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A Revision of the Spider Genus *Eilica* (Araneae, Gnaphosidae)

NORMAN I. PLATNICK[1]

ABSTRACT

The 12 known species of *Eilica* are diagnosed and described. The genera *Laronia* Simon, *Gnaphosoides* Hogg, and *Caridrassus* Bryant are newly synonymized with *Eilica*. The genus is newly recorded from Jamaica, Honduras, Panama, Chile, and South Africa. The existence of a significant Australian fauna is established with the transfer of one species from *Gnaphosoides* and the description of three others. Five specific names are newly synonymized: *variegata* (Simon) and *maculipes* (Vellard), both with *modesta* Keyserling, and *purpusi* (Roewer), *reynosana* (Gertsch and Davis), and *wheeleri* (Bryant), all with *bicolor* Banks. *Eilica trilineata* (Mello-Leitão) is removed from the synonymy of *variegata* and considered a valid species. Five new species are described: *chickeringi* from Panama, *fusca* from South Africa, and *contacta*, *rotunda*, and *serrata* from Australia.

INTRODUCTION

The present paper, the third in a series on the spider family Gnaphosidae, is concerned with the small but widespread genus *Eilica* and its synonyms, *Laronia*, *Gnaphosoides*, and *Caridrassus*. Although many of the species treated here were covered in a revision of *Laronia* by Gerschman and Schiapelli (1967), information provided by additional specimens has necessitated a reexamination of the genus, resulting in numerous taxonomic changes and a much fuller understanding of the distribution of the taxa involved.

Eilica may be easily recognized by the presence of two or three translucent laminae on the cheliceral retromargin (figs. 1, 2). These laminae closely resemble the single lamina found in *Callilepis*, with which *Eilica* are occasionally confused. Unlike most other gnaphosids, the chelicerae are anteriorly produced and extend considerably beyond the edge of the carapace. The endites are strongly convergent and the abdomen often has an unusually distinct pattern of light and dark areas (figs. 3-7). The male palpi are unique in that the base of the embolus is inserted in a cuplike sclerite (fig. 8) that is presumably homologous to the well-developed conductor of *Callilepis*. The ancestors of *Eilica* may have passed through a stage similar to that of present-day *Callilepis* in which the long, coiled embolus is supported apically by a conductor which almost entirely surrounds it. A proximal shift of

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the conductor could then conceivably produce the envelopment of the embolar base typical of *Eilica*.

Although the synonymy of *Laronia* Simon (1892) with *Eilica* Keyserling (1891) was suspected by early arachnologists (Simon indicated this probable synonymy [1897, p. 176] and Banks [1896, p. 60] correctly placed his Florida species in *Eilica*), more recent workers have inexplicably continued to use the later name. The type specimen of *Eilica modesta*, type species of the genus, which should be in the British Museum (Natural History), is lost and probably destroyed. As Keyserling's illustrations (1891, pl. 1, figs. 9, 9a, 9b), however, leave no doubt about the generic, if not the specific, placement of his species, relegation of *Eilica* to the status of a *nomen dubium* is unacceptable. Instead, as available collections indicate that only one species occurs in southeastern Brazil (the type locality of *modesta*), I have assigned that species (subsequently described, apparently, by both Simon, 1892, and Vellard, 1925) to *modesta*. Although designation of a neotype might help to stabilize the generic name, the distinct possibility that subsequent collecting may reveal additional species from the area of the type locality renders this approach undesirable.

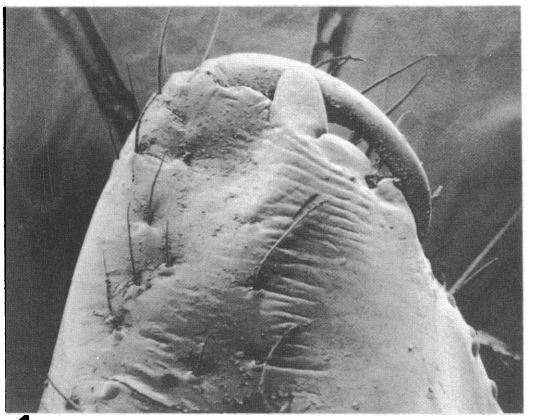
At the time of Gerschman and Schiapelli's (1967) revision, *Laronia* was known only from North and South America and Sierra Leone. This African record, based on a single poorly labeled specimen in the Simon collection, was suspect. The description below of a further species, *fusca*, from the Cape province of South Africa confirms the presence of the group in Africa and indicates that additional species probably await discovery in other areas of that continent.

The discovery of Australian specimens belonging to *Eilica* and the subsequent search for synonyms among the described Australian Gnaphosidae brought to light a curious case of homonymy. Most of the Australian gnaphosid genera were described in the last century and are poorly illustrated; of these, only *Gnaphosoides* Hogg appeared similar to *Eilica*. The catalogues of Bonnet (1957) and Roewer (1954) each listed two species of *Gnaphosoides, albopunctata* Hogg (1896) and *signata* Hogg (1900). The types of these two species belong to two unrelated genera; only *albopunctata* belongs to *Eilica*. Each of Hogg's species descriptions is preceded by a description of a new genus, and it is apparent that when describing a new genus for *signata* in 1900, Hogg inadvertently used the same name he had used for a new gnaphosid genus in 1896. *Gnaphosoides* thus falls in synonymy to *Eilica*, and a new name is needed for the later genus. As *signata* has been introduced in New Zealand, a replacement name will be established in a forthcoming volume of R. R. Forster's "Spiders of New Zealand."

With most of the species known from only one sex, a detailed analysis of their phylogeny is not possible; some observations, however, are suggested by the available data. Both the most divergent somatic forms (*serrata* with two rather than three cheliceral laminae; *albopunctata* and *rotunda* with a strongly procurved anterior eye row) and the simplest, and presumably most primitive, genitalic forms (the palp of *albopunctata*; the epigynum of *rotunda*) are found among the Australian species. A hypothesis that the genus originated in Australia, or at least that the Australian species are the oldest of those now extant, could account for this combination of primitive and derived characters. Such a hypothesis is supported by the fact that the two closely related African species show great genitalic affinities with such American species as *bicolor* and *uniformis*, but no such affinities with known Australian forms.

Format of the descriptions follows that of Platnick and Shadab (1975). Only differences from the general somatic pattern, including the leg spination, are noted in the species descriptions.

In addition to the curators listed below, I am deeply indebted to several of my colleagues for their assistance. Drs. B. H. Lamoral of the Natal Museum and R. R. Forster of the Otago Museum kindly (though unsuccessfully) searched their respective gnaphosid collections for *Eilica* specimens. Mr. F. R. Wanless of the British Museum (Natural History) lent the types of *Gnaphosoides signata*. Dr. V. R. von Eickstedt of the Instituto Butantan and Drs. O. Blanco and S. Coscarón of the Museo de La Plata searched unsuccessfully for the types of *Laronia maculipes* Vellard and *L. trilineata* Mello-Leitão, respectively. Drs. B. S.



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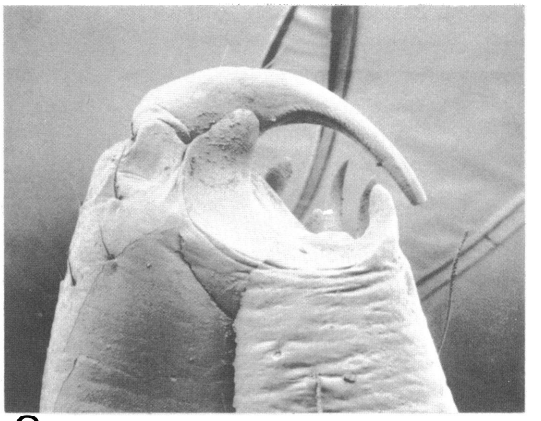

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FIGS. 1, 2. Posterior views of chelicerae, scanning electron micrographs, 280×. 1. *Eilica bicolor* Banks. 2. *E. serrata*, new species.

Gerschman de Pikelin and R. D. Schiapelli kindly allowed me to study some of the material on which their revision of *Laronia* was based. Mr. O. F. Francke of Arizona State University arranged for a loan from the Museu Nacional do Rio de Janeiro. Drs. H. W. Levi and W. J. Gertsch provided helpful advice on nomenclatural matters, and Dr. P. Wygodzinsky of the American Museum of Natural History provided invaluable help with South American correspondence, literature, and localities. The scanning electron micrographs were obtained with the assistance of Mr. R. J. Koestler of the American Museum of Natural History on a Cambridge Scientific Instruments Model S-4 purchased with the aid of a grant from the National Science Foundation.

Abbreviations

AMNH, the American Museum of Natural History
CAS, California Academy of Sciences, Dr. R. X. Schick
CJAB, personal collection, Dr. J. A. Beatty
FSCA, Florida State Collection of Arthropods, Dr. H. V. Weems, Jr.
MACN, Museo Argentino de Ciencias Naturales, Drs. B. S. Gerschman de Pikelin and R. D. Schiapelli
MCZ, Museum of Comparative Zoology, Dr. H. W. Levi
MNHN, Muséum National d'Histoire Naturelle, Dr. M. Hubert
MNRJ, Museu Nacional do Rio de Janeiro, Dr. A. Timotheo da Costa
MSU, Michigan State University, Dr. R. J. Sauer
NMS, Natur-Museum und Forschungs-Institute Senckenberg, Dr. M. Grasshoff
NMV, National Museum of Victoria, Mr. A. Neboiss

Abbreviations of morphological terms follow those used in Platnick and Shadab (1975).

Eilica Keyserling

Eilica Keyserling, 1891, p. 29 (type species by monotypy *Eilica modesta* Keyserling). Roewer, 1954, p. 421. Bonnet, 1956, p. 1649.

Laronia Simon, 1892, p. 437 (type species, designated by Simon, 1893a, p. 379, *Laronia rufithorax* Simon). Roewer, 1954, p. 381. Bonnet, 1957, p. 2352. NEW SYNONYMY.

Gnaphosoides Hogg, 1896, p. 332 (type species by monotypy *Gnaphosoides albopunctata* Hogg). Roewer, 1954, p. 473. Bonnet, 1957, p. 2023. NEW SYNONYMY.

Caridrassus Bryant, 1940, p. 392 [type species by original designation *Caridrassus wheeleri* Bryant (=*Eilica bicolor* Banks)]. Roewer, 1954, p. 411. NEW SYNONYMY.

Diagnosis. Eilica may be easily recognized by the two or three translucent laminae found on

the cheliceral retromargin (figs. 1, 2). The only genus with which *Eilica* could be confused is *Callilepis*, specimens of which have only one cheliceral lamina (Platnick, 1975, fig. 3). The anteriorly produced chelicerae and convergent endites are also diagnostic of *Eilica*.

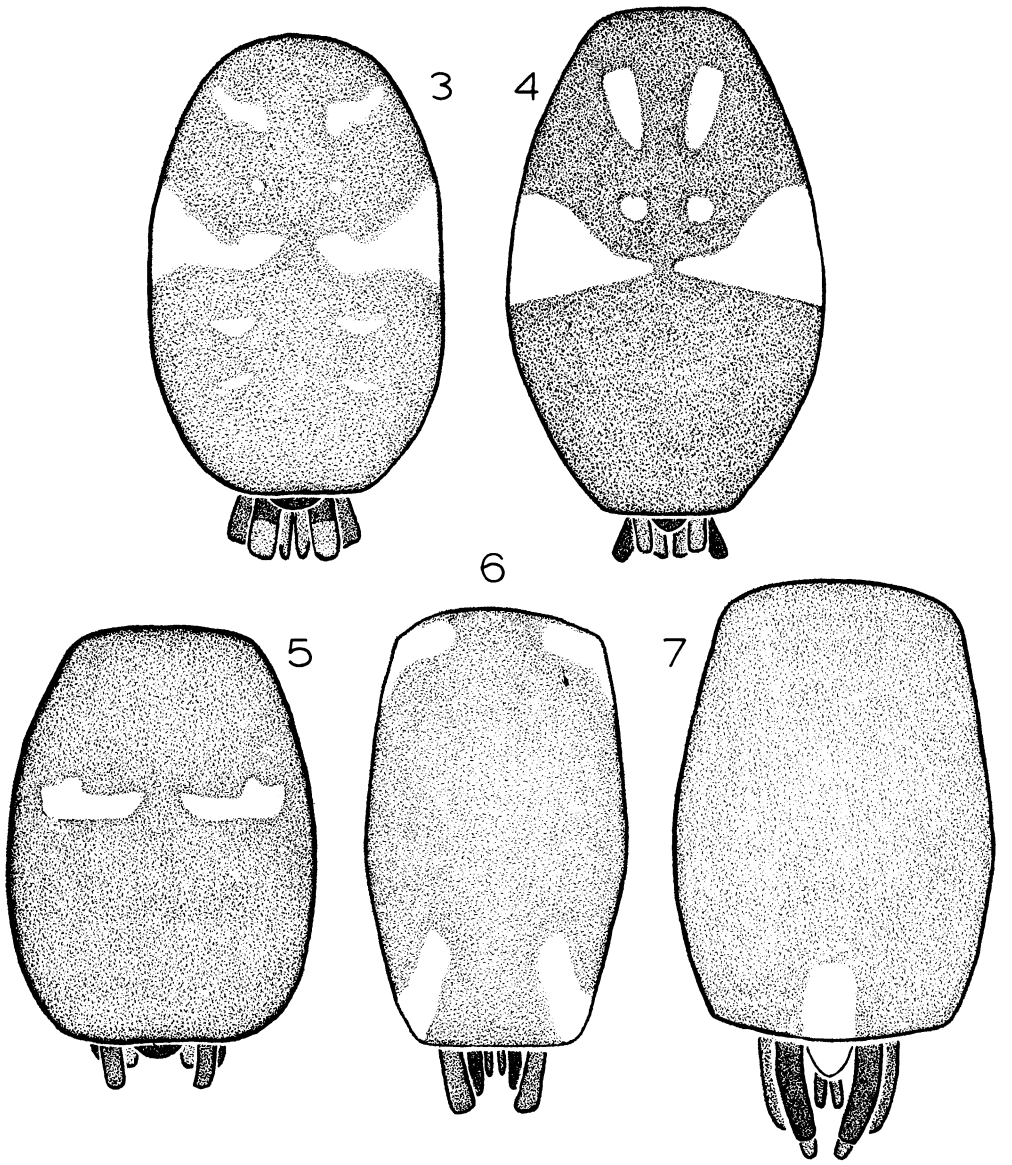
Description. Total length 2.2-7.8 mm. Carapace oval in dorsal view, widest at coxae II, flattened, narrowed anteriorly, light orange to dark brown. Cephalic area not elevated; thoracic groove short, longitudinal. From front, anterior eye row usually only slightly procurved, posterior row slightly recurved. PME irregularly rectangular, other eyes circular. Lateral eyes larger than medians. AME separated by their diameter, by their radius from ALE. PME separated by twice their diameter, by their diameter from PLE. MOQ wider in back than in front and than long. Clypeal height equal to AME diameter. Chelicerae each with two (*serrata*, fig. 2) or three (fig. 1) translucent laminae on retromargin, produced anteriorly in front of carapace. Endites long, strongly convergent; anterior edge with lateral keel and median serrula. Labium elongate, spear-shaped. Sternum rounded, strongly bordered, not extending between coxae IV. Leg formula 4123. Typical leg spination (only surfaces bearing spines listed): femora: I, II d1-1-0, p0-0-1; III d1-1-0, p0-0-1, r0-0-1; IV d1-1-0, r0-0-1; tibiae: I v1-2-2; II v1-1-2; III p1-0-1, v2-2-2, r0-1-1; IV p1-0-1, v1-1-2, r1-1-1; metatarsi: I, II v2-0-2; III p0-0-1, v2-0-2, r0-0-1; IV p0-0-1, v2-0-2, r0-1-1. Tarsi with two dentate claws and claw tufts. Tarsal scopulae and metatarsal preening comb lacking. Tibiae, metatarsi, and tarsi with dorsal trichobothria. Trochanters not notched. Abdomen light brown to black, longer than wide, with shiny anterior scutum in males and often distinct pattern of light spots. Six spinnerets, anteriors widely separated with three spigots. Palp with long, curving embolus, cuplike conductor containing embolar base, short, curved median apophysis inset in unsclerotized base, and broad tegulum. Retrolateral tibial apophysis simple, spikelike. Epigynum usually with anterior and lateral margins and posterior V-shaped bar; spermathecae globose, with coiled ducts.

Synonymy. It is evident from Keyserling's illustrations (1891, pl. 1, figs. 9, 9a, 9b) of the endites and male palpus that *Eilica modesta* is congeneric with *Laronia rufithorax*. *Gnaphosoides albopunctata* has the cheliceral laminae and cuplike palpal conductor typical of the American forms. *Caridrassus wheeleri* is merely a junior synonym of *Eilica bicolor*. Further comments on these synonymies are in the Introduction.

Misplaced Species. Neither *Gnaphosoides signata* Hogg (1900) nor *Caridrassus magnus* Bryant (1948) have the cheliceral laminae characteristic of *Eilica*. Palpal structure indicates that the latter species belongs to the *Herpyllus-Poecilochroa* complex.

KEY TO SPECIES OF *EILICA*

1. Males 2
   Females 7
2. Protruding portion of embolar base serrate (fig. 32) . . . . . *serrata*
   Protruding portion of embolar base not serrate 3
3. Embolus relatively short, with long protruding spine at base (fig. 28); Australia . . . . . *albopunctata*
   Embolus relatively long, without long protruding spine at base (figs. 8, 12, 16, 20); America 4
4. Protruding portion of embolar base twisted (figs. 8, 12); South America 5
   Protruding portion of embolar base not twisted (figs. 16, 20); North and Central America 6
5. Retrolateral tibial apophysis relatively long (fig. 9) . . . . . *modesta*
   Retrolateral tibial apophysis relatively short (fig. 13) . . . . . *rufithorax*
6. Embolus with large shield, relatively short (fig. 16) . . . . . *chickeringi*
   Embolus without large shield, relatively long (fig. 20) . . . . . *bicolor*
7. Anterior epigynal margin reduced to small hood (fig. 34) . . . . . *contacta*
   Anterior epigynal margin not reduced to small hood 8
8. Anterior epigynal margin relatively short (figs. 10, 14) 9
   Anterior epigynal margin relatively long (figs. 18, 22, 24, 26, 30) 10
9. Anterior epigynal margin acutely curved (figs. 10, 11) . . . . . *modesta*



FIGS. 3-7. Abdominal patterns, dorsal views. 3. *Eilica modesta* Keyserling. 4. *E. rufithorax* (Simon). 5. *E. chickeringi*, new species. 6. *E. albopunctata* (Hogg). 7. *E. serrata*, new species.

Anterior epigynal margin rounded (figs. 14, 15) . . . . . *trilineata*

10. Anterior epigynal margin semicircular (fig. 30) . . . . . *rotunda*
Anterior epigynal margin not semicircular 11

11. Spermathecae approximate (fig. 26) . . *fusca*
Spermathecae separated 12

12. Lateral margins of epigynum straight (fig. 18) . . . . . *uniformis*

Lateral margins of epigynum sinuous . . . 13
13. Anterior epigynal margin anteriorly expanded at middle (fig. 22) . . . . . *bicolor*
Anterior epigynal margin not anteriorly expanded at middle (fig. 24) . . . . . *cincta*

Eilica modesta Keyserling
Figures 3, 8-11; Map 1

Eilica modesta Keyserling, 1891, p. 30, pl. 1, figs. 9, 9a, 9b (male holotype from Blumenau, Santa Catarina, Brazil, lost). Roewer, 1954, p. 421. Bonnet, 1956, p. 1650.

Laronia variegata Simon, 1892, p. 458, fig. 30 (female holotype from Uruguay, no specific locality, in MNHN, examined). Roewer, 1954, p. 381. Bonnet, 1957, p. 2353. Gerschman and Schiapelli, 1967, p. 202, figs. 5-8, 21-24 (in part; Uruguay records only). NEW SYNONYMY.

Laronia maculipes Vellard, 1925, p. 80, pl. 16 (two male and two female syntypes from Instituto de Butantan, São Paulo, Brazil, lost). Roewer, 1954, p. 381. Bonnet, 1957, p. 2352. Gerschman and Schiapelli, 1967, p. 198. NEW SYNONYMY.

Laronia uniformis (misidentification): Gerschman and Schiapelli, 1967, p. 201, figs. 13-16 (in part; male "allotype" only).

Diagnosis. Eilica modesta is closest to *trilineata* but may be distinguished by the twisted embolar base (fig. 8) and the acutely curved anterior epigynal margin (fig. 10).

Male. Total length 2.28, 2.66 mm. Carapace 1.09, 1.25 mm. long, 0.83, 0.97 mm. wide. Femur II 0.65, 0.83 mm. long (two specimens). Carapace light orange; abdominal pattern similar to that of *chickeringi* (fig. 5) but with posteromedian rounded white spot; femora and tibiae dark brown, metatarsi and tarsi light brown. Eye sizes and interdistances (mm.): AME 0.04, ALE 0.06, PME 0.05, PLE 0.06; AME-AME 0.05, AME-ALE 0.03, PME-PME 0.05, PME-PLE 0.05, ALE-PLE 0.07. MOQ length 0.14 mm., front width 0.13 mm., back width 0.16 mm. Protruding portion of embolar base twisted (fig. 8); retrolateral tibial apophysis long, bent near midpoint (fig. 9). Leg spination: tibiae: I v1-1-2; III r1-0-1; IV v1-2-2; metatarsus IV p1-0-1, r1-0-2.

Female. Total length 4.28, 6.88 mm. Carapace 1.94, 2.27 mm. long, 1.55, 1.75 mm. wide. Femur II 1.19, 1.35 mm. long (two specimens). Carapace as in male; abdominal pattern as in figure 3; legs uniformly orange. Eye sizes and interdistances (mm.): AME 0.05, ALE 0.08, PME 0.07, PLE 0.07; AME-AME 0.08, AME-ALE 0.03, PME-PME 0.12, PME-PLE 0.09, ALE-PLE 0.10. MOQ length 0.19 mm., front width 0.19 mm., back width 0.26 mm. Anterior epigynal margin acutely curved (fig. 10); ducts gently coiled (fig. 11). Leg spination: femur IV p0-0-1; tibiae: I, II v2-2-2; III r1-1-1; IV v2-2-2; metatarsi: I v1-3-2; II p0-0-1, v2-4-2; III v2-2-2; IV v1-5-3, r0-0-1.

Material Examined. **Argentina**: *Misiones*: Puerto Igazú, Nov., 1959 (Schiapelli and De Carlo, MACN), 1♂. **Brazil**: *Minas Gerais*: Diamantina, Dec., 1944 (E. Cohn, AMNH), 1♀. **Uruguay**: *Rocha*: Rocha, Nov. 21, 1962 (San Martin, MACN), 1♂.

Distribution. Southeastern Brazil, northeastern Argentina, and Uruguay (map 1).

Synonymy. The epigynum of the female from Minas Gerais, Brazil, is indistinguishable from that of the holotype of *variegata* from Uruguay; Vellard's illustration of the epigynum of *maculipes*, although printed upside down, agrees well with these specimens. The illustrations of *modesta* and *maculipes* palpi also agree with the available males from Argentina and Uruguay.

Eilica trilineata (Mello-Leitão)
new combination
Figures 14, 15; Map 1

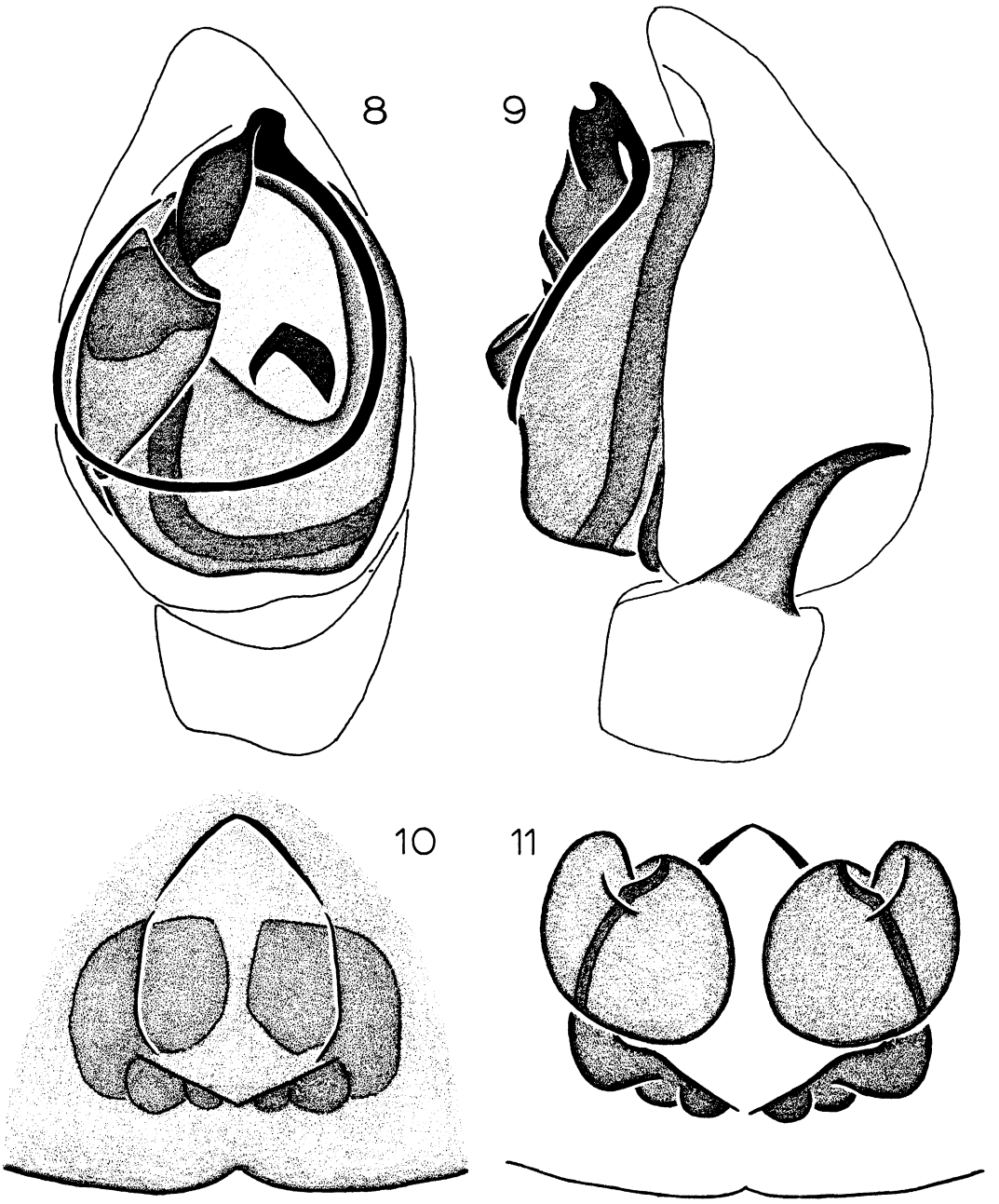
Laronia trilineata Mello-Leitão, 1941, p. 173, fig. 63 (female holotype from Alemania, Salta, Argentina, lost). Roewer, 1954, p. 381.

Laronia variegata (misidentification): Gerschman and Schiapelli, 1967, p. 202 (in part; some females only).

Diagnosis. Eilica trilineata is closest to *modesta* but may be distinguished by the rounded anterior epigynal margin (fig. 14).

Male. Unknown.

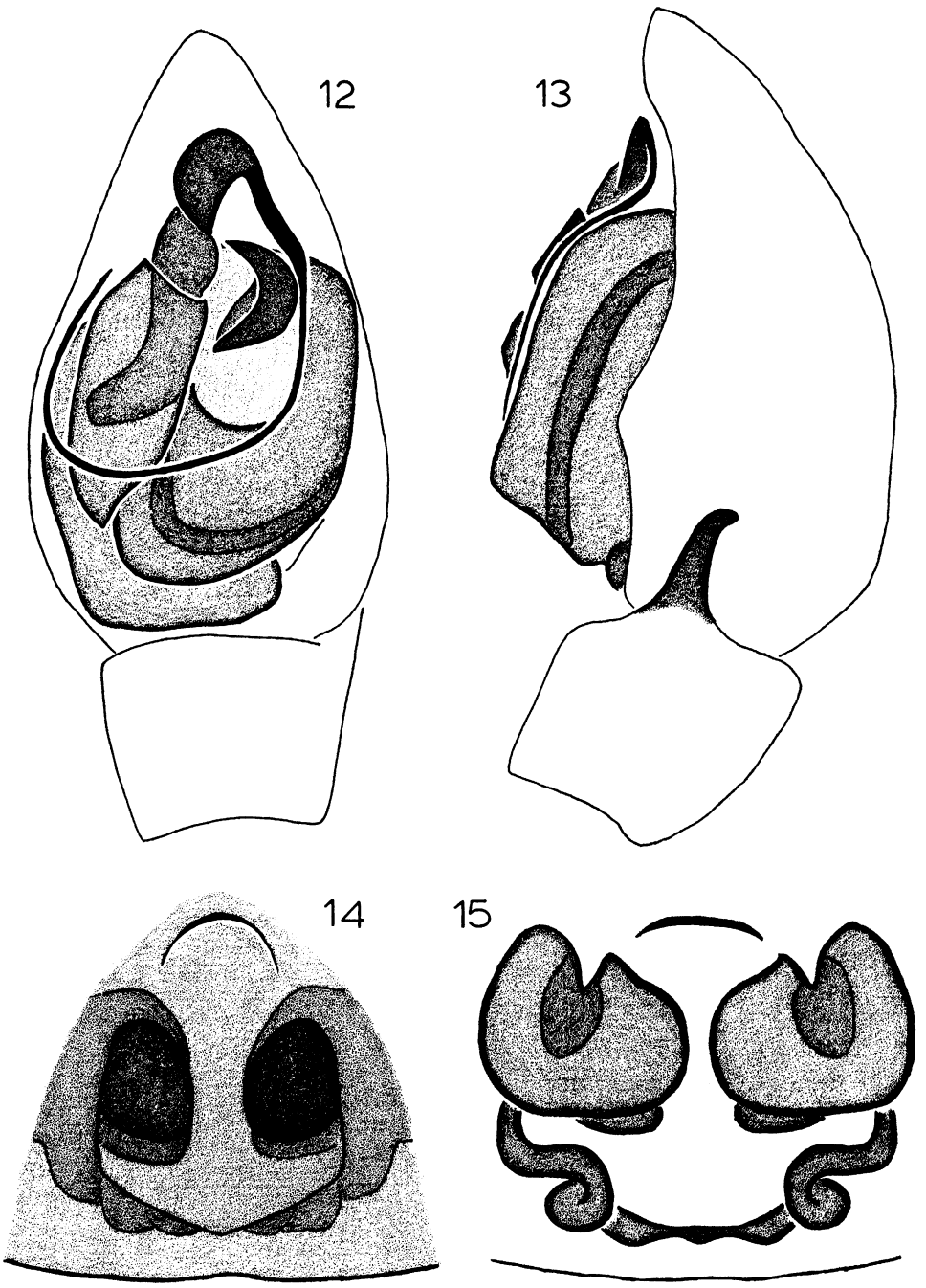
Female. Total length 3.64-6.44 mm. Carapace 1.68-2.38 mm. long, 1.15-1.69 mm. wide. Femur II 0.96-1.33 mm. long (six specimens). Carapace dark brown; abdomen gray, without pattern or with four vaguely indicated paramedian light spots; proximal leg segments dark brown, distal segments lighter. Eye sizes and interdistances (mm.): AME 0.05, ALE 0.10, PME 0.07, PLE 0.08; AME-AME 0.10, AME-ALE 0.05, PME-PME 0.15, PME-PLE 0.10, ALE-PLE 0.12. MOQ



FIGS. 8-11. *Eilica modesta* Keyserling. 8. Palp, ventral view. 9. Palp, retrolateral view. 10. Epigynum, ventral view. 11. Vulva, dorsal view.

length 0.25 mm., front width 0.20 mm., back width 0.29 mm. Anterior epigynal margin rounded (fig. 14); ducts elongate (fig. 15). Leg spination: tibiae: II v1-2-2; III v1-2-2, r1-0-1; IV v1-2-2; metatarsus IV r0-0-1.

Material Examined. **Argentina**: *Córdoba*: Cala-



FIGS. 12-15. 12, 13. *Eilica rufithorax* (Simon). 12. Palp, ventral view. 13. Palp, retrolateral view. 14, 15. *E. trilineata* (Mello-Leitão). 14. Epigynum, ventral view. 15. Vulva, dorsal view.

muchita, Jan., 1955 (M. J. Viana, MACN), 2♀. *Salta*: Juramento (MNRJ), 1♀. **Chile**: *Aconcagua:* 85 km. S Illapel, Nov. 29, 1950 (Ross and Michelbacher, CAS), 1♀; *Malleco*: 25 km. N Curacautín, Dec. 30, 1961 (J. K. Greer, MSU), 2♀.

Distribution. Northwestern Argentina and central Chile (map 1).

Eilica uniformis (Schiapelli and Gerschman) new combination
Figures 18, 19; Map 1

Laronia uniformis Schiapelli and Gerschman, 1942, p. 330, figs. 17-19 (female holotype from Colonia Dora, Santiago del Estero, Argentina, in MACN, examined). Roewer, 1954, p. 381. Gerschman and Schiapelli, 1967, p. 201, figs. 17-20 (in part; females only).

Diagnosis. Eilica uniformis is closest to *rufithorax* but may be distinguished by the wide anterior epigynal margin (fig. 18).

MAP 1. South America, showing distribution of *Eilica rufithorax* (squares), *E. modesta* (circles), *E. uniformis* (hexagons), and *E. trilineata* (triangles). Open symbols indicate localities of type specimens unavailable for study.

Male. Unknown.

Female. Total length 6.44, 7.78 mm. Carapace 2.23, 2.60 mm. long, 1.61, 1.94 mm. wide. Femur II 1.55 mm. long (two specimens, one missing leg II). Carapace light brown; abdomen gray with indistinct pattern; femora slightly darker than other leg segments. Eye sizes and interdistances (mm.): AME 0.09, ALE 0.13, PME 0.10, PLE 0.12; AME-AME 0.11, AME-ALE 0.04, PME-PME 0.12, PME-PLE 0.10, ALE-PLE 0.10. MOQ length 0.29 mm., front width 0.29 mm., back width 0.32 mm. Anterior epigynal margin wide (fig. 18); spermathecae widely separated (fig. 19). Leg spination: tibiae: I v2-2-2; III v1-1-2.

Material Examined. **Argentina**: *Chaco*: no specific locality (MACN), 1♀ abdomen only; *Río Negro*: El Bolsón, 1965-1966 (A. Kovacs, AMNH), 1♀.

Distribution. Argentina (map 1).

Eilica rufithorax (Simon), new combination
Figures 4, 12, 13; Map 1

Laronia rufithorax Simon, 1892, p. 457 (male holotype from Valencia, Carabobo, Venezuela, in MNHN, examined); 1893a, p. 379, fig. 335. Roewer, 1954, p. 381. Bonnet, 1957, p. 2353. Gerschman and Schiapelli, 1967, p. 200, figs. 1-4.

Diagnosis. Eilica rufithorax is closest to *uniformis* but may be distinguished by the long embolar base (fig. 12).

Male. Total length 3.10, 3.35 mm. Carapace 1.40, 1.59 mm. long, 0.97, 1.17 mm. wide. Femur II 0.97 mm. long (two specimens, one missing leg II). Carapace light brown medially, darker laterally; abdominal pattern as in figure 4; leg coloration as in male *modesta.* Eye sizes and interdistances (mm.): AME 0.06, ALE 0.08, PME 0.07, PLE 0.07; AME-AME 0.05, AME-ALE 0.02, PME-PME 0.09, PME-PLE 0.06, ALE-PLE 0.06. MOQ length 0.18 mm., front width 0.17 mm., back width 0.22 mm. Embolar base elongate, reaching beyond tegulum (fig. 12); retrolateral tibial apophysis short, bent at tip (fig. 13). Leg spination: patella III p-0-1-0; tibiae: I v2-2-2;

II v1-2-2; III p1-0-1, v2-3-2; IV v2-2-2, r0-1-1; metatarsi: II p0-0-1; III p1-0-1, v2-2-2; IV p0-0-2, v3-3-2.

Female. Unknown.

Material Examined. **Brazil**: *Goiás*: Santa Isabel do Morro, July 15-29, 1957 (B. Malkin, AMNH), 1♂.

Distribution. Venezuela and Brazil (map 1).

Eilica chickeringi, new species
Figures 5, 16, 17; Map 2

Type. Male holotype from El Valle, Coclé, Panama (January 11, 1958; A. M. Chickering), deposited in MCZ.

Etymology. The specific name is a patronym in honor of the late Dr. A. M. Chickering, who collected the type specimen.

Diagnosis. Eilica chickeringi is closest to *bicolor* but may be distinguished by the much shorter embolus (fig. 16).

Male. Total length 2.31 mm. Carapace 1.12 mm. long, 0.84 mm. wide. Femur II 0.65 mm. long (holotype). Carapace dark brown, lightest medially; abdominal pattern as in figure 5; proximal leg segments dark gray, distal segments light brown; coxae IV much lighter than others. Eye sizes and interdistances (mm.): AME 0.04, ALE 0.06, PME 0.08, PLE 0.05; AME-AME 0.05, AME-ALE 0.02, PME-PME 0.08, PME-PLE 0.04, ALE-PLE 0.04. MOQ length 0.13 mm., front width 0.13 mm., back width 0.18 mm. Embolar base with shieldlike projection (fig. 16); retrolateral tibial apophysis short, bent at midpoint (fig. 17). Leg spination: tibiae: I v1-1-1; III v1-1-2, r0-1-0; IV p0-0-1; metatarsi: II v1-0-2; IV v1-0-2, r0-0-1.

Female. Unknown.

Material Examined. Only the holotype.

Distribution. Panama (map 2).

Eilica bicolor Banks
Figures 1, 20-23; Map 2

Eilica bicolor Banks, 1896, p. 60 (male holotype from Punta Gorda, Charlotte County, Florida, in MCZ, examined). Roewer, 1954, p. 421.

Laronia bicolor: Chamberlin, 1922, p. 156. Bonnet, 1957, p. 2352. Gerschman and Schiapelli, 1967, p. 196, figs. 29-36.

Laronia purpusi Roewer, 1933, p. 185, figs. 1a, 1b, 1c (female holotype from Mirador, Veracruz, Mexico, in NMS, examined). Roewer, 1954, p. 381. Bonnet, 1957, p. 2352. Gerschman and Schiapelli, 1967, p. 198. NEW SYNONYMY.

Laronia reynosana Gertsch and Davis, 1940, p. 9, fig. 7 (female holotype from Reinosa, Tamaulipas, Mexico, in AMNH, examined). Roewer, 1954, p. 381. Gerschman and Schiapelli, 1967, p. 200, figs. 25-28. NEW SYNONYMY.

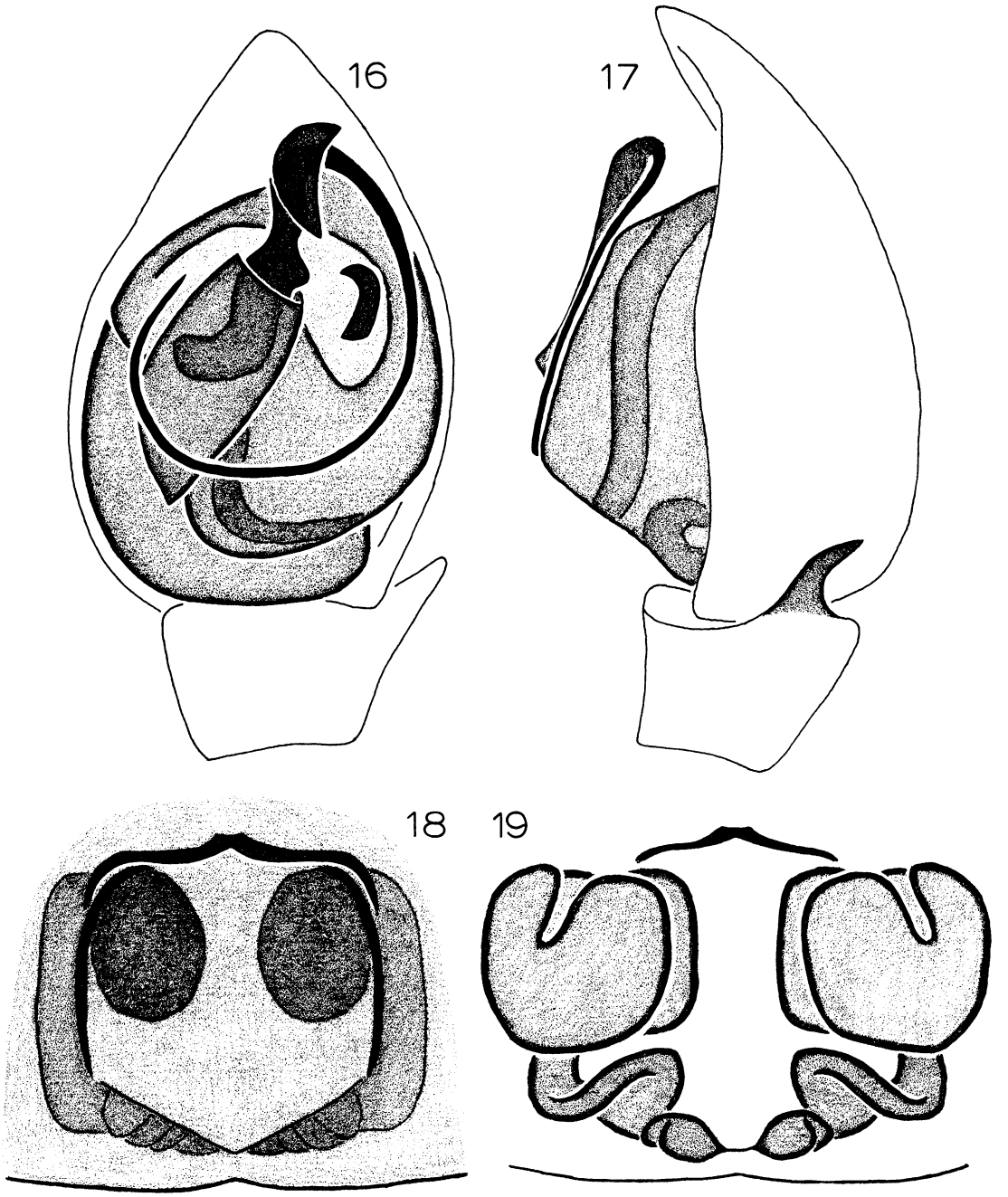
Caridrassus wheeleri Bryant, 1940, p. 392, figs. 166, 167 (female holotype from Ciénaga de Zapata, Las Villas, Cuba, in MCZ, examined). Roewer, 1954, p. 411. NEW SYNONYMY.

Diagnosis. Eilica bicolor is closest to *chickeringi* but may be distinguished by the much longer embolus (fig. 20) and the apical projection of the anterior epigynal margin (fig. 22).

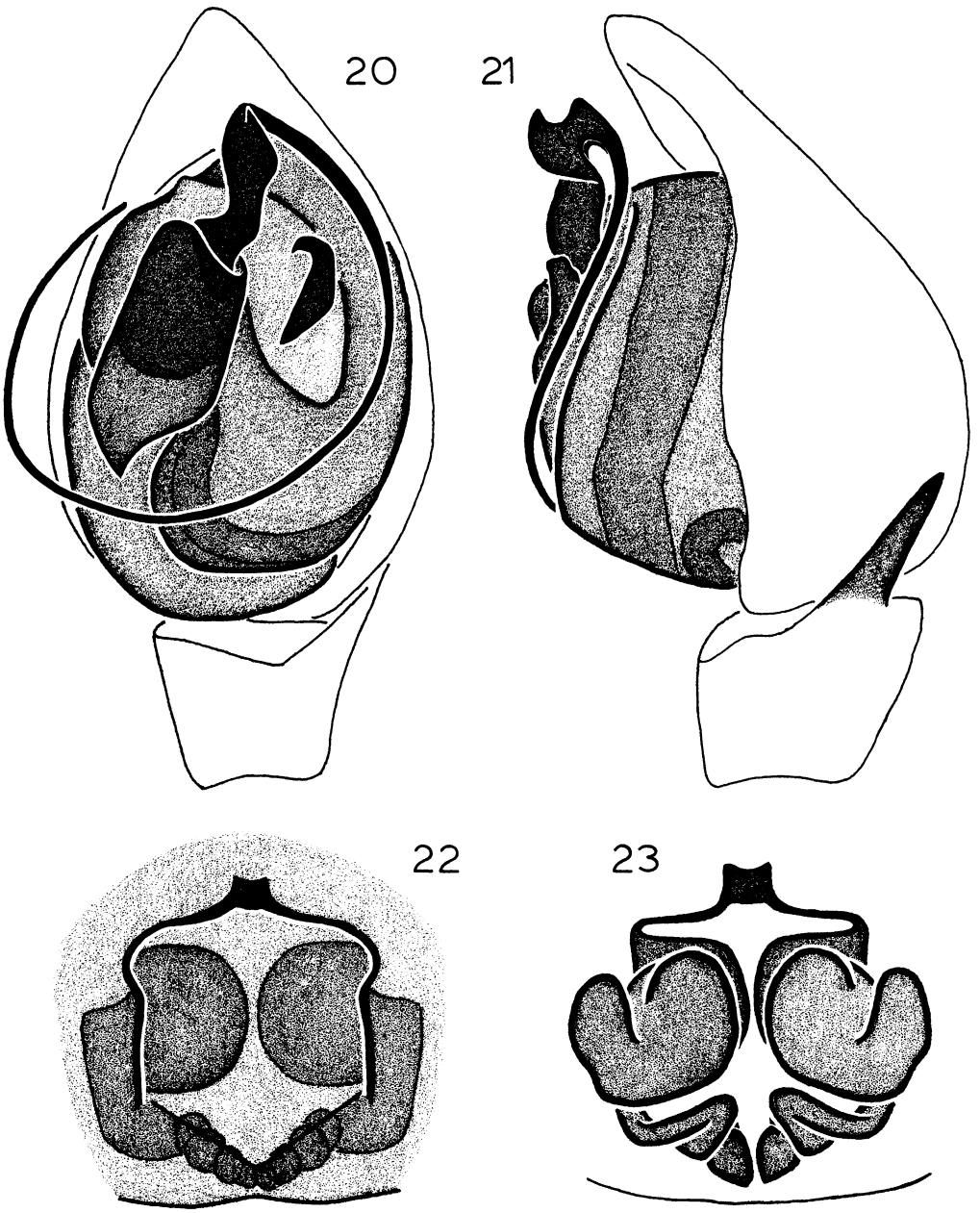
Male. Total length 2.27-3.06 mm. Carapace 1.08-1.39 mm. long, 0.83-1.06 mm. wide. Femur II 0.65-0.83 mm. long (eight specimens). Carapace orange to light brown; abdomen brown, without pattern; legs orange to brown, proximal segments darkest. Eye sizes and interdistances (mm.): AME 0.06, ALE 0.09, PME 0.07, PLE 0.08; AME-AME 0.06, AME-ALE 0.02, PME-PME 0.09, PME-PLE 0.06, ALE-PLE 0.04. MOQ length 0.18 mm., front width 0.19 mm., back width 0.22 mm. Embolus very long (fig. 20); retrolateral tibial apophysis long, not bent (fig. 21). Leg spination: tibiae: I v1-1-2; III p-0-0-1, v0-1-2, r1-0-0; IV p0-0-1; metatarsi: I v1-0-2; II v0-0-0; III p0-0-0, v0-0-2; IV v1-0-2, r1-0-0.

Female. Total length 5.25±1.02 mm. Carapace 2.02±0.28 mm. long, 1.51±0.19 mm. wide. Femur II 1.15±0.17 mm. long (12 specimens). Coloration as in male. Eye sizes and interdistances (mm.): AME 0.10, ALE 0.12, PME 0.09, PLE 0.11; AME-AME 0.08, AME-ALE 0.03, PME-PME 0.09, PME-PLE 0.11, ALE-PLE 0.11. MOQ length 0.29 mm., front width 0.28 mm., back width 0.35 mm. Anterior epigynal margin with apical projection (fig. 22); ducts elongate (fig. 23). Leg spination: tibiae: I v2-1-2; III r0-1-1; IV v1-2-2; metatarsus IV p0-0-2, r1-0-2.

Material Examined. **Honduras**: *Islas de la Bahía*: Isla Bonacca, Apr. 1-15, 1935 (M. Bates, MCZ), 1♂. **Jamaica**: *St. Andrew Par.*: Liguanea,



FIGS. 16-19. 16, 17. *Eilica chickeringi*, new species. 16. Palp, ventral view. 17. Palp, retrolateral view. 18, 19. *E. uniformis* (Schiapelli and Gerschman). 18. Epigynum, ventral view. 19. Vulva, dorsal view.



FIGS. 20-23. *Eilica bicolor* Banks. 20. Palp, ventral view. 21. Palp, retrolateral view. 22. Epigynum, ventral view. 23. Vulva, dorsal view.

Oct., 1957 (A. M. Chickering, MCZ), 1♂. **Mexico**: *Baja California Norte*: San Telmo, May 3, 1961 (W. J. Gertsch, V. Roth, AMNH), 1♂. *Sonora*: Álamos, latitude 27° 02′ N, longitude 108° 55′ W, Feb. 27, 1963 (P. H. Arnaud, Jr., AMNH), 1♀. *Tamaulipas*: Monte, Dec. 29, 1970 (J. Hallan,

AMNH), 1♂. **United States**: *California*: Riverside Co.: Herkey Creek, San Jacinto Mountains, June 20, 1939 (E. S. Ross, CAS), 1♀. *Florida*: Dade Co.: no specific locality (W. Ivie, AMNH), 1♀; Everglades National Park, Dec. 28, 1965 (L. Pinter, MCZ), 1♀. Highlands Co.: Archbold Biological Station, Lake Placid, Apr., 1936, from bark of trunks of *Pinus clausa* (AMNH), 1♂, 1♀; Sebring, Mar. 1, 1960, under rotting board in dry sandy field (H. V. Weems, Jr., AMNH), 1♀. Hillsborough Co.: MacDill Field, Tampa, Feb. 17-22, 1943 (B. Malkin, AMNH), 1♀. Monroe Co.: Torch Key, June 8, 1960, under bark of small dead tree (H. V. Weems, Jr., FSCA), 1♀. Nassau Co.: Fort Clinch State Park, June 10, 1962 (J. A. Beatty, CJAB), 1♀. Sarasota Co.: Long Boat Key, Sarasota, Dec. 30, 1940 (A. C. Cole, AMNH), 1♂. *Texas*: Hidalgo Co.: S Pharr, Apr. 5, 1936 (S. Mulaik, AMNH), 1♂.

Distribution. California east to Cuba and Jamaica, south to Honduras (map 2).

Synonymy. No genitalic differences were detected among the types of *purpusi*, *reynosana*, and *wheeleri* and the other females assigned to this species.

Eilica cincta (Simon), new combination
Figures 24, 25; Map 3

Laronia cincta Simon, 1893b, p. 312 (female holotype from Sierra Leone, no specific locality, in MNHN, examined). Roewer, 1954, p. 381. Bonnet, 1957, p. 2352. Gerschman and Schiapelli, 1967, p. 197, figs. 9-12.

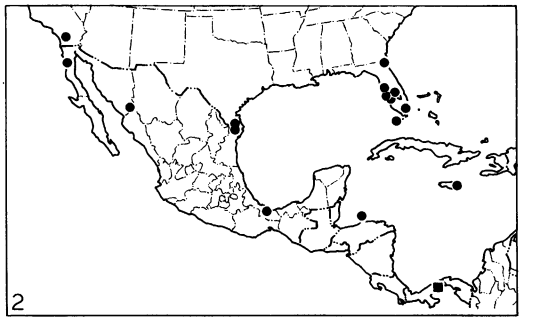
Diagnosis. Eilica cincta is closest to *fusca* but may be distinguished by the sinuous lateral margins of the epigynum (fig. 24).

Male. Unknown.

Female. Total length 4.21 mm. Carapace 1.89 mm. long, 1.37 mm. wide. Femur II 1.15 mm. long (holotype). Carapace light brown; abdominal pattern similar to that of *chickeringi* (fig. 5); legs uniform light brown. Eye sizes and interdistances (mm.): AME 0.06, ALE 0.12, PME 0.08, PLE 0.10; AME-AME 0.08, AME-ALE 0.02, PME-PME 0.07, PME-PLE 0.09, ALE-PLE 0.09. MOQ length 0.22 mm., front width 0.20 mm., back width 0.23 mm. Lateral margins of epigynum sinuous (fig. 24); spermathecae narrowly separated (fig. 25). Leg spination: tibiae: I v2-1-2; III v1-0-2, r1-1-1; metatarsus IV r1-0-1.

Material Examined. Only the holotype.

Distribution. Sierra Leone (map 3).



MAP 2. North and Central America, showing distribution of *Eilica bicolor* (circles) and *E. chickeringi* (square).

Eilica fusca, new species
Figures 26, 27; Map 3

Type. Female holotype from Dunbrody, 8 miles southeast of Kirkwood, Cape of Good Hope, South Africa, elevation 60 m. (April 18, 1958; E. S. Ross and R. E. Leech), deposited in CAS.

Etymology. The specific name is from the Latin *fuscus* (dark) and refers to the coloration of the carapace.

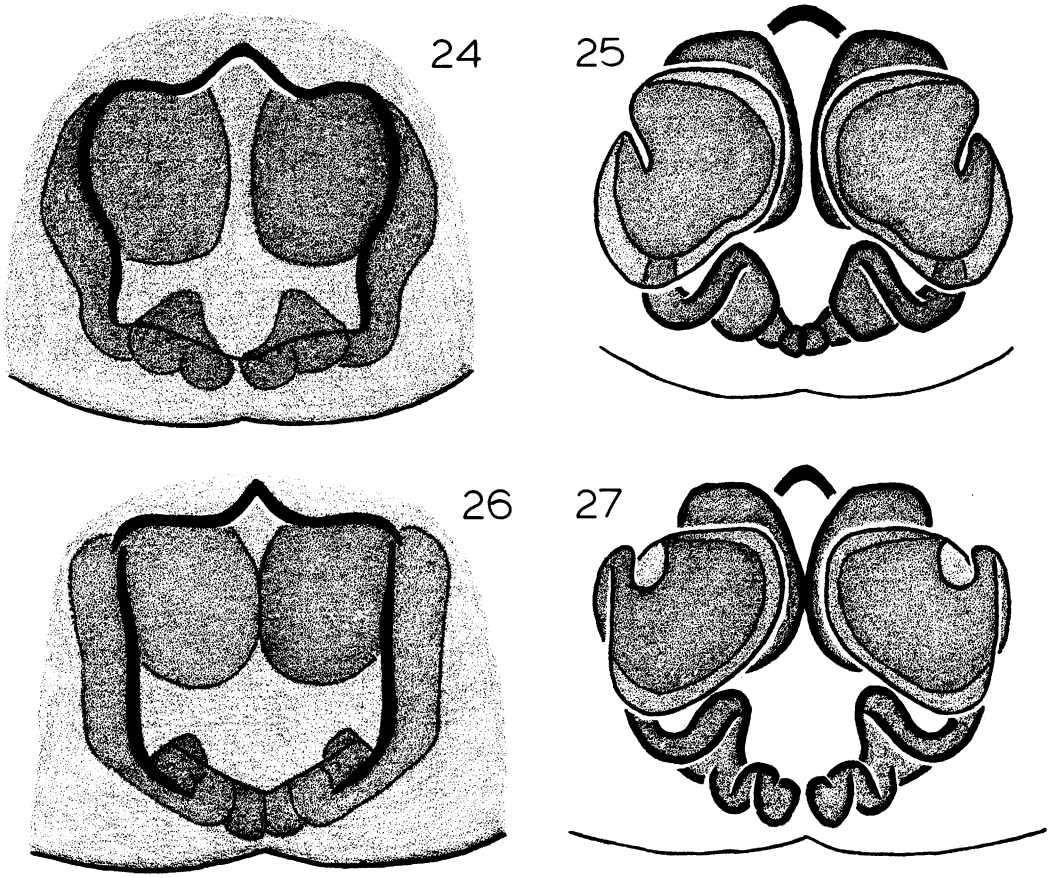
Diagnosis. Eilica fusca is closest to *cincta* but may be distinguished by the straight lateral margins of the epigynum (fig. 26).

Male. Unknown.

Female. Total length 4.20 mm. Carapace 1.69 mm. long, 1.35 mm. wide. Femur II 1.01 mm. long (holotype). Carapace dark brown; abdomen dark gray, without pattern; legs uniform dark brown. Eye sizes and interdistances (mm.): AME 0.06, ALE 0.09, PME 0.05, PLE 0.07; AME-AME 0.08, AME-ALE 0.03, PME-PME 0.11, PME-PLE 0.06, ALE-PLE 0.11. MOQ length 0.17 mm., front width 0.20 mm., back width 0.21 mm. Lateral margins of epigynum straight (fig. 26); spermathecae approximate (fig. 27). Leg spination: tibiae: I v2-2-2; III r1-1-1; IV v2-1-2.

Material Examined. Only the holotype.

Distribution. South Africa (map 3).



FIGS. 24-27. 24, 25. *Eilica cincta* (Simon). 24. Epigynum, ventral view. 25. Vulva, dorsal view. 26, 27. *E. fusca*, new species. 26. Epigynum, ventral view. 27. Vulva, dorsal view.

Eilica albopunctata (Hogg), new combination
Figures 6, 28, 29; Map 4

Gnaphosoides albopunctata Hogg, 1896, p. 333, fig. 18 (male holotype from Storm Creek, South Australia, in NMV, examined). Roewer, 1954, p. 473 (*albopunctatus*, lapsus). Bonnet, 1957, p. 2023.

Diagnosis. Eilica albopunctata is closest to *rotunda* but may be distinguished by the very short embolus (fig. 28).

Male. Total length 4.14 mm. Carapace 1.75 mm. long, 1.35 mm. wide. Femur II 1.14 mm. long (holotype). Carapace dark brown; abdominal pattern as in figure 6; proximal leg segments dark brown, distal segments light brown. Anterior eye row greatly procurved. Eye sizes and interdistances (mm.): AME 0.04, ALE 0.08, PME 0.05, PLE 0.09; AME-AME 0.08, AME-ALE 0.02, PME-PME 0.07, PME-PLE 0.06, ALE-PLE 0.11. MOQ length 0.21 mm., front width 0.16 mm., back width 0.18 mm. Embolus extremely short (fig. 28); retrolateral tibial apophysis short, with slightly recurved tip (fig. 29). Leg spination: tibia IV p1-1-1, v2-2-2.

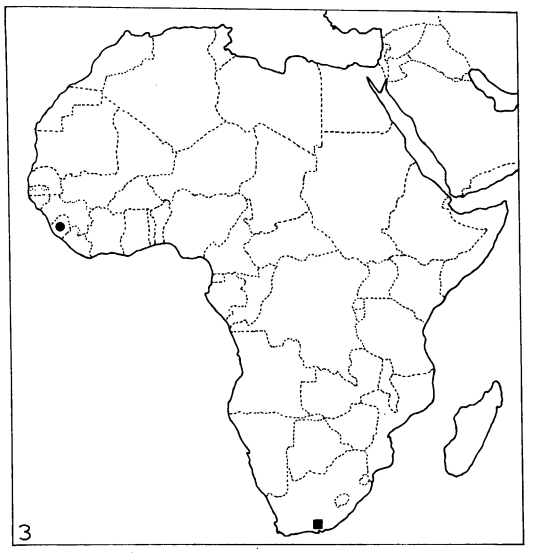
Female. Unknown.

Material Examined. Only the holotype.

Distribution. South Australia (map 4).

Eilica rotunda, new species
Figures 30, 31; Map 4

Type. Female holotype from 24 miles southeast of Einasleigh, Queensland, Australia, ele-



MAP 3. Africa, showing distribution of *Eilica cincta* (circle) and *E. fusca* (square).

vation 500 meters (November 4, 1962; E. S. Ross and D. Cavagnaro), deposited in CAS.

Etymology. The specific name is from the Latin *rotundus* (round) and refers to the shape of the epigynum.

Diagnosis. Eilica rotunda is closest to *albopunctata* but may be distinguished by the long, circular epigynal margin (fig. 30).

Male. Unknown.

Female. Total length 5.18 mm. Carapace 1.84 mm. long, 1.51 mm. wide. Femur II 1.22 mm. long (holotype). Carapace dark orange; abdominal pattern similar to that of *albopunctata* (fig. 6), but anterior white spots have narrow posterior extensions along borders and posterior white spots extend farther anteriorly; legs uniform dark orange. Anterior eye row greatly procurved. Eye sizes and interdistances (mm.): AME 0.04, ALE 0.09, PME 0.07, PLE 0.09; AME-AME 0.07, AME-ALE 0.02, PME-PME 0.06, PME-PLE 0.06, ALE-PLE 0.11. MOQ length 0.20 mm., front width 0.16 mm., back width 0.20 mm. Epigynal margin long, circular (fig. 30); ducts simple, folded (fig. 31). Leg spination: tibiae: I p1-0-0; II v1-2-2; IV v2-2-2; metatarsus IV v2-2-2, r1-1-1.

Material Examined. Only the holotype.

Distribution. Queensland, Australia (map 4).

Note. It is possible that this species represents the female of *E. albopunctata*; in view of the large geographical gap and the differences in coloration between the two known specimens, they are best considered as separate species until additional material is available.

Eilica contacta, new species
Figures 34, 35; Map 4

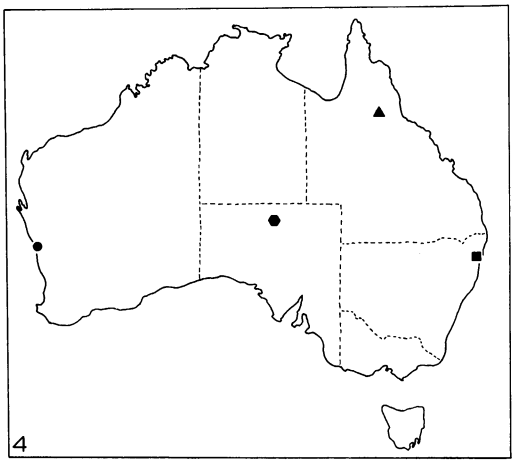
Type. Female holotype from Dorrigo, New South Wales, Australia (no date; W. Heron), deposited in MCZ.

Etymology. The specific name is from the Latin *contactus* (touching) and refers to the approximate spermathecae.

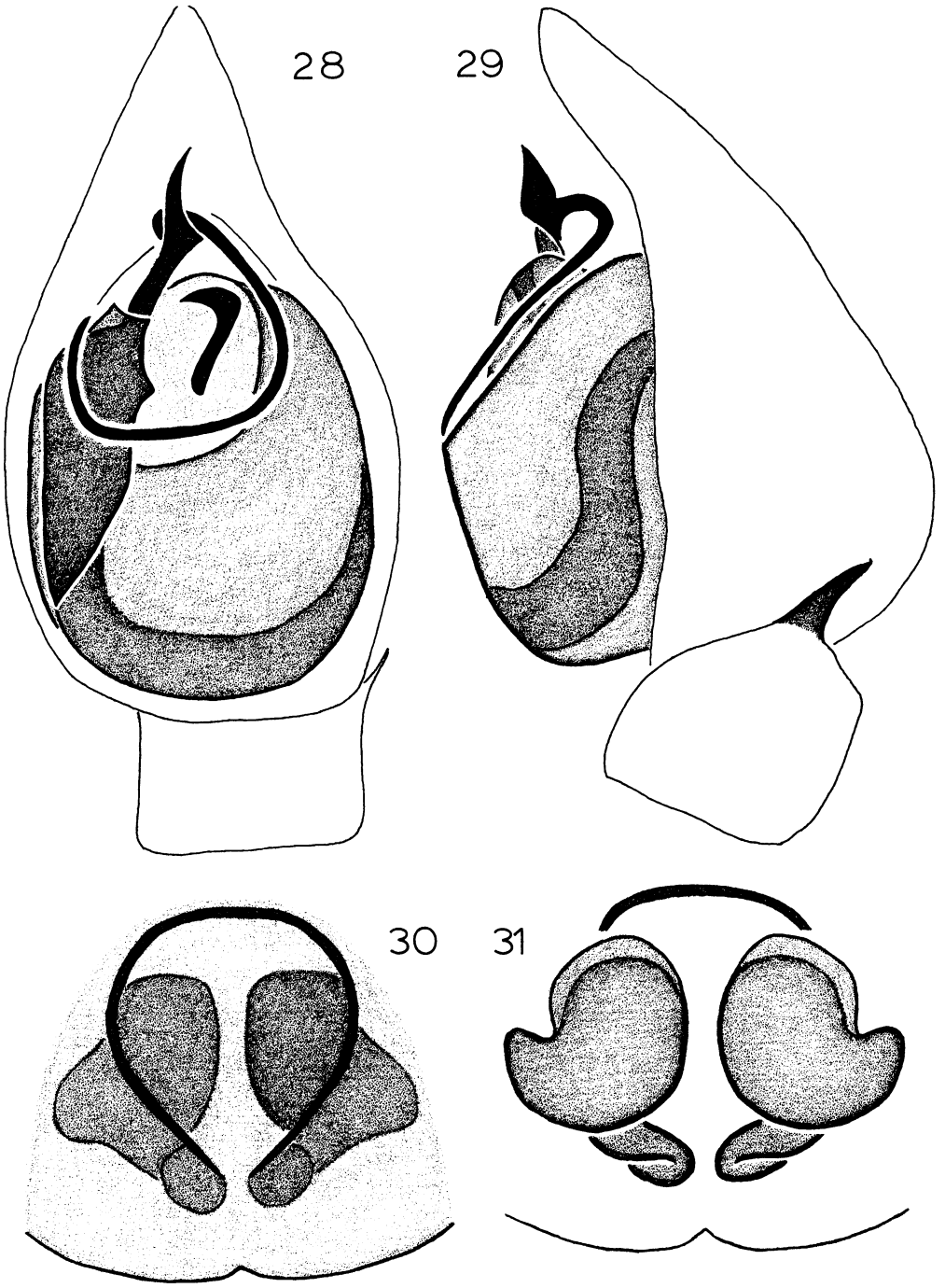
Diagnosis. Eilica contacta is closest to *serrata* but may be distinguished by the reduced anterior epigynal margin (fig. 34).

Male. Unknown.

Female. Total length 3.35 mm. Carapace 1.30 mm. long, 0.90 mm. wide. Femur II 0.72 mm. long (holotype). Carapace light brown medially, darker laterally; abdominal pattern poorly preserved but was probably similar to that of *rufithorax* (fig. 4); coxae pale brown, femora and tibiae dark brown, metatarsi and tarsi light brown, patellae pale brown proximally, dark brown distally. Eye sizes and interdistances (mm.): AME 0.03, ALE 0.06, PME 0.04, PLE 0.06; AME-AME 0.06, AME-ALE 0.03, PME-

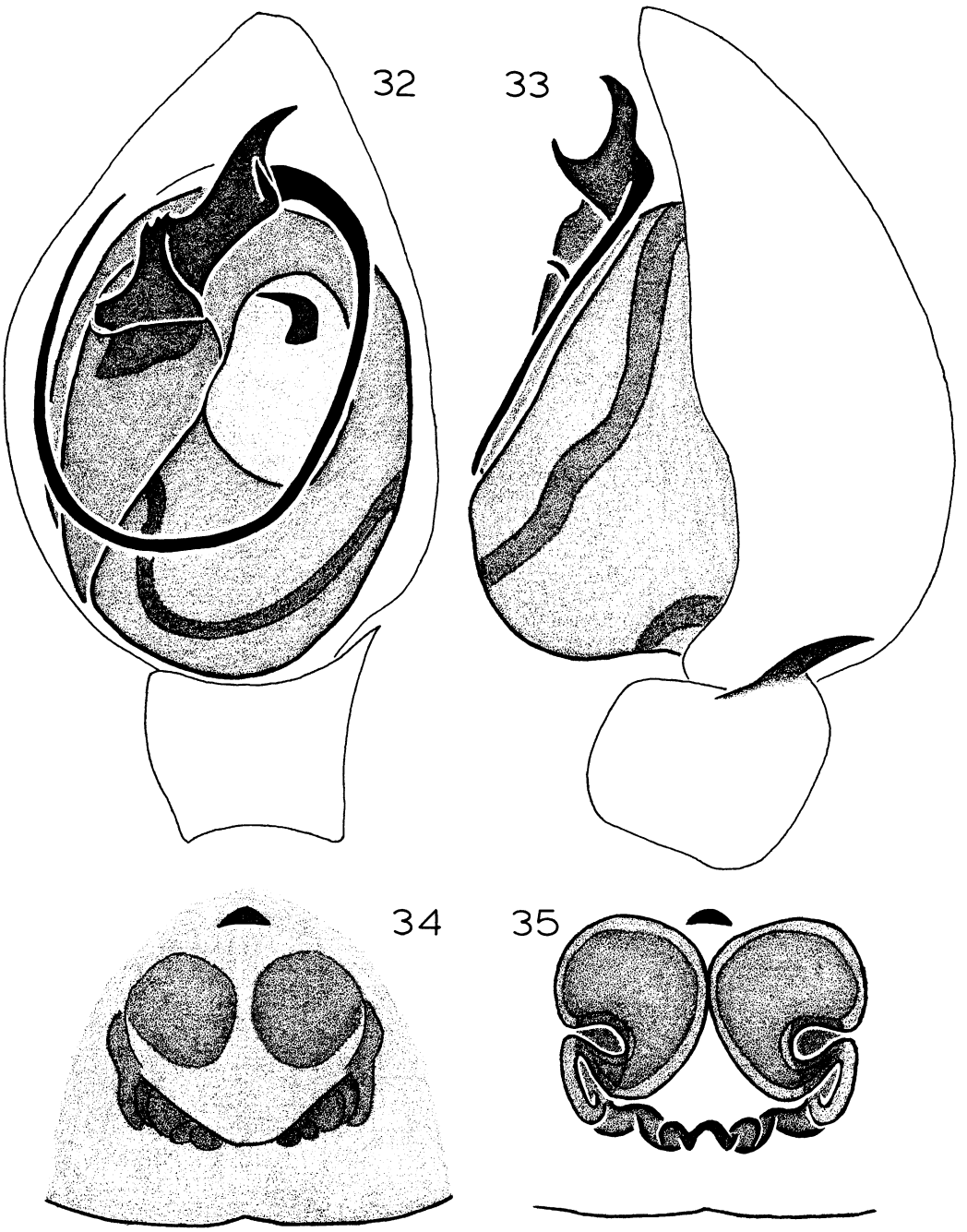


MAP 4. Australia, showing distribution of *Eilica albopunctata* (hexagon), *E. rotunda* (triangle), *E. contacta* (square), and *E. serrata* (circle).



FIGS. 28-31. 28, 29. *Eilica albopunctata* (Hogg). 28. Palp, ventral view. 29. Palp, retrolateral view. 30, 31. *E. rotunda*, new species. 30. Epigynum, ventral view. 31. Vulva, dorsal view.

PME 0.08, PME-PLE 0.07, ALE-PLE 0.06. MOQ length 0.14 mm, front width 0.12 mm., back width 0.16 mm. Anterior epigynal margin reduced to short hood (fig. 34); spermathecae



FIGS. 32-35. 32, 33. *Eilica serrata*, new species. 32. Palp, ventral view. 33. Palp, retrolateral view. 34, 35. *E. contacta*, new species. 34. Epigynum, ventral view. 35. Vulva, dorsal view.

approximate internally (fig. 35). Leg spination: tibiae: III p1-1-1, v1-2-2, r1-0-1; IV r01-1; metatarsi III, IV r1-0-1.

Material Examined. Only the holotype.

Distribution. New South Wales, Australia (map 4).

Eilica serrata, new species
Figures 2, 7, 32, 33; Map 4

Type. Male holotype from Geraldton, Western Australia (October 7, 1931; P. Darlington), deposited in MCZ.

Etymology. The specific name is from the Latin *serratus* (toothed) and refers to the serrate embolar base.

Diagnosis. Eilica serrata is closest to *contacta* but may be distinguished by the serrations on the protruding portion of the embolar base (fig. 32).

Male. Total length 3.13 mm. Carapace 1.44 mm. long, 1.15 mm. wide. Femur II 1.04 mm. long (holotype). Carapace light orange; abdominal pattern as in figure 7; proximal leg segments brown, distal segments orange. Cheliceral retromargin with only two laminae, excavate (fig. 2). Eye sizes and interdistances (mm.): AME 0.03, ALE 0.07, PME 0.06, PLE 0.06; AME-AME 0.07, AME-ALE 0.02, PME-PME 0.06, PME-PLE 0.06, ALE-PLE 0.06. MOQ length 0.16 mm., front width 0.13 mm., back width 0.18 mm. Protruding portion of embolar base serrate (fig. 32); retrolateral tibial apophysis long, not bent (fig. 33). Leg spination: tibia IV v-2-2-2, r1-0-1.

Female. Unknown.

Material Examined. Only the holotype.

Distribution. Western Australia (map 4).

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