oval, convex. Dorsal surface with head alutaceous, weakly shiny, pronotum alutaceous, dull, elytron smooth, shiny. Color yellow except pronotum with black basomedian macula extended more than 3/4 distance to anterior pronotal margin, middle of macula with anchor shaped yellow spot, lateral 1/4 of pronotum yellow; elytron black with 5 large yellow spots, humeral spot oblong oval, median lateral spot not projected inward, scutellar spot broadly oval, discal spot slender, elongate, apical spot transversely oval (Fig. 487); ventral surface with head, prosternum, meso- and metaventrites dark brown to black; abdomen brown, slightly paler toward lateral margin. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures slightly larger than head punctures, separated by less than to twice a diameter, elytral punctures as large as on pronotum, separated by 2 to 4 times a diameter; metaventral punctures as large as on elytron medially, separated by 2 to 3 times a diameter, becoming larger and separated by a diameter or less toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 8 eye facets long, not angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, basal tooth absent, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, curved toward base, joined just before base of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, short pubescence and slightly coarse, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe short, about 3/4 as long as paramere, symmetrical, sides parallel in basal 5/6, curved to abruptly rounded apex in apical 1/6; paramere strongly *Psc*, short, wide, slightly widened in apical 1/3 (Fig. 488, 489); siphon robust, strongly curved in basal 1/2, with visible alae in apical 1/6, basal capsule with inner arm short, narrow, apex bifid, outer arm slightly curved, about as wide as and longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 490, 491).

**Female.** Unknown.

**Variation.** Length 2.4 to 2.8 mm, width 1.9 to 2.2 mm. Pronotum with yellow spot in mediobasal black area reduced to central vitta and obliquely oval “eyespot” on each side of middle.

**Type material.** Holotype male; N. Peru, 2100m, Rio Chotano, VI-23-1956, W. Weyrauch 7121. (USNM). Paratype; 1, same data as holotype (USNM).



**Other specimen.** One male specimen labeled, Peru, Los Pobres, Ica, en maleza, L. Valencia, 29-5-69 (USNM), is not designated a paratype of *C. elsie* because of the large size, length 3.2 mm, and lateral margin with continuous yellow border from humeral spot to apical spot, apex of border recurved anteriorly along sutural margin. All other characters, including male genitalia, agree well with those described for the types above.

**Geographical distribution.** Peru.

**Remarks.** This species bears a remarkable resemblance to *C. alma*, but the male 5th abdominal ventrite lacks cusps, and the dorsal punctation of *C. elsie* is very fine, the punctures much smaller than in *C. alma*.

### 89. *Cyrea sue* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.8 mm, width 2.2 mm; body elongate oval, convex. Dorsal surface with head slightly alutaceous, weakly shiny, pronotum alutaceous, dull, elytron slightly alutaceous, weakly shiny. Color yellow except pronotum with large, black macula occupying all of pronotal surface except narrow anterior border and wider lateral border yellow; elytron black with 4 small yellow spots, humeral spot extended posteriorly along lateral margin of elytron to apical 5/6, widened at apical declivity, scutellar spot short, oval, discal spot obliquely oval, apical spot transversely oval (Fig. 492); ventral surface with head, prosternum, meso- and metaventrites black, trochanters and metafemur dark brown; abdomen dark brown, paler toward lateral margin. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by 1 to 4 times a diameter, elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures slightly larger than on elytron, separated by a diameter or less medially, becoming coarser and separated by less than a diameter laterally. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin rounded, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, basal tooth absent, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, convergent toward base, joined at basal 1/3 of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened medially, extended forward at apex, ventrite with sparse, short pubescence and coarse, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe longer than paramere, symmetrical, sides weakly convergent from base to rounded apex; paramere *Psc*, long, narrow, of equal width throughout (Fig. 493, 494); siphon robust, strongly curved in basal 2/3, with visible alae in apical 1/6, basal capsule distinctly sclerotized, inner arm long, narrow, apex bifid, outer arm straight, wider and shorter than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 495, 496).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Brazil, S. Antonio, Coll Lethierry (sic), H. gaynoni Muls. Pernambuco (Bresil) (USNM).

**Geographical distribution.** Brazil.

**Remarks.** The dorsal color pattern is most similar to that of *C. lucille*, but the pronotal dark area is larger, elytral spots smaller, trochanters and metafemur brown, and male genitalia with basal lobe distinctly longer than paramere.

The holotype is an old specimen from the Korschefsky collection, the folded determination label is handwritten, and one of the labels, although somewhat illegible, seems to state "Coll Lethierry."

### 90. *Cyrea collaris* (Mulsant), new combination

*Cleothera collaris* Mulsant, 1850:627.

*Hyperaspis collaris*: Korschefsky 1931:186; Blackwelder 1945:446.

**Description.** Male. Length 3.0 mm, width 2.4 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum slightly alutaceous, shiny, elytron smooth, shiny. Color yellow except pronotum with black basomedian macula extended 5/6 distance to anterior pronotal margin, middle of macula with obliquely oval yellow spot on each side, anterolateral angle with yellow area 1/4 width of pronotum; elytron black with 5 large yellow spots, humeral spot triangular, scutellar spot irregularly rectangular, median lateral spot triangular, projected inward, discal spot oblique from near suture anterolaterally toward humerus, each end of spot acute, apical spot transversely oval (Fig. 497); ventral surface entirely black except legs yellow with meso- and metafemur mostly brown. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by a diameter or less, elytral punctures larger than on pronotum, separated by less than a diameter; metaventral punctures as large as on elytron medially, separated by a diameter or less, becoming larger and separated by less than a diameter. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 8 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with slight oblique angle, basal tooth absent, sponda slightly extended beyond angle. Carinae on prosternal process widely separated at apex, parallel to basal 1/3 of prosternum, joined at base, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened medially, extended forward at apex, ventrite with sparse, short pubescence and coarse, dense punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite not depressed in median 1/3, apex shallowly emarginate; 6th ventrite depressed at apex, apex shallowly emarginate. Apical tergite coarsely, densely punctured, apex emarginate. Genitalia with basal lobe about 3/4 as long as paramere, asymmetrical, sides slightly convergent in basal 5/6, curved to rounded apex in apical 1/6; paramere *Psc*, about same width from base to apex (Fig. 498, 499); siphon robust, strongly curved in basal 1/2, with visible alae in apical 1/5, basal capsule heavily sclerotized, inner arm short, narrow, apex bifid, outer arm straight, slightly wider and longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 500, 501).

**Female.** Similar to male except head black with large, median, yellow triangular macula on frons and vertex, pronotum with black basomedian macula extended to pronotal apex. Genitalia with spermathecal capsule long, slender, slightly widened basally, narrowed to middle, cornu slightly widened; bursal cap rectangular, with 3 arms, apical strut large, long, apically widened (Fig. 502).

**Variation.** Length 2.6 to 3.1 mm, width 2.0 to 2.4 mm. Size of oblique, median yellow spots on pronotum variable from large to small, elytron highly variable with humeral and median lateral spots often connected, discal spot sometimes narrowly connected to both scutellar and apical spots, and discal spot occasionally expanded so that it is connected to all remaining elytral spots.

**Type locality.** Colombia.

**Type depository.** BMNH (lectotype here designated).

**Geographical distribution.** Colombia.

**Specimens examined.** 15. **Colombia.** Cundinamarca, Choachí; Guasca-Gacheta. (USNM) (ZMHB).

**Remarks.** In spite of the somewhat variable elytral color pattern, *C. collaris* is easily recognized by that pattern, pronotum with 2 median, oblique yellow spots, and densely, rather coarsely punctured ventral surface.

Mulsant listed the Buquet and Melly collections as the sources for his type specimens. The Melly material cannot be located, but the Buquet collection is in the BMNH and we have selected that type specimen as the lectotype.

### 91. *Cyrea vicki* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.0 mm, width 2.0 mm; body elongate, somewhat parallel sided, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except head black with yellow clypeus, pronotum with long, narrow black basomedian macula extended 7/8 distance to anterior pronotal margin, apex of macula briefly, narrowly indented with yellow at middle, lateral 1/4 of pronotum yellow; elytron black with 4 large yellow spots, humeral spot absent, median lateral spot rounded, not projected inward, scutellar spot triangular, nearly reaching oval discal spot, apical spot transversely oval (Fig. 503); ventral surface with head, prosternum, meso- and metaventrites black; abdomen dark brown, slightly paler toward lateral margin. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated less than to 3 times a diameter; metaventral punctures as large as on elytron medially, separated by 2 to 3 times a diameter, becoming larger and separated by a diameter or less toward lateral margin. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with weak oblique angle, basal tooth absent, sponda slightly extended beyond angle (Fig. 504). Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, short pubescence and fine, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite not depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed at apex, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe more than 3/4 as long as paramere, slightly asymmetrical, sides parallel in basal 5/6, curved to rounded apex in apical 1/6; paramere *Psc*, slightly narrowed in apical 1/3 (Fig. 505, 506); siphon robust, strongly curved in basal 1/2, with visible alae in apical 1/5, basal capsule with inner arm short, angled forward, apically rounded, outer arm slightly curved, about as wide and as long as inner arm, with accessory piece, basal border shallowly emarginate (Fig. 507, 508).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Ecuador, 700m, Pichincha Prov., Sto. Domingo Col., VIII-4-1956, on vegetation, G.H. Dieke. (USNM).

**Geographical distribution.** Ecuador.

**Remarks.** This species is distinctive within the tessulata group because of 4 yellow spots on each elytron; nearly parallel sided body form; and black male head with yellow clypeus.

**92. *Cyrea carla* Canepari and Gordon, new species**

**Description.** Male holotype. Length 1.6 mm, width 1.2 mm; body oval, convex. Dorsal surface with head weakly alutaceous, shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with basomedian dark brown macula extended 2/3 distance to pronotal apex, apex of macula briefly, narrowly indented with yellow medially; elytron dark brown with 4 (actually 5 because median lateral and discal spots connected) small yellow spots, humeral spot narrowly triangular, scutellar spot transversely oval, median lateral spot projected inward and narrowly connected to transverse discal spot, forming a narrow, irregular transverse vitta, apical spot transversely oval with anterior border emarginate (Fig. 509); ventral surface with head, prosternum, meso- and metaventrites dark brown, metafemur brown; abdomen with ventrites yellowish brown medially, slightly paler laterally. Head punctures small, separated by about diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by 1 to 2 times a diameter, elytral punctures larger than on pronotum, separated by a diameter or less; metaventral punctures absent medially, as large as elytral punctures and nearly contiguous laterally. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin rounded, basal margin without trace of bordering line medially. Epipleuron narrow, weakly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with slight oblique angle, basal tooth absent, sponda slightly extended beyond angle. Carinae on prosternal process narrowly separated at apex, convergent toward base, joined at basal 1/4 of prosternum, connected to prosternal base by short carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with short, dense pubescence and coarse, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite not depressed in median 1/3, apex shallowly emarginate; 6th ventrite depressed at apex, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe short, less than 3/4 as long as paramere, slightly asymmetrical, sides weakly convergent in basal 5/6, curved to rounded apex in apical 1/6; paramere *Psc*, about same width throughout (Fig. 510, 511); siphon robust, strongly curved in basal 2/3, with visible alae in apical 1/5, basal capsule with inner arm short, narrow, apex bifid, outer arm slightly curved, about as wide as and longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 512, 513).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; N. Venezuela: Estado Aragua, P. Nac. Henri Pittier, Maracay/Occumare km 36, La Trilla, 300m. alt., FOG 3.26.iii.1990, Deciduous forest, *Talisia* sp., J.G. Davies (BMNH).

**Geographical distribution.** Venezuela.

**Remarks.** *Cyrea carla* is a comparatively tiny species, only 1.6 mm long, distinguished externally by an elytral color pattern having a narrow, irregular transverse vitta composed of connected median lateral spot and discal spot (Fig. 509).

**93. *Cyrea tara* Canepari and Gordon, new species**

**Description.** Male holotype. Length 2.6 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface entirely smooth, shiny. Color yellow except pronotum with large, black basomedian macula extended more than 1/2 distance to anterior pronotal border, apex of black area widely, deeply incised with yellow; elytron black with 5 large yellow spots, humeral spot elongate, rectangular, median lateral spot projected inward, discal spot elongate oval, apical spot transversely oval (Fig. 514); ventral surface with head, prosternum, meso- and metaventrites black; abdomen dark brown, paler toward lateral margin. Head

punctures coarse, separated by a diameter or less, each puncture about as large as 2 eye facets; pronotal punctures larger than head punctures, separated by about a diameter, elytral punctures larger than on pronotum, separated by 1 to 2 times a diameter; metaventral punctures as large as on elytron medially, separated by 1 to 3 times a diameter, becoming larger and separated by less than a diameter toward lateral margin. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, not angled forward, apically rounded, yellowish brown. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, feebly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with weak oblique angle, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, parallel to middle of prosternum, not apically joined. Metaventricle without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, short pubescence and coarse, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite not depressed in median 1/3, apex shallowly emarginate; 6th ventrite not medially depressed, apex widely, deeply emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe as long as paramere, slender, strongly asymmetrical, sides curved in basal 3/4, rounded to truncate apex in apical 1/4; paramere *Psc*, slender throughout, apex rounded (Fig. 515, 516); siphon robust, strongly curved in basal 1/2, with visible alae in apical 1/6, basal capsule distinctly sclerotized, inner arm short, wide, apex weakly rounded, outer arm wide, slightly longer and wider than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 517, 518).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Peru, Dept. of Cuzco, Paucatumbo(sic), Kosnipata Bosque Nublado Reserve, Coll. MVL Barclay, Cock-of-the-Rock Lodge, Montane Wet Forest, 1400m, iv/1999, 13° 03' 21" S 71° 31' 44" W, M.V.L. Barclay, BMNH(E) 2001-121. (BMNH).

**Geographical distribution.** Peru.

**Remarks.** This species does not have a distinctive color pattern, but the incomplete, widely separated prosternal carinae are unusual within *Cyrea*, and male genitalia with a long, strongly asymmetrical basal lobe are not like those found elsewhere within the tessulata group.

#### 94. *Cyrea rosemary* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.0 mm, width 2.5 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except head with narrowly black vertex, pronotum with large, black basomedian macula occupying all of surface except narrow anterior and lateral borders yellow; elytron dark brown with 5 small yellow spots, humeral spot oval, median lateral spot projected inward, discal spot irregularly oval, apical spot transversely oval (Fig. 519); ventral surface with head, prosternum, meso- and metaventriles dark brown; abdomen brown. Head punctures coarse, separated by less than a diameter, each puncture about as large as 3 eye facets; pronotal punctures as large as head punctures, separated by less than to 3 times a diameter, elytral punctures larger than on pronotum, separated by a diameter or less; metaventral punctures as large as on elytron medially, separated by a diameter or less, becoming larger and separated by less than a diameter toward lateral margin. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, feebly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with weak oblique angle, basal

tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent toward base, joined almost at base of prosternum. Metaventricle without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, slightly extended forward at apex, ventrite with sparse, short pubescence and fine, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite not depressed in median 1/3, apex shallowly emarginate; 6th ventrite not medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe longer than paramere, slender, asymmetrical, sides convergent from base to apical 1/8, rounded to truncate apex in apical 1/8; paramere *Psc*, wide throughout, apex rounded (Fig. 520, 521); siphon robust, strongly curved in basal 1/2, narrowed at apical 1/8, without visible alae, basal capsule weakly sclerotized, inner arm short, narrow, weakly bifid apically, outer arm wider, longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 522, 523).

**Female.** Similar to male except head entirely dark brown, pronotum dark brown except lateral border narrowly yellow. Genitalia with spermathecal capsule elongate, basal 1/5 widened, cornu apically narrowed; bursal cap narrowly rectangular, with 3 sclerotized arms, apical strut short, weakly curved, slender (Fig. 524).

**Variation.** Length 2.8 to 3.2 mm, width 2.2 to 2.6 mm.

**Type material.** Holotype male; Paraguay, Sapucay, Mar., WT Foster Collector. (USNM). Paratypes; 4, same data as holotype except additional month "Feb." (USNM).

**Geographical distribution.** Paraguay.

**Remarks.** *Cyrea rosemary* is not easily distinguished from some other tessulata group species, but neither can it be placed with any one of them. The small, yellow elytral spots and basal lobe of male genitalia longer than paramere are a combination not found elsewhere.

### 95. *Cyrea flavoguttata* (Mulsant), new combination

*Hyperaspis flavoguttata* Mulsant, 1850:651; Mulsant 1853:99; Korschefsky 1931:189; Blackwelder 1945:447.

*Cleothera scapulata* Mulsant, 1853:81. NEW SYNONYM.

*Hyperaspis scapulata*: Korschefsky 1931:195; Crotch 1874:228 (as junior synonym of *H. mercabilis*); Blackwelder, 1945:448; Gordon 1987:29 (as senior synonym of *H. mercabilis*).

*Cleothera mercabilis* Mulsant, 1853:91.

*Hyperaspis mercabilis*: Crotch 1874:228 (as senior synonym of *H. scapulata*); Korschefsky 1931:195 (as junior synonym of *Hyperaspis scapulata*); Gordon, 1987:29.

*Hyperaspis iheringi* Weise, 1910:57; Korschefsky 1931:190; Blackwelder 1945:447. NEW SYNONYM.

**Description.** Male. Length 3.5 mm, width 2.7 mm; body elongate oval, convex. Dorsal surface with head and pronotum alutaceous, dull, pronotum alutaceous, slightly shiny. Color yellow except pronotum with large, black basomedian macula occupying all of pronotal surface except anterior 1/8 and anterolateral 1/5 yellow; elytron black with 4 large yellow spots, humeral spot extended posteriorly along lateral border of elytron to apical 1/6, median lateral spot represented as a projection of lateral yellow border, scutellar spot broadly triangular, discal spot obliquely oval, apical border of spot rounded (Fig. 525); ventral surface with head, prosternum, meso- and metaventricle black; metafemur brown; abdomen dark brown. Head punctures small, separated by a diameter or less, each puncture about as large as 2 eye facets; pronotal punctures slightly larger than head punctures, separated by less than to twice a diameter; elytral punctures as large as on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, becoming larger and separated by less than a diameter laterally. Clypeus deeply emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded,

yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, basal tooth absent, sponda slightly extended beyond angle (Fig. 526). Carinae on prosternal process widely separated at apex, parallel, curved and joined just anterior to middle of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded except slightly flattened at middle, ventrite with sparse, short pubescence and coarse, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite depressed medially, apex widely, shallowly emarginate. Apical tergite coarsely, densely punctured, apex slightly emarginate. Genitalia with basal lobe slightly longer than paramere, symmetrical, sides convergent from base to truncate apex; paramere *Psc*, narrowed in apical 1/3 (Fig. 527, 528); siphon robust, strongly curved in basal 2/3, with visible, sclerotized alae in apical 1/6, basal capsule distinctly sclerotized, inner arm long, slender, apex bifid, outer arm straight, as long as and slightly wider than inner arm, with accessory piece, basal border weakly emarginate (Fig. 529, 530).

**Female.** Similar to male except head black, pronotum entirely black except lateral 1/8 yellow. Genitalia with spermathecal capsule extremely long, slender, basal 1/6 enlarged, cornu narrowed to acute apex; bursal cap oval, with 3 sclerotized arms, apical strut short, slender, slightly widened from base to apex (Fig. 531).

**Variation.** Length 3.0 to 4.3 mm, width 2.3 to 3.0 mm. Size of elytral spots varies from small to large, there is a tendency for the discal and median lateral spots to connect and occasionally the humeral and scutellar spots are connected; sometimes the lateral yellow border extends to the apical spot. The form described as *iheringi* by Weise differs in dorsal coloration by having the elytron yellow with lateral border narrowly black, sutural border with irregular, wide black vitta extended from base to apex, vitta widened in basal 1/3, narrowed before apex and extended laterally long apical border of elytron, 2 large black spots present, 1 medially in basal 1/3, 1 transversely elongate spot narrowly connected to sutural vitta on apical declivity.

**Type locality.** Of *flavoguttata*, Brazil, "Monte-Video;" of *scapulata*, Brazil, "Saint Paul;" of *mercabilis*, Brazil; of *iheringi*, Brazil, Estado Sao Paulo, Yparanga.

**Type depository.** Of *flavoguttata*, MNHP (lectotype here designated); of *scapulata*, UMZC (lectotype designated by Gordon, 1987); of *mercabilis*, UMZC (lectotype designated by Gordon, 1987); of *iheringi*, MBR (lectotype here designated).

**Geographical distribution.** Argentina, Brazil, Paraguay.

**Specimens examined.** 102. **Argentina.** Dep. Concepcion, Sta. Maria; Estancia la Noria, Rio San Javier, Santa Fe; Pr. Cordoba, Capilla del Monte; Pr. Cordoba, 4 km NE Cruz del Eje; Mendoza; Misiones. **Brazil.** Alto Itatiaya, Serra de Itatiaya; Campos de Jordao; Chapada; MG, Serra Caraca; Minas Gerais, Poco de Caldas; Minas Gerais, V. Monte Verde; Rio de Janeiro; Sao Paulo; Sao Paulo, Barueri; Virmond. **Paraguay.** Hohenau, Alto-Parana; San Bernardino. (BMNH) (CAS) (CMNH) (CNC) (DZUP) (MHNP) (MZSP) (USNM) (ZMHB).

**Remarks.** *Cyrea flavoguttata* is frequently collected as evidenced by the number of specimens available for study. It is distinguished by the mostly alutaceous, dull dorsal surface; narrow, lateral yellow vitta extended from humeral spot to, or nearly to, the apical spot; basal lobe of male genitalia longer than paramere and with a truncate apex, paramere narrowed in apical 1/3, and siphon with lateral alae sclerotized. In spite of the color differences, this species, *C. scapulata*, *C. mercabilis* and *C. iheringi* are conspecific. Both male and the distinctive female genitalia are identical in these forms, and they differ only by the elytral color pattern. The distinctly sclerotized siphonal alae are unique to this species, all others have membranous alae. Both *C. scapulata* and *C. mercabilis* were correctly treated as synonyms of each

by Crotch (1874) and Korschefsky (1931). Here we consider both as junior synonyms of *C. flavoguttata*. *Cyrea iheringi* (Weise) is also an extreme color variation of *C. flavoguttata* that is identical in all other respects, including male and female genitalia.

A male type specimen of *C. flavoguttata* in the MNHP labeled "Museum Paris, Montevideo, 7 bre et 9 bre/1820" is designated as the lectotype. There are 2 other specimens in the MNHP from Minas Gerais, Brazil, that may or may not qualify as paralectotypes. Each bears the label "H. flavoguttata Muls, auct. det." A male specimen of *C. iheringi* in the MBR labeled "Ypirana, Estado de S. Paulo, 14.IX.1897" is designated as the lectotype.

### 96. *Cyrea ferruginiceps* (Weise), new combination

*Cleothera ferruginiceps* Weise, 1906:229.

*Hyperaspis ferruginiceps*: Korschefsky 1931:188; Blackwelder 1945:447.

**Description.** Male. Length 4.5 mm, width 3.0 mm; body elongate, somewhat parallel sided, convex. Dorsal surface with head alutaceous, weakly shiny, pronotum alutaceous, dull, elytron slightly alutaceous, weakly shiny. Color reddish yellow except pronotum with large, black basomedian macula extended 3/4 distance to anterior pronotal margin, apex of macula sinuate, middle of macula with small, elongate, triangular yellow spot, obscure, narrow, obliquely oval reddish spot on each side, lateral 1/6 reddish yellow; elytron black with 5 large yellow spots, humeral spot triangular, scutellar spot irregularly rectangular, median lateral spot oval, projected inward, discal spot irregularly rectangular, apical spot transversely oval, apical border of spot deeply emarginate (Fig. 532); ventral surface with head, prosternum, meso- and metaventrite black; abdomen reddish yellow. Head punctures small, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures slightly larger than head punctures, separated by 1 to 3 times a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures fine, sparse, becoming larger and separated by less than a diameter laterally. Head with deep impression on side posterior to clypeus. Clypeus prominent, emarginate apically, lateral angle rounded, angled from lateral angle to eye canthus, surface with sparse, long pubescence. Eye canthus short, 3 or 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with slight oblique angle, basal tooth absent, sponda slightly extended beyond angle (Fig. 533). Carinae on prosternal process narrowly separated at apex, convergent and joined at basal 1/3 of prosternum. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite extended to apex of ventrite, then right angled and abruptly terminated, ventrite with sparse, short pubescence and fine, dense punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite not depressed in median 1/3, apex shallowly emarginate; 6th ventrite depressed at apex, apex deeply emarginate. Apical tergite coarsely, densely punctured, apex emarginate. Genitalia with basal lobe longer than paramere, slightly asymmetrical, sides slightly convergent from base to rounded apex; paramere *Psc*, narrowed in apical 1/2 (Fig. 534, 535); siphon slender, strongly curved in basal 1/2, with visible alae immediately posterior to apex, basal capsule weakly sclerotized, inner arm short, narrow, apex rounded, outer arm straight, wider and longer than inner arm, with accessory piece, basal border not emarginate (Fig. 536).

**Female.** Similar to male except head black with large, reddish yellow spot on base of frons and vertex, pronotum with black basomedian macula extended to, or nearly to, pronotal apex, lateral 1/8 of pronotum yellow. Genitalia with spermathecal capsule short, widest at base, narrowed to acute apex; bursal cap without sclerotized arms, apical strut short, widened from narrow base to spatulate apex (Fig. 537).

**Variation.** Length 4.3 to 5.0 mm, width 2.8 to 3.2 mm. Pronotal pattern variable from that described above to entirely reddish yellow, or reddish yellow with obscure, short basomedian macula, elytron varies from that described above to having scutellar and discal spots broadly connected, or with all spots very small and scutellar spot entirely lacking.



**Type locality.** Argentina, Tucuman.

**Type depository.** MBR (lectotype here designated).

**Geographical distribution.** Argentina.

**Specimens examined.** 14. **Argentina.** Chaco, colonia Benitez; Salta, Cafayete; Salta, Cerrillos, INTA Salta, Cnel. Maldes; San Luis, S. Geronimo. (JEBC) (MBR) (USNM).

**Remarks.** *Cyrea ferruginiceps* is certainly one of the most distinctive of all *Cyrea* species because of the (usually) large size; post clypeal depressions of male head; very short eye canthus; clypeus produced anteriorly; and short, abruptly angled postcoxal line on basal abdominal ventrite. Specimens from all localities except Chaco are typically large and boldly marked. Chaco specimens are smaller, with all or mostly reddish yellow pronota, and elytral spots usually severely reduced in size, or with scutellar spot completely absent.

A type specimen in the MBR labeled "Rep. Argentina, Prov. Tucuman, 1-III-1900, C. bruch/TYPUS/Cleothera ferruginiceps Weise" is designated as the lectotype.

### 97. *Cyrea melinda* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.4 mm, width 1.8 mm; body elongate, slender, essentially parallel sided. Dorsal surface with head alutaceous, dull, pronotum weakly alutaceous, slightly shiny, elytron smooth, shiny. Color yellow except pronotum with short, narrow, dark brown basomedian macula, macula deeply emarginate medially, obscure, pale brown spot present on each side of middle of pronotum; elytron dark brown with 5 large yellow spots arranged in rows of 2 each with apical spot, humeral spot widely triangular, narrowly connected to mediolateral spot, scutellar spot rounded, mediolateral spot irregularly triangular, somewhat projected inward, discal spot broadly oval, apical spot transversely rectangular, apical margin of spot entire; (Fig. 538); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen dark brown except lateral 1/3 yellowish brown. Head punctures fine, separated by less than a diameter, each puncture about as large as an eye facet; pronotal punctures slightly larger than head punctures, separated by less than to about twice a diameter, elytral punctures larger than on pronotum, separated by less than to 3 times diameter; metaventral punctures much larger than on elytron medially, separated by a diameter or less, becoming larger and separated by less than a diameter toward lateral margin. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 5 eye facets long, angled forward, apically rounded, black. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, feebly grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, basal tooth absent, sponda distinctly extended beyond protibial margin. Carinae on prosternal process narrowly separated at apex, convergent toward base, joined at basal 1/5 of prosternum, connected to base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, with central groove or depression from base to apex of abdomen, basal ventrite with sparse, short pubescence and fine, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite with apex shallowly emarginate; 6th ventrite with apex shallowly emarginate with small, median projection. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe longer than paramere, slender, symmetrical, sides convergent from base to apical 1/5, curved to abruptly rounded apex in apical 1/5; paramere *Psc*, wide throughout, apex abruptly truncate (Fig. 539, 540); siphon robust, strongly curved in basal 1/2, without visible alae, basal capsule distinctly sclerotized, inner arm short, very narrow, curved upward to acute apex, outer arm wider and longer than inner arm, with accessory piece, basal border not emarginate (Fig. 541, 542).

**Female.** Unknown.

**Variation.** Length 2.0 to 2.3 mm, width 1.5 to 1.8 mm. Elytron may have the humeral and mediolateral spots barely perceptibly connected along the lateral margin, or broadly connected, one paratype has the lateral spots completely connected from humeral to apical spot.

**Type material.** Holotype male; (Argentina) Cordoba, Alta Gracia, III.959, Daguerre. (USNM). Paratypes; 3, same data as holotype (USNM).

**Geographical distribution.** Argentina.

**Remarks.** Only males are known for this species, and are distinctive because of the central abdominal groove and unusual male genitalia. The genitalia are not of the typical *Psc* type because the parameres are severely truncated apically, giving them a different appearance. However, they are more similar to the *Psc* type than to any other type within the genus, so are placed here.

### 98. *Cyrea dora* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.5 mm, width 2.2 mm; body elongate, slender, essentially parallel sided. Dorsal surface with head slightly alutaceous, shiny, pronotum and elytron smooth, shiny. Color yellow except head black, pronotum black except lateral 1/8 yellow; elytron yellow with lateral margin of apical declivity and apex narrowly bordered with black, sutural margin with wide, irregular black vitta, large, wide black macula on apical declivity connected to sutural border and lateral margin, small, irregularly rounded, black spot posterior to humerus (Fig. 543); ventral surface with head, prosternum, meso- and metaventrites black; legs with femur black; abdomen dark brown. Head punctures fine, separated by less than a diameter, each puncture about as large as 3 eye facets; pronotal punctures slightly larger than head punctures, separated by 1 to 2 times a diameter, elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures about as large as on elytron medially, separated by a diameter or less, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, black. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, feebly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, basal tooth absent, sponda distinctly extended beyond protibial margin (Fig. 544). Carinae on prosternal process widely separated at apex, convergent toward base, joined almost at base of prosternum, connected to base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened medially, extended forward at apex, ventrite with sparse, short pubescence and fine, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite slightly depressed medially, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe nearly as long as paramere, slender, symmetrical, sides very slightly convergent from base to apical 1/6, curved to rounded apex in apical 1/6; paramere *Psc*, wide throughout, apex rounded (Fig. 545, 546); siphon robust, strongly curved in basal 2/3, with visible alae, basal capsule distinctly sclerotized, inner arm short, narrow, weakly bifid apically, outer arm wider, longer than inner arm, with accessory piece, basal border abruptly emarginate (Fig. 547, 548).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Argentina, prov. San Luis, San Gerónimo, dic 1972, leg. G. Williner, Coleccion J.E. Barriga, Chile 116927. (JEBC).

**Geographical distribution.** Argentina.

**Remarks.** *Cyrea dora* is distinctive within this genus because of the elongate, parallel sided body form and elytral color pattern. It bears some resemblance to *C. lacy* in both regards, but the latter species lacks an abdomen.

### 99. *Cyrea allison* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.3 mm, width 2.4 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except head black with clypeus and anterolateral angle of frons yellow, pronotum with long, narrow basomedian macula extended 3/4 distance to anterior pronotal margin, macula with apex medially indented with yellow, lateral borders sinuate; elytron black with narrow yellow vitta on lateral margin from humeral angle to apical declivity, and small, somewhat transversely oval reddish yellow spot at apex (Fig. 549); ventral surface with head, prosternum, meso- and metaventrites black; abdomen yellowish brown except median portions of ventrites 1-4 brown. Head punctures fine, separated by less than a diameter, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures as large as on elytron medially, separated by a diameter or less, becoming larger and separated by less than a diameter toward lateral margin. Clypeus weakly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, parallel to middle of prosternum, apparently not joined apically. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened medially, extended forward at apex. Ventrites 1-3 with sparse, short pubescence and coarse, sparse punctures; ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about 2/3 as long as paramere, slender, asymmetrical, sides weakly convergent from base to apical 1/4, curved to rounded apex in apical 1/4; paramere *Psc*, slender throughout, apex rounded (Fig. 550, 551); siphon robust, strongly curved in basal 1/2, without visible alae, basal capsule with inner arm short, wide, apex weakly bifid, outer arm wider, longer than inner arm, narrowed from base to apex, with accessory piece, basal border shallowly emarginate (Fig. 552, 553).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Ecuador, Canar Prov., 22 km SE El Triunfo, 200m, 2.III.81, H. Howden. (USNM).

**Geographical distribution.** Ecuador.

**Remarks.** This large species has a dorsal color pattern differing from that of any known species of *Cyrea*, and males have a mostly black head, making identification relatively simple.

### 100. *Cyrea tamara* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.0 mm, width 2.4 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellow except head black with clypeus and anterolateral angle of frons yellow, pronotum with long, narrow basomedian macula ex-

tended 5/6 distance to anterior pronotal margin, macula with apex medially indented with yellow, lateral borders sinuate; elytron black without humeral spot, with wide, sinuate vitta on sutural margin from base of elytron to apical declivity (vitta composed of broadly connected sutural and discal spots), mediolateral spot rounded, apical spot irregularly rounded (Fig. 554); ventral surface with head, prosternum, meso- and metaventrites black; abdomen yellowish brown except median portions of ventrites 1-4 black to dark brown. Head punctures fine, separated by less than a diameter, each puncture about as large as 2-3 eye facets; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron medially, separated by less than a diameter medially, becoming larger and separated by less than a diameter toward lateral margin. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin straight, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process narrowly separated at apex, convergent at basal 1/4 of prosternum, connected to base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite flattened medially, extended forward at apex. Ventrites 1-3 with sparse, short pubescence and coarse, sparse punctures; ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate, lateral angle with small, apically acute projection. Genitalia with basal lobe about 3/4 as long as paramere, wide, asymmetrical, sides curved from base to apical 1/4, curved to rounded apex in apical 1/4; paramere *Psc*, narrowed from base to apex, apex rounded (Fig. 555, 556); siphon robust, strongly curved in basal 1/2, with visible alae at apical 1/6, basal capsule with inner arm short, tapered, apex rounded, outer arm wider, longer than inner arm, curved, narrowed from base to apex, with accessory piece, basal border shallowly emarginate (Fig. 557, 558).

**Female.** Similar to male externally. Genitalia with spermathecal capsule short, narrow; bursal cap rectangular, with 3 sclerotized arms, apical strut long, widened from base to large, racket shaped apex (Fig. 559).

**Variation.** Length 2.3 to 3.4 mm, width 1.7 to 2.6 mm. Elytron sometimes with sutural vitta, mediolateral spot, and apical spot all connected.

**Type material.** Holotype male; Ecuador, Canar Prov., 22 km SE El Triunfo, 200m, 2.III.81, H. Howden. (USNM). Paratypes; 15, 2, Ecuador, , 700 m, Pichincha Prov., Sto. Domingo Col., VIII-4-1956, sweeping, G.H. Dieke (USNM); 2, Ecuador, Pichincha, 3 km. S Union del Toachi, VIII-27-1997, 900m, Fred G. Andrews (CSCA); 2, Ecuador, Pichincha, 70km.W. Quito, Quito-Santo Domingo Rd.nr Chiriboga, VII-1-1982, J. Slansky coll. (CSCA); 2, Ecuador, Sto Domingo de los Colorados, Oct. 10, 1958, Vasquez (USNM); 7, Ecuador, Sto. Domingo de los Colorados, 6 Feb.1973, 5 Mar. 1973, M.A. and N. Deyrup (USNM).

**Remarks.** This comparatively large species has a distinctive dorsal color pattern and an Ecuadorean type locality, rendering it easily identified. However, it is very similar to the preceding *C. allison* in many respects, including the mostly black male head. In fact, the holotypes of each species were collected at the same time and place by the same collector. *Cyrea tamara* males have an anterolateral projection of the apical tergite that is lacking in *C. allison*, and male genitalia of the two species differ.

### 101. *Cyrea exclamatoris* (Mulsant), new combination

*Hyperaspis exclamatoris* Mulsant, 1850:654; Weise 1906:229; Korschefsky 1931:188; Blackwelder 1945:447.

**Description.** Male. Length 2.6 mm, width 1.8 mm; body elongate oval, convex. Dorsal surface with head weakly alutaceous, slightly shiny, pronotum alutaceous, dull, elytron smooth, shiny. Color yellow with

pronotum all black except narrow anterior and lateral borders yellow; elytron black with lateral vitta and 2 spots yellow, lateral vitta extended from humeral angle nearly to suture at apex, scutellar spot small, somewhat triangular, discal spot elongate, obliquely oval (Fig. 560); ventral surface with head, prosternum, meso- and metaventrites black; abdomen mostly dark brown except paler brown laterally and apically. Head punctures fine, separated by less than a diameter, each puncture about as large as an eye facet; pronotal punctures about as fine as head punctures, separated by less than to 3 times a diameter, elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures larger than on elytron, separated by less than to twice diameter medially, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, arcuate, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, parallel to basal 1/4 of prosternum, joined at basal 1/4, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex. Ventrites 1-6 with sparse, short pubescence and fine, sparse punctures; 5th ventrite depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe slightly shorter than paramere, slender, slightly asymmetrical, sides parallel from base to apical 1/3, curved to rounded apex in apical 1/3; paramere *Psc*, wide, apex rounded (Fig. 561, 562); siphon robust, strongly curved in basal 2/3, with visible alae at apical 1/6, basal capsule with inner arm long slender, narrowed medially, apex bifid, outer arm wider, longer than inner arm, curved, with accessory piece, basal border shallowly emarginate (Fig. 563, 564).

**Female.** Similar to male except head black, pronotum with anterior border black. Genitalia with spermathecal capsule long, slender, basal 1/6 widened, apex of cornu acute; bursal cap rectangular, with 3 heavily sclerotized arms, apical strut robust, short, extreme apex slightly widened (Fig. 565).

**Variation.** Length 1.9 to 2.7 mm, width 1.5 to 2.0 mm.

**Type locality.** Brazil.

**Type depository.** MHNG (lectotype here designated).

**Geographical distribution.** Brazil.

**Specimens examined.** 18. **Brazil.** Brasilia, Rio. Jan; Santa Catha.; Parana, 40km. SE Curitiba, Jose dos Pinhais; Porto Alegre; S.C. (Santa Catarina), Sao Joaquin; Vila Velho, PR; 1 BMNH specimen without specific locality data, but labeled "257/80.23/Hyperaspis exclamationis Melly Brasil/ Named by Mulsant." (BMNH) (MHNG) (USNM).

**Other specimens.** Three specimens from the DZUP collection labeled as from "(Brazil) Guarapucava, H. Schneider"

**Remarks.** This little species is surprisingly distinctive because the pronotum is heavily alutaceous; male pronotum entirely black except narrow anterior and lateral borders yellow; and elytron with long, lateral vitta and elongate oval discal spot. Within this group of species it is rather distinctive. "Other specimens" are placed here because 2 of them, both females, have the scutellar and discal spots united into a central vitta.

Mulsant stated that his type was from the Melly collection, some part of which is in the MHNG. Dr. G. Cuccodoro provided a loan of specimens from the MHNG collection, among which was one from the

Melly collection recognizable as a type of *C. exclamatoris*. This specimen is here designated as the lectotype.

### 102. *Cyrea joy* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.0 mm, width 1.5 mm; body elongate oval. Dorsal surface with head, pronotum and elytron smooth, shiny. Color black except head yellow, pronotum with narrow anterior border and small, triangular, anterolateral macula yellow; elytron black except minute, triangular spot at humeral angle yellow (Fig. 566); ventral surface black except mouthparts, legs yellow; abdomen dark brown. Head punctures fine, separated by a diameter or less, each puncture about as large as 2-3 eye facets; pronotal punctures larger than head punctures, separated by less than to about a diameter; elytral punctures larger than on pronotum, separated by less than to about diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, feebly grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, basal tooth absent, sponda distinctly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent toward base, joined at basal 1/6 of prosternum, connected to base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex, ventrite with sparse, short pubescence and coarse, sparse punctures; ventrites 2-6 pubescent throughout, punctures coarse, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite depressed medially, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe nearly as long as paramere, asymmetrical, sides curved from base to apical 2/3, curved to unevenly rounded apex in apical 1/3; paramere *Psc*, straight, widened from base to apex, apex rounded (Fig. 567, 568); siphon robust, strongly curved in basal 2/3, without visible alae, basal capsule distinctly sclerotized, inner arm long, narrow, obliquely bifid apically, outer arm curved, wider, longer than inner arm, with accessory piece, basal border widely, shallowly emarginate (Fig. 569, 570).

**Female.** Similar to male except head black, anterior margin of pronotum black, elytron without yellow humeral spot. Genitalia with spermathecal capsule short, rather wide, bent medially, about same width from base to rounded apex of cornu; bursal cap oval, with 2 slender, sclerotized arms, apical strut, long, slender (Fig. 571).

**Variation.** Length 2.0 to 2.4 mm, width 1.5 to 1.7 mm. Dorsal background color varies from black to dark, pitchy brown.

**Type material.** Holotype male; Brazil, M. Couto N. Iguassu, Est. Rio de Janeiro, VIII-1960, M. Alvarenga leg. (DZUP). Paratypes; 3, 2, same data as holotype (DZUP); 1, Brazil, Guarapari, E. Santo, IX-1960, M. Alvarenga leg. (DZUP).

**Geographical distribution.** Brazil.

**Remarks.** *Cyrea joy* is defined by the very small size and dark, nearly immaculate dorsal surface. It does not resemble any other known species of *Cyrea*, and is one of the few immediately recognizable taxa within the genus.

**103. *Cyrea georgia* Canepari and Gordon, new species**

**Description.** Male holotype. Length 2.7 mm, width 2.2 mm; body elongate oval, convex. Dorsal surface with head smooth, shiny, pronotum slightly alutaceous, shiny, elytron smooth, shiny. Color yellow except pronotum with long, narrow, black basomedian macula extended 2/3 distance to anterior pronotal margin, macula with apex not indented with yellow, lateral borders sinuate; elytron black with 3 large yellow spots, humeral spot elongately triangular, discal spot round, apical spot transversely oval (Fig. 572); ventral surface with head, prosternum, meso- and metaventrites dark brown; abdomen yellowish brown except median portions of ventrites 1-3 brown. Head punctures fine, separated by less than a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron medially, separated by 1 to 2 times a diameter, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, weakly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin weakly arcuate, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/4 of prosternum, connected to base with single carina. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex. Ventrites 1-3 with sparse, short pubescence and coarse, dense punctures; ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate with lateral angle produced, apically rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about as long as paramere, wide, asymmetrical, sides curved in basal 3/4, apical 1/4 narrow, apex obliquely truncate; paramere *Psc*, wide, widened from base to rounded apex (Fig. 573, 574); siphon robust, strongly curved in basal 2/3, without visible alae, basal capsule with inner arm long, slender, curved anteriorly at apex, outer arm wider, slightly longer than inner arm, with accessory piece, basal border deeply, abruptly emarginate (Fig. 575, 576).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; (Bolivia) Quatro Ojos, Bol. Steinbach., C.M. Acc 5052, Nov 1913. (CMNH).

**Geographical distribution.** Bolivia.

**Remarks.** This is a large species with an elytral color pattern not often found in *Cyrea*. That pattern; presence of setal tufts on the metaventrite and basal abdominal ventrite; and siphon of male genitalia with siphonal capsule deeply, abruptly emarginate basally characterize *C. georgia*.

**104. *Cyrea ruizi* (Bréthes), new combination**

*Curinus ruizi* Bréthes, 1924:40; Korschefsky 1932:252; 1945:451.

*Cyrea ruizi*: González 2008:89.

**Description.** Male. Length 2.4 mm, width 1.5 mm; body elongate, slender, parallel sided. Dorsal surface with head, pronotum and elytron smooth, shiny. Color black except head and pronotum yellowish red; elytron with 3 small yellow spots, mediolateral spot irregularly round, discal spot slender, elongate oval, apical spot narrowly, transversely oval (Fig. 577); ventral surface with head, prosternum except apical process, legs yellow; abdomen yellow except median portion of ventrites 1-4 brownish yellow. Head punc-

tures small, separated by a diameter or less, each puncture large as an eye facet; pronotal punctures slightly larger than head punctures, separated by less than to about a diameter, elytral punctures slightly larger than on pronotum, separated by less than to twice a diameter; metaventral punctures as large as on elytron, separated by about a diameter, becoming larger and separated by less than a diameter laterally. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 4 eye facets long, angled forward, apically rounded, reddish yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, basal tooth absent, sponda slightly extended beyond angle (Fig. 578). Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/3 of prosternum, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite short, rounded throughout, ventrite with sparse, short pubescence and fine, sparse punctures; ventrites 2-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite depressed medially, apex widely, deeply emarginate. Apical tergite coarsely, densely punctured, apex emarginate. Genitalia with basal lobe about 3/4 length of paramere, symmetrical, sides very slightly convergent from base to apical 2/3, curved to rounded apex; paramere *Psc*, narrowed from base to apex (Fig. 579, 580); siphon robust, strongly curved in basal 2/3, with visible alae in apical 1/6, basal capsule distinctly sclerotized, inner arm short, wide, apically widened, apex obliquely truncate, outer arm slightly curved, as long and as wide as inner arm, with accessory piece, basal border weakly emarginate (Fig. 581, 582).

**Female.** Similar to male except genitalia with spermathecal capsule long, slender, basal 1/4 enlarged, cornu narrowed to acute apex; bursal cap oval, with 3 sclerotized arms, apical strut short, widened from base to apex (Fig. 583).

**Variation.** None observed.

**Type locality.** Chile, locality not stated.

**Type depositary.** Unknown. Not in BMNH or MNHS collections.

**Geographical distribution.** Chile.

**Specimens examined.** 2. **Chile.** Subida C El Roble Caleu -Chacabuco, Región Metropolitana. (MNHS) (RH).

**Remarks.** *Cyrea ruizi* is known only from Chile, where it is rarely collected (Guillermo Gonzalez, pers. comm.). This is an easily recognized species because of the entirely yellowish red head and pronotum; 3 small, discrete, yellow spots on each elytron, both humeral and scutellar spots absent; and Chilean distribution.

Bréthes originally described it as a species of *Curinus*, a genus of Chilocorini not at all similar to *Cyrea*. For several years it was recognized within Chile as a species of *Cyra* (*Cyrea*), and González (2008) formally placed it in *Cyra* (*Cyrea*). This generic disposition is almost certainly correct because the Chilean *Cyrea* fauna is extremely depauperate, and these specimens fit the original description well.

### 105. *Cyrea constance* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.0 mm, width 2.4 mm; body elongate oval, convex. Dorsal surface with head and pronotum slightly alutaceous, shiny, elytron smooth, shiny. Color yellow except pronotum with long, narrow basomedian macula extended 3/4 distance to anterior pronotal margin, macula with apex not indented with yellow, lateral borders widely emarginate; elytron black with 3 large yellow spots, humeral spot elongately triangular, single wide, median vitta present from near basal border of elytron posteriorly onto apical declivity, apical spot transversely oval (Fig. 584); ventral surface with head,



prosternum, meso- and metaventrites dark brown; abdomen yellowish brown except median portions of ventrites 1-3 brown. Head punctures fine, separated by less than a diameter, each puncture slightly larger than an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron medially, separated by less than a diameter, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, weakly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin weakly arcuate, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent to basal 1/5 of prosternum, connected to base with single carina. Metaventrite with setal tuft. Basal abdominal ventrite with setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex. Ventrites 1-6 with dense, short pubescence and fine, dense punctures; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate with lateral angle slightly produced, apically rounded. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about as long as paramere, wide, asymmetrical, sides curved in basal 5/6, apical 1/6 narrow, apex truncate; paramere *Psc*, wide, widened from base to rounded apex (Fig. 585, 586); siphon robust, strongly curved in basal 2/3, without visible alae, basal capsule with inner arm short, wide, curved anteriorly at apex, outer arm curved, wider and slightly longer than inner arm, with accessory piece, basal border shallowly emarginate (Fig. 587, 588).

**Female.** Similar to male except head entirely dark brown, pronotum with basomedian macula extended to anterior pronotal margin, elytron without humeral spot. Genitalia with spermathecal capsule short, wide, about same width from base to rounded apex of cornu (Fig. 589).

**Variation.** None observed.

**Type material.** Holotype male; (Brazil) 4436, Hist.-Coll. (Coleoptera), Nr. 4436, *Hyperaspis frenata* N., Para, Sieber, Zool. Mus. Berlin. (ZMHB). Paratype; 1, same data as holotype (ZMHB).

**Geographical distribution.** Brazil.

**Remarks.** This species is quite similar to *C. georgia* except for a differing elytral color pattern; siphon of male genitalia with basal border of capsule shallowly, widely emarginate; and Brazilian type locality.

### 106. *Cyrea lillie* Canepari and Gordon, new species

**Description.** Male holotype. Length 2.6 mm, width 2.0 mm; body elongate oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color yellowish red except head with small brown spot at lateral margin of clypeus, small brown spot near eye at apex of frons, and small brown spot at base of eye; pronotum with small, transverse, sinuate brown spot medially in apical 1/2; elytron black except humeral spot yellowish red with narrow, yellowish red vitta extended posteriorly along lateral margin to apical declivity (Fig. 590); ventral surface with head, prosternum, meso- and metaventrites black, meso- and metafemur dark brown; abdomen brown except median portions of ventrites 1-3 dark brown. Head punctures fine, separated by a diameter or less, each puncture smaller than an eye facet; pronotal punctures slightly larger than head punctures, separated by less than to about 3 times a diameter, elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures much larger than on elytron medially, separated by less than a diameter, becoming larger and separated by less than a diameter toward lateral margin. Clypeus slightly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior

angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin weakly arcuate, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, nearly parallel, joined at basal 1/5 of prosternum, connected to base with single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened medially, extended forward at apex. Ventrites 1-3 with dense, short pubescence and coarse, sparse punctures; ventrites 4-6 with dense, fine punctures; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe longer than paramere, slender, symmetrical, sides curved from base to truncate apex; paramere *Psc*, long, narrow, slightly curved, about same width from near base to rounded apex (Fig. 591, 592); siphon robust, strongly curved in basal 1/2, with visible alae in apical 1/7, basal capsule with inner arm short, slender, apex slightly rounded, outer arm wider and longer than inner arm, with accessory piece, basal border abruptly, triangularly emarginate (Fig. 593, 594).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; (Colombia) Colomba., Bogota., illegible line. (ZMHB).

**Geographical distribution.** Colombia.

**Remarks.** *Cyrea lillie* has a unique dorsal color pattern that separates it from other species in the genus. In addition, the dull, alutaceous pronotum has punctures so minute as to be nearly invisible, and the basal lobe of the male genitalia is longer than the paramere.

### 107. *Cyrea languida* (Mulsant), new combination

*Cleothera languida* Mulsant, 1850: 563.

*Hyperaspis languida*: Crotch 1874: 216; Korschefsky 1931:191; Blackwelder 1945: 447.

**Description.** Male. Length 3.0 mm, width 2.5 mm; body elongate oval, convex. Dorsal surface with head weakly alutaceous, slightly shiny, pronotum and elytron smooth, shiny. Color yellow except pronotum with 5 pale brown spots, 1 spot on each side of middle on basal margin, 1 median spot on basal margin, 1 oblique spot at middle of pronotum on each side (Fig. 595); elytron entirely yellow, immaculate; ventral surface with head, prosternum, meso- and metaventrites pale reddish brown; abdomen yellow. Head punctures fine, separated by a diameter or less, each puncture about as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron, separated by a diameter or less medially, becoming larger and separated by less than a diameter toward lateral margin. Clypeus feebly emarginate apically, nearly truncate, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron wide, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, arcuate, basal tooth absent, sponda slightly extended beyond protibial margin (Fig. 596). Carinae on prosternal process narrowly separated at apex, convergent to basal 1/3 of prosternum, joined at basal 1/3, connected to prosternal base by single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex. Ventrites 1-2 with dense, long pubescence and fine, sparse punctures, ventrites 3-6 with dense, short, pubescence and fine, dense punctures; 5th ventrite depressed in median 1/

3, apex slightly emarginate, nearly truncate; 6th ventrite medially depressed, apex slightly emarginate, nearly truncate. Apical tergite finely, densely punctured, apex weakly emarginate. Genitalia with basal lobe 2/3 as long as paramere, wide, asymmetrical, sides convergent from base to rounded, slightly emarginate apex; paramere *Psc*, wide in basal 2/3, narrowed to rounded apex in apical 1/3 (Fig. 597, 598); siphon robust, strongly curved in basal 2/3, without visible alae, basal capsule with inner arm long slender, apex obliquely truncate, outer arm curved, wider and shorter than inner arm, with accessory piece, basal border deeply emarginate (Fig. 599, 600).

**Female.** Similar to male except genitalia with spermathecal capsule elongate, slender, about same width throughout, apex of cornu rounded; bursal cap oval, with 3 small sclerotized arms, apical strut slender, straight, apex not enlarged (Fig. 601).

**Variation.** Length 2.6 to 3.1 mm, width 2.2 to 2.6 mm.

**Type locality.** Colombia.

**Type depository.** MNHP (lectotype here designated).

**Geographical distribution.** Colombia, Brazil, Central America.

**Specimens examined.** 47. **Colombia.** Cauca, Pereira; Val (Valle del Cauca) Palmira. **Venezuela.** Aragua, Ocumare de la Costa; Guarjira Valley; Maracay, El Limon; Puerto Cabello. (USNM) (ZMHB).

**Other specimens.** 2. (Brazil) Corumba, Matto Grosso. (CAS)

**Remarks.** This species is distinctive because the dorsal surface is entirely yellow except for some pale brown pronotal spots. Male abdominal ventrites have the least apical emargination of any species examined, the apex being almost truncate.

A specimen of *Cleothera languida* in the MNHP collection labeled "Type/Coll. Mniszech" is designated as the lectotype.

### 108. *Cyrea arrowi* (Brèthes), new combination

*Hyperaspis arrowi* Brèthes, 1925a: 13; Korschefsky 1931:184; Blackwelder 1945:446.

*Hyperaspis arrowi* var. *darwinii* Brèthes, 1925a: 13.

*Hyperaspis arrowi* ab. *darwinii*: Korschefsky 1931:184; Blackwelder 1945:446. NEW SYNONYM.

**Description.** Male. Length 2.4 mm, width 1.6 mm; body elongate, oval, slightly flattened. Dorsal surface with head alutaceous, dull, pronotum slightly alutaceous, weakly shiny, elytron smooth, shiny. Color yellow except pronotum with large, wide, black basomedian macula extended about 5/6 distance to anterior pronotal margin, apical border slightly arcuate, lateral 1/5 of pronotum yellow; elytron black with 2 yellow vittae, vitta on lateral margin narrow, sinuate, widened at apical declivity, extended from humeral angle onto apical declivity, median vitta wide at base, narrowed to wide apex on apical declivity (Fig. 602); ventral surface with head, prosternum, and metaventrite black; abdomen dark brown except lateral and apical 1/3 slightly paler brown. Head punctures fine, separated by a diameter or less, each puncture about as large as 2 eye facets; pronotal punctures larger than head punctures, separated by less than to about twice a diameter; elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron medially, separated by a diameter or less, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, nearly flat, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia

with wide oblique angle, outer margin arcuate, basal tooth absent, sponda extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/3 of prosternum, connected to base with single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite abruptly rounded throughout, extended forward at apex. Ventrites 1-3 with dense, long pubescence and coarse, dense punctures; ventrites 4-6 pubescent throughout, punctures fine, dense; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe about 5/6 as long as paramere, slender, symmetrical, sides convergent from base to abruptly rounded apex; paramere *Psc*, slender, evenly curved, nearly same width from base to rounded apex (Fig. 603, 604); siphon robust, strongly curved in basal 2/3, with visible alae at apical 1/8, basal capsule with inner arm short, wide, apex bifid, outer arm curved, about same width and length as inner arm, with small accessory piece, basal border widely, shallowly emarginate (Fig. 605, 606).

**Female.** Similar to male except head black, pronotum entirely black except narrow lateral margin yellow. Genitalia with spermathecal capsule long, slender, basal 1/3 wide, slightly widened from basal 1/3 to acute apex of cornu; bursal cap small, oval with 3 heavily sclerotized arms, apical strut short, robust (Fig. 607).

**Variation.** Length 2.3 to 3.0 mm., width 1.6 to 2.2 mm. Male pronotum sometimes with narrow, black apex, elytron with vittae widely separated at apex (*arrowi*) or with lateral vitta extended nearly to suture at apex, narrowly separated from median vitta (*darwini*).

**Type locality.** Of *C. arrowi*, not stated; of *C. darwini*, "Maldonado."

**Type depository.** Of *C. arrowi* and *C. darwini*, BMNH.

**Geographical distribution.** Argentina, Uruguay.

**Specimens examined.** 35. **Argentina.** Bella Vista, Corrientes; Buenos Aires; Buenos Aires, La Plata; Buenos Aires, San Fernando; Entre Rios, Concordia; Prov. Córdoba, dpto. Calamuchita, Sauce; Garay, Santa Fe; Tigre. **Uruguay.** Montevideo to Salto & Concordia. (BMNH) (JEBC) (USNM).

**Remarks.** *Cyrea arrowi* has distinctively patterned elytra and an elongate body form that is similar to that of many species of *Hyperaspis*.

Brèthes (1925a) described *C. darwini* as a variety of *C. arrowi*, which it certainly is. Here the two names are treated as synonyms.

### 109. *Cyrea courtney* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.9 mm, width 2.6 mm; body elongate, nearly parallel sided, convex. Dorsal surface with head, pronotum alutaceous, dull, elytron smooth, shiny. Color yellow except pronotum with large, black macula extended 2/3 distance to apical pronotal margin, apex of macula entire, slightly arcuate; elytron black except basal, lateral, and apical margins broadly yellow, median yellow vitta reduced to elongate oval spot (Fig. 608); ventral surface with head, prosternum, meso- and metaventrites black; abdomen dark brown except ventrites 5-6 reddish yellow. Head punctures fine, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures larger than on elytron medially, separated by a diameter or less, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of border-

ing line medially. Epipleuron narrow, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with wide oblique angle, almost flanged, outer margin arcuate, basal tooth absent, sponda widely extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/3 of prosternum, connected to base with single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex. Ventrites 1-3 with dense, short pubescence and coarse, sparse punctures; ventrites 4-6 with dense, fine punctures; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex shallowly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe 3/4 as long as paramere, wide, asymmetrical, sides parallel from base to rounded apex; paramere *Psc*, long, wide, slightly widened medially, apex rounded (Fig. 609, 610); siphon robust, strongly curved in basal 1/2, with visible alae in apical 1/6, basal capsule with inner arm short, slender, apex obliquely bifid, outer arm curved, wider and longer than inner arm, with accessory piece, basal border abruptly emarginate (Fig. 611, 612).

**Female.** Similar to male except head black. Genitalia with spermathecal capsule long, slender, basal 1/5 widened, apex of cornu acute; bursal cap rectangular with 3 heavily sclerotized arms, apical strut long, apex abruptly widened (Fig. 613).

**Variation.** Length 3.7 to 3.9 mm, width 2.5 to 2.6 mm. Elytron with elongate median vitta enlarged, extended to basal and apical yellow borders, or vitta more widely expanded and more widely connected to yellow borders.

**Type material.** Holotype male; (Brazil) Vila Monte Verde, Minas Gerais, 9.II.1965, Halik 26507. (USNM). Paratypes; 7, 1 (Brazil) V. Monte Verde, M. Gerais, 25.II.1964, Halik 23968 (USNM); 1, Brazil, Minas Gerais, Poco de Caldas, ZII 1965, Coll. O. Leoncini (CAS); 5, Brazil, SC, Nova Teutonia, I.1966, F. Plaumann col. (DZUP).

**Geographical distribution.** Brazil.

**Remarks.** *Cyrea courtney* has a vittate elytral color pattern that is different from other vittate species of *Cyrea*. However, it is somewhat variable as the paratypes from Nova Teutonia have the yellow elytral vittae and borders more widely expanded and more broadly connected, leaving a central dark vitta on each elytron.

### 110. *Cyrea marian* Canepari and Gordon, new species

**Description.** Male holotype. Length 3.0 mm, width 2.0 mm; body elongate, nearly parallel sided, slightly flattened. Dorsal surface with head, pronotum, elytron somewhat alutaceous, feebly shiny. Color yellow except head, pronotum yellowish red, immaculate; elytron with 2 dark brown vittae, sutural vitta wide, widest posterior to scutellum, narrowed toward elytral apex, apex of vitta continued around apex of elytron, lateral vitta wide, uneven from humeral angle nearly to apex (Fig. 614); ventral surface with head, prosternum, meso- and metaventrites, legs reddish yellow; abdomen yellow. Head punctures fine, separated by a diameter or less, each puncture as large as an eye facet; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by less than to about a diameter; metaventral punctures larger than on elytron medially, separated by less than a diameter, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus short, about 3 eye facets long, angled forward, apically rounded, reddish yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin slightly curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia without oblique angle, outer margin simply grooved for reception of tarsus, basal tooth absent, sponda not extended beyond protibial margin (Fig.

615). Carinae on prosternal process narrowly separated at apex, convergent, joined at basal 1/8 of prosternum, connected to base with single carina. Metaventricle without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite slightly flattened medially, extended forward at apex. Ventrites 1-3 with dense, short pubescence and coarse, sparse punctures; ventrites 4-6 with dense, fine punctures; 5th ventrite slightly depressed in median 1/3, apex shallowly emarginate; 6th ventrite medially depressed, apex deeply emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe longer than paramere, wide, symmetrical, sides parallel in basal 4/5, apical 1/5 narrowed to rounded apex; paramere *Psc*, long, narrow, nearly equal in width from base to apex, apex rounded (Fig. 616, 617); siphon robust, strongly curved in basal 1/2, with visible alae in apical 1/8, basal capsule with inner arm short, obliquely triangular, apex acute, outer arm wider and longer than inner arm, with accessory piece, basal border straight (Fig. 618, 619).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male; Argentina, prov. Córdoba, depto Calamuchita, El Sauce, feb 1960, leg. M. Viana, Coleccion J.E. Barriga Chile 115478. (JEBC).

**Geographical distribution.** Argentina.

**Remarks.** *Cyrea marian* is not closely similar to any other *Cyrea* species. The immaculate, reddish yellow head and pronotum are similar only to those of *C. ruizi*. The protibia without an oblique angle and basal capsule of male genitalia with outer arm not emarginate are unique to this species.

### 111. *Cyrea pseudospinalis* Canepari and Gordon, new species

*Hyperaspis spinalis*: Gordon, 1987:27 (in part).

**Description.** Male, length 3.4 mm, width 2.7 mm; body oval, convex. Color yellow except scutellum with narrow brown border; elytron with suture narrowly dark brown from posterior to scutellum to apex, dark brown area briefly widened on disc (Fig. 620); ventral surface with head, prosternum, meso-, and metaventricle black, abdominal ventrites 1-4 dark brown medially, remainder of abdomen yellow. Head punctures large, separated by less than to 3 times a diameter, each puncture as large as 4 eye facets; pronotal punctures as large as on head, separated by 1 to 3 times a diameter; elytral punctures larger than on pronotum, separated by less than to 3 times a diameter; metaventral punctures much larger than on pronotum, smaller medially, becoming larger and nearly contiguous toward lateral margin. Clypeus abruptly, strongly emarginate medially, margin lateral to emargination angled posteriorly, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as about 6 eye facets, angled forward, abruptly rounded apically, yellow. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded, basal margin without bordering line. Epipleuron wide, weakly descending externally, weakly grooved, deeply emarginate for reception of femoral apices. Protibia narrowly oblique, outer margin smooth; sponda shallow. Carinae on prosternal process distinct, narrowly separated at apex, convergent at about 1/2 length of prosternum. Metaventricle with median setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded, extended to apical margin of ventrite at middle, then broadly forward to lateral 1/5 of ventrite; ventrites 1-4 with sparse, long pubescence, punctures sparse medially becoming dense laterally; 5th ventrite weakly depressed medially in apical 1/2, apical margin weakly emarginate medially, surface densely punctate; 6th ventrite short, narrow, not depressed in apical 1/2, apical margin weakly emarginate, not densely pubescent, with distinct angular, lateral projection, surface smooth, glabrous. Apical tergite finely, densely punctured. Genitalia with basal lobe shorter than paramere, asymmetrical, wide, apically split; paramere weakly *Psc*, wide (Fig. 621, 622); siphon robust, strongly curved, without obvious lateral alae, basal capsule

large, inner arm short, wide, unevenly truncate apically outer arm longer than inner arm, with small accessory piece, basal border deeply emarginate (Fig. 623, 624).

**Female.** Unknown.

**Variation.** Unknown.

**Type material.** Holotype male labeled "TYPE (blue paper)/ Caracas (green paper, handwritten)/ TYPE/ A/LECTOTYPE *Hyperaspis spinalis* Muls 1853, Gordon 1987." (UMZC).

**Etymology:** This species is named for the strong superficial similarity to *C. spinalis*.

**Geographical distribution.** Venezuela

**Remarks.** This species superficially resembles *C. spinalis*, but that species has a large pronotal spot, strongly descending outer epipleural margin, and lacks apparent prosternal carinae. The deeply emarginate clypeal apex is an unusual character and immediately distinguishes *C. pseudospinalis*. Male genitalia of the two species are also extremely dissimilar.

The specimen described above is actually a paralectotype of *C. spinalis* Mulsant incorrectly designated as the lectotype of that species by Gordon (1987). Mulsant (1853) stated that his type material came from Bolivia and Brazil, no mention was made of a specimen from Caracas, Venezuela. Therefore the BMNH specimen of *C. spinalis* from Brazil is here designated the lectotype of that species, and the UMZC paralectotype is described as the holotype of *C. pseudospinalis*, n. sp.

## 112. *Cyrea nigripennis* (Brèthes), new combination

*Cleothera nigripennis* Brèthes, 1925b:4.

*Hyperaspis nigripennis*: Korschefsky 1931:192; Blackwelder 1945:447.

**Description.** Male holotype. Length 2.7 mm, width 2.3 mm; body rounded, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron shiny, lacking alutaceous sculpture. Color yellow except pronotum with large, basomedian bluish black spot, lateral border of spot emarginate; elytron entirely bluish black (Fig. 625); venter of head, prosternum, meso- and metaventrites black, epipleuron dark brown, abdomen reddish yellow. Head punctures small, nearly invisible, separated by less than to twice a diameter, each puncture as large as 2 eye facets; pronotal punctures larger than on head, separated by a diameter or less; elytral punctures larger than on pronotum, separated by less than to twice a diameter; metaventral punctures larger than on elytron, separated by less than a diameter medially, becoming larger, nearly contiguous in lateral 1/4. Clypeus weakly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as about 6 eye facets, strongly angled forward, abruptly rounded apically, brown. Pronotum narrowed from base to apex, sides weakly rounded, basal and anterior angles abruptly rounded, basal margin without bordering line. Epipleuron wide, nearly flat, deeply emarginate for reception of femoral apices. Protibia not oblique, outer margin straight, sponda nearly absent. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/4, with single stem extended to prosternal margin. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite angled to ventrite apex, flat along border, then rounded forward to lateral 1/5 of ventrite; ventrites 1-4 with sparse, short pubescence, punctures on median 1/3 of basal ventrite large, separated by less than to twice a diameter, punctures on remaining ventrites small, dense, separated by less than a diameter; 5th ventrite with long, dense pubescence laterally on apical margin, apical margin weakly emarginate medially; 6th ventrite short, narrow, with dense pubescence on apical angle, medially grooved, apical angle evenly rounded, apex weakly emarginate, surface nearly impunctate. Genitalia with basal lobe long, slightly shorter than paramere, widened medially, tapered to rounded apex; paramere somewhat *Psc*, slender, abruptly curved ventrally in apical 1/6 (Fig. 626, 627); siphon long, slender, curved in basal 1/2, basal capsule with inner arm long,

slender, outer arm elongate, slender, without accessory piece, basal border broadly emarginate (Fig. 628, 629).

**Female.** Unknown.

**Variation.** Unknown.

**Type locality.** Brazil, Rio de Janeiro.

**Type depository.** BMNH (holotype).

**Geographical distribution.** Known only from the type locality (Brazil).

**Specimens examined.** 1. The holotype.

**Remarks.** *Cyrea nigripennis* is an unusual species primarily because of the entirely bluish black elytra reminiscent of *Tiphysa* species, but mostly unknown in *Cyrea*. It also has male genitalia of a form completely different from those of any presently known species.

Brèthes had a single type specimen, a holotype male labeled "Type (orange bordered disc)/type (handwritten in pencil)/1831 (handwritten)/Fry RioJan (handwritten)/Fry Coll. n 1905.100/Cleothera nigripennis Brethes (handwritten)."

### 113. *Cyrea ustulata* (Mulsant), new combination

*Cleothera ustulata* Mulsant, 1850: 566.

*Hyperaspis ustulata*: Crotch 1874: 216; Korschefsky 1931:199; Blackwelder 1945: 448.

*Hyperaspis camelina* Crotch, 1874: 217; Korschefsky 1931:185; Blackwelder 1945: 446; Gordon 1987: 27.

NEW SYNONYM.

**Description.** Male lectotype. Length 2.1 mm, width 1.7 mm; body oval, convex. Color yellow except pronotum with irregular, basomedian black area extended 2/3 distance to anterior margin; scutellum black; elytron with large black macula extended from base to apical 3/4, black area emarginated laterally on anterior border (Fig. 630); ventral surface with prosternum, meso- and metaventrite yellowish red; abdomen yellowish red. Head punctures small, separated by a diameter or less, each puncture as large as 2 eye facets; pronotal punctures as large as on head, separated by 1 to 3 times a diameter; elytral punctures larger than on pronotum, separated by less than to about 3 times a diameter; metaventral punctures larger than on pronotum, separated by several times a diameter medially, becoming larger and separated by 2 to 3 times a diameter toward lateral margin. Clypeus weakly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as about 6 eye facets, angled forward, abruptly rounded apically, yellow. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded, basal margin without bordering line. Epipleuron narrow, grooved, deeply emarginate for reception of femoral apices. Protibia narrowly oblique, outer margin smooth; sponda shallow (Fig. 631). Carinae on prosternal process widely separated at apex, convergent before prosternal base, single carina extended to base. Metaventrite without median setal tuft. Abdomen with postcoxal line on basal abdominal ventrite angled to ventrite apex, flattened along base, then rounded forward to lateral 1/4 of ventrite; ventrites 1-4 with sparse, long pubescence, punctures sparse medially becoming dense laterally; 5th ventrite weakly depressed medially in apical 1/2, apical margin weakly emarginate medially, surface densely punctate; 6th ventrite short, narrow, not depressed in apical 1/2, apical margin slightly emarginate, densely pubescent, surface smooth, glabrous. Apical tergite finely, densely punctured. Genitalia with basal lobe shorter than paramere, wide, apex split, asymmetrical; paramere *Psc*, wide (Fig. 632, 633); siphon slender, strongly curved, without obvious lateral alae, basal capsule small, inner arm long, narrow, apically rounded on inner margin, outer arm shorter than inner arm, with very small accessory piece, basal border broadly emarginate (Fig. 634, 635).



**Female.** Similar to male except female genitalia with spermathecal capsule strongly curved. (Fig. 636).

**Variation.** None observed.

**Type locality.** Of *ustulata*, Colombia; of *camelina*, Brazil, Santarem.

**Type depository.** Of *ustulata*, MNHP (lectotype here designated); of *camelina*, UMCZ (holotype).

**Geographical distribution.** Known only from the type localities (Colombia, Brazil).

**Specimens examined.** 4. **Colombia.** The lectotype of *ustulata*. **Brazil.** The holotype of *camelina*.

**Remarks.** This species has an unusual diagnostic dorsal color pattern, and also has the head punctures widely spaced, about 5 times the diameter of a puncture.

A type specimen in the MNHP labeled "Type/coll. Mniszech/ustulata Muls. Colombia. Type" is designated as the lectotype of *ustulata*. There are also 2 MNHP paralectotypes, male and female, bearing the same data.

#### 114. *Cyrea moritzi* (Mader), new combination

*Hyperaspis moritzi* Mader, 1954:128.

**Description.** Male lectotype. Length 2.6 mm, width 2.1 mm; body oval, convex. Dorsal surface smooth, shiny, lacking alutaceous sculpture. Color yellow except pronotum with median portion of basomedian black area extended 3/4 distance to anterior margin, median projection of macula rectangular, apically truncate; elytron with narrow black border on sutural margin, border slightly, triangularly widened anterior to middle and on apical declivity, 5 small black spots present, elongated spot on humeral callus, anterior spot on lateral margin projected inward, discal spot irregularly round, posterolateral spot projected inward, nearly reaching obliquely triangular apical spot (Fig. 637); ventral surface black except mouthparts, prothoracic hypomeron, epipleuron yellow, legs yellow except metafemur brown with yellow apex. Head punctures small, separated by a diameter or less, each puncture as large as 2 eye facets; pronotal punctures larger than on head, separated by less than to about a diameter; elytral punctures as large as on pronotum, separated by slightly more than a diameter; metaventral punctures larger than on pronotum, separated by several times a diameter medially, becoming larger and separated by less than a diameter near lateral margin. Clypeus weakly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as about 6 eye facets, angled forward, abruptly rounded apically, yellow. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded, basal margin with trace of bordering line. Epipleuron narrow, grooved, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly curved, sponda weakly extended beyond angle (Fig. 638). Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/3 of prosternum, single carina extended to base. Metaventrite without median setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex; ventrites 1-3 with sparse, long pubescence, punctures coarse, sparse, ventrites 4-6 with fine, dense punctures; 5th ventrite not depressed medially, apical margin widely, weakly emarginate medially; 6th ventrite short, narrow, not depressed in apical 1/2, apical border slightly emarginate. Apical tergite finely, densely punctured, apex emarginate. Genitalia with basal lobe asymmetrical, nearly as long as paramere, sides parallel in basal 3/4, apical 1/4 slightly bent to one side, apex rounded; paramere *Psc*, widened before apex (Fig. 639, 640); siphon slender, strongly curved, without obvious lateral alae, basal capsule with inner arm short, narrow, apex obliquely truncate, outer arm longer, wider than inner arm, with accessory piece, basal border deeply emarginate (Fig. 641, 642).

**Female.** Unknown.

**Variation.** Unknown.

**Type locality.** Venezuela.

**Type depository.** NHMV.

**Geographical distribution.** Known only from the type locality (Venezuela).

**Specimens examined.** 1. **Venezuela.** The holotype.

**Remarks.** This species has a dorsal color pattern unique among presently known species of *Cyrea*; definitive male genitalia; and Venezuelan type locality. However, it should be noted that *C. moritzi* might be better placed in the genus *Dilatitibialis* Duverger because there seems to be a trace of primary pores between abdominal ventrites 4 and 5. For now it is placed in *Cyrea*, but may have to be moved to *Dilatitibialis* once more specimens become available for study.

**Females not associated with males**

### 115. *Cyrea lucy* Canepari and Gordon, new species

**Description.** Holotype, male?. Length 3.8 mm, width 2.1 mm; body elongate, slender, nearly parallel sided. Dorsal surface with head slightly alutaceous, shiny, pronotum and elytron smooth, shiny. Color reddish yellow except elytron yellow apically, lateral and posterior margins narrowly bordered with black, sutural margin with wider black border enlarged in basal 1/2 (Fig. 643); ventral surface with head dark brown; venter with prosternum, mesoventrite brown. Head punctures coarse, separated by less than a diameter, each puncture about as large as 2 eye facets; pronotal punctures smaller than head punctures, separated by less than to twice a diameter, elytral punctures larger than on pronotum, separated by less than to twice a diameter. Clypeus weakly emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin weakly curved, basal margin without trace of bordering line medially. Epipleuron narrow, feebly grooved, not descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, basal tooth absent, sponda strongly extended beyond protibial margin. Carinae on prosternal process narrowly separated at apex, convergent toward base, joined at base of prosternum.

**Male.** Unknown?

**Variation.** Unknown.

**Type material.** Holotype; Uruguay, Artigas, Arroyo de la Invernada, 18-II-1954, C. S. Carbonell, ex Coleccion M. Viana ARG. 022023, Coleccion J.E. Barriga, Chile 072091. (JEBC).

**Geographical distribution.** Uruguay.

**Remarks.** *Cyrea lucy* is represented by one badly damaged specimen, possibly a male, with most of venter, including abdomen, lost. The elongate, nearly parallel sided form and very distinctive elytral color pattern distinguish this species from other known species of *Cyrea*. Sex of the holotype is not determined because the abdomen is not available, but the head is uniformly pale, without any dark maculae, so it is possibly a male.

**116. *Cyrea trina* (Brèthes), new combination**

*Cleothera trina* Brèthes, 1925b: 3.

*Hyperaspis trina*: Korschefsky 1931: 198; Blackwelder 1945: 448.

**Description.** Female. Length 2.7 mm, width 2.1 mm; body elongate oval, convex. Dorsal surface with head slightly alutaceous, shiny, pronotum and elytron smooth, shiny. Color yellow except head with dark brown clypeus, pronotum with long, narrow, dark brown basomedian macula extended 5/6 distance to apical pronotal margin, apex of macula entire, arcuate; elytron with 2 dark brown vitta, sutural vitta narrow, extended from posterior to scutellum nearly to apex of elytron, median vitta wider than sutural vitta, apically curved, extended from base inside humeral callus to apical 1/8 (Fig. 644); ventral surface with head, prosternum, meso- and metaventrites black, trochanters dark brown; abdomen dark brown except paler brown laterally and apically. Head punctures coarse, separated by a diameter or less, each puncture about as large as 2 eye facets; pronotal punctures larger than head punctures, separated by less than to about a diameter, elytral punctures larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures larger than on elytron, separated by less than a diameter medially, becoming larger and separated by less than a diameter toward lateral margin. Clypeus emarginate apically, lateral angle rounded, surface with sparse, long pubescence. Eye canthus about 6 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, basal and anterior angles abrupt, lateral margin curved, basal margin without trace of bordering line medially. Epipleuron narrow, grooved, slightly descending externally, deeply emarginate for reception of femoral apices. Protibia with narrow oblique angle, outer margin slightly arcuate, basal tooth absent, sponda slightly extended beyond protibial margin. Carinae on prosternal process widely separated at apex, convergent, joined at basal 1/5 of prosternum, connected to base with single carina. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded throughout, extended forward at apex. Genitalia with spermathecal capsule short, wide, basal 1/3 slightly widened, cornu apically rounded; bursal cap rounded, with 2 sclerotized arms, apical strut short, apex abruptly widened.

**Male.** Unknown.

**Variation.** Length 2.7 to 3.0 mm, 2.1 to 2.4 mm. Pronotum with basomedian macula sometimes reduced in size to a basal dark border and obscure brown markings at middle of pronotum.

**Type locality.** Brazil, Rio de Janeiro.

**Type depository.** BMNH (holotype).

**Geographical distribution.** Brazil.

**Specimens examined.** 4. **Brazil.** Corcovado, Guanabara; Rio de Janeiro; S. Bocaina, 1650 m, S. J. Barreiro, SP. (BMNH) (DZUP).

**Remarks.** Brèthes (1925b) stated that he had a single female when he described this species. The three additional specimens examined here were also females. The dorsal color pattern is diagnostic for *C. trina*, but placement within the genus is unknown because no males were available.

**117. *Cyrea suturella* (Mulsant), new combination**

*Cleothera suturella* Mulsant, 1853: 76.

*Hyperaspis suturella*: Crotch 1874: 216; Korschefsky 1931: 197; Blackwelder 1945: 448; Gordon, 1987: 27.

**Description.** Female lectotype. Length 2.7 mm, width 2.2 mm; body oval, convex. Color yellow except pronotum mostly yellowish brown with anterolateral angle broadly yellow; scutellum dark brown; elytron with suture very narrowly dark brown from base to apex (Fig. 645); ventral surface with head, prosternum, meso- and metaventrite black; abdomen with basal 4 ventrites dark brown medially, remainder of abdomen yellow. Head punctures small, separated by less than to twice a diameter, punctures as large as 2 eye facets; pronotal punctures smaller than on head, separated by about a diameter; elytral punctures larger than on pronotum, separated by 2 to 3 times a diameter; metaventral punctures much larger than on pronotum, separated by a diameter medially, becoming larger and nearly contiguous toward lateral margin. Clypeus strongly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as about 6 eye facets, angled forward, abruptly rounded apically, yellow. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded. Epipleuron narrow, not descending externally, weakly grooved, deeply emarginate for reception of femoral apices. Protibia narrowly oblique, outer margin smooth; sponda shallow. Carinae on prosternal process narrowly separated apically, nearly parallel, convergent before prosternal base, connected to base by single carina. Metaventrite without median setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded, extended to apical margin of ventrite at middle, then broadly forward to lateral 1/5 of ventrite. Genitalia with spermathecal capsule lost (Fig. 646).

**Male.** Unknown.

**Variation.** Unknown.

**Type locality.** Brazil.

**Type depository.** UMZC (lectotype designated by Gordon, 1987).

**Geographical distribution.** Brazil.

**Specimens examined.** The lectotype.

**Remarks.** *Cyrea suturella* resembles both *C. spinalis* and *C. pseudospinalis* in dorsal color, but lacks the strongly emarginate clypeal apex of the latter and the wide, outwardly descending epipleuron of the former.

### 118. *Cyrea emmae* (Crotch), new combination

*Hyperaspis emmae* Crotch, 1874:215; Korschefsky 1931: 188; Blackwelder 1945: 447; Gordon 1987: 27.

**Redescription.** Female holotype. Length 2.3 mm, width 1.8 mm; body oval, convex. Color dark brown except head with obscure, dark reddish brown area medially; pronotum with anterolateral angle broadly yellow; scutellum dark brown; elytron yellow bordered with dark brown, suture broadly dark brown, brown area slightly widened on apical declivity (Fig. 647); ventral surface with head, prosternum, meso-, and metaventrite black; abdomen yellowish brown. Head punctures small, separated by less than to twice a diameter, each puncture as large as 2 eye facets; pronotal punctures smaller than on head, separated by 2 to 3 times a diameter; elytral punctures larger than on pronotum, separated by 2 to 3 times a diameter; metaventral punctures much larger than on pronotum, separated by a diameter or more medially, becoming larger and denser toward lateral margin. Clypeus weakly emarginate apically, nearly truncate, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as about 6 eye facets, angled forward, abruptly rounded apically, yellow. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded, basal margin with strong bordering line. Epipleuron narrow, not descending externally, weakly grooved, deeply emarginate for reception of femoral apices. Protibia with slight oblique angle, angle less than 1/2 width of tibia, outer margin smooth; sponda shallow. Carinae on prosternal process narrowly separated apically, convergent

to basal 2/3, connected to base by single carina. Metaventricle without median setal tuft. Abdomen with postcoxal line on basal abdominal ventrite rounded, extended to apical margin of ventrite at middle, then broadly forward to lateral 1/4 of ventrite. Genitalia with spermathecal capsule short, bent medially; bursal cap with 2 short, sclerotized arms, apical projection long, spatulate in lateral view (Fig. 648).

**Male.** Unknown.

**Variation.** Unknown.

**Type locality.** Brazil.

**Type depository.** UMZC (holotype).

**Geographical distribution.** Brazil.

**Specimens examined.** 1. The holotype.

**Remarks.** *Cyrea emmae* is a boldly colored species with strong contrast between the yellow elytra and dark brown bordering colors giving it a vittate appearance. It is another *Cyrea* species having a pronotum with a distinctly bordered base.

### 119. *Cyrea octupla* (Mulsant), new combination

*Cleothera octupla* Mulsant, 1853: 80.

*Hyperaspis octupla*: Crotch 1874: 219; Korschefsky 1931: 193; Gordon 1987: 27.

**Redescription.** Female lectotype. Length 3.0 mm, width 2.3 mm; body oval, convex. Color yellow except anterior 1/2 of head dark brown; pronotum dark brown with narrow anterior border and lateral border yellow, lateral yellow area widened anterolaterally; elytron with lateral and sutural margins narrowly dark brown, sutural brown area widened on disc, 4 large, elongate brown spots arranged in two rows, first row across anterior 1/2 of elytron, second row across apical declivity, posteromedian spot somewhat triangular, anterior margin oblique (Fig. 649); ventral surface with mouthparts yellowish brown, prosternum, meso-, and metaventriles black; median area of abdominal ventrites 1-4 dark brown, lateral 1/4 of ventrites yellow. Head punctures small, separated by less than a diameter, each puncture as large as 4 eye facets; pronotal punctures as large as on head, separated by less than to twice a diameter; elytral punctures slightly larger than on pronotum, separated by 1 to 3 times a diameter; metaventral punctures larger than on pronotum, separated by 2 to 4 times a diameter medially, becoming very large and separated by less than a diameter toward lateral margin. Clypeus weakly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as about 8 eye facets, strongly angled forward, abruptly rounded apically, brown. Pronotum narrowed from base to apex, sides rounded, basal and anterior angles abruptly rounded, basal margin with faint trace of bordering line. Epipleuron narrow, grooved, deeply emarginate for reception of femoral apices. Protibia without oblique angle, outer margin smooth; sponda shallow. Carinae on prosternal process widely separated at apex, convergent before prosternal base, single carina extended to base. Abdomen with postcoxal line on basal abdominal ventrite angled to ventrite apex, rounded along base, then rounded forward to lateral 1/4 of ventrite. Genitalia with short, wide, strongly curved spermatheca; bursal cap with 2 arms, median strut apically paddle shaped (Fig. 650).

**Male.** Unknown.

**Variation.** Unknown.

**Type locality.** Brasil, "Ste-Catherine" (Santa Catarina).

**Type depository.** UMZC (lectotype designated by Gordon, 1987).

**Geographical distribution.** Known only from the type locality (Brazil).

**Specimen examined.** 1. The lectotype.

**Remarks.** *Cyrea octupla* has a dorsal color pattern similar to that of *C. noticollis*, but the elytral spots are differently shaped, and females of *C. noticollis* always have a patterned pronotum, unlike the mostly dark brown pronotum of *C. octupla*. Many specimens from the state of Santa Catarina have been available, but thus far none have been *C. octupla*.

### 120. *Cyrea flavocalceata* (Mulsant), new combination

*Cleothera flavocalceata* Mulsant, 1850: 648.

*Hyperaspis flavocalceata*: Korschefsky 1931: 189; Blackwelder 1945: 447; Gordon 1987: 28.

**Redescription.** Female holotype. Length 3.4 mm, width 2.7 mm; body rounded, convex. Dorsal surface with head alutaceous, dull, pronotum weakly alutaceous, shiny, elytron shiny, lacking alutaceous sculpture. Color black except pronotum with lateral 1/5 yellow, yellow macula wide anteriorly, narrowed toward base, inner margin “ragged;”; elytron entirely black (Fig. 651); venter of head, prosternum, meso- and metaventrites black, epipleuron dark brown, mouthparts, legs brownish yellow except femora brown in basal 7/8; abdomen reddish yellow. Head punctures large, dense, separated by less than a diameter, each puncture as large as 2 eye facets; pronotal punctures as large as on head, separated by a diameter or less; elytral punctures as large as on pronotum, separated by a diameter or less; metaventral punctures larger than on abdomen, separated by less than a diameter medially, becoming larger, nearly contiguous in lateral 1/4. Clypeus weakly emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus short, wide, as long as about 4 eye facets, slightly angled forward, apical and posterior margins strongly rounded, apex round, yellow. Pronotum narrowed from base to apex, sides weakly rounded, anterior angle abruptly rounded, posterior angle broadly rounded, basal margin without bordering line. Epipleuron narrow, grooved, deeply emarginate for reception of femoral apices. Protibia narrowly oblique, outer margin weakly curved; sponda nearly invisible. Carinae on prosternal process narrowly separated at apex, slightly convergent, joined at basal 5/6, with single stem extended to prosternal margin. Metaventrite without setal tuft. Basal abdominal ventrite without setal tuft. Abdomen with postcoxal line on basal abdominal ventrite angled to ventrite apex, rounded along border, then rounded forward to lateral 1/5 of ventrite. Genitalia with spermathecal capsule long, slender, slightly curved, cornu enlarged; bursal cap with 2 faint outer arms, apically rounded, apical strut short, widened from base to apex, apical 2/3 flattened in lateral view.

**Male.** Unknown.

**Variation.** Unknown.

**Type locality.** Brazil.

**Type depository.** UMZC (lectotype designated by Gordon, 1987).

**Geographical distribution.** Known only from the type locality (Brazil).

**Specimens examined.** 1. The lectotype.

**Remarks.** *Cyrea flavocalceata* is similar to *C. nigripennis* because of the entirely black dorsal surface, but the latter species is smaller, the black dorsal surface has a distinct bluish cast, and the eye canthus is narrow, angled forward, and brown. *Cyrea flavocalceata* has an extremely unusual eye canthus in that

it is wide, rounded, and yellow in color, unlike that of any known species of *Cyrea* except *C. crotchii* which has an almost identically shaped canthus.

### 121. *Cyrea sexguttata* (Mulsant), new combination

*Cleothera sexguttata* Mulsant, 1850: 642.

*Hyperaspis sexguttata*: Crotch 1874: 222; Korschefsky 1931: 196; Blackwelder 1945: 448.

**Redescription.** Female lectotype. Length 2.3 mm, width 2.0 mm; body oval, convex. Dorsal surface with head alutaceous, dull, pronotum and elytron smooth, shiny. Color black except elytron with 3 small yellow spots, scutellar spot round, discal spot triangular, apical spot transversely oval (Fig. 652); ventral surface with antenna, mouthparts dark red, femur dark red with black apex, tibia red; abdomen dark brown. Head punctures small, separated by 4 times a diameter, each puncture as large as an eye facet; pronotal punctures larger than on head, separated by 2 to 4 times a diameter; elytral punctures slightly larger than on pronotum, separated by twice a diameter; metaventral punctures larger than on elytron, separated by twice a diameter. Clypeus emarginate apically, lateral angle abruptly rounded, surface with sparse, long pubescence. Eye canthus as long as about 6 eye facets, strongly angled forward, abruptly rounded apically, brown. Pronotum narrowed from base to apex, sides nearly straight, basal and anterior angles abruptly rounded, basal margin with faint trace of bordering line. Epipleuron narrow, grooved, deeply emarginate for reception of femoral apices. Protibia without oblique angle, outer margin smooth, sponda small (Fig. 653). Carinae on prosternal process widely separated at apex, convergent before prosternal base, single carina extended to base. Postcoxal line on basal abdominal ventrite angled to ventrite apex, rounded along base, then rounded forward to lateral 1/4 of ventrite. Genitalia with spermathecal capsule short, wide, narrowed from base to acute apex; bursal cap with 2 sclerotized arms, apical strut long, narrow with widened apex (Fig. 654).

**Male.** Unknown.

**Variation.** Unknown.

**Type locality.** Brazil, "Matto-Grosso."

**Type depository.** MNHP (lectotype here designated).

**Geographical distribution.** Known only from the type locality (Brazil).

**Specimen examined.** 1. The lectotype.

**Remarks.** *Cyrea sexguttata* has a dorsal color pattern similar to that of several other *Cyrea* species, but the dark red femora with black apices and red tibiae are distinctive for this species. Males may have 4 yellow spots on each elytron because they may also have a humeral spot.

A type specimen in the MNHP labeled "Museum Paris, Matto-Grosso, de Castelnau 13-47/166/Cleothera sexguttata Muls., auct. det." is designated as the lectotype.

### Genus *Tiphysa* Mulsant

*Tiphysa* Mulsant, 1850:517; Crotch, 1874:210; Korschefsky, 1931:208; Blackwelder, 1945:449; Gordon, 1987:26; Duverger, 1989:146; Milléo and Almeida, 2003:274; Milléo and Almeida, 2007:423.

Type species: *Tiphysa plumbea* Mulsant, 1850, by monotypy.

**Description:** Brachiacanthini with form oval, convex. Dorsal surface of pronotum and elytra entirely black with metallic blue or green tint (Fig. 655). Head partly yellow in male, brown or black in female.

Antenna with 11 articles, basal article twice as long as wide, antennal insertion exposed. Clypeus with apical border emarginate. Labrum rectangular. Apical maxillary palpomere securiform with sides diverging (Fig. 657). Mandible large, robust, with apical tooth and subapical tooth. Scutellum small, longer than wide. Elytral epipleuron narrow, deeply excavated for reception of tibiae, strongly descending externally. Prosternal process slightly convex, with two carinae. Protibia short, with large, arcuate flange smooth on outer margin (Fig. 656). Abdomen without visible gland pores between ventrites 4 and 5. Tarsal claw with subquadrate basal tooth. Postcoxal line on basal abdominal sternite incomplete, of *Scymnus* (*Scymnus*) type. Male genitalia with basal lobe asymmetrical (Fig. 658, 659). Female genitalia typical Brachiacanthini type.

**Remarks:** *Tiphysa* was reviewed and correctly assigned to Brachiacanthini by Milléo & Almeida (2003). That publication should be referred to for detailed illustrations of morphological characters.

*Tiphysa* is not strongly distinguished from *Cyrea*, they both lack abdominal gland openings between abdominal ventrites 4-5, but *Tiphysa* has epipleurae strongly descending externally, a black, dorsal surface with a metallic luster, and strongly flanged protibia. Nearly all members of *Cyrea* lack a well-defined protibial flange, the epipleurae do not have a strongly descending external margin, and no known species has an entirely black, metallic dorsum.

Type specimens of *Tiphysa egae* and two unlabeled specimens of *T. plumbea* in the Crotch collection are the only *Tiphysa* found among many Brachiacanthini taxa examined. *Tiphysa plumbea*, the type species, was described from Cayenne (French Guiana), and *T. egae* from Brazil (Amazonas). Mulsant (1850) stated that his type(s) were in the Dejean collection, now deposited in the MNHL, but no specimens remain there.

#### Key to species of *Tiphysa*

1. Length less than 5.0 mm; elytral punctation not dual, all punctures equal in size; female head with triangular yellow spot on clypeus and frons ..... ***T. egae* Crotch**
- Length more than 5.0 mm; elytral punctation dual, large and small punctures intermixed; female head entirely dull black ..... ***T. plumbea* Mulsant**

#### *Tiphysa plumbea* Mulsant

*Tiphysa plumbea* Mulsant, 1850: 517; Crotch, 1874: 210; Korschefsky, 1931: 208; Blackwelder, 1945: 449; Gordon, 1987: 26; Duverger, 1989: 146; Milléo & Almeida, 2003: 279.

**Redescription.** Male. Length 5.0 mm, width 4.1 mm; body oval, convex. Color black except clypeus and apical 1/4 of frons rectangularly yellow; pronotum dull black with metallic green tint, anterior and lateral borders narrowly yellow; elytron shiny black with metallic green tint (Fig. 655); ventral surface with prosternum, meso- and metaventrites black medially, reddish yellow laterally, legs and abdomen reddish yellow. Head punctures small, separated by less than a diameter, each puncture as large as 3 eye facets; pronotal punctures larger than on head, separated by less than a diameter; elytral punctation dual, dense, larger punctures smaller than on pronotum, separated by less than to 3 times a diameter; metaventral punctures 3 or 4 times as large as on pronotum, nearly absent medially, separated by 3 to 4 times a diameter laterally. Clypeus emarginate apically, lateral angle broadly rounded, surface with dense, long pubescence. Eye canthus about 8 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, sides feebly rounded, basal and anterior angles rounded, basal margin without bordering line. Epipleuron wide medially, grooved, strongly descending externally, deeply emarginate for reception of femoral apices. Protibia broadly flanged, flange evenly arcuate, wider than remainder of protibia, outer margin smooth (Fig. 656); sponda deep, slightly wider than flange. Carinae on prosternal process pronounced, widely spaced apically, convergent toward base, joined at apical 2/3 of prosternum, connected to prosternal base by single carina. Metaventrite without median setal tuft. Abdomen with postcoxal line on basal abdominal ventrite straight in basal 1/3, extended to apical margin of ventrite at middle, rounded in apical 2/3, extended to lateral 1/5 of ventrite; ventrites 1-4 with sparse, short pubescence and dense, fine punctures; 5th ventrite not depressed medially, unmodified, apical mar-



gin broadly emarginate, with dense pubescence laterally; 6th sternum short, narrow, depressed in apical 1/2, apical margin broadly, distinctly emarginate, lateral angle of emargination projecting, almost angulate, with dense pubescence, surface densely punctured. Apical tergite densely punctured, with shallow median groove. Genitalia with basal lobe shorter than paramere, asymmetrical, wide, apex truncate, paramere *Unm*, wide (Fig. 658, 659); siphon robust, strongly curved in basal 1/2, without apparent lateral alae, basal capsule lightly sclerotized, inner arm short, wide, outer arm as long as inner arm, narrow, with large accessory piece, basal border broadly emarginate (Fig. 660).

**Female.** Similar to male except head entirely dull black; pronotum entirely dull black with greenish blue metallic tint; elytron shiny black with greenish metallic tint; eye canthus entirely dark brown. Bursal cap of genitalia with 2 outer arms apically modified, enlarged on outer margin before apex, apex emarginate, apical strut short (Fig. 661).

**Variation.** Length 5.0 to 5.2 mm.

**Type locality.** “Cayenne” (French Guiana).

**Type depository.** Type stated to be in the Dejean collection (MNHL) by Mulsant (1850), but not found there.

**Geographical distribution.** Unknown, type locality “Cayenne.”

**Specimens examined.** 2. Localities unknown, specimens unlabeled. (UMZC).

**Remarks.** The true identity of *T. plumbea* is open to question because the type specimen(s) are no longer available. Milléo and Almeida (2003) considered the UMZC specimens to be correctly identified. Therefore *T. plumbea* and *T. egae* appear to be distinguished by size and type of elytral punctation, as indicated in the key above. However, female genitalia in each specimen of *T. egae* differ slightly from each other. One specimen has female genitalia that agree with those of *T. plumbea* in having the outer bursal cap arms modified apically, the other specimen has the arms unmodified. *Tiphysa egae* is known only from two females, making male genitalic comparison impossible at present.

### *Tiphysa egae* Crotch

*Tiphysa egae* Crotch, 1874: 210; Korschefsky, 1931: 208; Blackwelder, 1945: 449; Gordon, 1987: 26; Milléo & Almeida, 2003: 280.

**Redescription.** Female paralectotype. Length 4.0 mm, width 3.5 mm; body oval, convex. Color black except clypeus and apical 1/4 of frons triangularly yellow; pronotum dull black with metallic bluish green tint, anterior and lateral borders narrowly yellow; elytron shiny black with metallic green tint; ventral surface with head black, prosternum, meso- and metaventrites black medially, reddish yellow laterally, legs and abdomen reddish yellow. Head punctures small, separated by less than a diameter, each puncture as large as 3 eye facets; pronotal punctures larger than on head, separated by less than to twice a diameter; elytral punctation single, sparse, punctures smaller than on pronotum, separated by 3 to 4 times a diameter; metaventral punctures 3 or 4 times as large as on pronotum, nearly absent medially, separated by 3 to 4 times a diameter laterally. Clypeus emarginate apically, lateral angle broadly rounded, surface with dense, long pubescence. Eye canthus about 8 eye facets long, angled forward, apically rounded, yellow. Pronotum narrowed from base to apex, sides feebly rounded, basal and anterior angles rounded, basal margin without bordering line. Epipleuron wide medially, grooved, strongly descending externally, deeply emarginate for reception of femoral apices. Protibia broadly flanged, flange evenly arcuate, wider than remainder of protibia, outer margin smooth sponda deep, slightly wider than flange. Carinae on prosternal process pronounced, widely spaced apically, convergent toward base, joined at apical 2/3 of prosternum, connected to prosternal base by single carina. Metaventrite without median setal tuft. Abdo-

men with small pores present on each side of middle between ventrites 2-3, 3-4; postcoxal line on basal abdominal ventrite straight in basal 1/3, extended to apical margin of ventrite at middle, rounded in apical 2/3, extended to lateral 1/5 of ventrite. Genitalia with spermathecal capsule evenly rounded; bursal cap with 3 arms, outer arms slender, unmodified, apical strut present (Fig. 662).

**Male.** Unknown.

**Variation.** Length 4.0 to 4.9 mm. Dorsal color tint varies from greenish black to bluish black.

**Type locality.** “Egae” (Brasil, Amazonas, Tefé).

**Type depository.** UMZC (lectotype designated by Gordon 1987).

**Geographical distribution.** Brazil.

**Specimens examined.** 2. Type specimens. (UMZC).

**Remarks.** See remarks under *T. plumbea*. Questions remain as to the correct identity of each of these two species, questions that will only be resolved with discovery of additional material.

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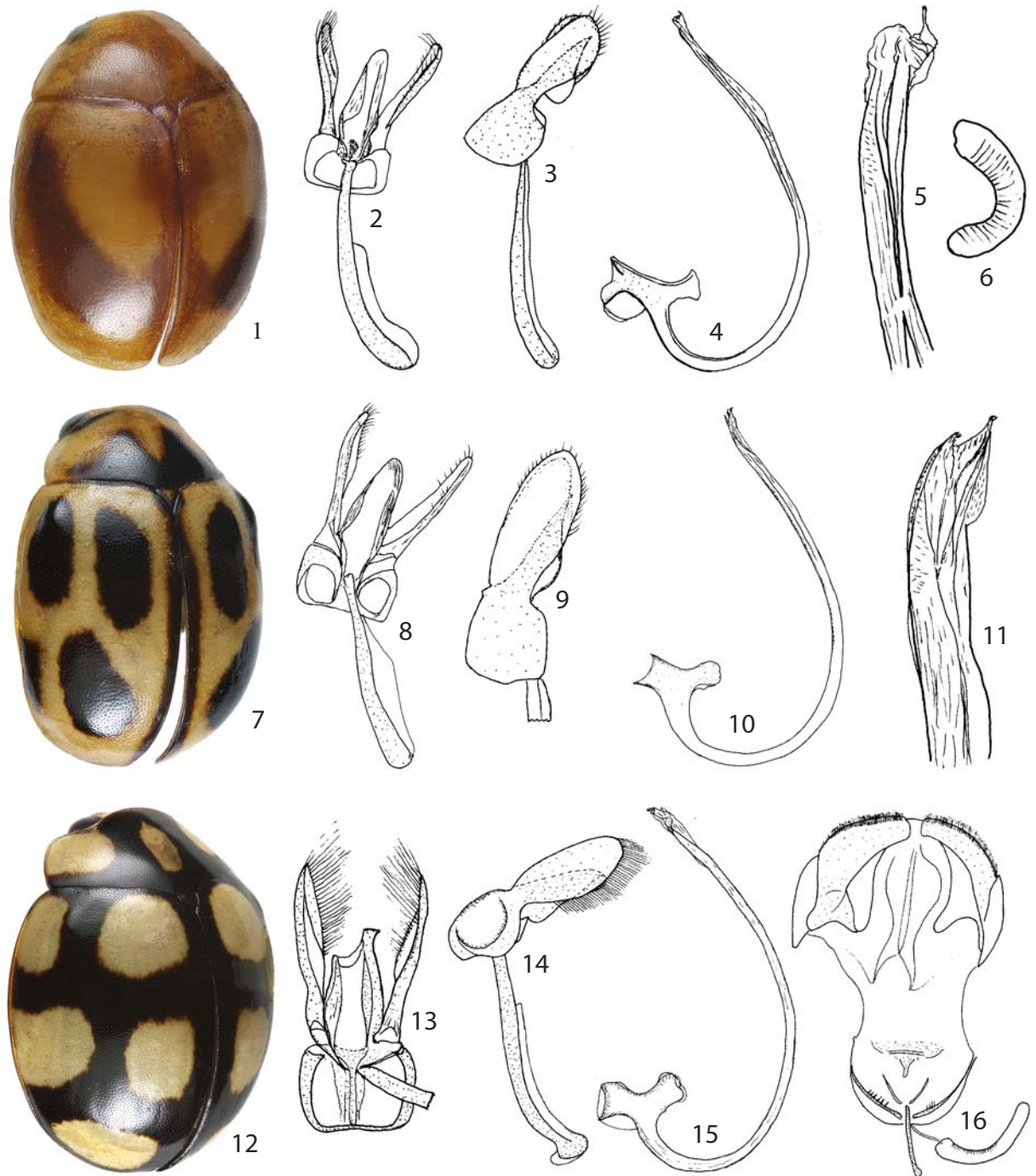
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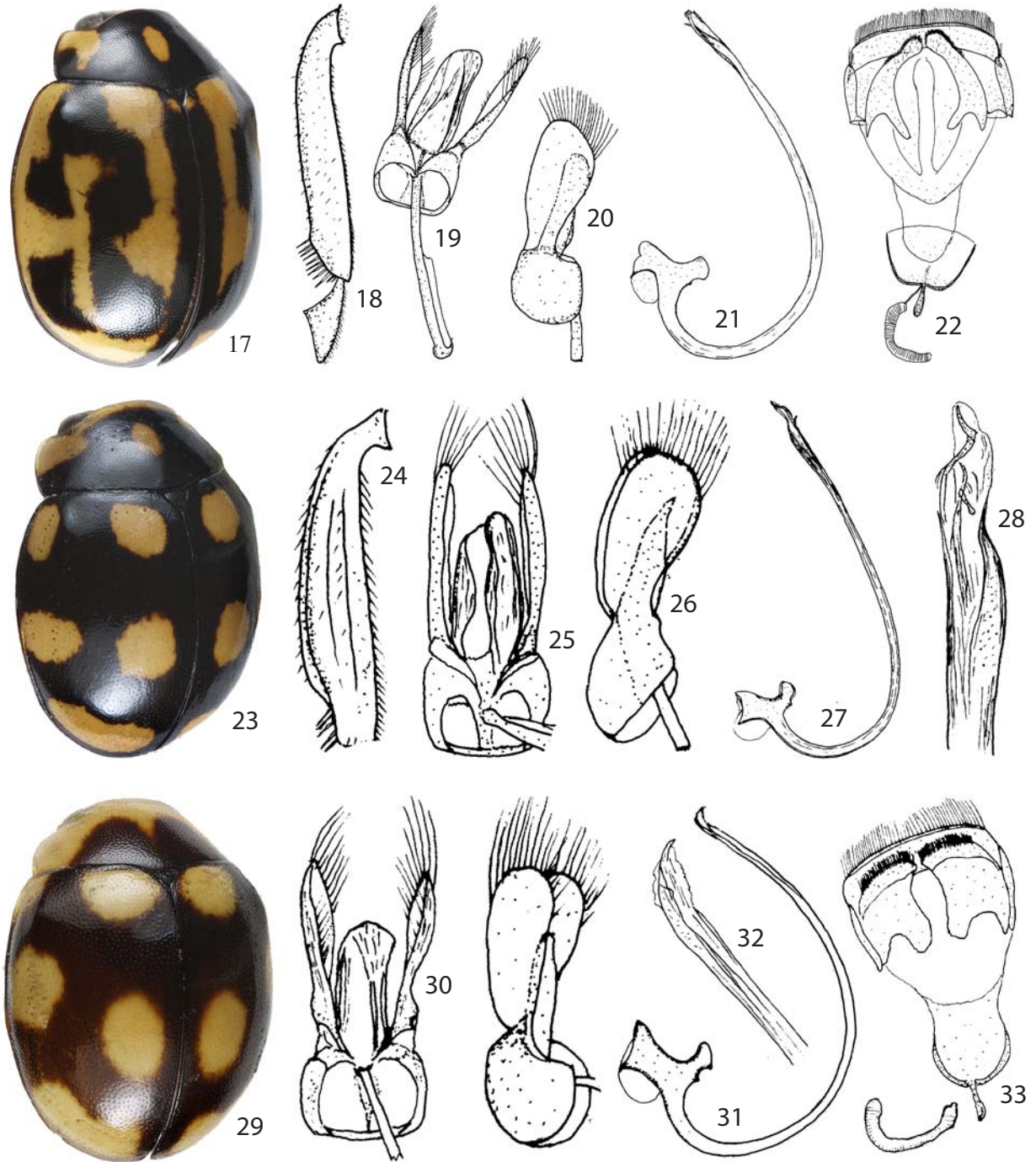
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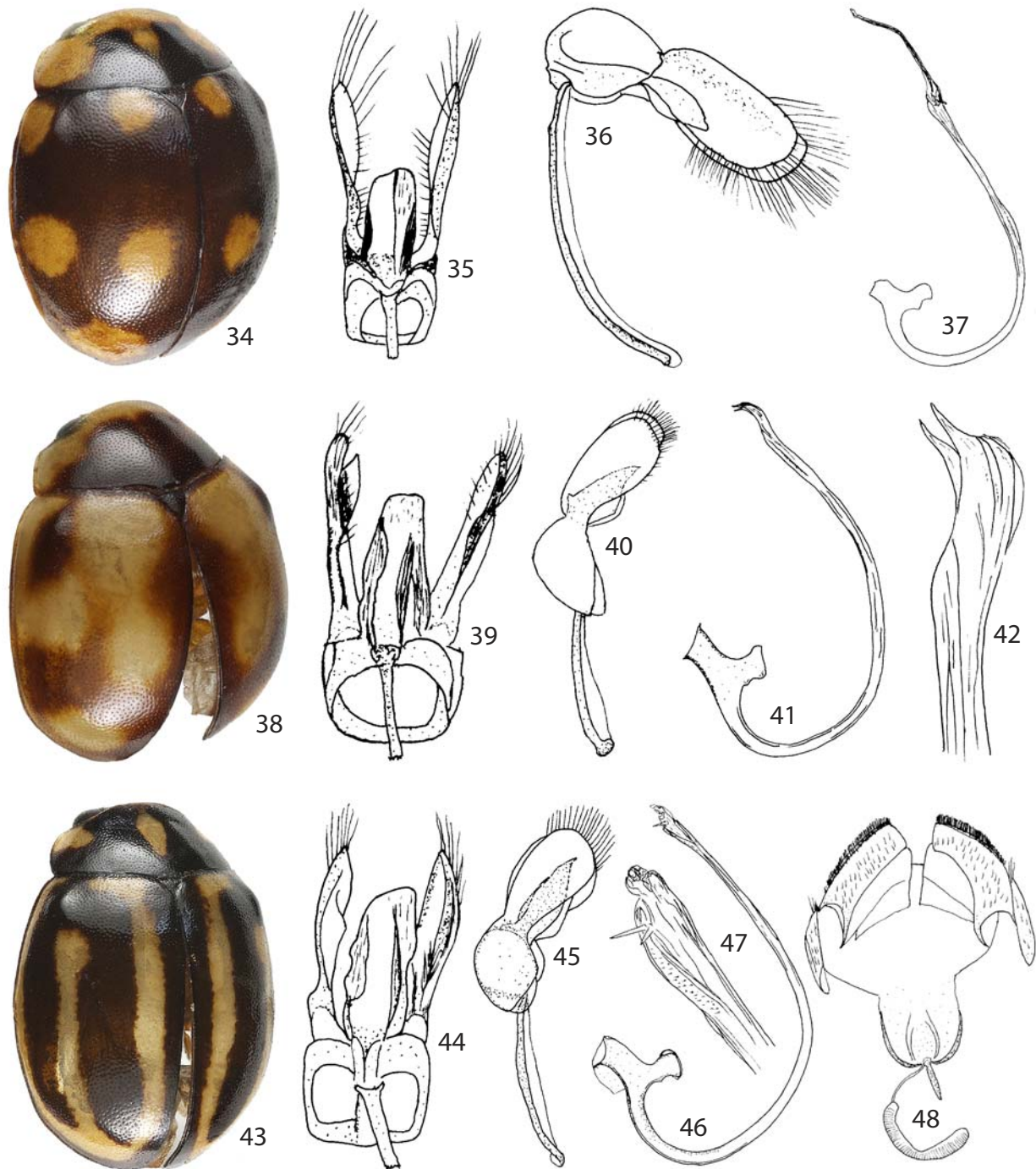


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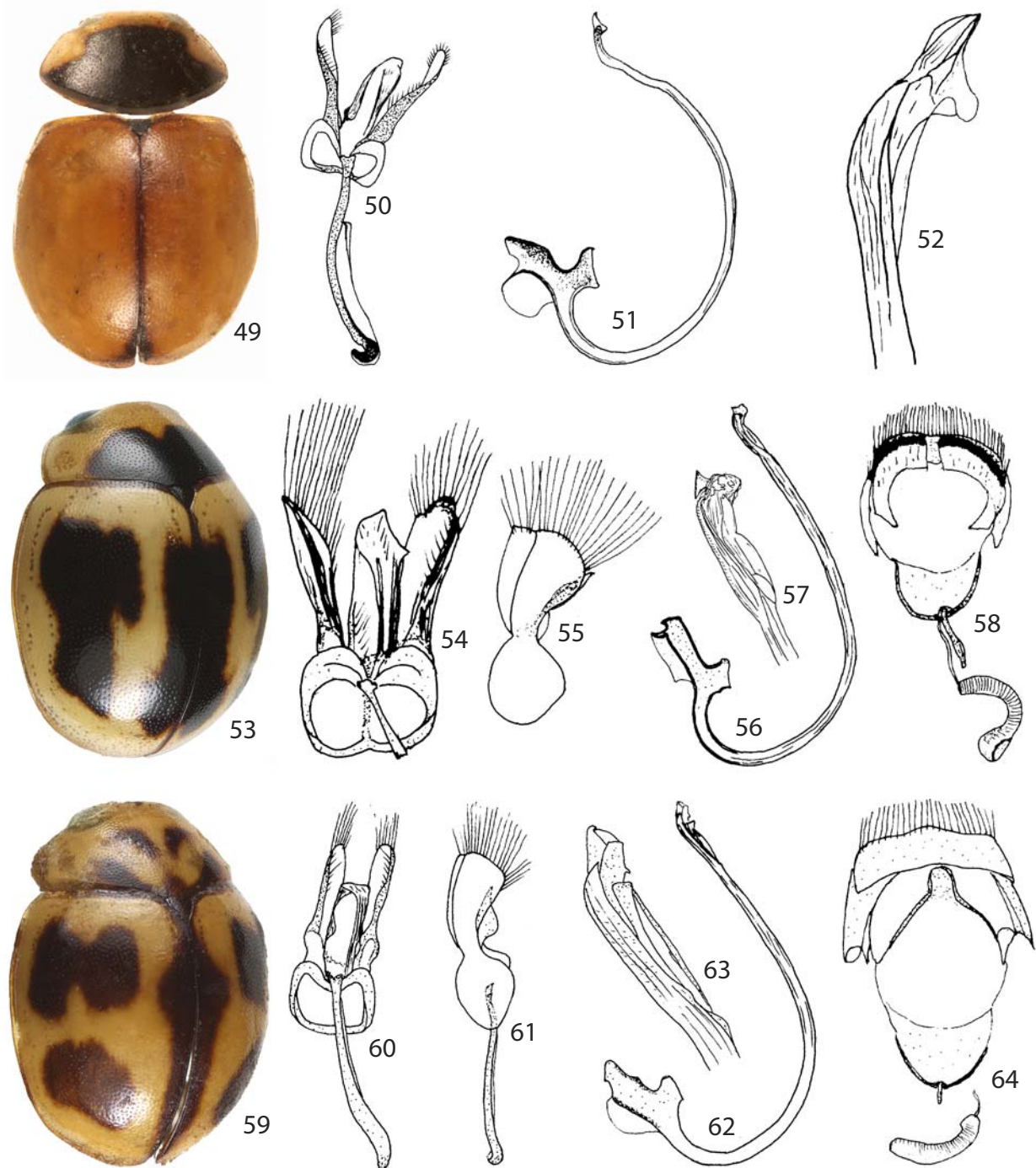


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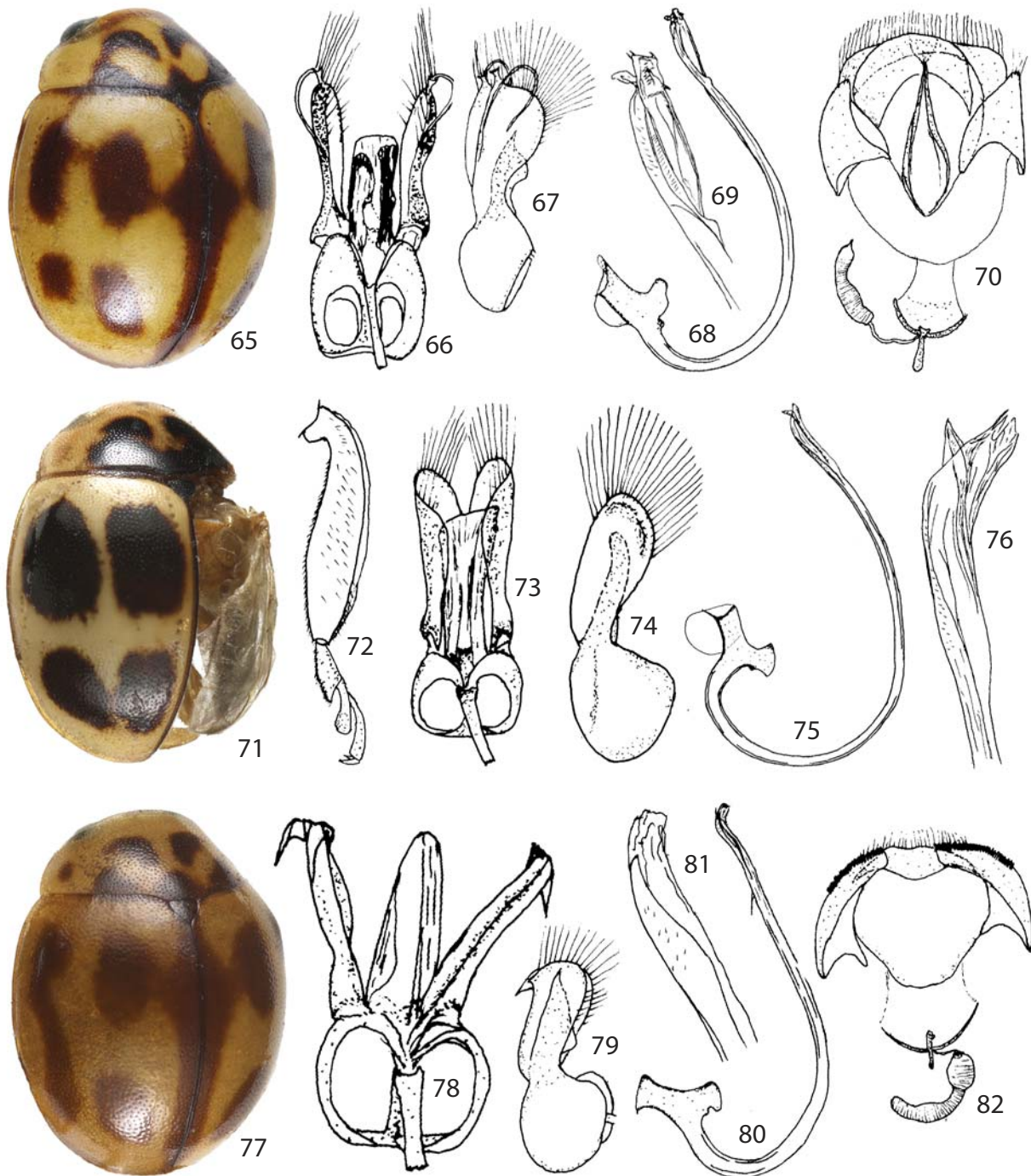




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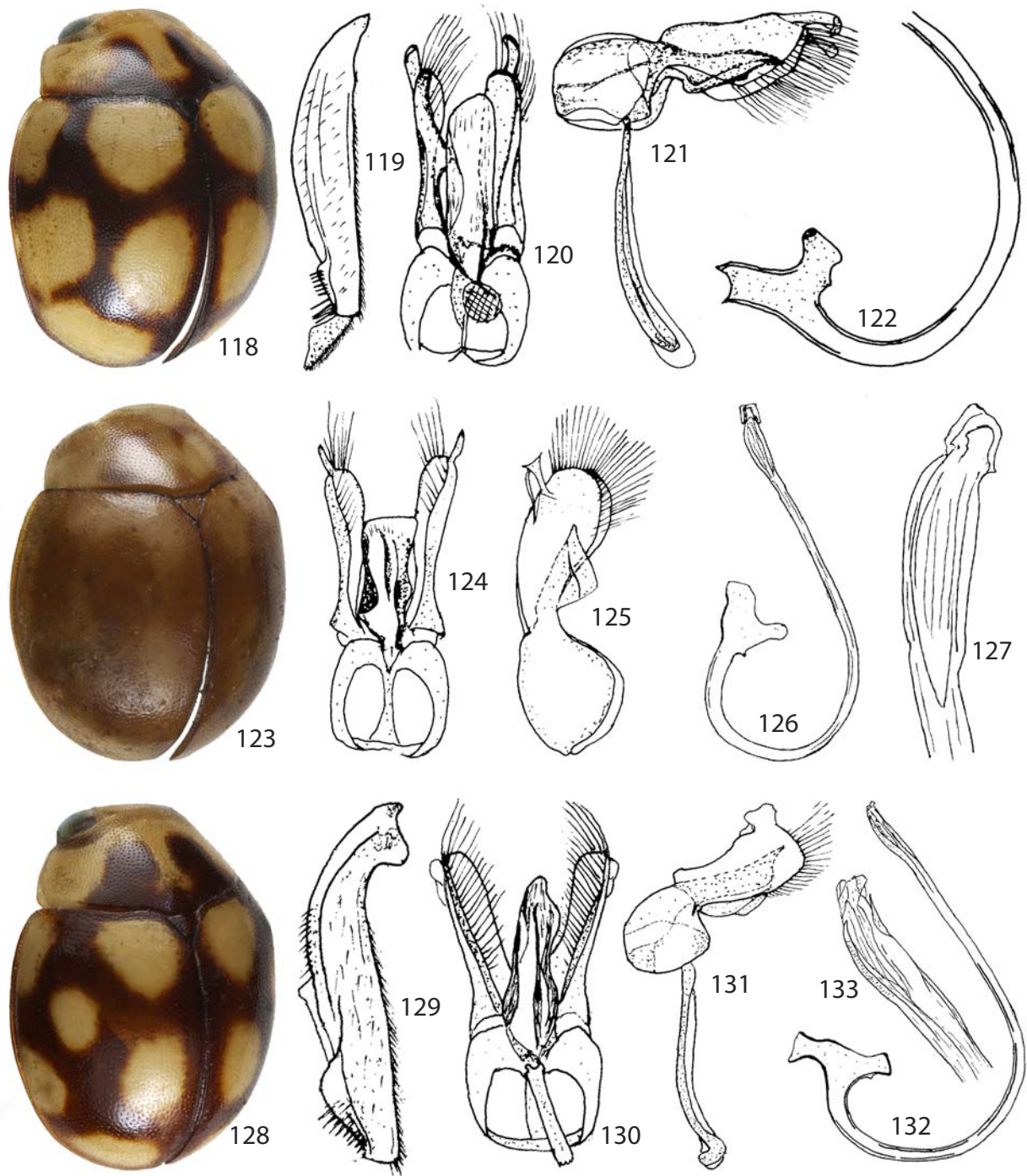
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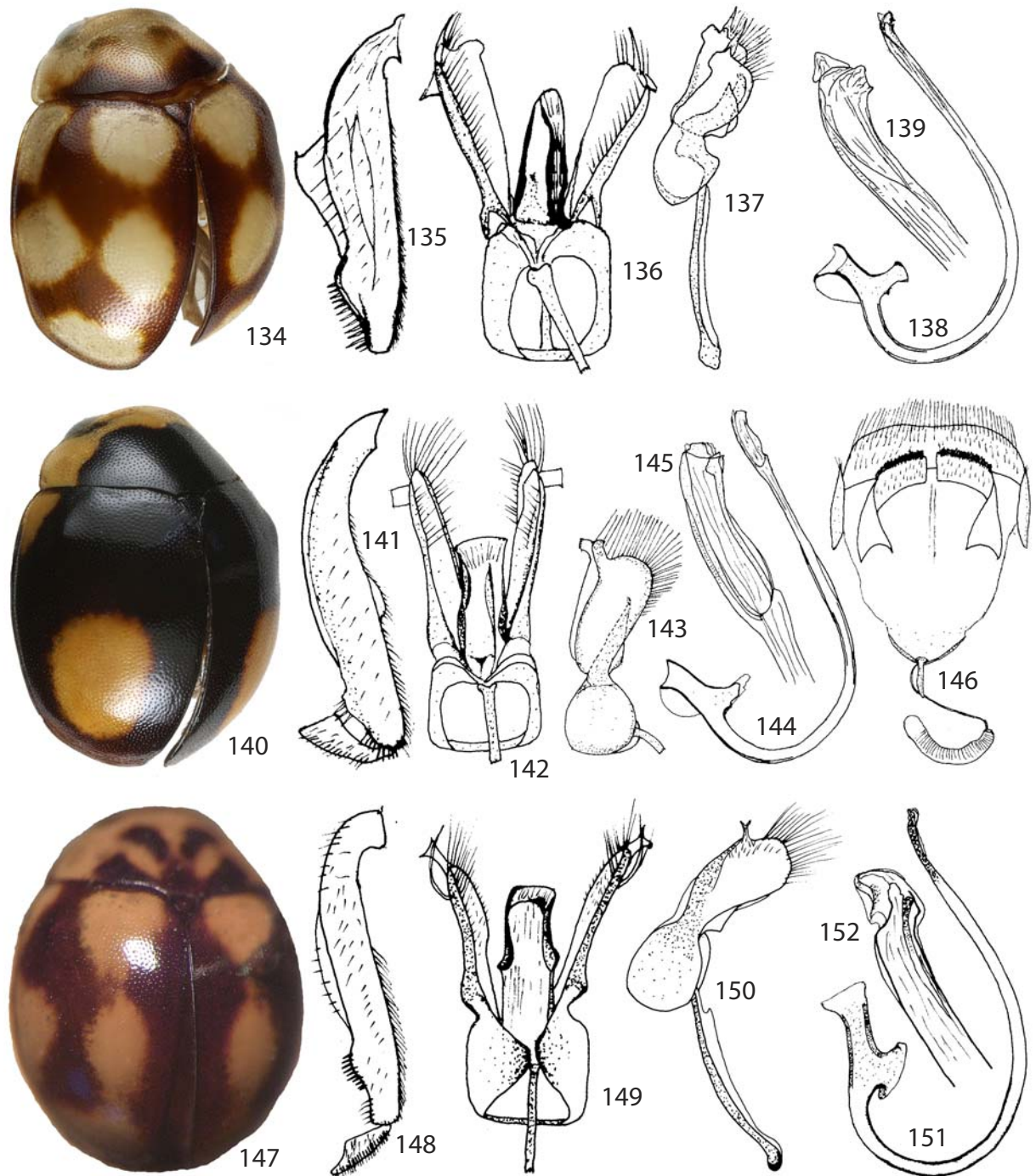
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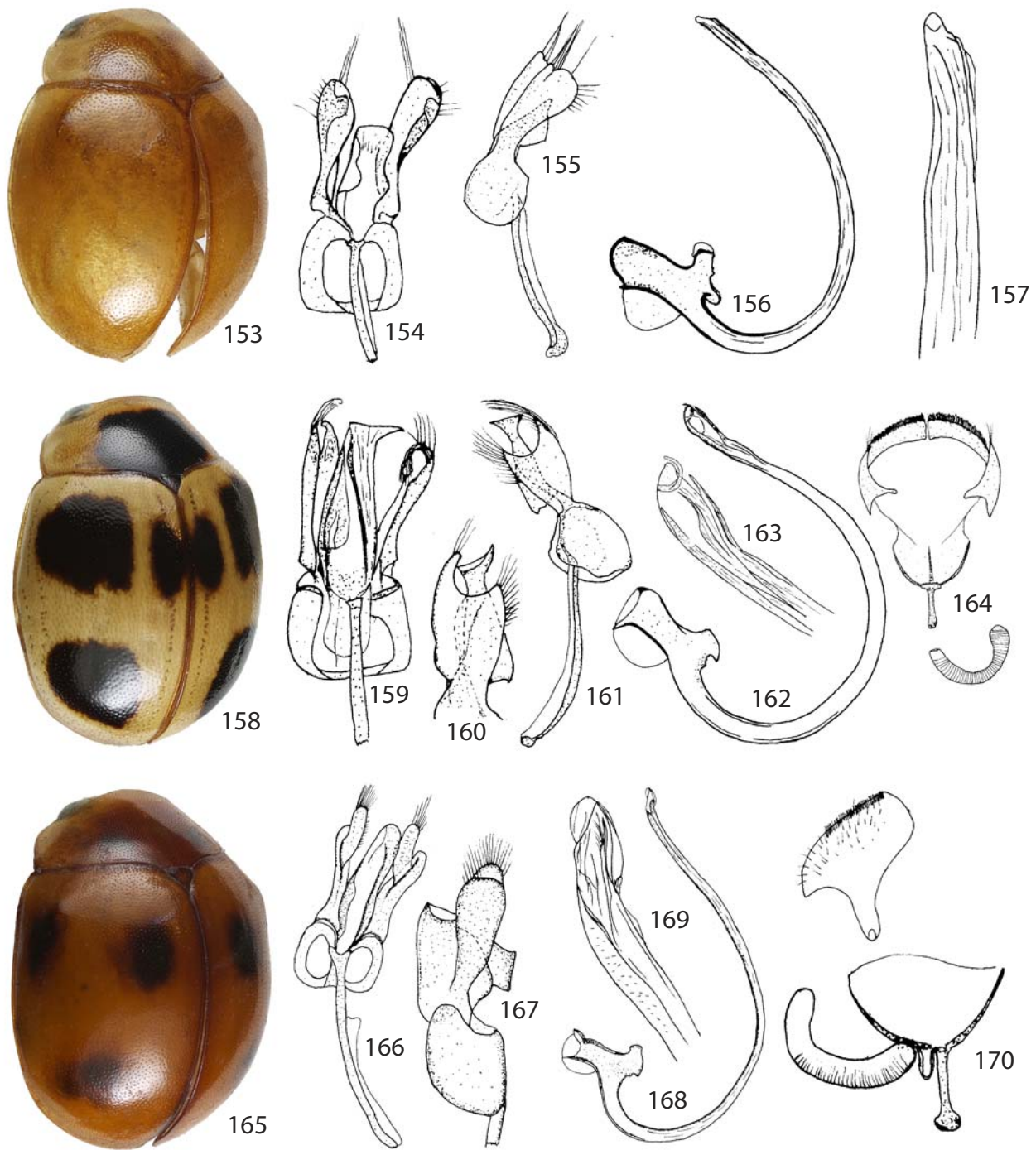
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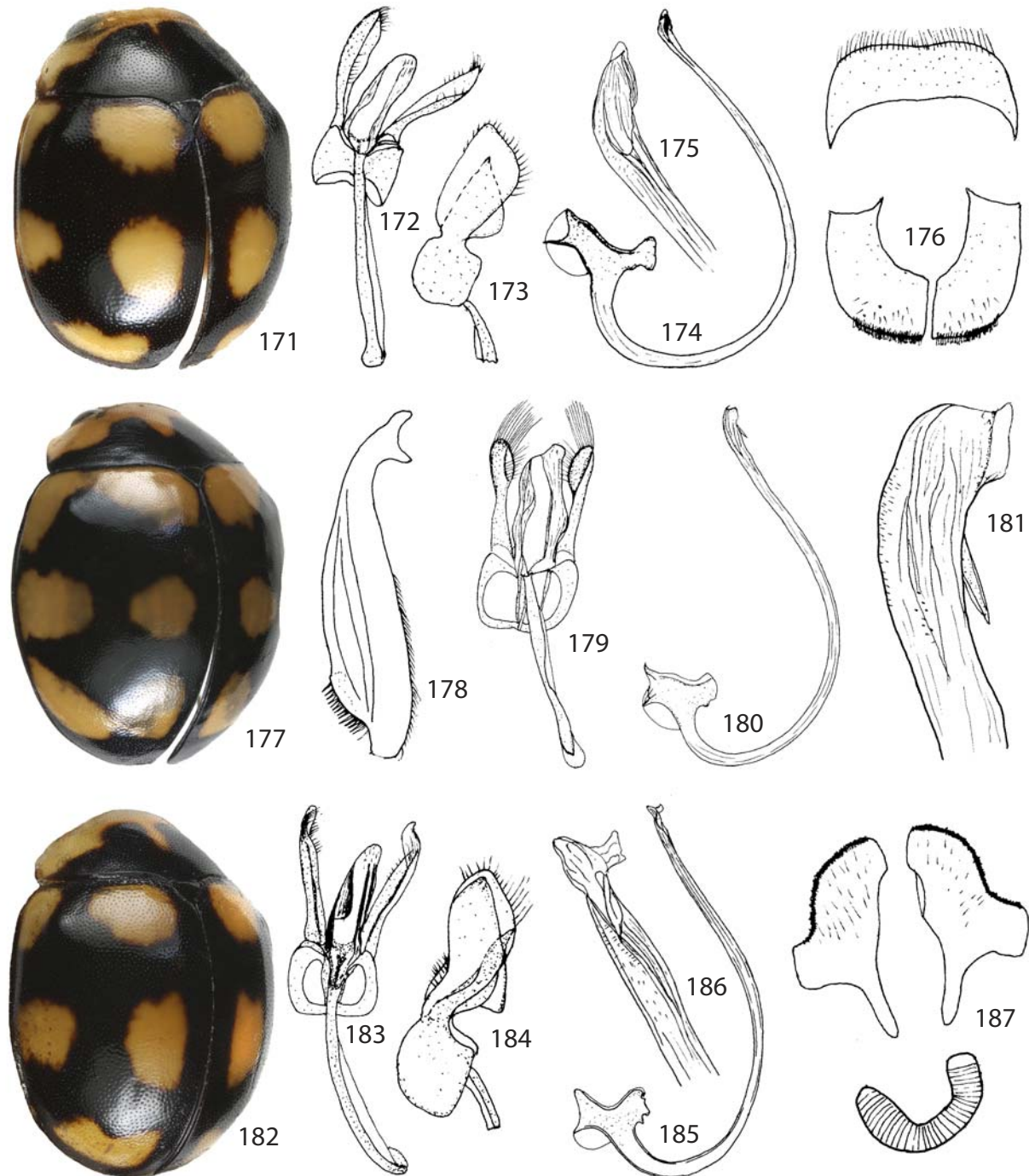


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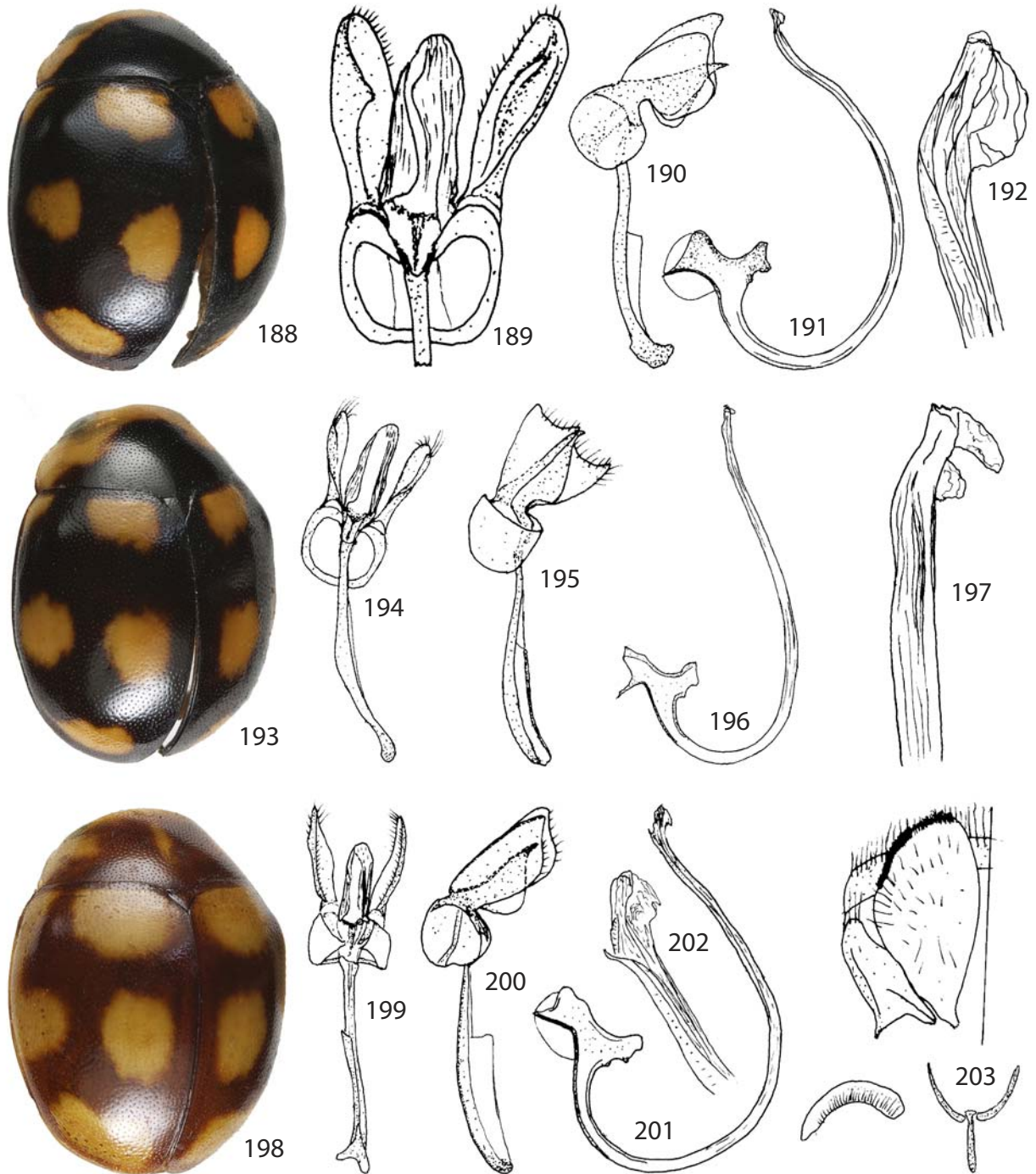


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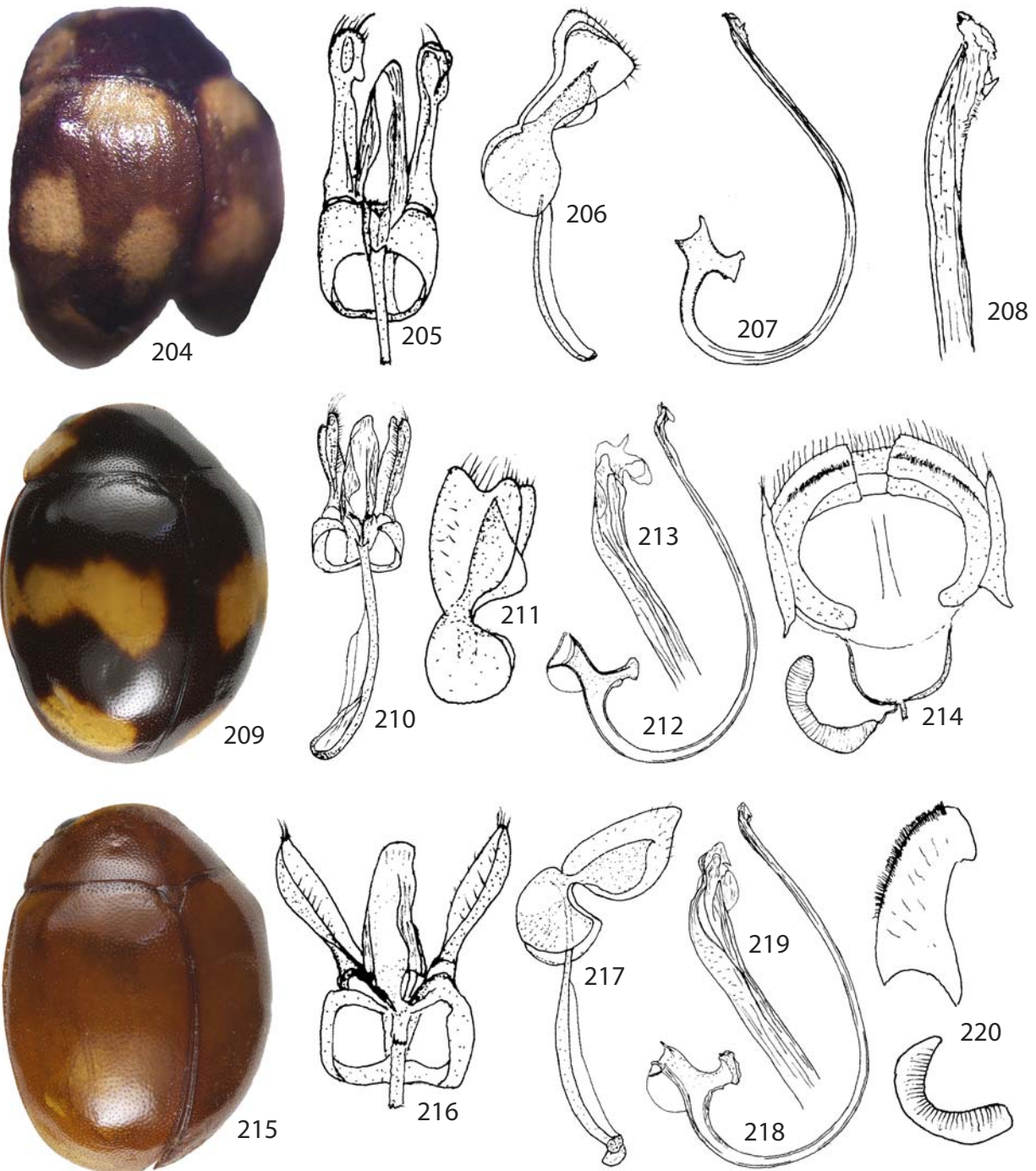




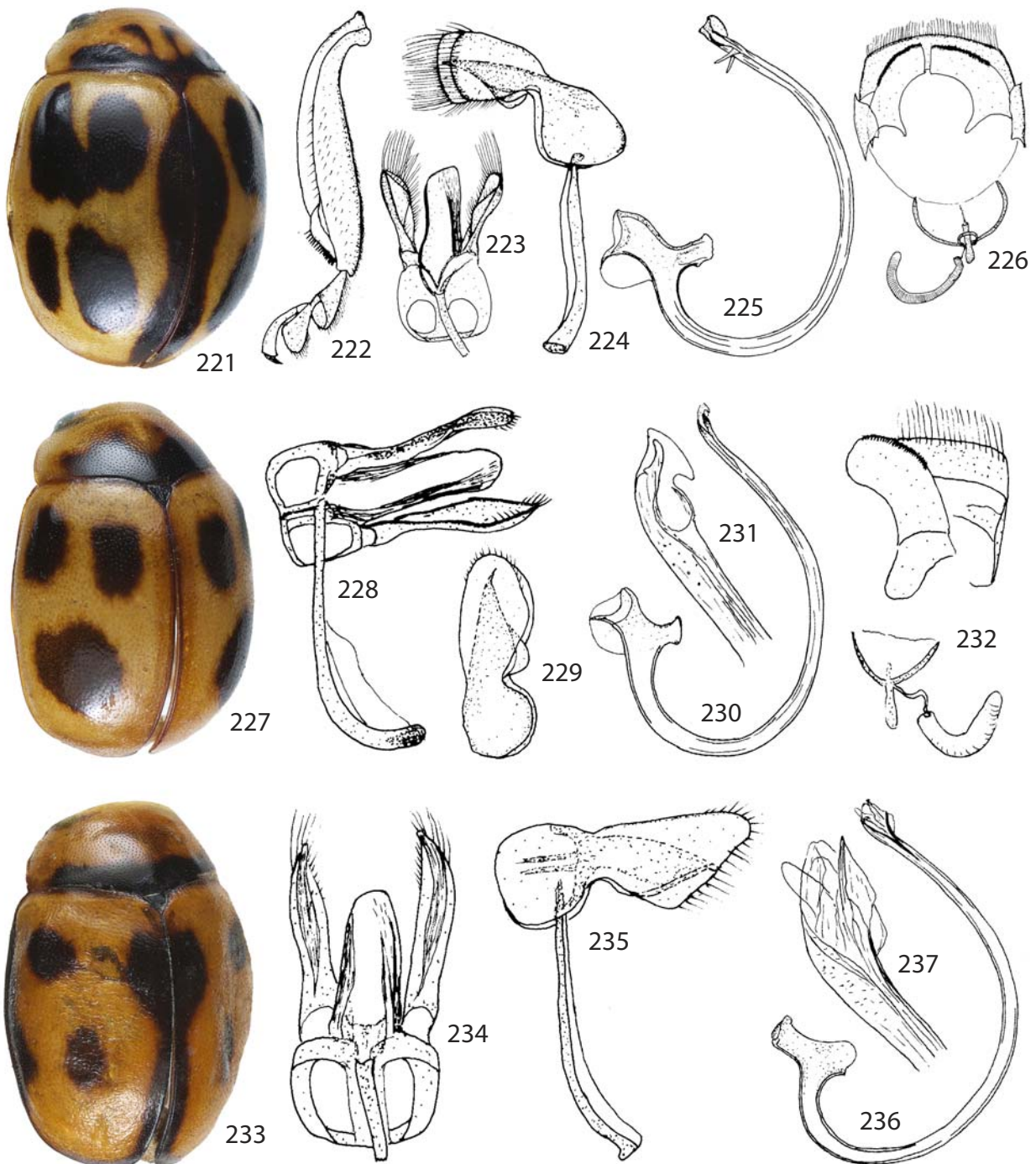
**Figures 171-187.** *Cyrea* spp. **171-176)** *Cyrea natalia*. **171)** Habitus. **172)** Phallobase ventral. **173)** Phallobase lateral. **174)** Siphon. **175)** Enlarged siphonal apex. **176)** Female genital plates. **177-181)** *Cyrea vera*. **177)** Habitus. **178)** Protibia. **179)** Phallobase ventral. **180)** Siphon. **181)** Enlarged siphonal apex. **182-187)** *Cyrea agnes*. **182)** Habitus. **183)** Phallobase ventral. **184)** Phallobase lateral. **185)** Siphon. **186)** Enlarged siphonal apex. **187)** Female genital plates and spermathecal capsule.



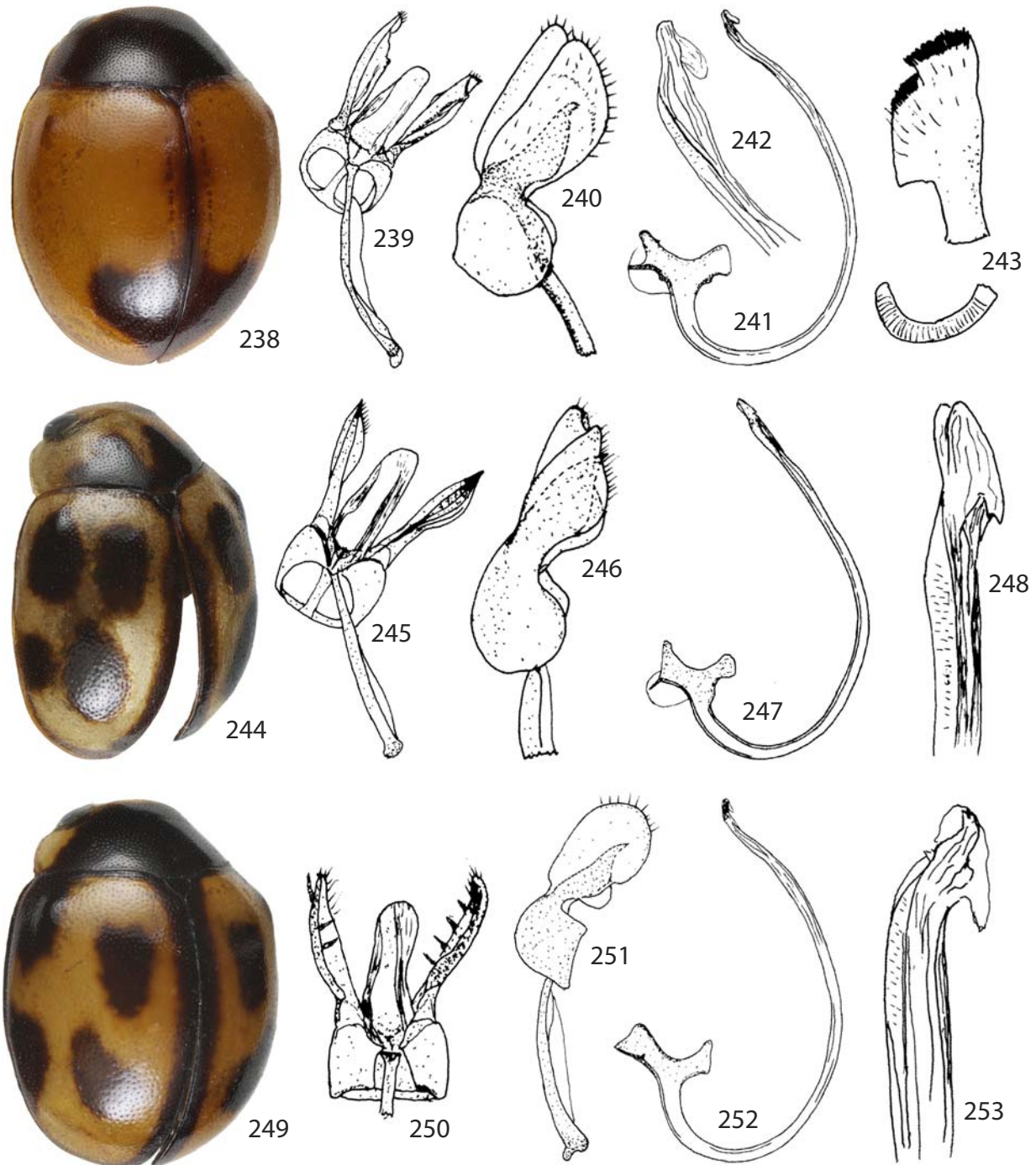
**Figures 188-203.** *Cyrea* spp. **188-192)** *Cyrea willie*. **188)** Habitus. **189)** Phallobase ventral. **190)** Phallobase lateral. **191)** Siphon. **192)** Enlarged siphonal apex. **193-197)** *Cyrea charlene*. **193)** Habitus. **194)** Phallobase ventral. **195)** Phallobase lateral. **196)** Siphon. **197)** Enlarged siphonal apex. **198-203)** *Cyrea bessie*. **198)** Habitus. **199)** Phallobase ventral. **200)** Phallobase lateral. **201)** Siphon. **202)** Enlarged siphonal apex. **203)** Female genitalia.



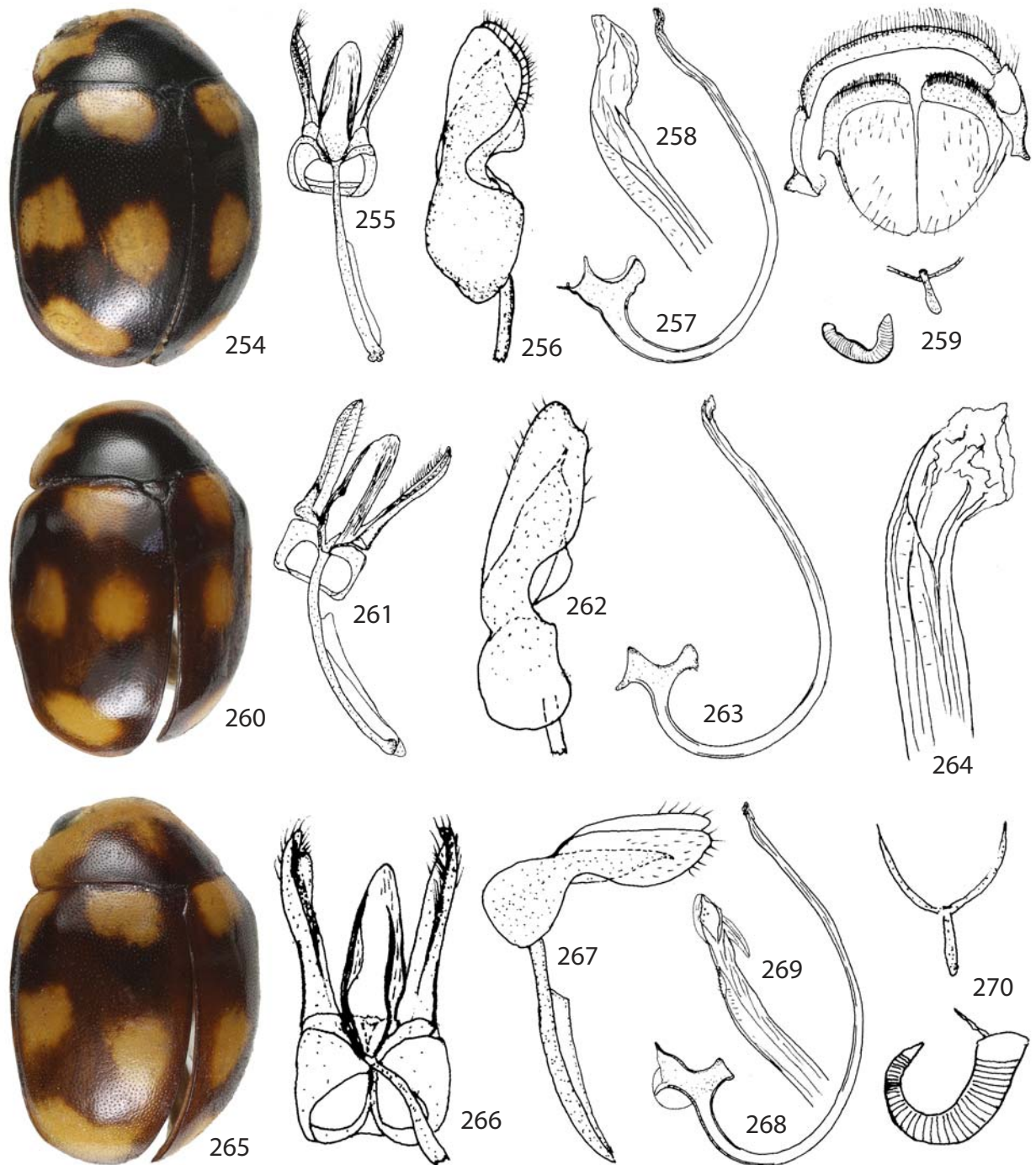
**Figures 204-220.** *Cyrea* spp. **204-208)** *Cyrea seval*. **204)** Habitus. **205)** Phallobase ventral. **206)** Phallobase lateral. **207)** Siphon. **208)** Enlarged siphonal apex. **209-214)** *Cyrea lydia*. **209)** Habitus. **210)** Phallobase ventral. **211)** Phallobase lateral. **212)** Siphon. **213)** Enlarged siphonal apex. **214)** Female genitalia. **215-220)** *Cyrea yvonne*. **215)** Habitus. **216)** Phallobase ventral. **217)** Phallobase lateral. **218)** Siphon. **219)** Enlarged siphonal apex. **220)** Female genital plate and spermathecal capsule.



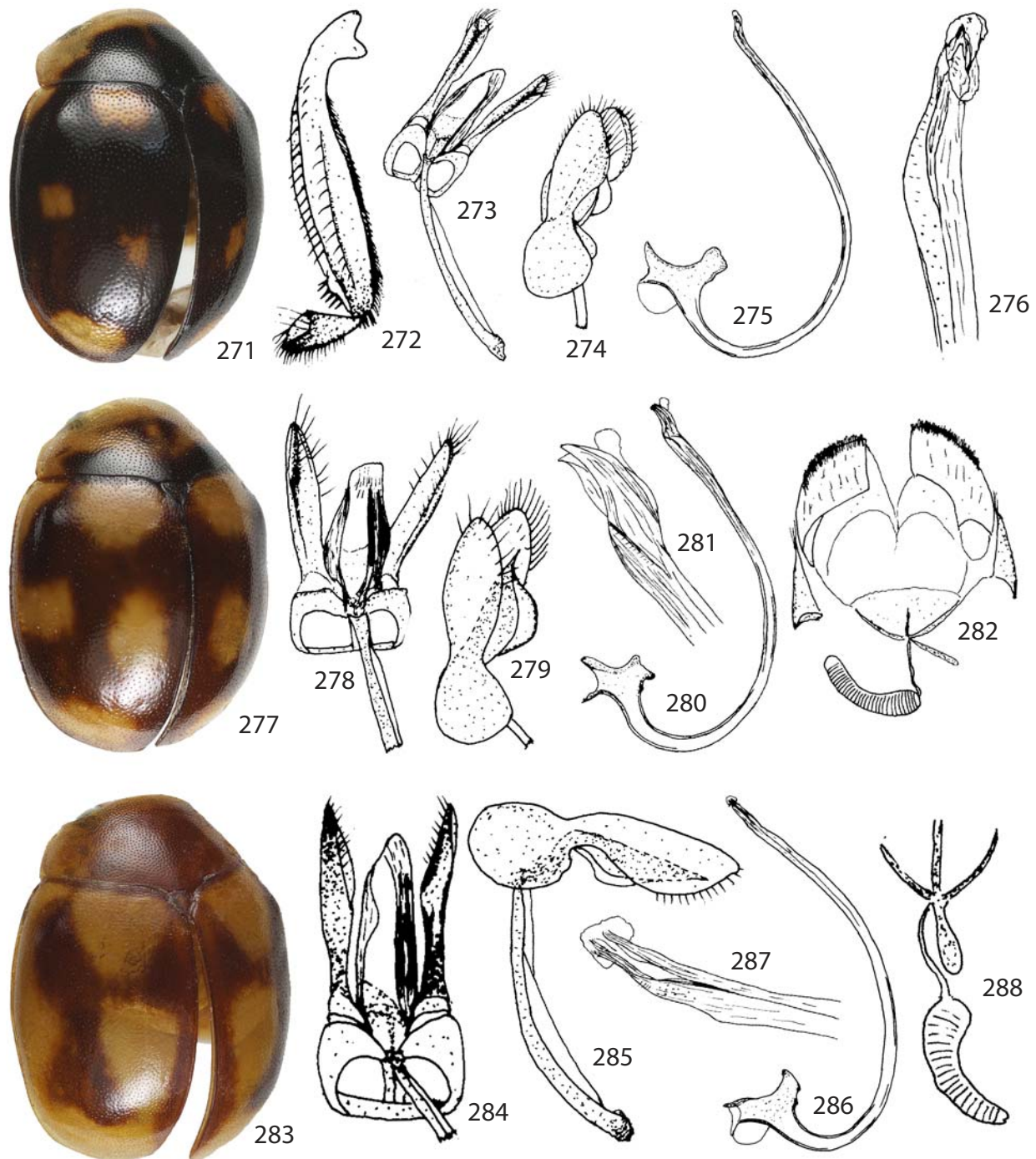
**Figures 221-237.** *Cyrea* spp. **221-226)** *Cyrea renee*. **221)** Habitus. **222)** Proleg. **223)** Phallobase ventral. **224)** Phallobase lateral. **225)** Siphon. **226)** Female genitalia. **227-232)** *Cyrea bernice*. **227)** Habitus. **228)** Phallobase ventral. **229)** Phallobase lateral. **230)** Siphon. **231)** Enlarged siphonal apex. **232)** Female genital plate, bursal cap, apical strut, and spermathecal capsule. **233-237)** *Cyrea audrey*. **233)** Habitus. **234)** Phallobase ventral. **235)** Phallobase lateral. **236)** Siphon. **237)** Enlarged siphonal apex.



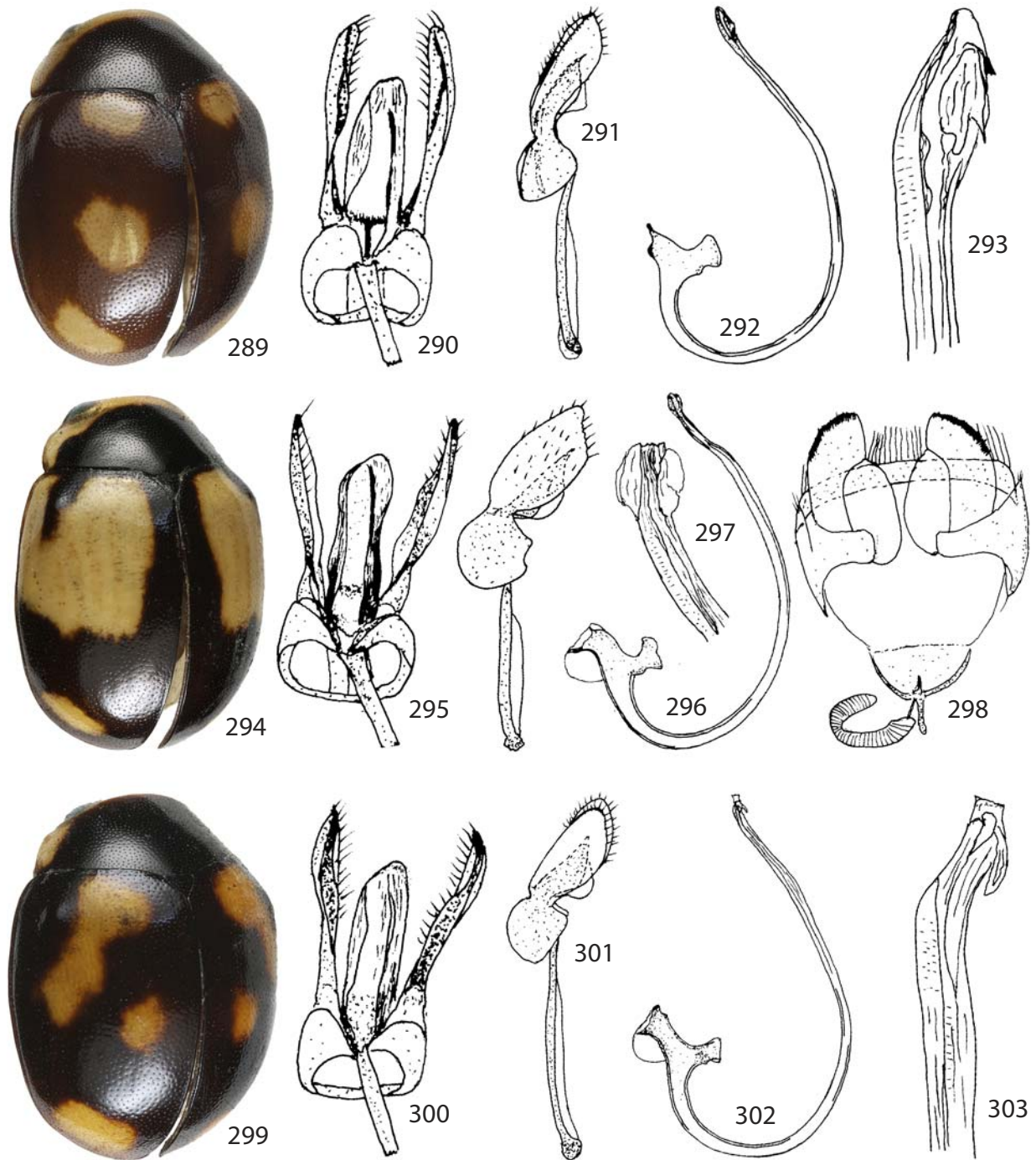
**Figures 238-253.** *Cyrea* spp. **238-243)** *Cyrea devillii*. **238)** Habitus. **239)** Phallobase ventral. **240)** Phallobase lateral. **241)** Siphon. **242)** Enlarged siphonal apex. **243)** Female genitalic plate and spermathecal capsule. **244-248)** *Cyrea yolanda*. **244)** Habitus. **245)** Phallobase ventral. **246)** Phallobase lateral. **247)** Siphon. **248)** Enlarged siphonal apex. **249-253)** *Cyrea jeannette*. **249)** Habitus. **250)** Phallobase ventral. **251)** Phallobase lateral. **252)** Siphon. **253)** Enlarged siphonal apex.



**Figures 254-270.** *Cyrea* spp. **254-259)** *Cyrea ella*. **254)** Habitus. **255)** Phallobase ventral. **256)** Phallobase lateral. **257)** Siphus. **258)** Enlarged siphonal apex. **259)** Female genitalia. **260-264)** *Cyrea terry*. **260)** Habitus. **261)** Phallobase ventral. **262)** Phallobase lateral. **263)** Siphus. **264)** Enlarged siphonal apex. **265-270)** *Cyrea wilma*. **265)** Habitus. **266)** Phallobase ventral. **267)** Phallobase lateral. **268)** Siphus. **269)** Enlarged siphonal apex. **270)** Female bursal cap, apical strut, and spermathecal capsule.

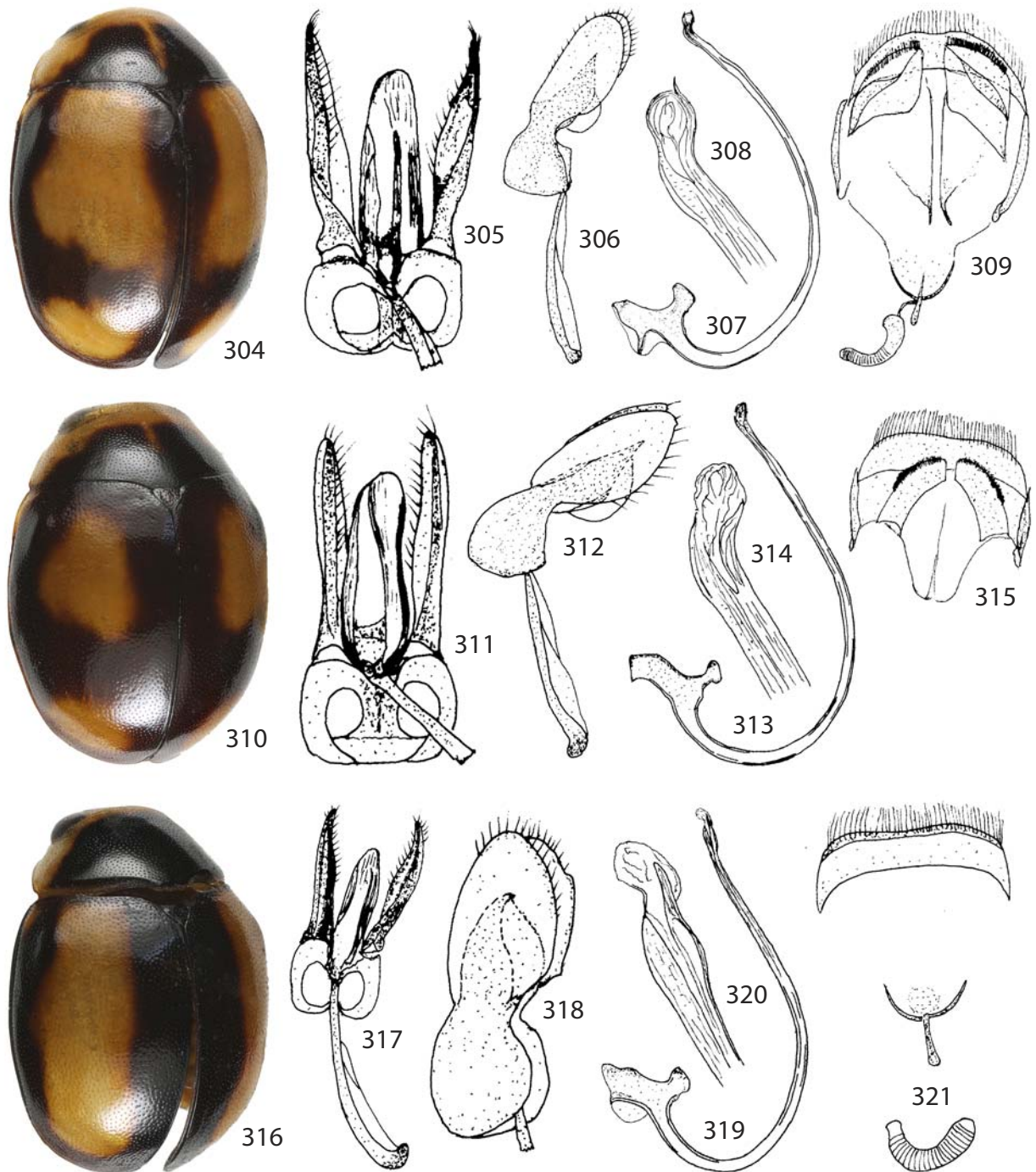


**Figures 271-288.** *Cyrea* spp. **271-276)** *Cyrea gina*. **271)** Habitus. **272)** Proleg. **273)** Phallobase ventral. **274)** Phallobase lateral. **275)** Siphon. **276)** Enlarged siphonal apex. **277-282)** *Cyrea maxine*. **277)** Habitus. **278)** Phallobase ventral. **279)** Phallobase lateral. **280)** Siphon. **281)** Enlarged siphonal apex. **282)** Female genitalia. **283-288)** *Cyrea jessie*. **283)** Habitus. **284)** Phallobase ventral. **285)** Phallobase lateral. **286)** Siphon. **287)** Enlarged siphonal apex. **288)** Female bursal cap, apical strut, and spermathecal capsule.

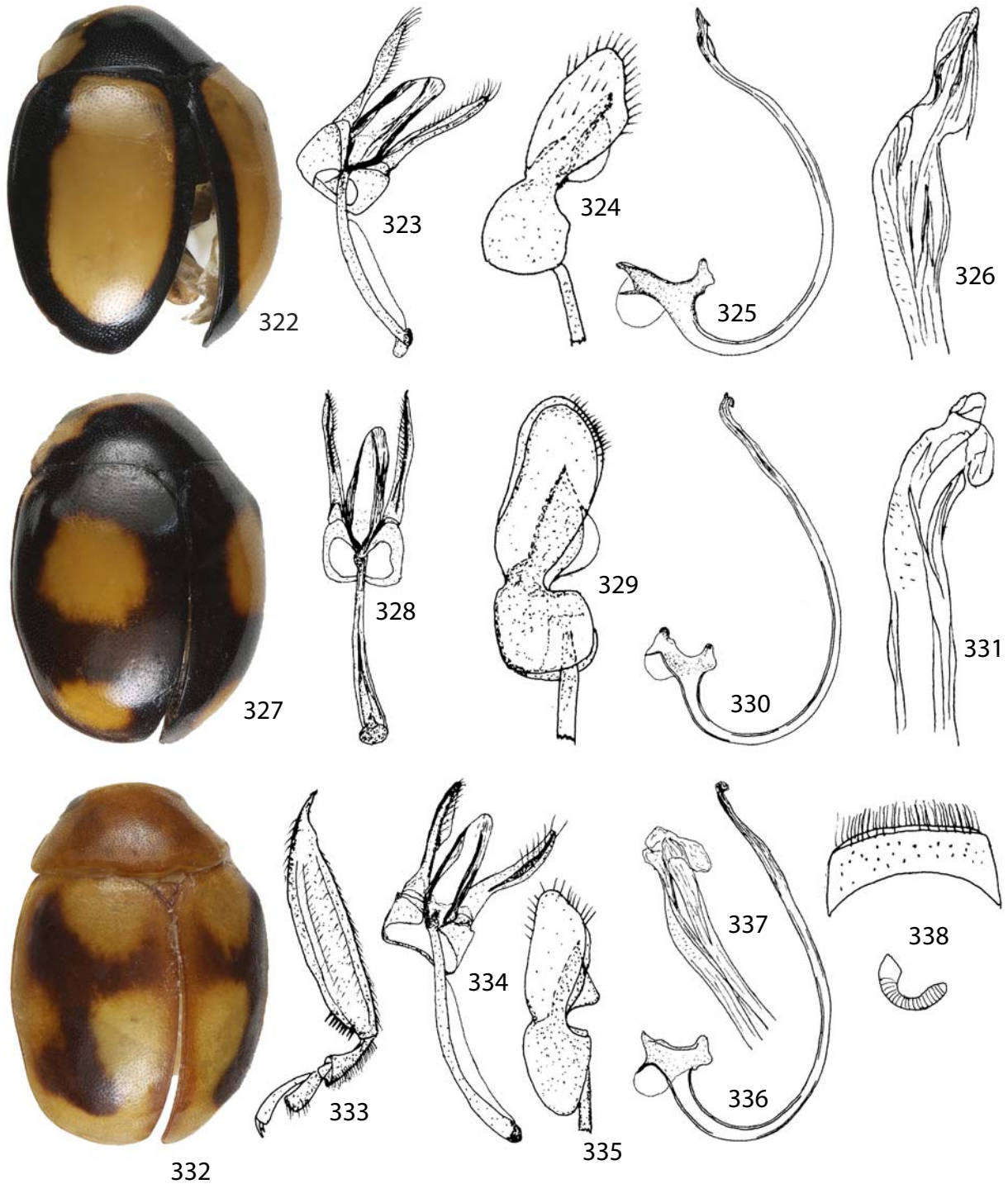


**Figures 289-303.** *Cyrea* spp. **289-293)** *Cyrea minnie*. **289)** Habitus. **290)** Phallobase ventral. **291)** Phallobase lateral. **292)** Siphon. **293)** Enlarged siphonal apex. **294-298)** *Cyrea claudia*. **294)** Habitus. **295)** Phallobase ventral and lateral. **296)** Siphon. **297)** Enlarged siphonal apex. **298)** Female genitalia. **299-303)** *Cyrea jackie*. **299)** Habitus. **300)** Phallobase ventral. **301)** Phallobase lateral. **302)** Siphon. **303)** Enlarged siphonal apex.

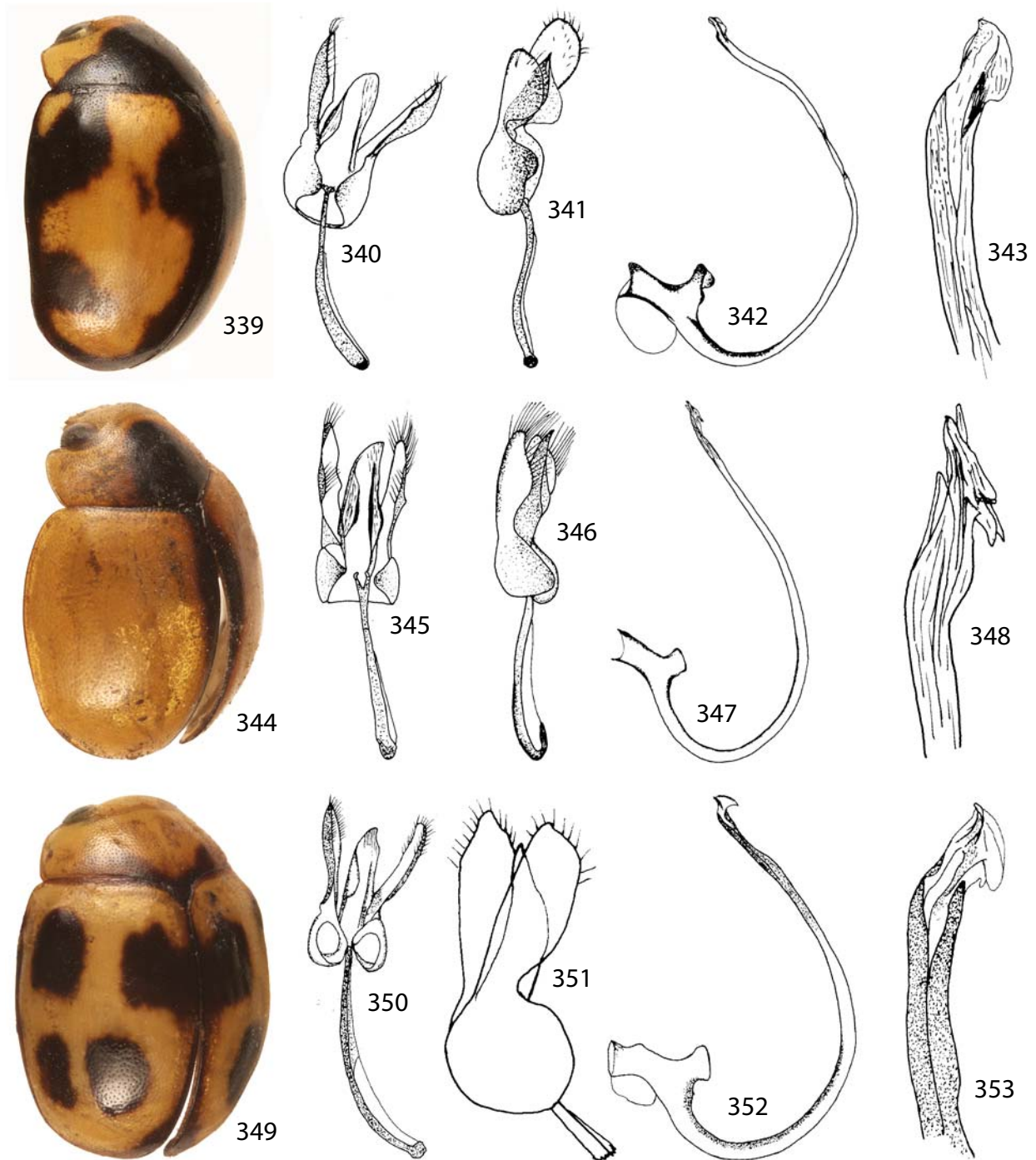




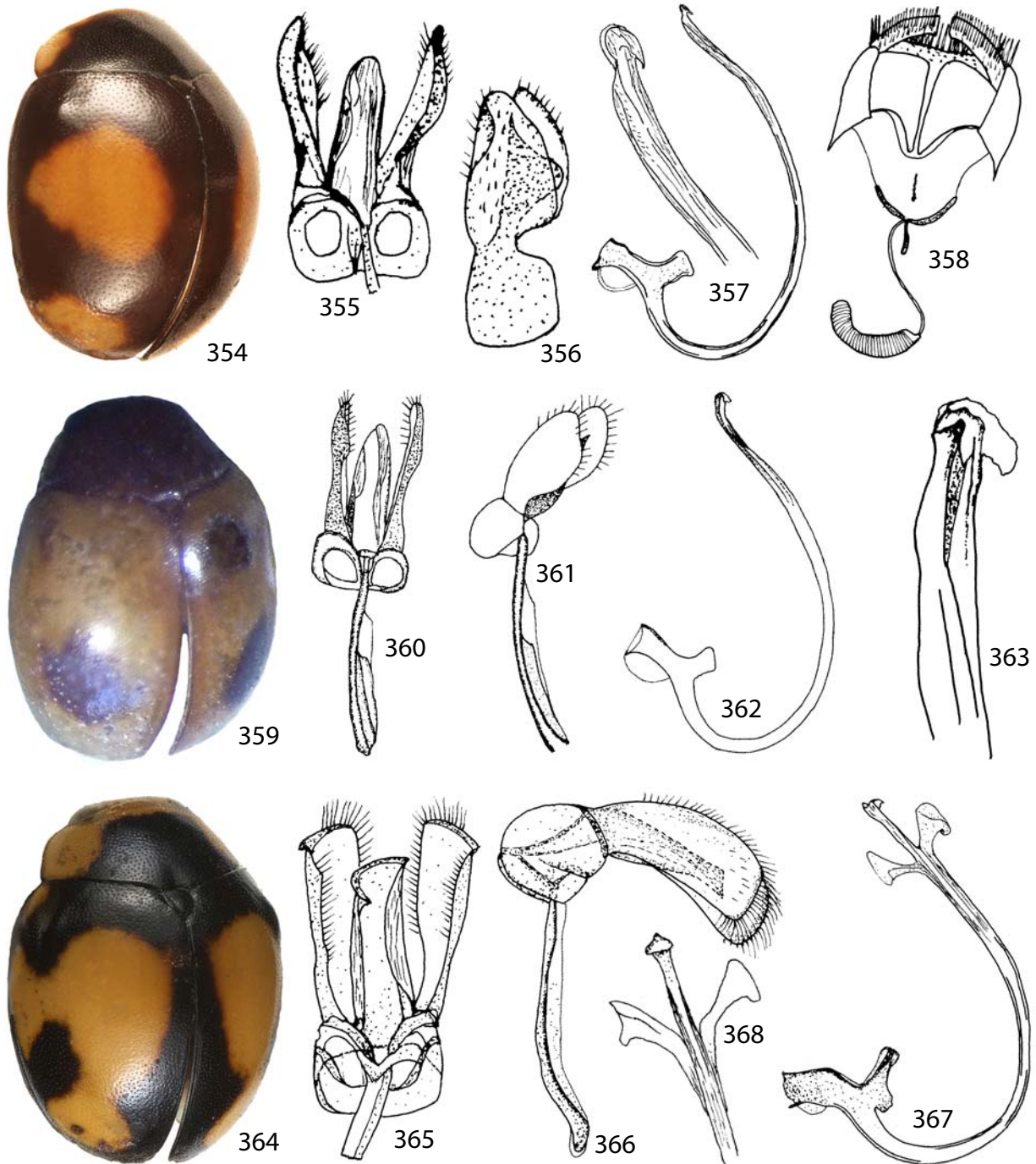
**Figures 304-321.** *Cyrea* spp. **304-309)** *Cyrea victoria*. **304)** Habitus. **305)** Phallobase ventral. **306)** Phallobase lateral. **307)** Siphon. **308)** Enlarged siphonal apex. **309)** Female genitalia. **310-315)** *Cyrea marcia*. **310)** Habitus. **311)** Phallobase ventral. **312)** Phallobase lateral. **313)** Siphon. **314)** Enlarged siphonal apex. **315)** Female genital plates. **316-321)** *Cyrea tanya*. **316)** Habitus. **317)** Phallobase ventral. **318)** Phallobase lateral. **319)** Siphon. **320)** Enlarged siphonal apex. **321)** Female genitalia.



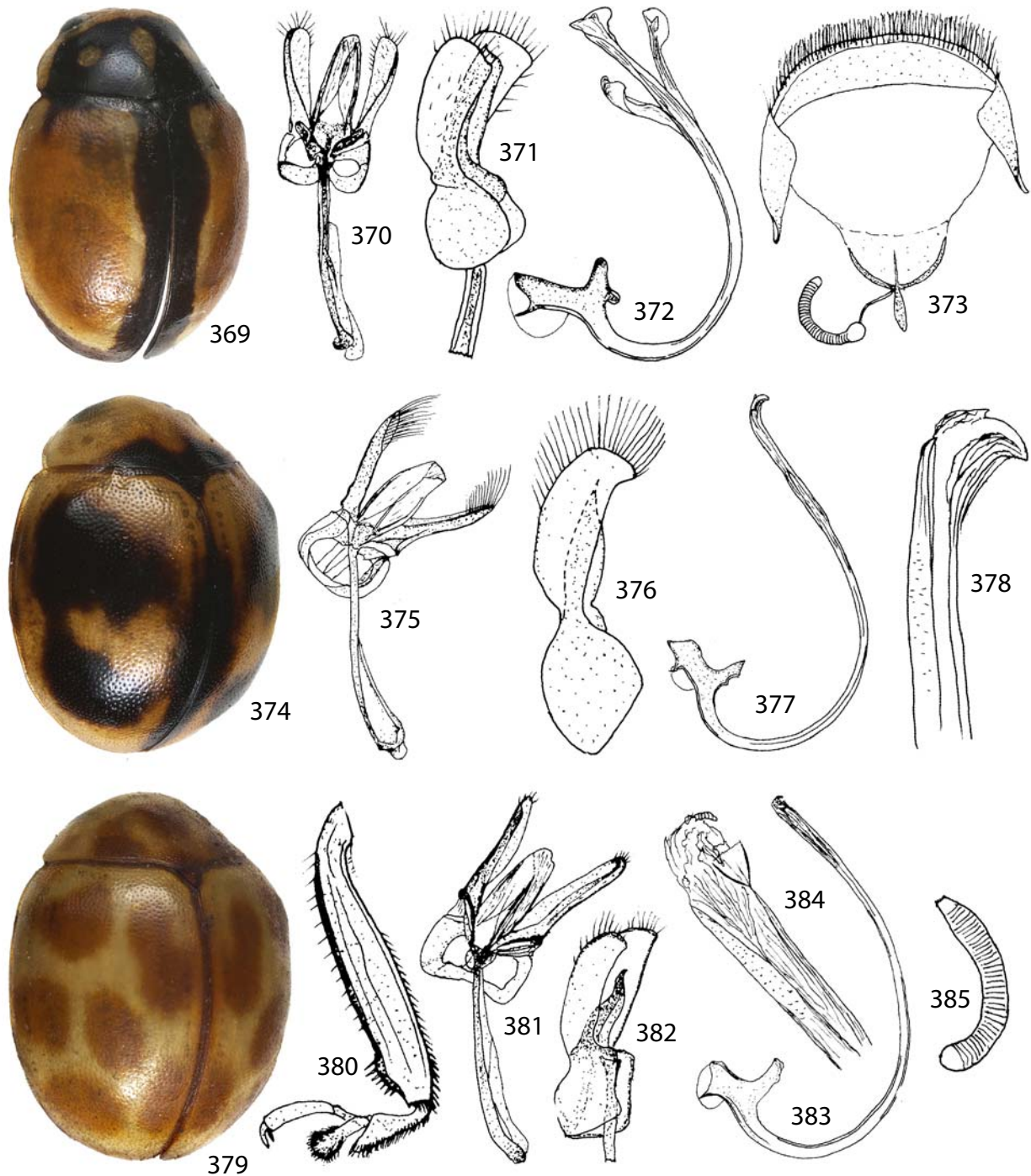
**Figures 322-338.** *Cyrea* spp. **322-326)** *Cyrea nelli*. **322)** Habitus. **323)** Phallobase ventral. **324)** Phallobase lateral. **325)** Siphon. **326)** Enlarged siphonal apex. **327-331)** *Cyrea marlene*. **327)** Habitus. **328)** Phallobase ventral. **329)** Phallobase lateral. **330)** Siphon. **331)** Enlarged siphonal apex. **332-338)** *Cyrea heidi*. **332)** Habitus. **333)** Proleg. **334)** Phallobase ventral. **335)** Phallobase lateral. **336)** Siphon. **337)** Enlarged siphonal apex. **338)** Female genital plate and spermathecal capsule.



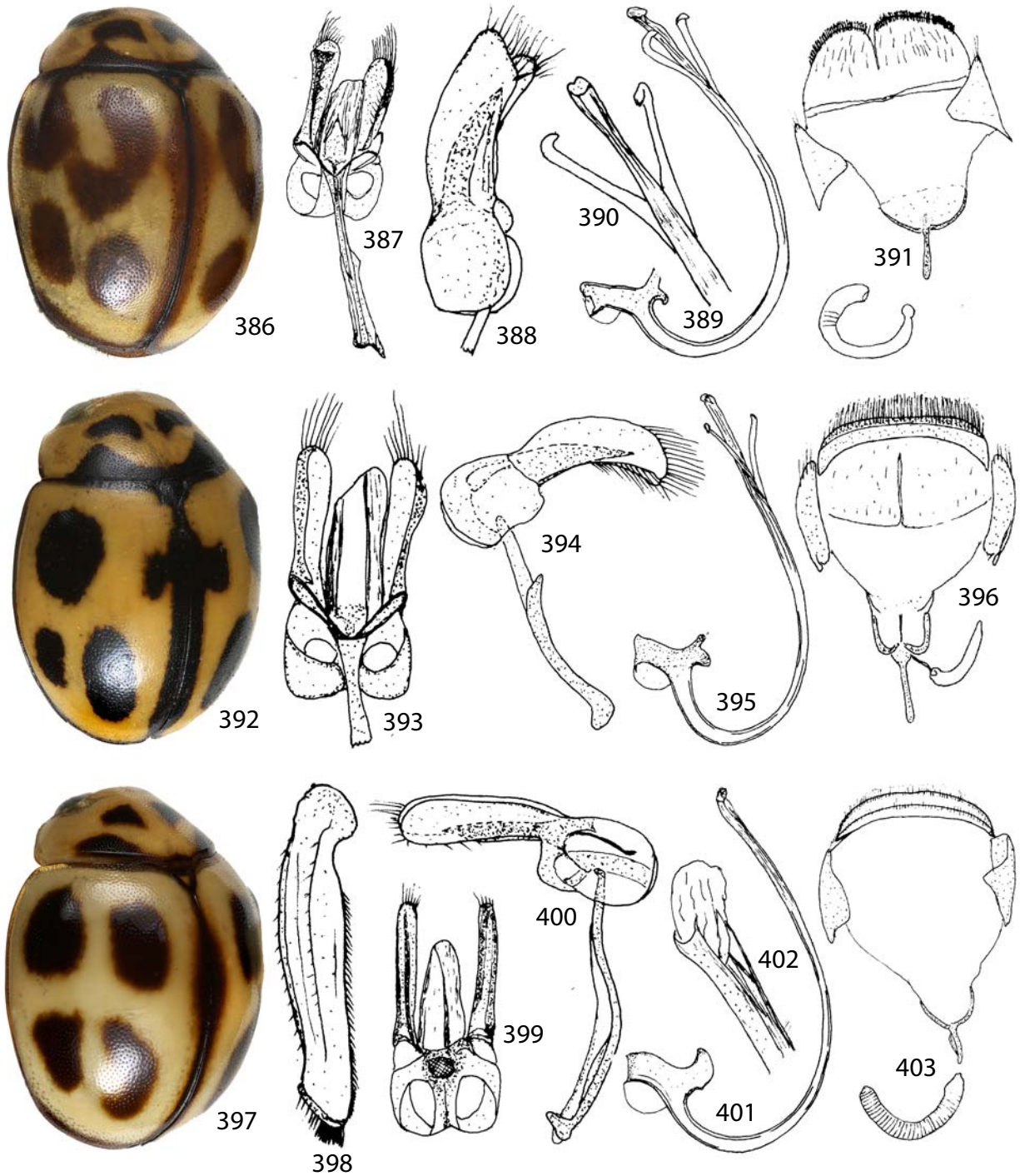
**Figures 339-353.** *Cyrea* spp. **339-343)** *Cyrea januarii*. **339)** Habitus. **340)** Phallobase ventral. **341)** Phallobase lateral. **342)** Sipho. **343)** Enlarged siphonal apex. **344-348)** *Cyrea spinalis*. **344)** Habitus. **345)** Phallobase ventral. **346)** Phallobase lateral. **347)** Sipho. **348)** Enlarged siphonal apex. **349-353)** *Cyrea similaris*. **349)** Habitus. **350)** Phallobase ventral. **351)** Phallobase lateral. **352)** Sipho. **353)** Enlarged siphonal apex.



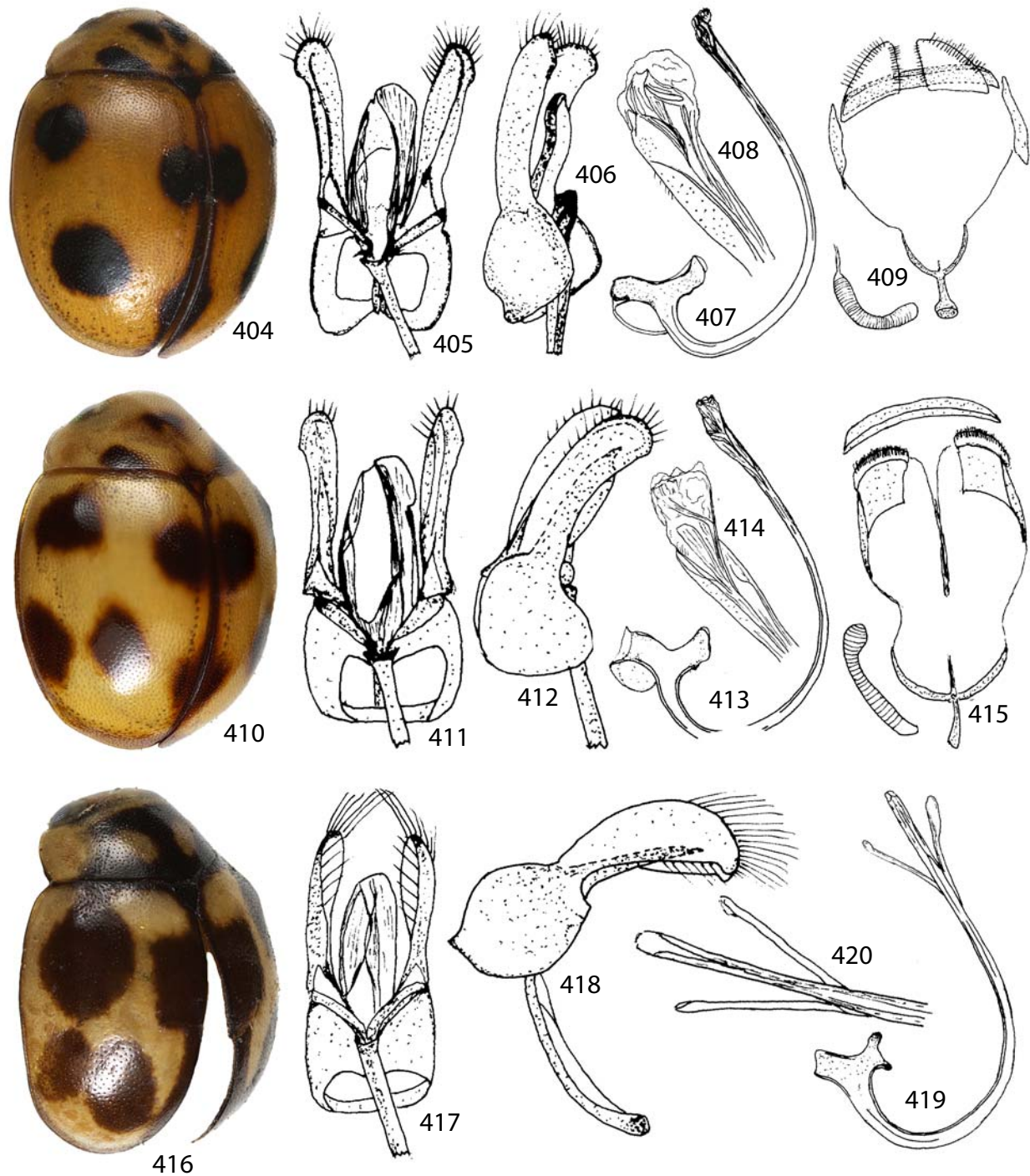
**Figures 354-368.** *Cyrea* spp. **354-358)** *Cyrea petropolitana*. **354)** Habitus. **355)** Phallobase ventral. **356)** Phallobase lateral. **357)** Siphon and enlarged siphonal apex. **358)** Female genitalia. **359-363)** *Cyrea castelnaudii*. **359)** Habitus. **360)** Phallobase ventral. **361)** Phallobase lateral. **362)** Siphon. **363)** Enlarged siphonal apex. **364-368)** *Cyrea beatrice*. **364)** Habitus. **365)** Phallobase ventral. **366)** Phallobase lateral. **367)** Siphon. **368)** Enlarged siphonal apex.



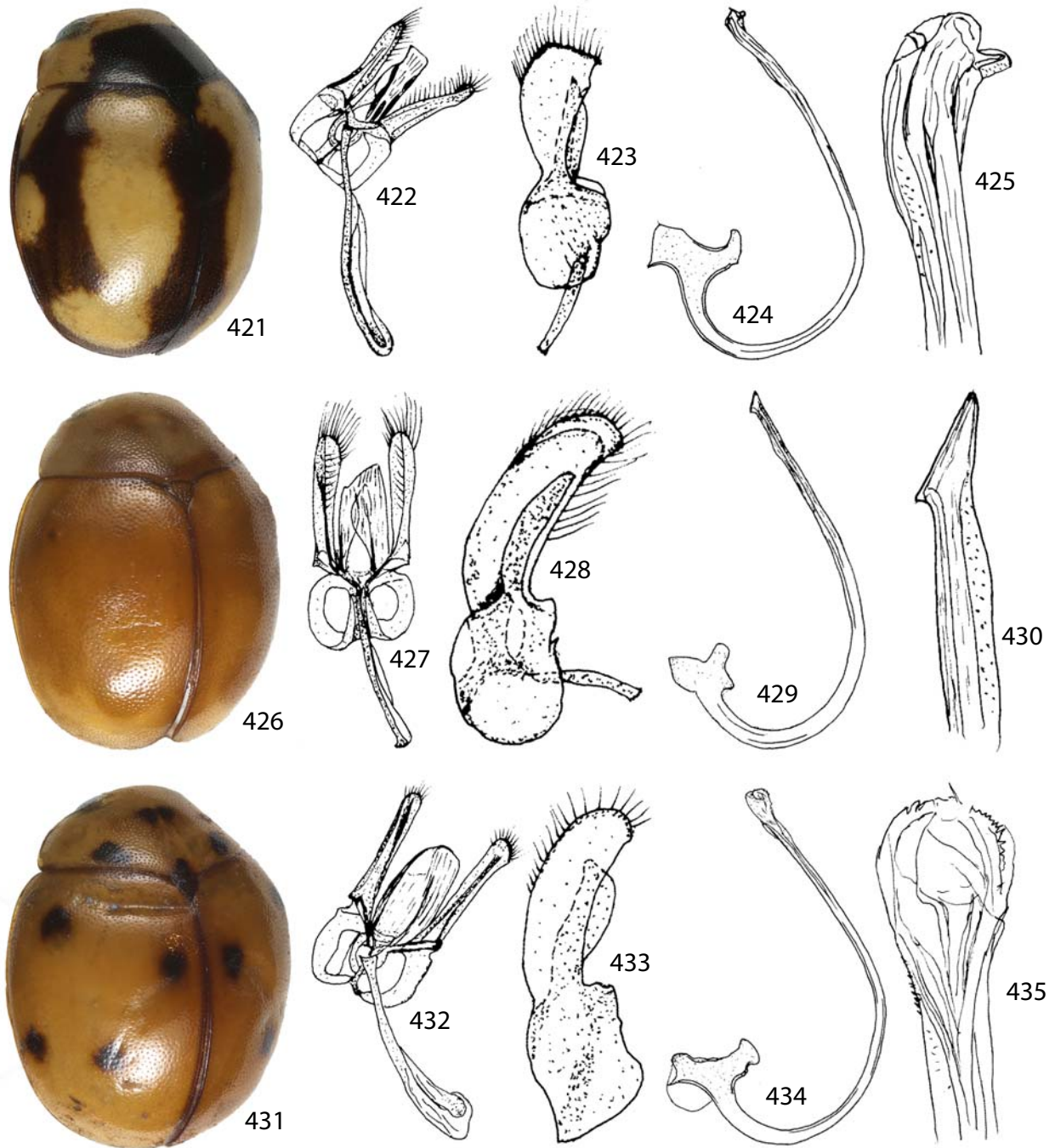
**Figures 368-385.** *Cyrea* spp. **369-373)** *Cyrea dolores*. **369)** Habitus. **370)** Phallobase ventral. **371)** Phallobase lateral. **372)** Siphon. **373)** Female genitalia. **374-378)** *Cyrea erica*. **374)** Habitus. **375)** Phallobase ventral. **376)** Phallobase lateral. **377)** Siphon. **378)** Enlarged siphonal apex. **379-385)** *Cyrea tessulata*. **379)** Habitus. **380)** Proleg. **381)** Phallobase ventral. **382)** Phallobase lateral. **383)** Siphon. **384)** Enlarged siphonal apex. **385)** Female spermathecal capsule.



**Figures 386-402.** *Cyrea* spp. **386-391)** *Cyrea noticollis*. **386)** Habitus. **387)** Phallobase ventral. **388)** Phallobase lateral. **389)** Siphon. **390)** Enlarged siphonal apex. **391)** Female genitalia. **392-396)** *Cyrea ornatocollis*. **392)** Habitus. **393)** Phallobase ventral. **394)** Phallobase lateral. **395)** Siphon. **396)** Female genitalia. **397-403)** *Cyrea renifera*. **397)** Habitus. **398)** Protibia. **399)** Phallobase ventral. **400)** Phallobase lateral. **401)** Siphon. **402)** Enlarged siphonal apex. **403)** Female genitalia.

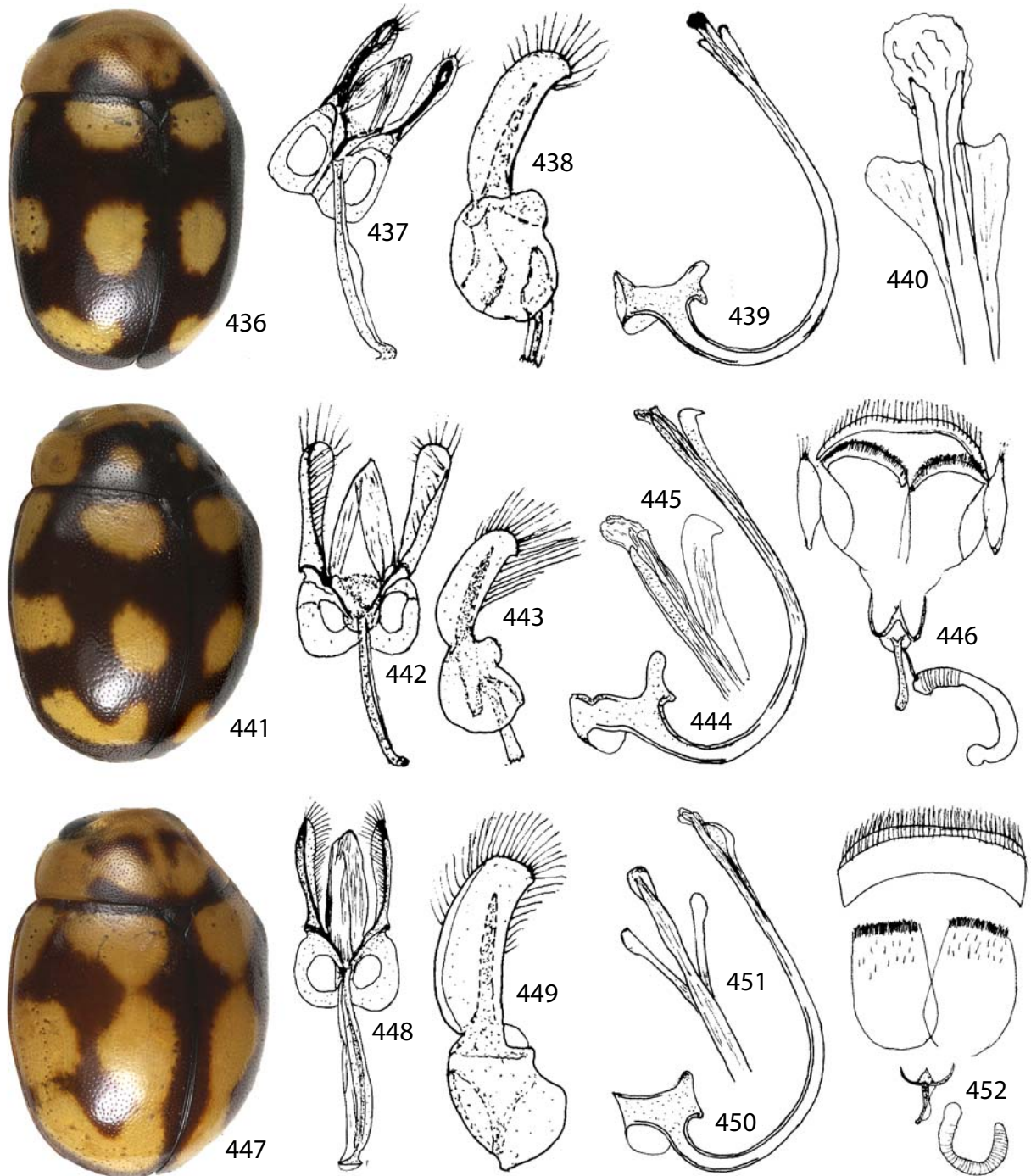


**Figures 404-420.** *Cyrea* spp. **404-409)** *Cyrea quinquenotata*. **404)** Habitus. **405)** Phallobase ventral. **406)** Phallobase lateral. **407)** Siphon. **408)** Enlarged siphonal apex. **409)** Female genitalia. **410-415)** *Cyrea novemsignata*. **410)** Habitus. **411)** Phallobase ventral. **412)** Phallobase lateral. **413)** Siphon. **414)** Enlarged siphonal apex. **415)** Female genitalia. **416-420)** *Cyrea samantha*. **416)** Habitus. **417)** Phallobase ventral. **418)** Phallobase lateral. **419)** Siphon. **420)** Enlarged siphonal apex.

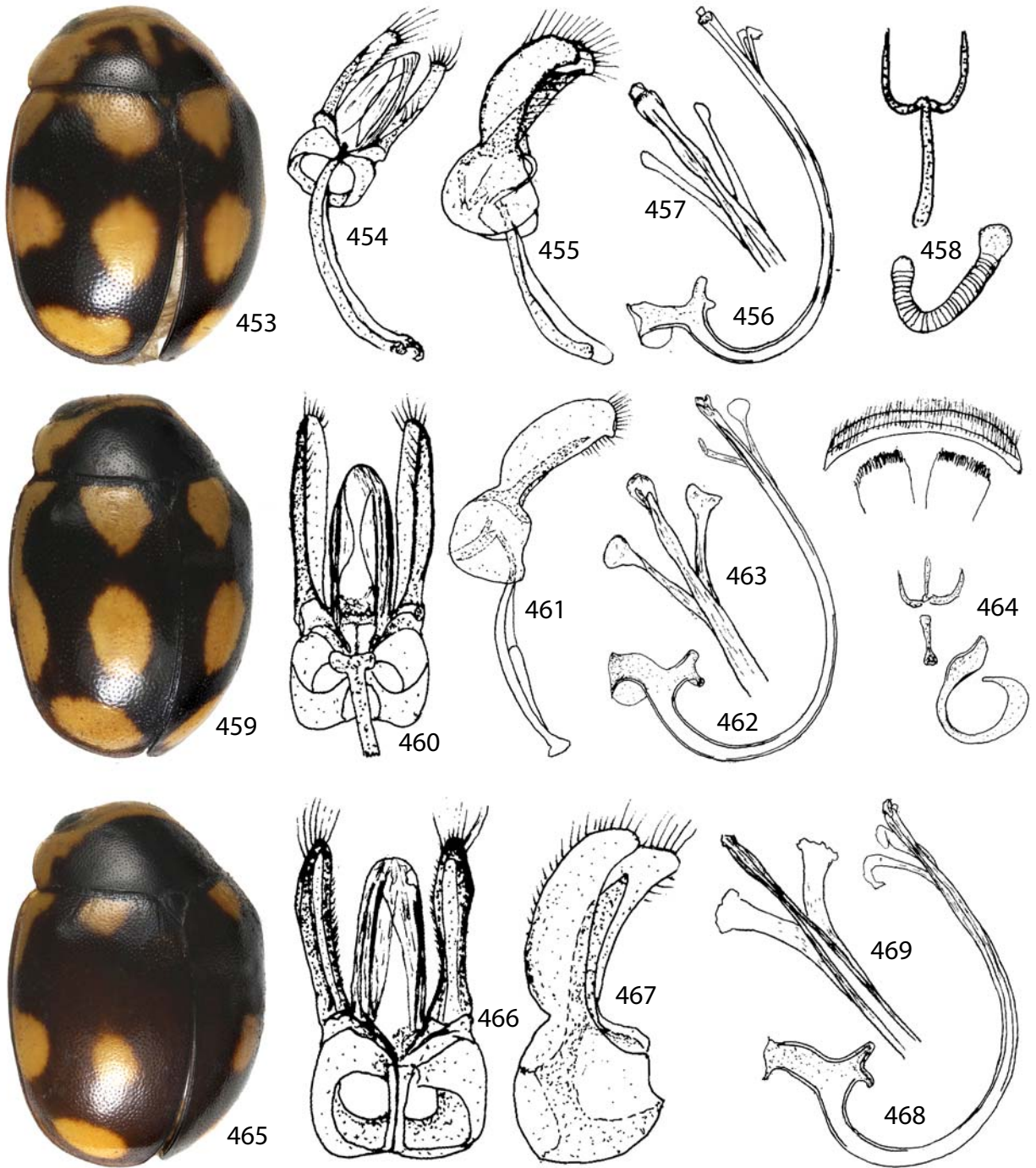


**Figures 421-435.** *Cyrea* spp. **421-425)** *Cyrea marion*. **421)** Habitus. **422)** Phallobase ventral. **423)** Phallobase lateral. **424)** Siphon. **425)** Enlarged siphonal apex. **426-430)** *Cyrea dana*. **426)** Habitus. **427)** Phallobase ventral. **428)** Phallobase lateral. **429)** Siphon. **430)** Enlarged siphonal apex. **431-435)** *Cyrea stacy*. **431)** Habitus. **432)** Phallobase ventral. **433)** Phallobase lateral. **434)** Siphon. **435)** Enlarged siphonal apex.

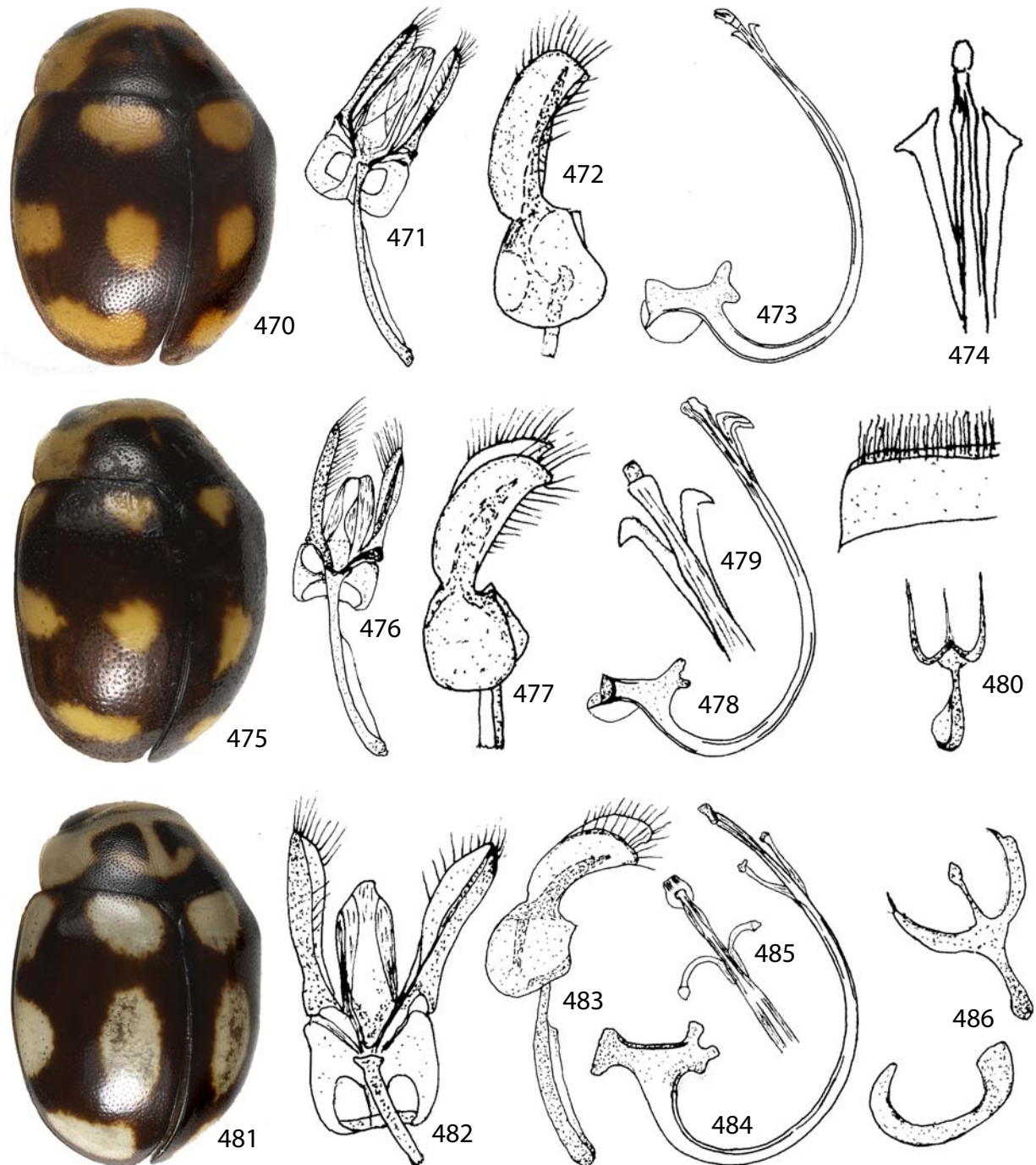




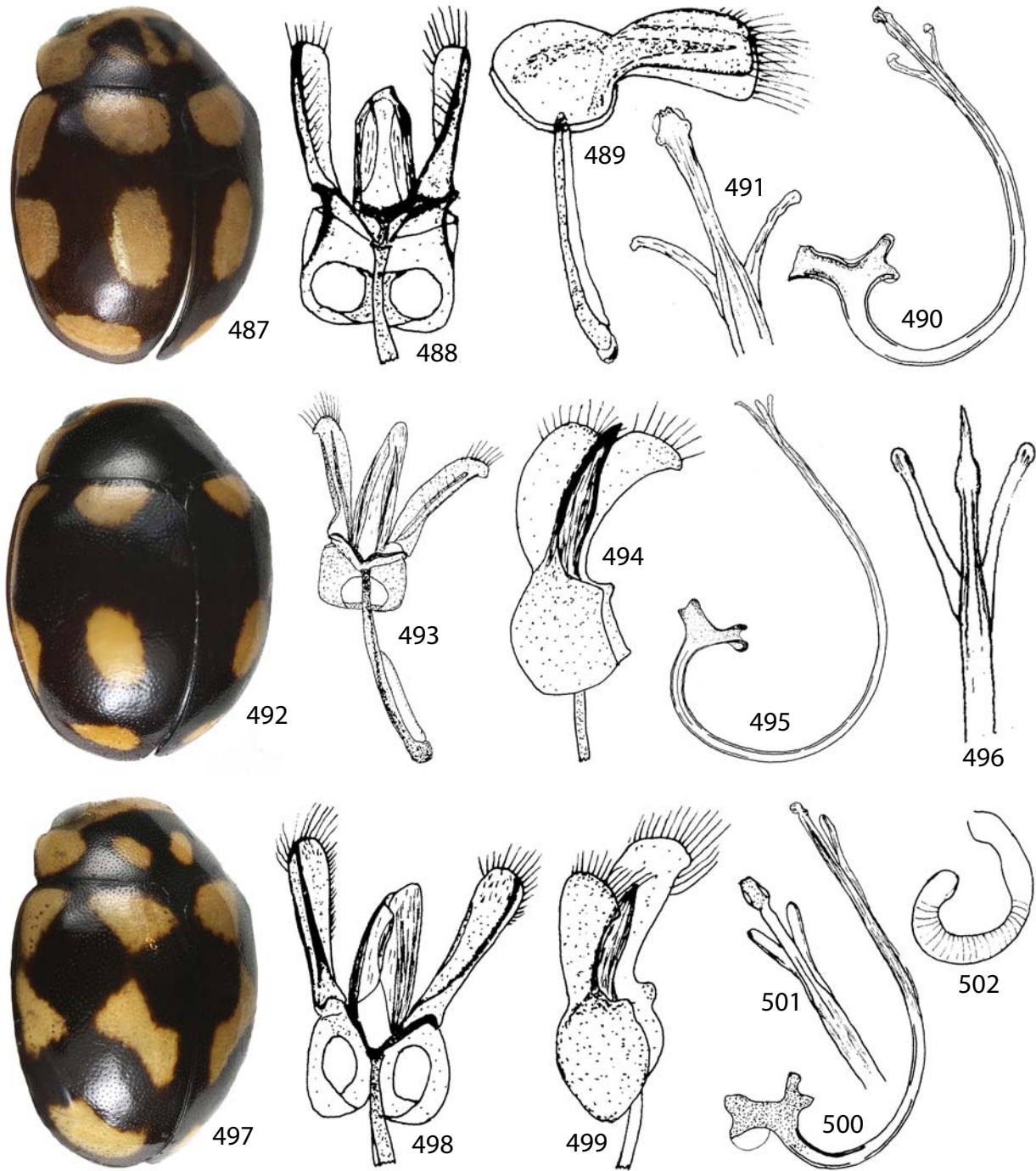
**Figures 436-452.** *Cyrea* spp. **436-440** *Cyrea ormanceayi*. **436)** Habitus. **437)** Phallobase ventral. **438)** Phallobase lateral. **439)** Siphon. **440)** Enlarged siphonal apex. **441-446** *Cyrea fasciata*. **441)** Habitus. **442)** Phallobase ventral. **443)** Phallobase lateral. **444)** Siphon. **445)** Enlarged siphonal apex. **446)** Female genitalia. **447-452** *Cyrea jeanne*. **447)** Habitus. **448)** Phallobase ventral. **449)** Phallobase lateral. **450)** Siphon. **451)** Enlarged siphonal apex. **452)** Female genitalia.



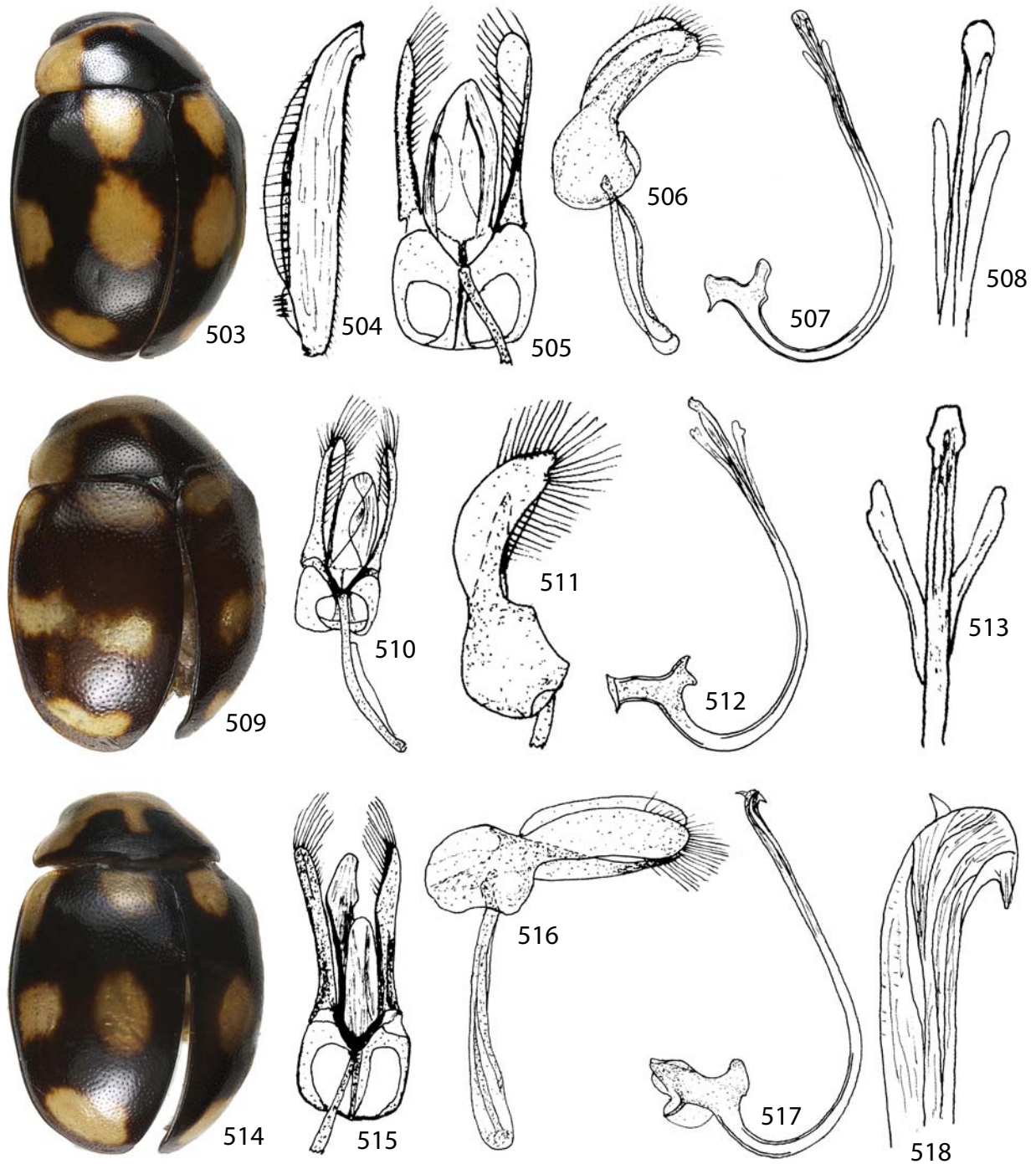
**Figures 453-469.** *Cyrea* spp. **453-458)** *Cyrea laurie*. **453)** Habitus. **454)** Phallobase ventral. **455)** Phallobase lateral. **456)** Siphon. **457)** Enlarged siphonal apex. **458)** Female bursal cap, apical strut, and spermathecal capsule. **459-464)** *Cyrea lucille*. **459)** Habitus. **460)** Phallobase ventral. **461)** Phallobase lateral. **462)** Siphon. **463)** Enlarged siphonal apex. **464)** Female genitalia. **465-469)** *Cyrea katy*. **465)** Habitus. **466)** Phallobase ventral. **467)** Phallobase lateral. **468)** Siphon. **469)** Enlarged siphonal apex.



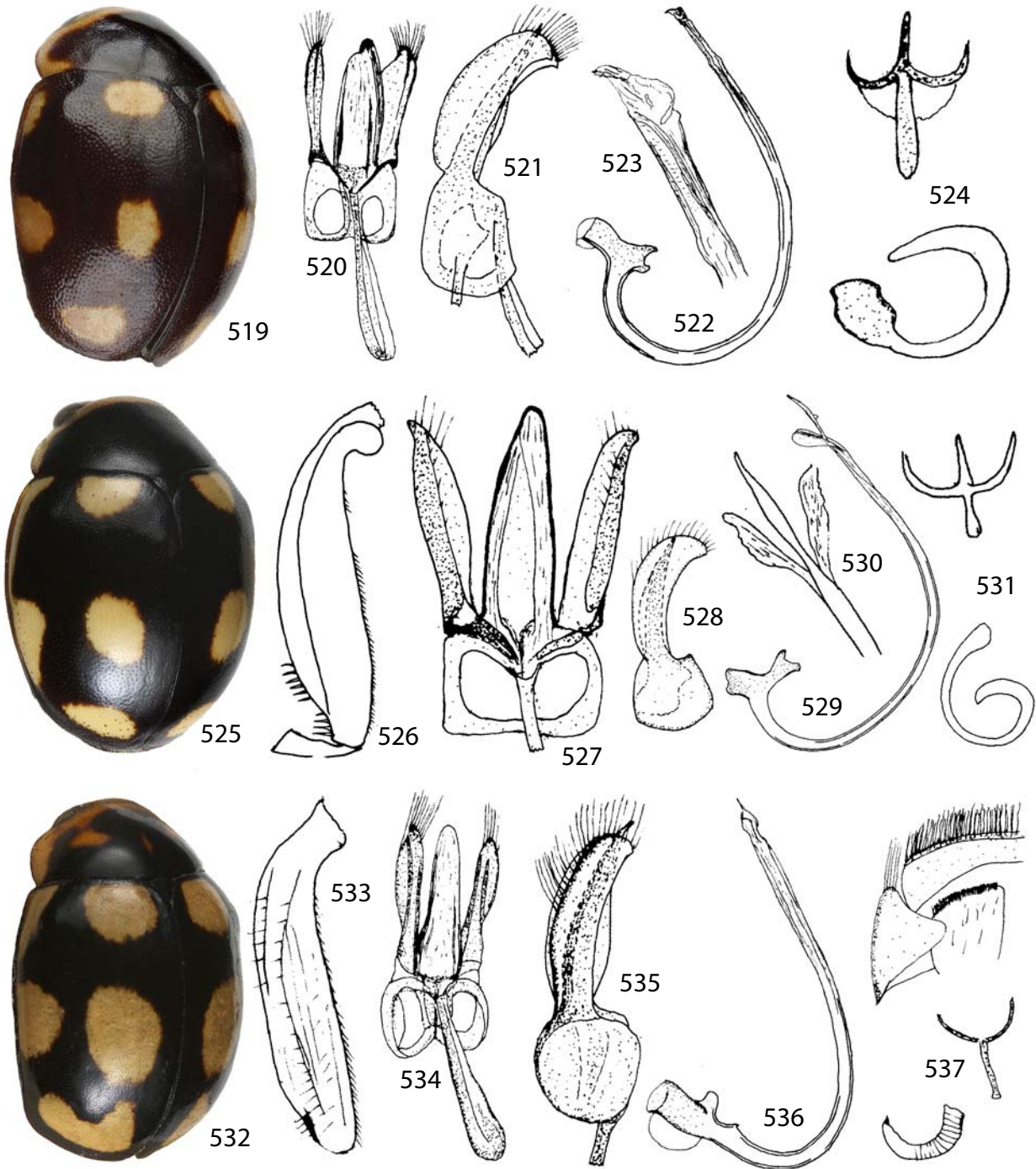
**Figures 470-486.** *Cyrea* spp. **470-474)** *Cyrea kirsten*. **470)** Habitus. **471)** Phallobase ventral. **472)** Phallobase lateral. **473)** Siphon. **474)** Enlarged siphonal apex. **475-480)** *Cyrea vanessa*. **475)** Habitus. **476)** Phallobase ventral. **477)** Phallobase lateral. **478)** Siphon. **479)** Enlarged siphonal apex. **480)** Female genitalia. **481-486)** *Cyrea alma*. **481)** Habitus. **482)** Phallobase ventral. **483)** Phallobase lateral. **484)** Siphon. **485)** Enlarged siphonal apex. **486)** Female bursal cap and apical strut, spermathecal capsule.



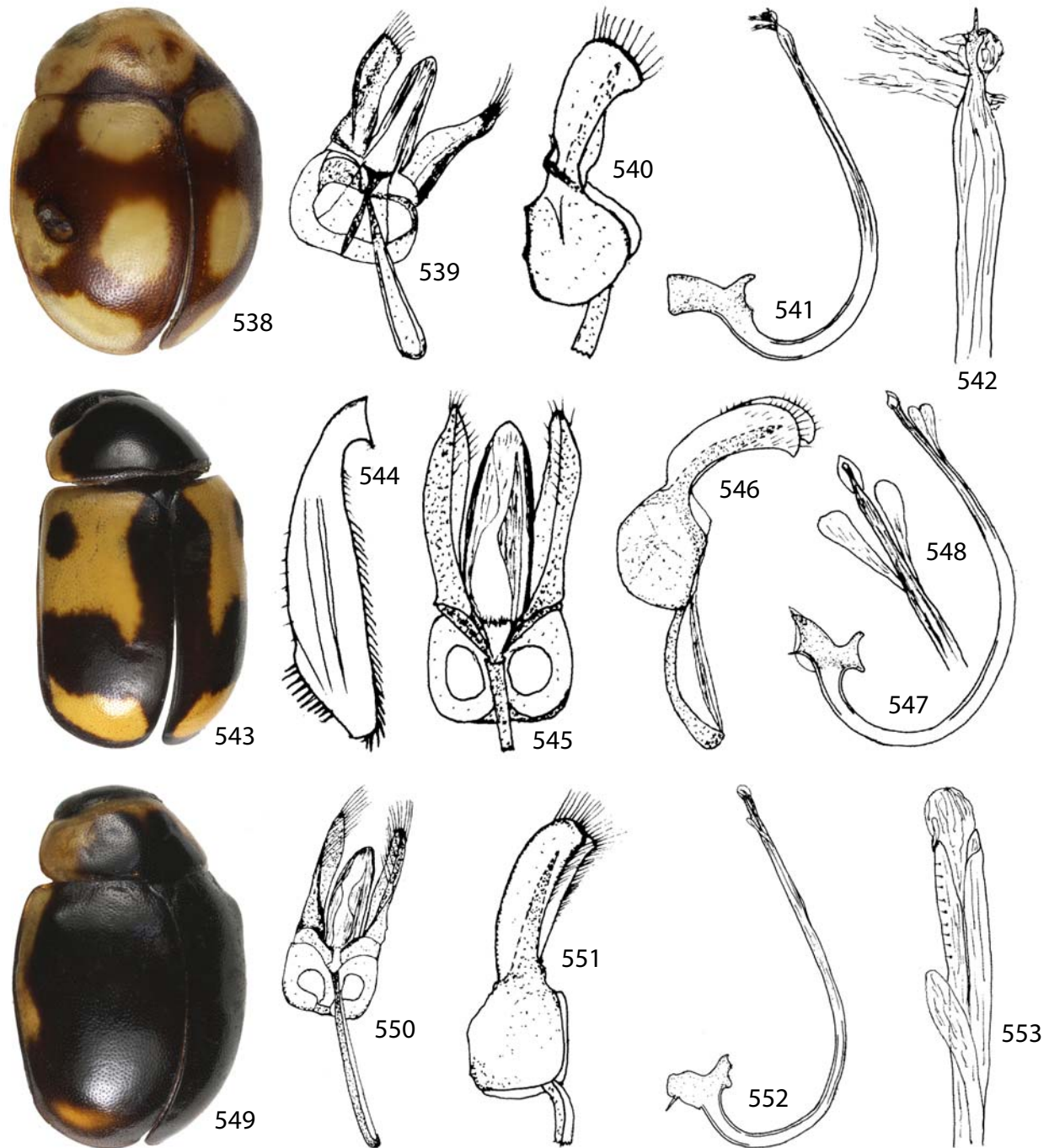
**Figures 487-502.** *Cyrea* spp. **487-491)** *Cyrea elsie*. **487)** Habitus. **488)** Phallobase ventral. **489)** Phallobase lateral. **490)** Siphon. **491)** Enlarged siphonal apex. **492-496)** *Cyrea sue*. **492)** Habitus. **493)** Phallobase ventral. **494)** Phallobase lateral. **495)** Siphon. **496)** Enlarged siphonal apex. **497-502)** *Cyrea collaris*. **497)** Habitus. **498)** Phallobase ventral. **499)** Phallobase lateral. **500)** Siphon. **501)** Enlarged siphonal apex. **502)** Female spermathecal capsule.



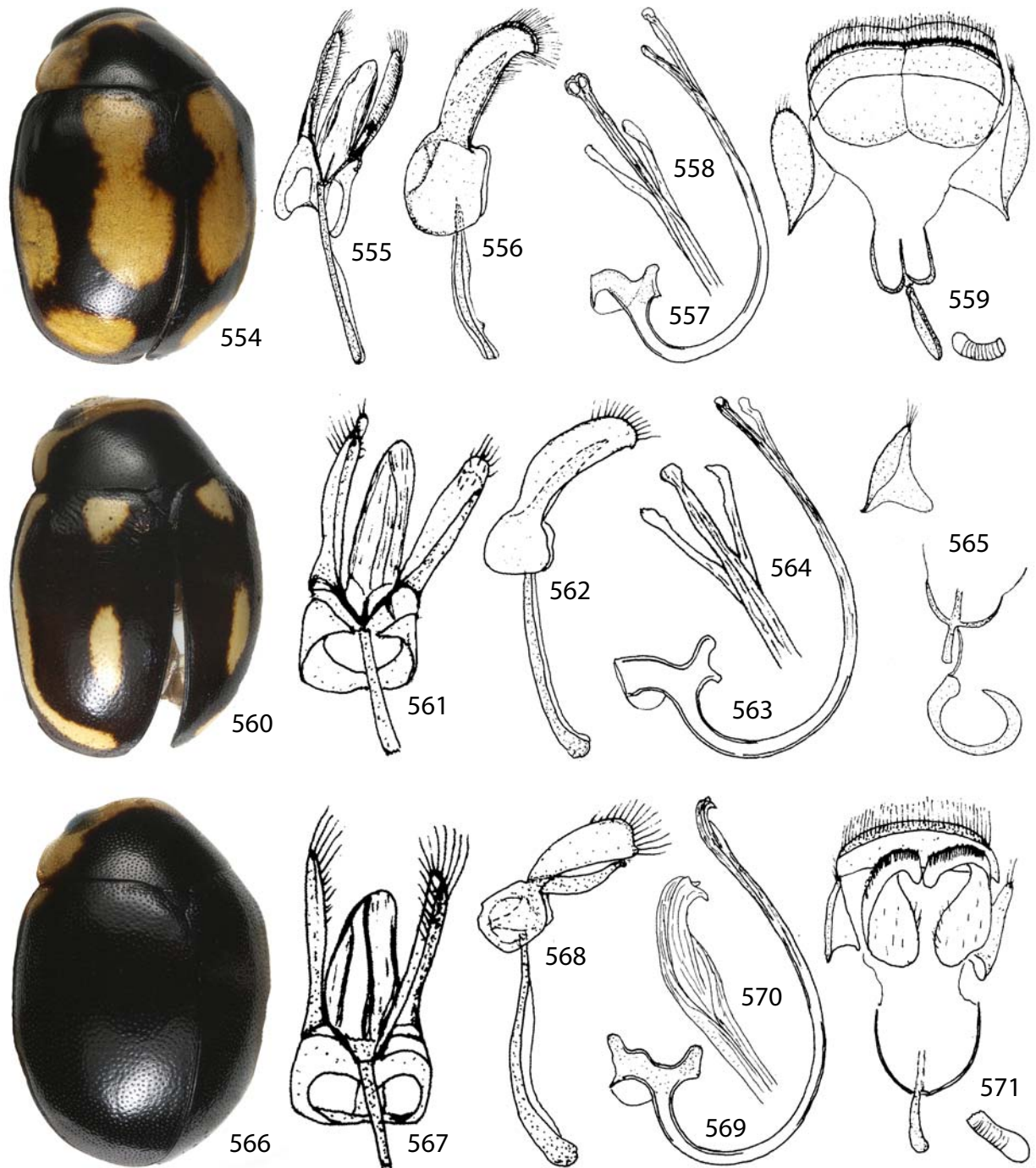
**Figures 503-518.** *Cyrea* spp. **503-508)** *Cyrea vicki*. **503)** Habitus. **504)** Protibia. **505)** Phallobase ventral. **506)** Phallobase lateral. **507)** Siphon. **508)** Enlarged siphonal apex. **509-513)** *Cyrea carla*. **509)** Habitus. **510)** Phallobase ventral. **511)** Phallobase lateral. **512)** Siphon. **513)** Enlarged siphonal apex. **514-518)** *Cyrea tara*. **514)** Habitus. **515)** Phallobase ventral. **516)** Phallobase lateral. **517)** Siphon. **518)** Enlarged siphonal apex.



**Figures 519-537.** *Cyrea* spp. **519-524)** *Cyrea rosemary*. **519)** Habitus. **520)** Phallobase ventral. **521)** Phallobase lateral. **522)** Siphon. **523)** Enlarged siphonal apex. **524)** Female bursal cap and apical strut, spermathecal capsule. **525-531)** *Cyrea flavoguttata*. **525)** Habitus. **526)** Protibia. **527)** Phallobase ventral. **528)** Phallobase lateral. **529)** Siphon. **530)** Enlarged siphonal apex. **531)** Female bursal cap and apical strut, spermathecal capsule. **532-537)** *Cyrea ferruginiceps*. **532)** Habitus. **533)** Protibia. **534)** Phallobase ventral. **535)** Phallobase lateral. **536)** Siphon. **537)** Female genitalia.

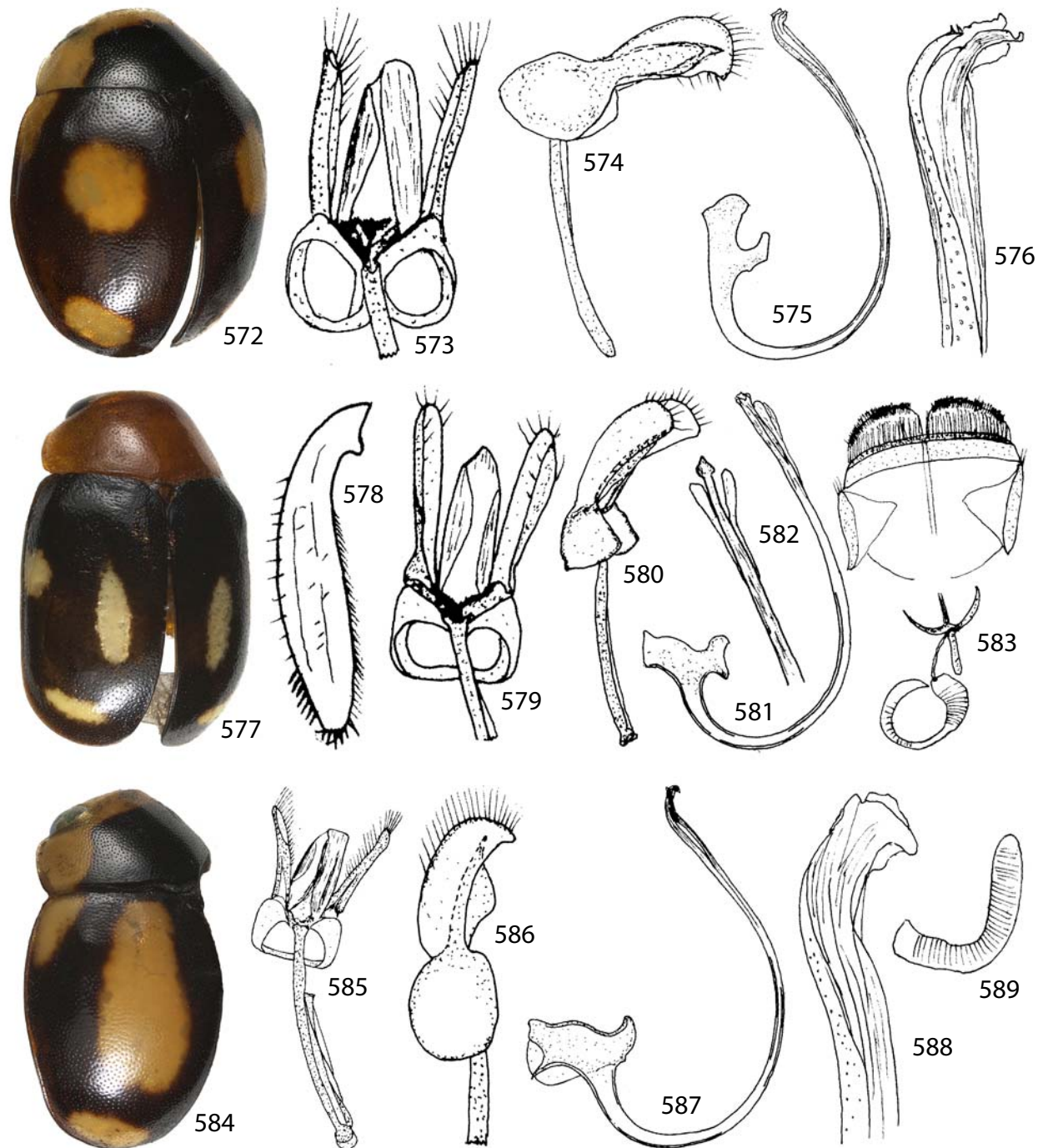


**Figures 538-553.** *Cyrea* spp. **538-542)** *Cyrea melinda*. **538)** Habitus. **539)** Phallobase ventral. **540)** Phallobase lateral. **541)** Siphon. **542)** Enlarged siphonal apex. **543-548)** *Cyrea dora*. **543)** Habitus. **544)** Protibia. **545)** Phallobase ventral. **546)** Phallobase lateral. **547)** Siphon. **548)** Enlarged siphonal apex. **549-553)** *Cyrea allison*. **549)** Habitus. **550)** Phallobase ventral. **551)** Phallobase lateral. **552)** Siphon. **553)** Enlarged siphonal apex.

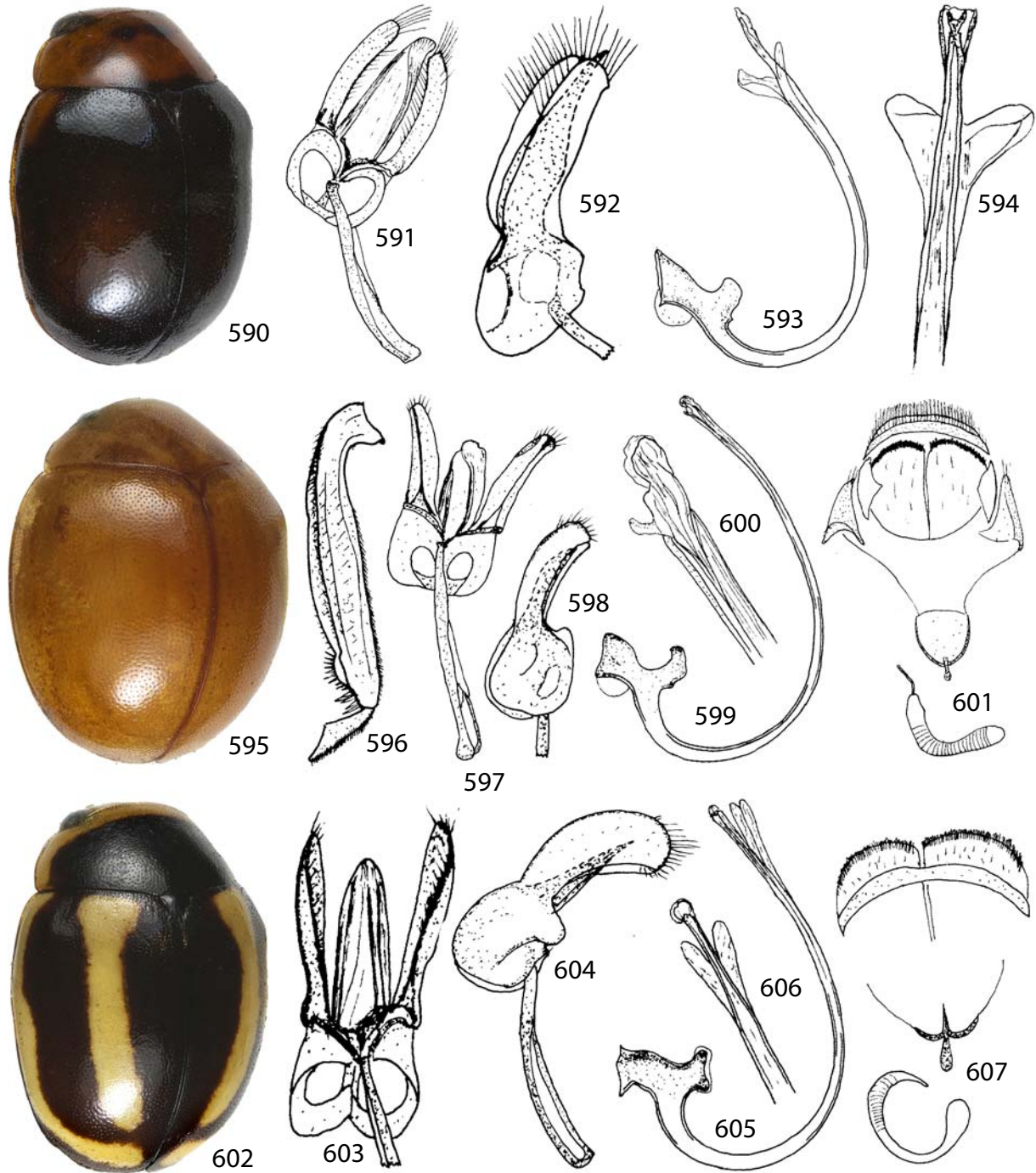


**Figures 554-571.** *Cyrea* spp. **554-559)** *Cyrea tamara*. **554)** Habitus. **555)** Phallobase ventral. **556)** Phallobase lateral. **557)** Siphon. **558)** Enlarged siphonal apex. **559)** Female genitalia. **560-565)** *Cyrea exclamatoris*. **560)** Habitus. **561)** Phallobase ventral. **562)** Phallobase lateral. **563)** Siphon. **564)** Enlarged siphonal apex. **565)** Female genitalia. **566-571)** *Cyrea joy*. **566)** Habitus. **567)** Phallobase ventral. **568)** Phallobase lateral. **569)** Siphon. **570)** Enlarged siphonal apex. **571)** Female genitalia.

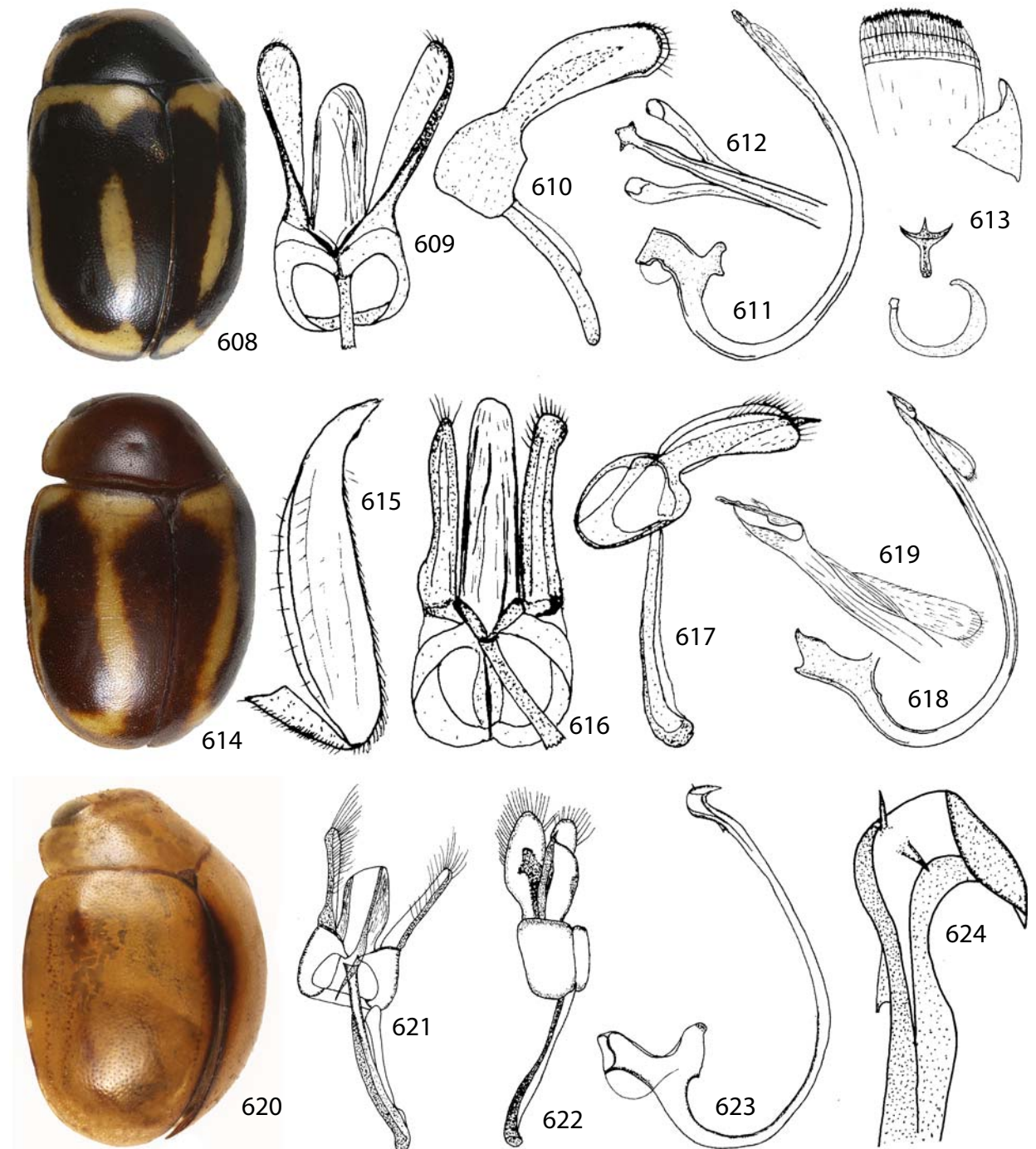




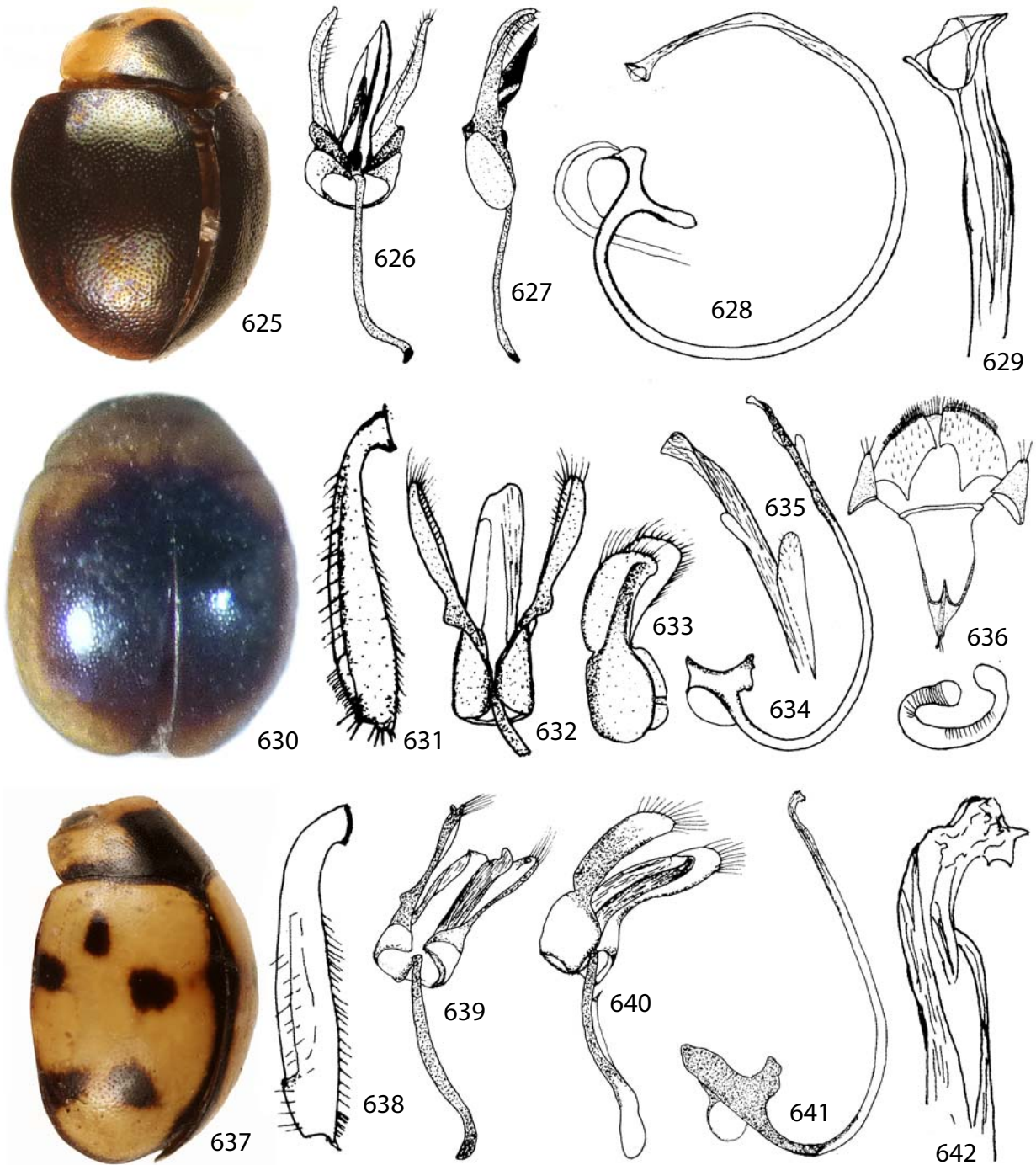
**Figures 572-589.** *Cyrea* spp. **572-576)** *Cyrea georgia*. **572)** Habitus. **573)** Phallobase ventral. **574)** Phallobase lateral. **575)** Siphon. **576)** Enlarged siphonal apex. **577-583)** *Cyrea ruizi*. **577)** Habitus. **578)** Proleg. **579)** Phallobase ventral. **580)** Phallobase lateral. **581)** Siphon. **582)** Enlarged siphonal apex. **583)** Female genitalia. **584-589)** *Cyrea constance*. **584)** Habitus. **585)** Phallobase ventral. **586)** Phallobase lateral. **587)** Siphon. **588)** Enlarged siphonal apex. **589)** Female spermathecal capsule.



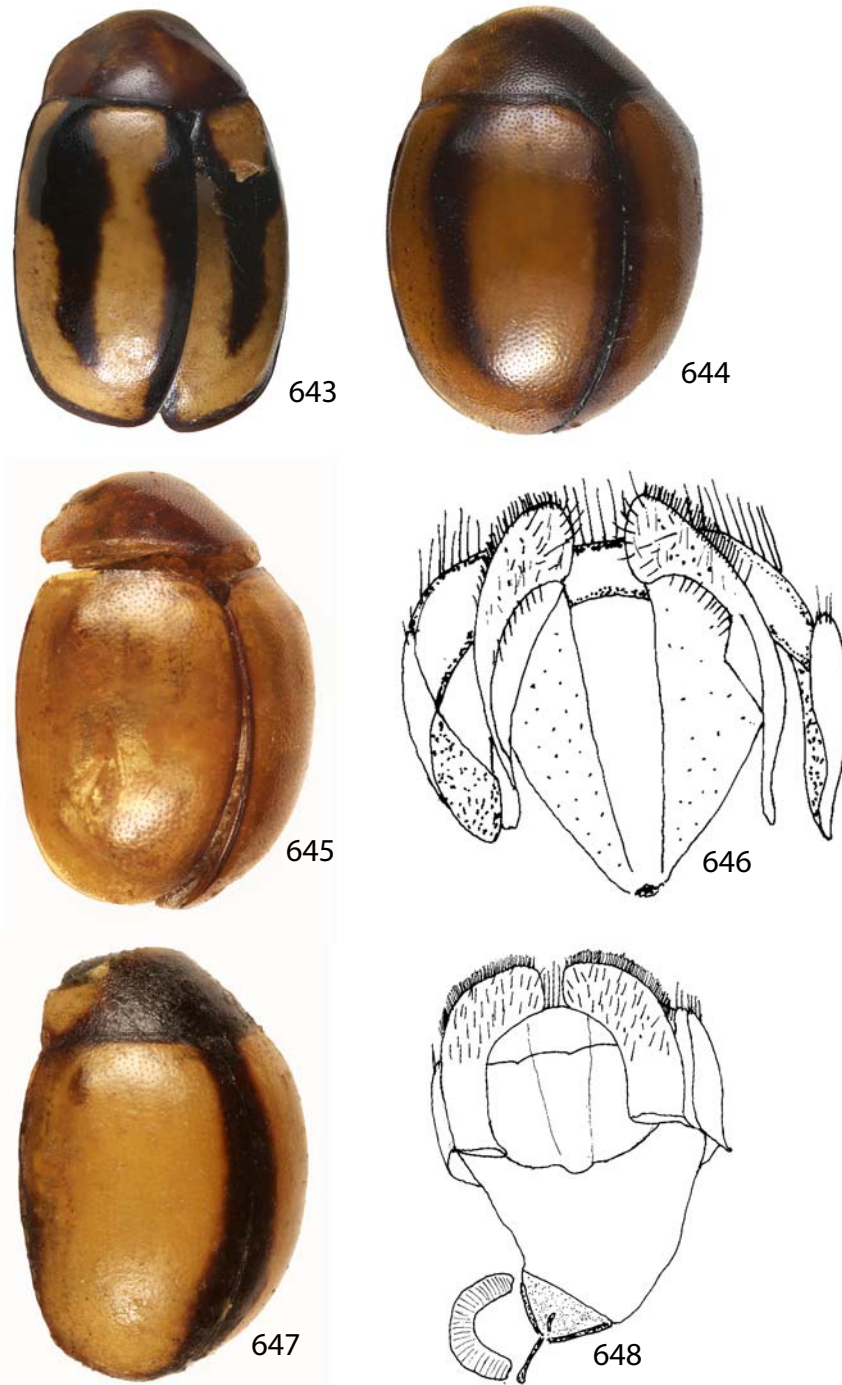
**Figures 590-607.** *Cyrea* spp. **590-594)** *Cyrea lillie*. **590)** Habitus. **591)** Phallobase ventral. **592)** Phallobase lateral. **593)** Siphon. **594)** Enlarged siphonal apex. **595-601)** *Cyrea languida*. **595)** Habitus. **596)** Protibia. **597)** Phallobase ventral. **598)** Phallobase lateral. **599)** Siphon. **600)** Enlarged siphonal apex. **601)** Female genitalia. **602-607)** *Cyrea arrowi*. **602)** Habitus. **603)** Phallobase ventral. **604)** Phallobase lateral. **605)** Siphon. **606)** Enlarged siphonal apex. **607)** Female genitalia.



**Figures 608-624.** *Cyrea* spp. **608-613)** *Cyrea courtney*. **608)** Habitus. **609)** Phallobase ventral. **610)** Phallobase lateral. **611)** Siphon. **612)** Enlarged siphonal apex. **613)** Female genitalia. **614-619)** *Cyrea marian*. **614)** Habitus. **615)** Protibia. **616)** Phallobase ventral. **617)** Phallobase lateral. **618)** Siphon. **619)** Enlarged siphonal apex. **620-624)** *Cyrea pseudospinalis*. **620)** Habitus. **621)** Phallobase ventral. **622)** Phallobase lateral. **623)** Siphon. **624)** Enlarged siphonal apex.



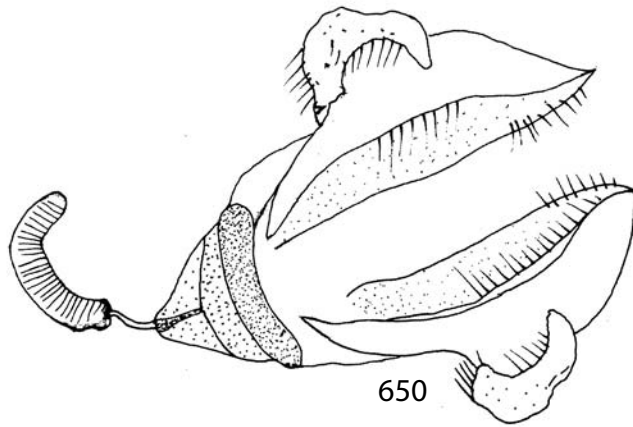
**Figures 625-642.** *Cyrea* spp. **625-629)** *Cyrea nigripennis*. **625)** Habitus. **626)** Phallobase ventral. **627)** Phallobase lateral. **628)** Siphon. **629)** Enlarged siphon apex. **630-636)** *Cyrea ustulata*. **630)** Habitus. **631)** Protibia. **632)** Phallobase ventral. **633)** Phallobase lateral. **634)** Siphon. **635)** Enlarged siphonal apex. **636)** Female genitalia. **637-642)** *Cyrea moritzi*. **637)** Habitus. **638)** Protibia. **639)** Phallobase ventral. **640)** Phallobase lateral. **641)** Siphon. **642)** Enlarged siphonal apex.



**Figures 643-648.** *Cyrea* spp. **643-644)** *Cyrea lucy*. **643)** Habitus. *Cyrea trina*. **644)** Habitus. **645-646)** *Cyrea suturella*, **645)** Habitus. **646)** Female genitalia. **647-648)** *Cyrea emmae*. **647)** Habitus. **648)** Female genitalia.



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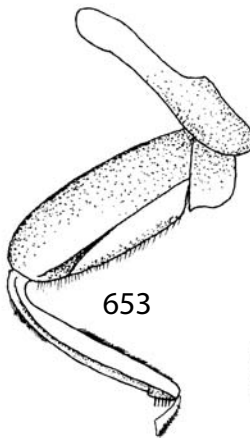
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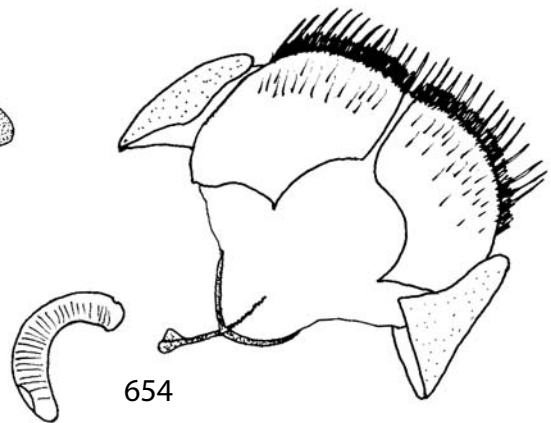
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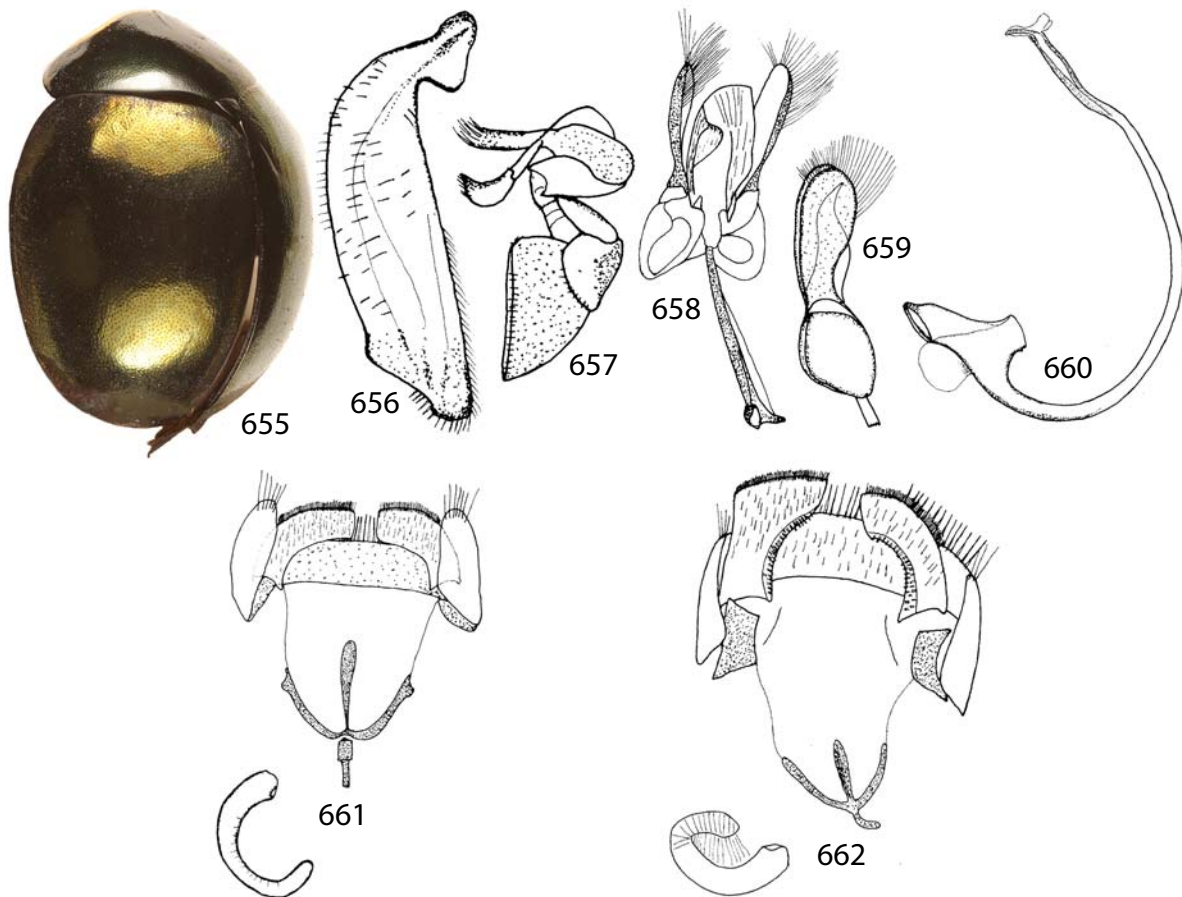


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**Figures 649-654.** *Cyrea* spp. **649-650)** *Cyrea octupla*. **649)** Habitus. **650)** Female genitalia. **651)** *Cyrea flavocalceata*. **651)** Habitus. **652-654)** *Cyrea sexguttata*. **652)** Habitus. **653)** Proleg. **654)** Female genitalia.



**Figures 655-662.** *Tiphysa* spp. **655-661)** *Tiphysa plumbea* **655)** Habitus. **656.** Protibia. **657)** Maxilla. **658)** Phallobase ventral. **659)** Phallobase lateral. **660)** Siphon. **661).** Female genitalia. **662)** *Tiphysa egae* **662)** Female genitalia.