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ADDITIONS TO THE BUPRESTID FAUNA OF THE BAHAMA ISLANDS, BRITISH WEST INDIES (COLEOPTERA, BUPRESTIDAE)

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During the months of May, June, July, and August of 1951, Dr. Willis J. Gertsch, Dr. and Mrs. Charles Vaurie, and the author had the privilege of being guests at the Lerner Marine Laboratory, located on North Bimini Island in the Bimini Island group. The object of our stay was to make more comprehensive collections of insects and spiders than were made during our preliminary survey in June of 1950. By using more diverse methods of collecting, staying for a longer period of time, having more collectors and generally good collecting weather, we were able to increase our collections by some 137,000 specimens. Of this number 1307 belonged to the family Buprestidae, representing 13 species, three of which are new to science and belong to three genera not previously recorded from the Bahama Islands. Two additional species previously known only from Florida were taken. Including the genera and species recorded previously by the author (Cazier, 1951), we now know 10 genera and 19 species, including two subspecies, from these islands. On the basis of our present knowledge eight species and two subspecies are endemic in the Bahamas (52%), two species are common to the West Indies and the Bahamas (11%), two species are common to the United States and the Bahamas (11%), and five species are common to all three regions (26%). The high percentage of endemics and the low percentage of West Indian elements may be due to the lack of

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material from other islands in the Bahamas and more especially those in the southern portion.

Some of the series of species previously recorded have been enlarged to a considerable extent, as follows: *Actenodes auronotata brederi* Cazier (184), *Paratyndaris suturalis* Fall (214), *Psiloptera bahamica* Fisher (441), *Chrysobothris sexfasciata* Schaeffer (312), *Chrysobothris chryseola lernerii* Cazier (95). These appear to be the most abundant species on the island.

The writer is indebted to Dr. C. M. Breder, Jr., Chairman and Curator, Department of Fishes and Aquatic Biology of the American Museum of Natural History, for the opportunity of making an insect survey of the island of Bimini. I would also like to express my thanks to Miss Marjorie Statham who made the drawings and to Mr. W. S. Fisher who checked the identifications.

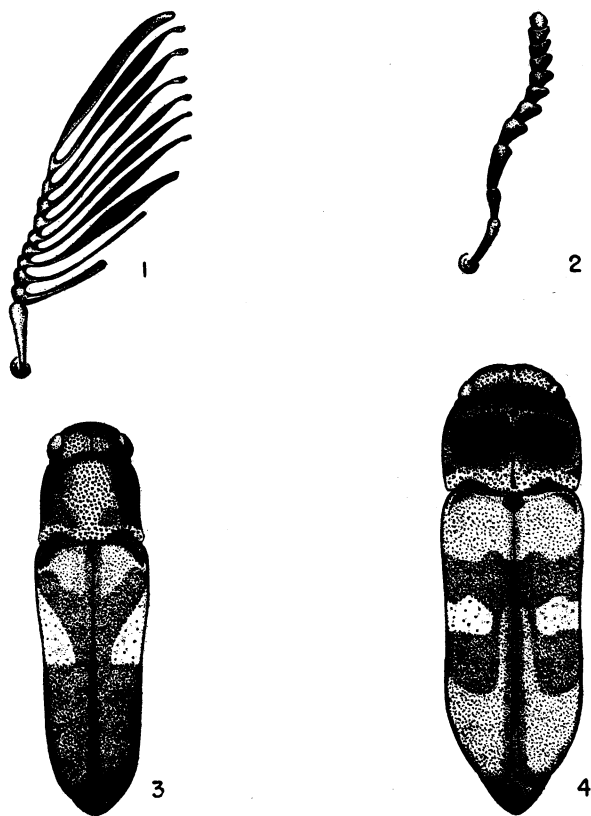
KEY TO THE GENERA OF BUPRESTIDAE KNOWN TO OCCUR
IN THE BAHAMA ISLANDS

1. Scutellum visible.....2
Scutellum not visible.....*Acmaeodera*
2. Third tarsal segment with apices prolonged laterally, overlapping most of fourth segment.....*Actenodes*
Third tarsal segment with apices not prolonged laterally, usually truncate...3
3. Metasternal episterna visible, not covered by side margins of elytra.....4
Metasternal episterna not visible, covered by elytral margins...*Paratyndaris*
4. Elytra not completely covering abdomen, males with pectinate antennae....
.....*Xenorhysis*
Elytra completely covering abdomen, males without pectinate antennae...5
5. Prosternal projection not, or but very slightly, expanded laterally behind anterior coxae.....7
Prosternal projection widely expanded laterally behind anterior coxae.....6
6. Mesosternum completely divided medially, prosternal projection not overlapping mesosternum behind anterior coxae.....*Melanophila*
Mesosternum not completely divided medially, prosternal projection prominently overlapping mesosternum behind anterior coxae...*Chrysobothris*
7. Lateral margins of pronotum with two prominent carinae, size small, 2-4 mm.....*Mastogenius*
Lateral margins of pronotum with at most a single carina, size large, 10-20 mm.....8
8. First four tarsal segments with enlarged pads beneath.....9
First two tarsal segments with pads obsolete or lacking.....*Polycesta*
9. First tarsal segment subequal to second, prosternal projection broadly rounded or truncate apically.....*Psiloptera*
First tarsal segment one-third longer than second, prosternal projection acutely pointed at apex.....*Cinyra*

GENUS **XENORHIPIS****Xenorhipis vauriei**, new species

Figures 1-4

Small, narrow; head and disc of pronotum dark cupreous, posterior pronotal angles brilliant cupreous, scutellum black, elytra



FIGS. 1-4. *Xenorhipis vauriei*. 1. Male antenna. $\times 20$. 2. Female antenna. $\times 20$. 3. Male. $\times 10$. 4. Female. $\times 10$.

with humeral umbones blue, basal blue fascia extending from umbones diagonally back to suture, ending at basal fifth of elytra, sutural margins on basal fifth and apical third greenish blue, large testaceous triangular spot on each elytron extending from lateral margins behind umbone diagonally back and inward to middle of

elytra and transversely out to margin, not reaching suture, remainder of surface dark cupreous, under surface dark cupreous.

MALE: Head evenly rounded, densely punctate, punctures coalescent, vertex with shallowly impressed fine median line, front sparsely clothed with short white hair; clypeus evenly rounded and narrowed anteriorly, margins strongly reflexed and extending around base of antennae; surface densely punctate, punctures coalescent; antennae strongly pectinate beginning at second segment, first rami nearly half as long as third, second two-thirds as long as third, third five-sixths of length of fourth, fourth to tenth subequal; palpi with last segment elongate, blunt at apex. Pronotum broader than long, widest at base, side margins slightly sinuate at basal third, only slightly narrowed anteriorly, surface rugosely punctate throughout, sparsely clothed laterally with short white hairs. Scutellum subpentagonal, surface alutaceous. Elytra slightly wider than pronotum, strongly impressed basally between umbones and suture, apices evenly rounded internally, margins finely serrate, surface uniformly densely minutely tuberculate, sparsely clothed with short white hairs. Under surface crenulate, surface alutaceous, metasternum densely clothed with long white pile, apical abdominal segment deeply emarginate. Length, 5 mm.; width, 1.5 mm.

FEMALE: Differs from the male as follows: Head dark blue except for narrow black basal band extending between eyes; last palpal segment short, twice as wide apically as at base; antennae serrate beginning at fourth segment. Pronotum with anterior margin and sides blue, basal margin brilliant green, disc with two round black spots that connect narrowly at middle. Elytra with basal fourth purplish blue, apical fourth green, sutural area on apical half cupreous green, middle white lunule narrow extending from margin to inner third of elytra, slightly expanded internally. Under surface of thorax bluish green, legs with femora green apically, abdomen black except for narrow cupreous band laterally, surface sparsely punctate, strongly alutaceous, apical segment shallowly emarginate. Length, 6 mm.; width, 2 mm.

TYPE MATERIAL: Holotype, male, collected on South Bimini Island, Bahamas, British West Indies, August 2-9, 1951 (C. and P. Vaurie). Allotype, female, collected on South Bimini Island, Bahamas, British West Indies, June, 1951 (M. Cazier, C. and P. Vaurie). Six male paratypes collected on South Bimini: three in June, two in July, and one in August. Four female paratypes

collected on South Bimini: two in June, one in July, and one in August. All types in the collection of the American Museum of Natural History. All but one of the specimens were collected in rearing cages from wood gathered on South Bimini, and one was taken on the end of a dead twig on South Bimini.

There is little variability in the males of this species. In the females the length varies from 6 to 8 mm., and in the largest specimen the black areas on the pronotal disc are very small.

Xenorhipis vauriei is very easily separated from any of the three previously known species by its brilliant coloration, type of elytral markings, and larger size. This is the first record of the occurrence of this genus outside the United States. *Xenorhipis osborni* is known only from Texas, *X. brendeli* LeConte is widespread throughout the eastern United States, and *X. vejdotskyi* Obenberger (of doubtful validity) is from Connecticut. This species is named in honor of Dr. and Mrs. Vaurie who have collected much valuable material for the American Museum of Natural History.

GENUS POLYCESTA

Polycesta abdita Barr

Polycesta abdita BARR, 1949, Amer. Mus. Novitates, no. 1432, p. 17.

During June and July, 1951, 24 males and 11 females of this species were collected on mangrove trees. The male genitalia and all external characters agree with those of examples collected in Florida and on the Florida Keys.

TYPE LOCALITY: Chocoloskee, Florida.

NEW RECORDS FOR BAHAMA ISLANDS: South Bimini Island, Bahamas, British West Indies, June and July, 1951 (M. Cazier, C. and P. Vaurie).

Polycesta angulosa Jacquelin Duval

Polycesta angulosa JACQUELIN DUVAL, 1857, in Ramon de la Sagra, Histoire physique, politique et naturelle de l'île de Cuba, Animaux articulés (French edition), p. 62; 1857 (Spanish edition), vol. 7, p. 28.

This is one of the species referred to by the author (Cazier, 1951) as being unidentifiable until male specimens were available. During June, 1951, three males and three additional females were collected, making a total of nine specimens. These examples agree in every respect with specimens from Florida except that the

middle lobe of the male genitalia is slightly more elongate, the lateral lobes are slightly more deeply cleft, and the tips are more approximate. The latter differences are considered as being individual variations and not of specific value.

TYPE LOCALITY: Cuba.

NEW RECORDS FOR BAHAMA ISLANDS: South Bimini Island, Bahamas, British West Indies, June 13–17, 1950 (M. Cazier, F. Rindge); same locality, June, 1951 (M. Cazier, C. and P. Vaurie).

Polycesta species

One additional species is still unassociated with males and at present unidentifiable. It is a large female specimen (21.5 mm.) and is violaceous in color. It was collected on South Bimini Island, Bahamas, British West Indies, June 13, 1950 (M. Cazier, F. Rindge).

GENUS **CHRYSOBOTHRIS**

Chrysobothris tranquebarica (Gmelin)

Buprestis impressa FABRICIUS, 1787, Mantissa insectorum, vol. 1, p. 182, no. 61 (preoccupied).

Buprestis tranquebarica GMLIN, 1788, Linnaeus, Systema naturae, 13th ed., vol. 1, pt. 4, no. 4, p. 1932.

During 1951 two specimens of this widespread species were collected, and they agree in all respects with specimens from Florida, Republic of Dominica, and Andros Island, Bahamas.

TYPE LOCALITY: "Indies."

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Mangrove Cay, Andros Island.

NEW RECORDS FOR BAHAMA ISLANDS: South Bimini Island, Bahamas, British West Indies, May, 1951 (M. Cazier, W. Gertsch), July, 1951 (C. and P. Vaurie).

GENUS **MASTOGENIUS**

Mastogenius antennatus, new species

Small, uniformly black, pronotum and elytra moderately densely clothed with rather long yellow hairs.

MALE: Head with front moderately convex and elevated above eyes, deep median impression extending from near base to middle of antennal pits, margins along eyes deeply impressed, surface sparsely punctate, punctures separated by about their own widths;

eyes with inner margins shallowly sinuate, narrowly converging above; epistoma shallowly emarginate anteriorly; antennae long, reaching behind humeral umbone of elytra to basal third, segments 1 and 2 globose and subequal, segment 3 shorter and narrower than 2 and about one-third of the length of segments 4 and 5, segments 4 to 10 shallowly serrate apically, segment 11 oblong ovate and slightly longer than tenth, segments 4 to 11 sparsely clothed with long yellowish hairs. Pronotum wider than long, convex, widest slightly behind middle, anterior margin truncate, posterior margins shallowly sinuate, lateral margins evenly rounded and not visible from above for anterior third, sublateral carina slightly sinuate, extending from apex to base, narrowly converging with upper carina, dorsal surface crenulate laterally and on basal two-thirds, anterior third punctate, punctures separated by about their own widths, surface with semi-erect hairs tilted antelaterally, basal margin glabrous and impunctate except for numerous small grooves along margin. Scutellum subtriangular, shallowly crenulate. Elytra equal in width to middle of pronotum, slightly wider than base of pronotum, side margins parallel to apical third, evenly rounded to apex, apical surface slightly elevated, entire surface rugosely punctate, semi-erect hairs tilted postlaterally, base deeply impressed from umbones to suture, basal margin glabrous and impunctate. Under surface black, sparsely clothed with semi-erect white hair, prosternum without antennal groove, anterior margin truncate, not reflexed, last abdominal segment evenly rounded, legs with femora widened medially, tibiae round, slender and subequal in length to femora, first tarsal segment one and one-half times length of second, second to fourth subequal, third and fourth segments densely pilose beneath. Length, 2.5 mm.; width, 1.0 mm.

TYPE MATERIAL: Holotype, male, collected on South Bimini Island, Bahamas, British West Indies, May, 1951 (M. Cazier, W. Gertsch).

This species, although very distinct, appears to resemble most closely *M. subcyaneous crenulatus* Knull but differs from it in its black rather than piceous color, longer antennae, with very short third segment, long and semi-erect elytral pile, and rugose elytral sculpturing. In addition to the above characters it can be distinguished from *M. subcyaneous* by its black coloration rather than blue elytra and black pronotum as in that species. From *M. castlei* Chamberlain and Knull it can be separated by its black

color throughout rather than having the head and prothorax bright metallic blue and the elytra metallic green, by having the third antennal segment one-third of the length of the fourth rather than half as long, by having the pronotum crenulate for the most part rather than punctate, and by the pile. *M. antennatus* differs from *M. puncticollis* Schaeffer in being pilose rather than glabrous, in having longer antennae, in its crenulate pronotal and rugose elytral sculpturing. From *M. impressipennis* Fall it can be distinguished by having the third antennal segment much shorter than the fifth, pronotum widest slightly behind the middle, and lack of pronotal impressions. It differs from *M. robustus* in being black and in having the impressed line on the front of the head deeply impressed. *M. knulli* Obenberger from Texas is of questionable validity, and the unique type had no antennae. However, judging from the poor description of *M. knulli*, *M. antennatus* differs in having no pronotal impressions, and the pronotum is crenulate rather than punctate.

Only one species of this genus has been recorded from the West Indies. *Mastogenius uniformis* Waterhouse was described from the island of Grenada which is the southernmost island of the Windward Group in the Lesser Antilles. *M. antennatus* differs from this species in not having a groove on the prosternum for the reception of the antennae, in its longer antennae, in its rugose elytral sculpturing, and in its longer first tarsal segment. Fisher (1925) was doubtful about retaining *M. uniformis* in the genus because of the antennal groove and the short first tarsal segment. Lack of additional material still prevents a definite conclusion concerning its generic status.

GENUS CINYRA

Cinyra bahamica, new species

Figure 5

Medium-sized moderately robust, greenish black; pronotum and elytra with densely pilose depressions.

Head moderately convex, eyes narrowly converging above, vertex with shallow median depressed line, front with irregular impunctate areas, densely punctate around eyes, vertex moderately punctate, punctures separated by about their own widths, front irregularly punctate, surface sparsely clothed with long white pile; epistoma shallowly emarginate; labrum truncate apically,

sparsely pilose; antennae extending almost to hind pronotal margins, shallowly serrate beginning at fourth segment, first segment elongate cylindrical, second segment short, ovate, about half as long as third, third subequal to fourth, all segments sparsely pilose; last segment of maxillary palpi short, truncate apically. Pronotum wider than long, widest at base, margins almost straight on basal third, gradually converging apically, surface with five depressed, densely pilose areas, one median, elongate, two lateral rounded, and two lateral rounded before the middle, small deep median depression in front of scutellum, lateral and apical margins densely punctate, disc irregularly, sparsely punctate, punctures

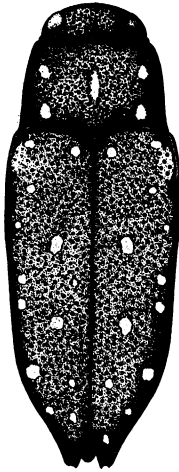


FIG. 5. *Cinyra bahamica*. $\times 5$.

large and with a short hair extending from anterior margin. Scutellum subquinciform, impunctate. Elytra slightly wider than pronotum, subparallel to behind middle, obliquely converging to apex, apices dehiscent internally, shallowly emarginate, not spined, surface with irregular, depressed, densely pilose areas, not symmetrically arranged between each elytron (fig. 5), base of elytra slightly rugose, remainder of surface sparsely, finely punctate, punctures separated by about three to four times their own widths, each puncture with a short hair, suture on apical half slightly elevated, striae impressed on apical two-thirds, not evident on basal third. Under surface shining black, with greenish reflections, moderately densely clothed with long white pile;

prosternum densely punctate, anterior margin with prominent elevation on each side of middle, median portion flat, prosternal projection acute at apex, not expanded behind coxae; legs black, with greenish and cupreous reflections, tarsal claws simple, apical abdominal segment truncate, subapical depression shallow and irregular, lateral apical angles short but acutely pointed. Length, 12.5 mm.; width, 5.0 mm.

TYPE MATERIAL: Holotype, collected on South Bimini Island, Bahamas, British West Indies, June, 1951 (M. Cazier).

This species appears to be most closely related to the Cuban *Cinyra multipunctata* (Olivier) but can be separated from it by being greenish black rather than cupreous, by its broader shape, by its larger pronotal and head punctures, more shallow median pronotal impression, by having the third antennal segment subequal to fourth rather than longer than fourth. From *Cinyra albonotata* (Castelnau and Gory), another closely related species, it can be distinguished by the median, depressed, pilose area on the pronotum, less deeply incised anterior epistomal margin, by its more robust shape, by its more dehiscent and less broadly truncate elytral apices, and by having the median portion of the prosternal margin flat, not elevated as in that species.

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