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MORE NEW GALERUCINE BEETLES
WITH EXCISED MIDDLE TIBIAE IN THE MALE

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This paper is a supplement to "A Review of Some Galerucine Beetles with Excised Middle Tibiae in the Male" (Proc. U.S. Nat. Mus., vol. 108, 1958) which, owing to its delayed publication, appeared subsequent to a paper by J. Bechyne (Ent. Arb., vol. 7, 1956), wherein he described the genus *Trichobrotica*, giving the same type of the genus, *Neobrotica sexplagiata* Jacoby, that I had for my new genus *Iceloceras*. He described only one new species under this, *Trichobrotica brasiliensis*, the type of which I have examined. Since it is my *Iceloceras flavipes*, I am transferring to the genus *Trichobrotica* those species described by me under *Iceloceras* although I recognize that some of them do not fit entirely into the rather narrow limits of Bechyne's genus described from two very similar species and having as the only characters coarsely punctate elytra with sparse pubescence and with vertical elytral epipleura visible the entire length. Bechyne did not note the excised middle tibiae in the male, which, together with the lack of any sexual differences in the antennae, I had taken as characters separating *Iceloceras* from other genera with excised middle tibiae. In general most beetles of the group with excised middle tibiae have unusual antennal development in the male also. In *Trichobrotica* I

have included those with antennae that do not change to any extent in the male. Some of the species that I have allocated to *Trichobrotica* differ from *T. sexplagiata* in having the third antennal joint short, as in *T. ruatanae* (Jacoby). These species may eventually be placed elsewhere.

In trying to classify these Galerucine beetles one is constantly meeting some characters that are found in one genus in species that otherwise seem predominately to belong to another genus. I have been reluctant to make new genera for these species that are mainly one of a kind until others like them turn up, which I am confident in time will be the case. For the present I have included such species in the genus to which they appear to be more closely related. More than in any group with which I have ever worked, these beetles intermingle in their characters so that few of the genera are clear cut. Six of the species dealt with in this paper, all having excised middle tibiae in the male, have been described as *Neobrotica*, four as *Diabrotica*, and others as species of *Phyllobrotica*, *Luperus*, and *Chthoneis*.

In a later publication (Ent. Arb. vol. 9, 1958) Bechyne has described the two new genera *Deuterobrotica* and *Romanita*, in both of which the males have excised middle tibiae, although here again Bechyne has made no mention of this character. He took as type of the first genus *Diabrotica amplicornis* Baly, which species I had placed rather doubtfully in *Luperosoma*. He described two other closely related species, each represented only by a female, as species of *Neobrotica*, *N. latifrons* and *N. lineigera*, separating them from *Deuterobrotica* because they did not have enlarged antennal joints, which, of course, is purely a male character.

In the genus Bechyne described as *Romanita*, he named *R. amazonica* as the genotype and described three more species of widely different aspect and doubtfully assigned Weise's *Neobrotica fasciata* as the fifth species. Since they are all females it is impossible to be certain that they are congeneric. I have made drawings of those that I have been able to examine for the enlightenment of future workers in the group.

For another group of beetles somewhat resembling *Romanita amazonica* but differing in the head and antennal characters, I have erected the genus *Porechontes* because of the large pore in the middle of the front of the head in the male. It resembles *Romanita amazonica* in having the third antennal joint very short, but the apical joints tend to be widened triangularly in the male. The species that I tentatively described as *Platymorpha albiventris* in my earlier paper belongs here. Two other species have come to my attention, all three having a similar pore in the middle of the front of the head.

Among other Galerucine beetles having the middle tibiae excised in the male are two very different groups, both with bifid claws instead

of the usual appendiculate ones. One species of the first group so closely resembles a species of *Trichobrotica* in general appearance that it would appear to be only a color form. The other species has been described first by Weise as *Phyllobrotica subtilis*, and later by Bechyne as *Neobrotica achroma*, but it belongs to neither genus with its bifid claws. For these species I have erected the genus *Neotrichota*.

The second group with bifid claws is most remarkable for its bizarrely formed antennal joints in the male. No female of any of the three species has been examined. All three bear a close resemblance to each other in elytral markings as well as in having the antennal joints similar though distinctly different in each. The only specimens of *Diabrotica pectinicornis* Baly I have ever seen, which I have taken as the type of this genus, are one collected at Cauca, Colombia, in the British Museum, and one collected in "Bolivia," in the Bowditch collection. The second species, which is new, was taken at Tingo Maria, Peru, and the third, also new, at Turrialba, Costa Rica.

John Wilcox has discovered in the U.S. National Museum collection a second species of that odd genus *Oroetes*, originally described from Panama. The second species was taken in Bolivia. It has a similar but smaller modification of the third and fourth antennal joints in the male, and as in *O. flavicollis* there are only ten antennal joints in the male, and the excavation of the face is similar.

I wish to acknowledge my indebtedness to the U.S. National Museum (USNM), the Museum of Comparative Zoology (MCZ), and the British Museum (Natural History) (BMNH), for the material on which this study is based. Mr. Hugh Leech also has picked out material for me to study at the California Academy of Sciences (CAS), and for some years John A. Wilcox has been assiduously finding specimens for me in the collections with which he has worked. I have visited the Frey Museum at Tutzing near Munich to study Bechyne's types and also the British Museum (Natural History) on a grant from the National Science Foundation. A later grant from the National Science Foundation has enabled me to examine insect collections in Brazil, Argentina, Peru, and Colombia.

Key to the Genera of Galerucinae Here Treated

- 1. Claws bifid 2
- Claws appendiculate 3
- 2. Antennae in male bizarrely shaped with greatly enlarged 9th and 10th antennal joints **Deinocladius**, new genus
- Antennae in male no different from female **Neotrichota**, new genus
- 3. In male, the face excavated, 3rd and 4th antennal joints with excision at adjoining ends, a node anteriorly in the middle of pronotum . . . **Oroetes**
- Face and antennae in male not excavated, no median node 4

4. Disc of pronotum not at all sulcate. West Indies **Ectmesopus**
 Disc of pronotum usually more or less sulcate 5
5. Antennae in male filiform with 3rd joint somewhat shorter than 4th
Trichobrotica
 Antennae in male with 3rd joint short, often cup shaped, 4th joint usually
 much longer 6
6. Terminal antennal joints in male not thickened 7
 Terminal antennal joints in male thickened 11
7. Face of male with a spine over the labrum **Platymorpha**
 Face of male without a spine 8
8. Antennae in male with median joints (5-7 or more) somewhat enlarged, front
 of face flat 9
 Median joints of antennae in male not enlarged, front of face rather
 bulging 10
9. Joints 5-7 in male slightly enlarged **Simopsis**, new genus
 Joints 5-9 in male noticeably enlarged **Luperosoma**
10. In male, front of face with a median pore, antennal joints 9 and sometimes 10,
 somewhat triangularly widened at apex . . . **Porechontes**, new genus
 Front of face in male without a median pore, antennae filiform . . **Romanita**
11. North and Central America and Northwestern South America . **Luperosoma**
 Southern Brazil **Deuterobrotica**

Trichobrotica nymphaea flavicollis, new subspecies

FIGURE 3

About 3.5 mm. in length, oblong oval, the middle tibiae in the male deeply excised near the apex, pale yellow with a wide brown elytral vitta covering most of each elytron, the margin and suture yellow, legs with a brown streak on the femora, tibiae and tarsi and antennae brown, the antennae with the three apical joints yellow.

Head with the interocular space approximately half width of head, occiput shining, impunctate, frontal tubercles distinctly marked, a narrow carina down lower front, entirely pale yellow. Antennae very long and slender, the third joint a little shorter than fourth, remainder subequal, brownish with the three terminal joints pale yellow, tip of apical one dark. Prothorax a little wider than long with nearly straight sides, a faint depression in basal half, not well marked, shining, entirely pale yellow. Scutellum pale. Elytra finely and not densely punctate, with scattered erect hairs, margin pale and a wide pale sutural vitta, on each elytron a broad dark-brown vitta wider near the scutellum. Body beneath entirely pale, the femora with a dark streak above on the anterior pair and the apices of the femora dark in the two posterior pairs, tibiae and tarsi brown, the middle tibiae of the male deeply incised near apex. Length 3-3.8 mm.; width 1.5-1.8 mm.

Type, male, USNM 66856, from Paraiso, Canal Zone, one female paratype, taken Feb. 6, 1911, and Mar. 30, 1911, respectively, by E. A. Schwarz and A. H. Jennings.

Remarks: The male is an immature specimen with shriveled abdomen which I did not try to dissect. Although both specimens lack the pronotal vittae characteristic of *T. nymphaea* (Jacoby), the specimens in other ways resemble that species so much that I believe they are but a color race of it.

Trichobrotica rhabdota, new species

FIGURE 8

About 3 mm. in length, oblong oval, shining, nearly impunctate, the middle tibiae of the male excised near the apex, elytra with a few erectish hairs, pale yellow, each elytron with a wide brownish vitta extending from over the humerus to cover half of elytra at base and widening towards apex, margin pale.

Head with the interocular space approximately half width of head, occiput rounded, polished, impunctate, frontal tubercles well marked, a narrow carina down front, entirely pale yellow. Antennae yellowish brown, long, slender, the four terminal joints missing. Prothorax only a little wider than long with nearly straight sides, a depression in basal half, shining, pale yellow. Scutellum pale. Elytra shining, nearly impunctate, pale yellow with a wide brown vitta on each elytron, leaving the margin and a wide sutural pale vitta. Body beneath entirely pale, the legs entirely pale, middle tibiae of the male with a small notch, front tibiae and first tarsal joint a little stouter. Length 3 mm.; width $1\frac{1}{2}$ mm.

Type, male, MCZ 30675, from Aracataca, Magdalena Province, Colombia, collected by P. J. Darlington, Jr.

Remarks: This is close to the Panama subspecies, *T. nymphaea flavicollis*, but the legs are entirely pale and the dark elytral vitta not so wide. The aedeagus of this species also differs from that of typical *nymphaea* in not being rounded but pointed at the tip.

Trichobrotica egensis, new species

FIGURE 5

About 3.5 mm. in length, elongate oblong oval, shining, the elytra finely punctate, the prothorax with a transverse depression, pale yellow brown, a piceous vitta on both sides of pronotum and a wide piceous elytral vitta on each elytron joined at the apex.

Head with the interocular space approximately half width of head, a well-rounded occiput, frontal tubercles distinct, a narrow carina down front, entirely pale yellow brown. Antennae pale at base, third and fourth antennal joints about equal, the rest missing. Prothorax somewhat wider than long with nearly straight sides, a wide transverse sulcus and on either side a wide piceous vitta. Scutellum pale. Elytra shining, finely punctate, pale yellow with a broad

piceous vitta covering half of each elytron and uniting at apex. Body beneath and legs entirely pale, anterior coxal cavities open, claws appendiculate. Length 3.6 mm.; width 1.5 mm.

Type, female, BMNH, from Ega, Brazil.

Remarks: This is closely related to *T. rhabdota* from Colombia and *T. nymphaea* (Jacoby) from Panama, but differs from either in the elytral pattern with the elytral vittae joined at the apex. Although only a female is known, the male will undoubtedly have notched middle tibiae.

Trichobrotica nigripennis, new species

FIGURE 2

About 4.5 mm. in length, elongate oblong oval, moderately shiny, the elytra closely and coarsely punctate, middle tibiae of the male excised near the apex, pale yellow, the occiput of head tan colored, antennae, tibiae, and tarsi dark, femora with a dark streak, pronotum with a piceous vitta on either side, elytra piceous with a pale margin.

Head with the interocular space approximately half width of head, occiput shiny, very finely punctate, frontal tubercles swollen, a depression in the middle above them, carina very short, lower front punctate. Antennae long, slender, dark, joints five to seven a little thicker. Prothorax a third wider than long, with wide transverse depression, pale with a piceous vitta on each side at the end of the sulcus, surface shiny, impunctate. Scutellum pale. Elytra with the punctures contiguous, coarse, shallow, surface somewhat shiny, piceous, with a pale margin. Body beneath entirely pale, femora pale in basal portion, with a dark streak and dark apex, tibiae and tarsi piceous. Coxal cavities open, claws appendiculate. Length 4.5 mm.; width 1.7 mm.

Type, male, BMNH, from Ecuador, 1920, Gilbert Hammond collector.

Remarks: This is closely related to *Trichobrotica sexplagiata* (Jacoby) and closely resembles *T. biplagiata* Blake in coloring but lacks the pale elytral spots and the aedeagus is quite different.

Trichobrotica analis (Weise)

FIGURE 23

Neobrotica analis Weise, Ark. Zool., vol. 14, no. 1, p. 95, 1921.

About 5 mm. in length, oblong oval, moderately shiny, although alutaceous, elytra with traces of shallow nearly obsolete punctation, especially noticeable in the middle pale spot, moderately convex, without depressions, prothorax with a shallow transverse depression; yellowish or reddish brown, the antennae except the penultimate joint dark brown, tibiae and tarsi dark, and elytra dark piceous with six

large pale spots on disc and two along each lateral margin, middle tibiae of male excised near apex.

Head pale reddish or yellowish brown, shiny, rounded over the occiput with a median depression above the well-marked frontal tubercles, a narrow carina down lower front on both sides of which the surface is densely and coarsely punctate. Antennae with the third joint a little shorter than the fourth, rest subequal, brown except for the pale tenth joint. Prothorax a little wider than long with somewhat arcuate sides and a shallow transverse depression, shiny, reddish or yellowish brown. Scutellum pale. Elytra moderately convex, without depressions except the short intrahumeral sulcus, alutaceous and strongly and confusedly punctate, deep piceous, each elytron with three large pale spots, the median being almost a fascia but interrupted at the suture; along the sides of the lateral margin two pale spots. Epipleura vanishing at apical curve. Body beneath pale with the femora for the most part pale with a dark streak above, hind femora dark at apex, tibiae and tarsi dark. Anterior coxal cavities open, claws appendiculate, middle tibiae of male excised near apex, hind tibiae with spine. Length 4.9–5.5 mm.; width 2.4–2.7 mm.

Type, male, and female paratype, in Naturhistoriska Riksmuseet, Stockholm, Sweden, collected at Manáos, Amazon, Brazil, by Roman.

Remarks: This species described by Weise as a *Neobrotica* has excised middle tibiae and falls in the genus *Trichobrotica*.

Trichobrotica pallida (Jacoby)

FIGURE 1

Neobrotica pallida Jacoby, in Godman and Salvin, *Biologia Centrali-Americana*, Coleoptera, vol. 6, pt. 1, suppl., p. 335, 1892.

About 4 mm. in length, oblong oval, shining, almost impunctate, pale yellow with the antennae, tibiae and tarsi and a dark apex or streak on the femora, middle tibiae of the male excised near apex.

Head with interocular space half width of head, occiput smooth, no depression above frontal tubercles, carina short, lower front short. Antennae long, dark and hairy, the third joint a little longer than second but much shorter than fourth. Prothorax a little wider than long, sides nearly straight, a well-marked transverse sulcus. Scutellum rounded. Elytra wider below the middle, impunctate, with a little depression below the slight basal convexity, and another transverse depression below the middle. Body beneath with the anterior coxal cavities open, the middle tibiae excised in the male, the claws appendiculate, entirely pale, the anterior femora with a dark streak above, the hind femora dark at apex, tibiae and tarsi entirely dark. Length 4.2 mm.; width 2 mm.

Type, male, BMNH, from Panistlahuaca, Mexico, Sallé collector.

Remarks: In Jacoby's description he states that he has two specimens. Only one is now at the British Museum and there is none in the Bowditch collection. Jacoby described the antennae as having the last two segments missing, which applies to the specimen in the British Museum. The shallow notching of the middle tibiae is more typical of the genus *Platymorpha*, but the third antennal joint is not so compressed as in that genus, and in this respect is similar to that of *Trichobrotica ruatanae* (Jacoby).

Trichobrotica nigrosignata (Jacoby)

FIGURE 17

Diabrotica nigrosignata Jacoby, in Godman and Salvin, *Biologia Centrali-Americana*, Coleoptera, vol. 6, pt. 1, p. 522, 1887.

About 3.5 mm. in length, elongate oblong oval, shining, the elytra very finely and not densely punctate, pale yellow with dark antennae and dark tibiae and tarsi, and on each elytron three dark markings, one from the humerus down the side nearly to the middle, another short one from the base down the middle, and the third large spot near the apex; middle tibiae of the male excised.

Head with the interocular space about half width of head, occiput smoothly rounded, very finely punctate, no depression above the frontal tubercles, a narrow carina down lower front. Antennae long, dark brown, with the second and third joints short. Prothorax almost as long as wide with slightly rounded sides and a shallow depression across lower half. Scutellum pale. Elytra narrowly oblong and a little wider at apex, depressed, very finely punctate, shining, pale yellow with three dark markings on each elytron: the first from the humerus along the side to the middle, the second a very short curved vitta from the middle of the base, and the third a large dark spot near the apex. Body beneath pale, the femora pale, the tibiae and tarsi dark. Claws appendiculate. Length 3.2-4.9 mm.; width 1.4-1.5 mm.

Type, male, BMNH, and 4 paratypes, from San Geronimo, Guatemala, Champion collector. One specimen from San Isidro, Guatemala, 1600 ft., Champion collector.

Remarks: In two specimens the lateral spots are united along the side. This species with its excised middle tibiae in the male and appendiculate claws belongs rather in *Trichobrotica* than *Diabrotica*. The short third antennal joint resembles that of *T. ruatanae* (Jacoby).

Trichobrotica fenestrata, new species

FIGURE 14

About 4 mm. in length, elongate oblong oval, shining, the prothorax with a transverse scooped-out area in the lower half, elytra very finely

punctate, yellow brown with dark antennae, a piceous occiput on the head and a darkening over the anterior half of the pronotum, a wide dark area extending from the base of elytra over the humerus and down the side, widening to cover lateral half below the middle, margin and interior pale, body beneath pale with the breast brown, the tibiae and tarsi and apical half of femora piceous.

Head with the interocular space about half width of head, occiput smoothly rounded, frontal tubercles distinct, a well-defined carina down lower front, the occiput and around eyes piceous, front pale, mouthparts brownish. Antennae piceous (last two joints missing), third joint a little longer than second, remainder much longer. Prothorax with nearly straight sides, about a third wider than long, a scooped-out area in the basal half; shiny, yellow brown with the anterior half darkened. Scutellum pale. Elytra shiny although finely alutaceous, very finely punctate, somewhat flattish with small humeral prominences and short intrahumeral sulcus, yellow brown with a piceous band across base extending down over the humeri and along the side and widening in apical half to cover half the elytra, the explanate margin wide and pale, interior pale; body beneath pale with the breast brownish, basal part of femora pale, apical half, tibiae, and tarsi dark. Length 4 mm.; width 1.7 mm.

Type, female, CAS, from Cordoba, Mexico, A. Fenyès collector.

Remarks: Only a female of this species has been examined and without the male it is impossible to be certain into which genus it falls, but the front of the head resembles more the species of *Trichobrotica*.

Neotrichota, new genus

Type species: *Neotrichota flavipennis*, new species.

Elongate oblong oval, head with well-marked frontal tubercles and a short carina down the lower front; antennae long and filiform, the third joint longer than the second. Prothorax nearly rectangular with slightly curved sides and explanate margin, a shallow scooped-out area in lower half. Elytra with small humeral prominences, slightly wider towards the apex. Anterior coxal cavities open, middle tibiae of the male notched near apex, the first tarsal joint of the hindlegs scarcely as long as the rest of the joints together, claws bifid.

This genus resembles species of *Trichobrotica* except that the claws are not appendiculate but bifid. In this respect the genus is like *Deinocladus*, and these two genera alone stand out as having bifid claws in a group in which the claws are appendiculate.

The name *Neotrichota* is derived from the Latin "neo," meaning new, and "trichota," an abbreviation of *Trichobrotica*.

Neotrichota subtilis (Weise)

FIGURES 10, 11

Phyllobrotica subtilis Weise, Ark. Zool., vol. 14, no. 1, p. 104, 1921.*Neobrotica achroma* Bechyne, Ent. Arb. Mus. G. Frey, vol. 9, no. 8, p. 596, 1958.

About 4 mm. in length, oblong oval, very shiny, the prothorax with a shallow scooped-out depression in the lower half, the elytra with a short intrahumeral depression, the pronotum rather sparsely punctate, the elytra more densely and strongly punctate, entirely pale yellow except the tip of the mouthparts which are brownish, claws bifid.

Head with the interocular space half width of head, polished, impunctate over occiput, frontal tubercles well marked, lower front smooth with a short carina. Antennae long, first joint very long, second joint shorter than third, and third joint shorter than fourth, the remainder long and slender, a little darker. Prothorax with nearly straight sides, the basal half with shallow scooped-out area, shiny, rather sparsely punctate, pale yellow. Scutellum pale. Elytra wider towards apex, with small humeral prominences and a short intrahumeral sulcus, shiny, densely and moderately coarsely punctate, pale yellow. Body beneath and legs pale, the middle tibiae of the male notched near the apex. Claws bifid. Length 4 mm.; width 1.8 mm.

Type, male, in Riksmuseum, Stockholm, Sweden, collected on the Rio Autaz, Amazon, Roman collector. Two other specimens from Santarem, Brazil, in the Carnegie Museum. A female (type of *Neobrotica achroma* Bechyne) in the G. Frey Museum, Tutzing bei München, Germany, collected at Cayenne, French Guiana.

Remarks: Both Bechyne's and Weise's types have been examined by the writer and they are the same. Because of the bifid claws this species cannot be included in the genus *Trichobrotica* which it strongly resembles. For the same reason it cannot be a species of either *Phyllobrotica* or *Neobrotica*.

Neotrichota flavipennis, new species

FIGURE 12

About 4.5 mm. in length, elongate oblong oval, faintly shining, the elytra densely and strongly punctate, the prothorax transversely depressed in the basal half, middle tibiae of the male excised; pale yellow with the three terminal antennal joints brown, and with a pale reddish brown vitta on each side of the prothorax.

Head with the interocular space approximately half width of head, frontal tubercles somewhat swollen with a depression above them, a short carina down the lower front, which is smooth, without depressions and with long pale hairs, upper half of head a deeper yellow

than the lower front. Antennae extending below the middle of the elytra, joints long, slender and from the third to eighth joints subequal, last three joints deep brown. Prothorax about rectangular with the sides nearly straight, a slightly scooped-out depression in the basal half, surface shining, punctate along the base, pale yellow with a pale reddish-brown vitta on each side wider anteriorly but not meeting in middle. Scutellum pale yellow. Elytra elongate, a well-marked intrahumeral sulcus, densely and moderately coarsely but shallowly punctate, pale yellow, a few hairs at apex. Body beneath entirely pale yellow, the front tibiae thickened and middle tibiae notched near the apex in the male. Claws bifid. Length 4.5-5 mm.; width 1.8-2 mm.

Type, male, and 2 paratypes, USNM 66857, from Mr. Peter's Hall, 2 miles from Georgetown, British Guiana, Sept. 22, 1918, collected by Harold Morrison.

Remarks: This is another species with bifid claws but strongly resembling the *Trichobrotica sexplagiata* group with notched middle tibiae in the male and similar shape and markings except that the elytra are entirely pale.

Ectmesopus rhabdotus, new species

FIGURE 32

About 3 mm. in length, oblong oval, shining, the antennae in the male with the tenth joint wider than the rest and the middle tibiae excised; pale yellow brown with the occiput of the head dark, the prothorax with a piceous lateral vitta on either side, elytra shining with a blue-violet luster, tibiae in the apical half deeper brown.

Head smoothly rounded over the occiput with fine punctures over the rather indistinct frontal tubercles, a narrow carina, pale yellow with the occiput of the head having a darkened area behind the eyes and the tip of the mouthparts also dark. Antennae in the male with joints eight to ten gradually thickening, the tenth joint the widest, basal and terminal joints pale yellow brown, the remainder gradually deepening in color to the tenth which is piceous. Prothorax a little wider than long, with nearly straight sides, disc smooth and without depressions, shining, impunctate, pale yellow brown with a piceous vitta extending to margin and nearly the length of the pronotum on each side. Scutellum brown. Elytra blue violet, shining, in the one specimen examined the elytra much wrinkled, the specimen being immature. Body beneath entirely pale, the legs pale with the apical half of tibiae brown. Length 2.8 mm.; width 1.2 mm.

Type, male, USNM 66855, collected at Bahia Honda, Cuba, on June 1-3, by H. F. Wickham.

Remarks: The markings of this species resemble those of *E. vitticollis* Blake from Puerto Rico except that the vittae on the prothorax are longer. The graduated enlargement of the eighth to tenth antennal joints is different from any of the other species.

Luperosoma vittatum, new species

FIGURE 19

About 3.5 mm. in length, elongate oblong oval, shining, the elytra finely punctate, in the male the fifth to eighth antennal joints enlarged and the middle tibiae excised, pale yellow brown with a broad piceous vitta on each side of prothorax and a broad piceous vitta nearly covering each elytron leaving the margin and a narrow pale sutural vitta.

Head with the interocular space approximately half width of head, occiput smoothly rounded, frontal tubercles well marked with a median depression above, a narrow carina down lower front. Antennae in the male longer than half the body, third joint short and compressed, not so long as second, fourth joint very long and slender, fifth joint wider, sixth, seventh, eighth, much widened, ninth to eleventh gradually diminishing in width, entirely dark piceous. Prothorax only a little wider than long with the sides only slightly curved, a faint transverse depression, surface shining, pale yellow with a broad piceous vitta on each side. Scutellum pale. Elytra rather depressed, a small basal callosity with an intrahumeral sulcus, surface shining, finely and moderately densely punctate, pale yellow brown with a broad piceous vitta extending nearly across the elytra, leaving only a narrow pale vitta at the suture and the lateral margin pale. Body beneath pale yellow brown with the tibiae and tarsi a little darker, anterior tibiae in male enlarged, middle tibiae in male deeply excised, anterior coxal cavities open, claws appendiculate. Length 3.5 mm.; width 1.4 mm.

Type, male, USNM 66850, collected at Tegucigalpa, Honduras, July 9, 1918, by F. J. Dyer, at 5400 ft. altitude.

Remarks: The color pattern is similar to *Phyllecthrus gentilis* Leconte, but the enlarged antennal joints (in this case the intermediate instead of the terminal joints) and deeply excised middle tibiae in the male are like those of *Luperosoma marginatum* Jacoby and *L. nigrum* Blake, both from South America.

Luperosoma nigricolle, new species

FIGURE 21

About 3 mm. in length, oblong oval, shining, entirely dark piceous, the antennae with thickened apical joints in the male (no female examined) and excised middle tibiae, elytra rather rugosely punctate.

Head with the interocular space approximately half width of head, occiput smooth, shining, with few punctures, the frontal tubercles swollen, lower front short, a short carina, entirely dark piceous. Antennae not extending to the middle of the elytra, third joint not so long as second, fourth the longest, remainder gradually decreasing in length and the four apical joints short and broad, deep brown. Prothorax only a bit wider than long with nearly straight sides, slightly depressed in the basal half, shining, impunctate, piceous. Scutellum piceous. Elytra a little depressed, with a short intrahumeral sulcus, rather coarsely and rugosely punctate, shining dark piceous. Body beneath entirely dark, frontal cavities open, claws appendiculate. Length 3 mm.; width 1.5 mm.

Type, male, CAS, from Coyote Cove, Conception Bay, Lower California, collected Oct. 1, 1941, by Ross and Bohart.

Remarks: Only a single male so far is known. It differs from the North American species of *Luperosoma* in having a dark instead of a pale pronotum.

Luperosoma parvulum (Jacoby)

FIGURE 20

Luperus parvulus Jacoby, in Godman and Salvin, *Biologia Centrali-Americana*, Coleoptera, vol. 6, pt. 1, p. 597, 1888.

Between 2.5 and 3 mm. in length, elongate oblong oval, very shiny, the prothorax very finely and the elytra more distinctly and thickly punctate, the punctures becoming invisible on the sides and near apex, deep bluish black, the antennae and legs deep brownish piceous, in the male the middle tibiae excised and the last two joints of the antennae thickened, prothorax without visible depression on the disc.

Head with interocular space about half width of head, frontal tubercles swollen and a transverse depression over them, carina broad and flattish, lower front entirely dark, shining. Antennae extending to the middle of the elytra, the three basal joints dark reddish brown, remainder covered with pale pubescence and possibly a little darker. Second joint a little longer than third, fourth joint about equal to second and third together, rest subequal, gradually widening so that the tenth and eleventh joints are quite heavy. Prothorax only a little wider than long with slightly curved sides, not at all depressed although not very convex, but smoothly rounded, surface very finely punctate becoming more densely and distinctly punctate near the bottom, entirely shiny dark bluish black. Scutellum dark. Elytra narrowly elongate, smooth with a short intrahumeral sulcus, strongly punctate along the suture, in the base with transverse wrinkles near the suture, punctation tending to be striate and becoming evanescent on sides and below the middle; shining dark blue.

Body beneath dark (hidden by the glue on which it is stuck to a card); middle tibiae of the male excised near the apex. Length 2.8 mm; width 1.3 mm.

Type, male, MCZ, from Guanajuato, Mexico, Sallé collector.

Remarks: This is another of the species with excised middle tibiae and with the terminal joints of the antennae enlarged in the male. It differs from the others of the genus *Luperosoma* in that the prothorax is not at all depressed, in this respect resembling the species of the West Indian genus *Ectmesopus*. In fact, except for the locality of Mexico, there is little to differentiate this from the West Indian genus.

Platymorpha centromaculata (Jacoby)

FIGURE 9

Malacorhinus centromaculatus Jacoby, in Godman and Salvin, *Biologia Centrali-Americana*, Coleoptera, vol. 6, pt. 1, p. 590, 1888.

About 7 mm. in length, elongate oblong oval, not at all shiny, dull alutaceous, the elytra densely but not coarsely punctate, the prothorax faintly depressed in the lower half, pale yellow brown, on the elytra 2 piceous spots below the middle and a faint trace of spotting near the base in middle, the femora dark streaked, tibiae, tarsi, and antennae dark.

Head with interocular space more than half width of head, a median depressed line down the occiput and a depression over the frontal tubercles, alutaceous with a few punctures on the occiput, carina short, front short. Antennae extending to the middle of the elytra, piceous with the terminal three joints a little paler brown, second and third joints short. Prothorax with the sides only slightly curved and with a very faint depression in the basal half, alutaceous, the punctation distinct on the ridges on the sides, entirely pale yellow brown. Scutellum pale. Elytra alutaceous, rather densely and finely punctate, pale yellow brown, each elytron having a piceous spot below the middle, and a very faint trace of a spot in middle near the base. Body beneath pale with the breast a shade darker and the femora pale with a dark outer streak, tibiae and tarsi dark, claws appendiculate. Length 7 mm.; width 3.3 mm.

Type, female, MCZ, from Capetillo, Guatemala, Champion collector.

Remarks: Jacoby put this species "provisionally" in the genus *Malacorhinus* but wrote that it differs from the others in the "more transversely shaped and not posteriorly constricted thorax and in the longer metatarsus of the posterior legs." The short third antennal joint, the shape of the prothorax with its very faint depression, the coloring of the whole beetle, together with its alutaceous surface, all resemble species of *Platymorpha*. Jacoby had at least one

more specimen which was collected at Tepanistlahuaca, Mexico, by Sallé and is now probably in the British Museum. He also writes of a variety without spots. There is in the U.S. National Museum collection a specimen from Yepocapa, Guatemala, that may be the male of Jacoby's *centromaculatus*. It has, however, an additional pair of spots in the basal half of the elytra. On the other hand, it does not entirely correspond with Jacoby's description of the variety of *Platymorpha variegata* because there is no humeral dark spot, and in Jacoby's description no mention is made of median basal spots. One of the localities given by Jacoby for *variegata* is Capetillo, Guatemala, which is the same locality as that for *centromaculata*.

To J. A. Wilcox belongs the credit for noting that Jacoby's species doubtfully described as a species of *Malacorhinus* really belongs to *Platymorpha*.

Platymorpha homoia, new species

FIGURE 4

About 6.5 mm. in length, elongate oblong oval, feebly shining, alutaceous, the elytra finely punctate, the pronotum with a shallow, not very conspicuous transverse depression, the head in the male with a somewhat depressed lower front in the middle of which above the labrum protrudes a bifid spine, antennae with the second and third joints very short and compressed in the male, the remainder long, heavy and triangular at apex; pale yellowish brown with dark antennae, dark tibiae and tarsi, the femora with a dark streak at the apex, in the male the first tarsal joint and front tibiae much dilated, the middle tibiae excised near the apex.

Head with the interocular space a little more than half width of head, occiput alutaceous and finely punctate, a median depression over the frontal tubercles, carina short, below this the lower front shallowly depressed, with the labrum produced somewhat horizontally and right over it in the middle a bifid spine; all pale yellowish brown. Antennae long and dark and wide, the second and third joints short and compressed, the two terminal joints lacking. Prothorax with the lateral explanate margin visible from above its entire length and at apex slightly toothed; the transverse sulcus not very conspicuous but a shallow depression; surface alutaceous, finely punctate, entirely pale. Scutellum pale. Elytra alutaceous and finely punctate, entirely pale, except for a very faint median brown spot below the middle on each elytron. Body beneath entirely pale, femora pale with a dark streak, tibiae and tarsi dark. In the male the front tibiae widened near the apex and the first tarsal joint nearly globular above, the underside slightly concave; middle tibiae with a barely perceptible notch, very shallowly excised near the apex; first tarsal joint of hindlegs long and

slender, anterior coxal cavities open, claws appendiculate, a spine on middle and hind tibiae. Length 8.5 mm.; width 2.7 mm.

Type, male, USNM 66854, from Mauricio, Guatemala, collected in May 1891, by G. W. Bock, from the Knab collection.

Remarks: With the exception of the specimens of *Platymorpha smaragdipennis* Jacoby all the others of this genus that I have examined may possibly be of one species, since in general shape they are all very similar, although the variation in color and spotting is considerable. Jacoby described *P. variegata* as having the elytra black, and described as a variety of that two specimens with pale fulvous elytra having a small black spot placed on the shoulder and a more transversely shaped spot at the middle. The present species differs from the spotted variety in being pale yellow brown, and not at all reddish brown, with only a trace of a spot behind the middle on each elytron. Jacoby did not mention another male character, the median spine on the lower front of the face.

Romanita amazonica Bechyne

FIGURE 31

Romanita amazonica Bechyne, Ark. Zool., vol. 11, p. 136, 1958.

About 5 mm. in length, oblong oval, somewhat shiny, distinctly punctate, the head, elytra, breast, abdomen and legs entirely dark piceous, antennal joints four to seven piceous, basal joints partly dark, four terminal joints pale yellow; thorax pale, middle tibiae of the male excised near apex, and third antennal joint compressed.

Head with the interocular space half width of head, occiput smooth, alutaceous, very finely punctate, frontal tubercles distinct, smooth, carina short, disappearing in the rather swollen lower front, head entirely piceous. Antennae very hairy, second and third joints short, remainder very long, the last four joints pale yellow. Prothorax with the sides slightly rounded, wider than long, a distinct transverse sulcus, alutaceous and rather coarsely punctate. Scutellum dark. Elytra wider towards apex with a moderately wide explanate margin, entirely piceous, shining, a short intrahumeral sulcus, finely punctate with a faint trace of a postmedian depression. Body beneath with the breast, abdomen, and legs entirely piceous; anterior coxal cavities open, a spine on middle and hind tibiae, the middle tibiae with a small excision near apex in the male, claws appendiculate, the first tarsal joint long. Length 5 mm.; width 2.5 mm.

Type, in Naturhistoriska Riksmuseet, Stockholm, Sweden, and a paratype, a male, in Frey Museum, Tutzing bei Munich, Germany, both from Rio Uaupes, Taracúa, Rio Negro, from S. Gabriel, Roman expedition.

Remarks: The long slender antennae with the short compressed third joint in the male, the front of the head that is slightly bulging and without any spine, and the rather short prothorax differentiate this genus from the Central American genus *Platymorpha*, in which the antennae are stouter, there is a spine on the lower front of the face, and the prothorax is longer.

***Romanita vittata* Bechyne**

FIGURE 28

Romanita vittata Bechyne, Ark. Zool., vol. 11, p. 137, 1958.

About 4.5 mm. in length, elongate oblong oval, the antennae missing, the prothorax smooth and without any transverse depression, elytra with a slight depression below basal callosity and another below the middle, finely punctate with a tendency towards being striate; pale yellow brown with the occiput of the head dark, three dark pronotal vittae, the middle one the widest, and a wide vitta on each elytron covering more than half of each, breast brownish.

Head with the interocular space about half width of head, occiput rounded, frontal tubercles distinct, carina short ending in a slightly swollen ridge below the antennal sockets; pale yellow brown with the mouthparts brownish. Antennae missing, but said by Bechyne to be like those of *R. amazonica*. Prothorax wider than long with slightly curved sides and without any transverse sulcus visible to me although Bechyne stated it was "feebly impressed"; shiny pale yellow with a wide median vitta and a narrower one on each side. Scutellum dark. Elytra narrow, elongate, with a slight basal callosity and a depression below, and also another transverse impression below the middle, punctation fine, tending to be striate; pale yellow brown with a wide piceous vitta on each elytron beginning at the humerus and widening gradually towards apex but not extending to the suture, the apex dark, lateral margin pale, epipleura vanishing at apical curve. Body beneath pale with the breast brownish, the femora pale with a dark streak above, tibiae and tarsi brownish, a spine on hind tibiae, ? on others, claws appendiculate. Length 4.5 mm.; width 2 mm.

Type, female, in Naturhistoriska Riksmuseet, Stockholm, Sweden, from S. Gabriel, Roman expedition, collected on December 26.

Remarks: This female specimen with no antennae and without any discernible depression across the pronotum is without any characters by which it can be definitely placed in the genus *Romanita*.

***Romanita ornata* Bechyne**

FIGURE 34

Romanita ornata Bechyne, Ark. Zool., vol. 11, p. 136, 1958.

About 7 mm. in length, oblong oval, shining, the prothorax with a

shallow transverse sulcus not at all conspicuous, the elytra finely punctate, a little wrinkled and with faint costae; piceous, the prothorax pale, the body beneath except the breast pale, femora pale at base, a narrow pale fascia below the middle of elytra, not joined at suture, and a pale apical spot on each elytron.

Head with the interocular space about half width of head, the occiput polished and finely punctate, faint traces of frontal tubercles but flat, and a flat interantennal area without a carina swelling out below and widening; entirely dark. Antennae (in female) with the third joint a little longer than second, fourth joint considerably longer than second and third together and longer than the succeeding joints which are subequal, piceous with the three terminal joints pale yellow. Prothorax somewhat wider than long with nearly straight sides and with a very shallow transverse sulcus, scarcely visible; pale yellow, polished, nearly impunctate. Scutellum dark. Elytra obsolete and rather rugosely punctate, and with traces of costae, shining piceous with a pale yellow fascia below the middle interrupted at the suture and somewhat depressed, a round pale spot also near the apex. Epipleura vanishing at apical curve. Body beneath pale except the dark breast, femora pale at base but dark in apical half, tibiae and tarsi dark. Anterior coxal cavities open, the claws appendiculate. Length 6.8 mm.; width 3 mm.

Type, female, in Naturhistoriska Riksmuseet, Stockholm, Sweden, collected on the Río Negro, S. Gabriel, Amazon, Roman expedition, January 5.

?Romanita fasciata (Weise)

FIGURE 35

Neobrotica fasciata Weise, Ark. Zool., vol. 14, no. 1, p. 93, 1921.

About 8 mm. in length, elongate oblong oval, the elytra finely punctate, the punctures in the pale band coarser and more distinct, and with a suggestion of being geminate striate between feeble traces of costae, the transverse sulcus on the prothorax not marked; pale yellow brown, the head, antennae and legs piceous, elytra piceous with a broad pale band across the middle but interrupted at the suture, apex narrowly pale.

Head with the interocular space approximately half width of head, occiput polished, impunctate, frontal tubercles distinctly marked but not swollen, a median depression above them, a narrow, distinct carina down the lower front, entirely dark shiny piceous. Antennae with the third joint a little longer than the second, both together not so long as the fourth, rest a little shorter, long and slender, dark brown with the three terminal joints pale. Prothorax rectangular, almost twice as broad as long with slightly curved sides and

unusually shallow transverse depression more marked at the ends; very finely punctate, polished yellow brown. Scutellum yellow brown. Elytra with traces of lateral costae, finely punctate, in the dark part but in the broad pale median fascia which is also somewhat depressed, the punctation tending to be geminate striate and coarser; the fascia interrupted at suture, apex narrowly pale. Body beneath pale with the breast brownish, legs except coxae dark, anterior coxal cavities open, a spine at end of middle and hind tibiae, claws appendiculate. Length 8.2 mm.; width 3.8 mm.

Type, female, Naturhistoriska Riksmuseet, Stockholm, Sweden, collected at Manaos, on the Amazon, Brazil, by Roman.

Remarks: This is certainly not a species of *Neobrotica* as Weise has described it. Bechyne has stated that it is possible it may belong in his genus *Romanita*. Only a female is known, but it shows little resemblance to *Romanita amazonica* Bechyne, the genotype, except in the long fourth antennal joint. Whether the third joint in the male is short and compressed and the middle tibiae notched is impossible to determine at present. There is a depression behind the middle of the elytra, which is one of the characters that Bechyne gives for *Romanita*.

Porechontes, new genus

Type species: *Porechontes wilcoxi*, new species.

Elongate oblong oval, head with the lower front smooth and somewhat bulging, in the male a pore in the middle of the lower front below the antennal sockets. Antennae long, extending to the middle of the elytra, the third joint short and compressed in the male, fourth joint longer than the fifth joint, usually the eighth and ninth joints a little wider or irregularly triangular in the male. Prothorax with a shallow, scooped-out depression in the basal half, sides rounded with the explanate margin visible from above. Elytra without depressions, confusedly punctate. Anterior coxal cavities open, middle tibiae in the male excised near the apex, first joint of hind tarsi long, claws appendiculate.

This genus differs from the genus *Romanita* as typified by *Romanita amazonica* Bechyne in the shape of the head with the pore in the middle of the lower face, in having the ninth and tenth antennal joints usually somewhat widened in the male, and by the narrower prothorax and lack of any depression behind the middle of the elytra. It is distinguished from *Platymorpha* by the shape of the head which instead of having a spine over the labrum and a short carina, has a long somewhat bulging lower front with a pore below the antennal sockets. *Platymorpha albiventris* Blake (Proc. U.S. Nat. Mus., vol. 108, p. 99, 1958) belongs in this genus. At the time I described the

species none other had been seen and I tentatively included it in *Platymorpha* stating that it was not closely related to the other species.

The name *Porechontes* is derived from the Greek πόρος, meaning "pore," and έχοντες, meaning "having."

Porechontes wilcoxi, new species

FIGURE 29

Between 3 and 4.5 mm. in length, oblong oval, shining, elytra finely punctate, in the male the middle tibiae slightly notched and the third antennal joint short and compressed, in the female the third joint a little longer than the second, remaining joints long, in the male the ninth and tenth joints somewhat dilated; yellow brown with the occiput of the head and mouthparts piceous, pronotum more than half piceous, pale along the base, elytra piceous with the margin and a wide vitta common to both elytra along the suture and widened near the apex into a roundish area, pale, the abdomen and base of femora and ninth and tenth antennal joints pale.

Head with the interocular space about half width of head, occiput smoothly rounded, polished, finely punctate, dark to the antennal sockets, frontal tubercles clearly marked, lower front pale, bulging out so that the carina is not apparent, a pore in the middle of the front of the male; mouthparts dark. Antennae with the third joint short and compressed in the male, a little longer in the female, remainder long, dark, hairy except the ninth and tenth joints which are pale and in the male slightly wider. Prothorax about one-third wider than long with the sides only slightly rounded, a broad scooped-out depression in lower half; surface shining, very finely punctate; piceous except for the pale margin and pale basal fascia. Scutellum shining piceous. Elytra rather flat with wide explanate margin, small humeri, shiny; shallowly punctate, piceous with wide pale margin on the sides and wide pale sutural vitta beginning below the scutellum and widening in a roundish apical area before apex. Body beneath pale with the breast dark, the femora dark in apical half, tibiae and tarsi dark, anterior tibiae thickened in male and the middle tibiae with a barely perceptible notch; anterior coxal cavities open, claws appendiculate. Length 3-4.5 mm.; width 1.7-2.3 mm.

Type, male, MCZ 30676; 14 paratypes, of which 4 are in the U.S. National Museum, from Barro Colorado Island, Canal Zone, collected June 23, 1924 by Nathan Banks. Other specimens from Tabernella, Cobima, Canal Zone, collected by A. Busck.

Remarks: This species closely resembles the two following in size and shape and in having the ninth and tenth joints of the antennae in the male slightly dilated and a pore in the middle of the front of

the face. As in *Romanita amazonica* and the species of *Platymorpha* the third antennal joint in the male is compressed.

Porechontes limbella (Weise)

FIGURE 30

Chthoneis limbella Weise, Ark. Zool., vol. 14, no. 1, pp. 103-104, 1921.

About 4 mm. in length, elongate oblong oval, shining, the pronotum punctate along the base, the elytra strongly and a little rugosely punctate, the occiput of head, tip of abdomen, elytra (except lateral margin), legs more or less piceous, the lower front of head and base of femora deep brown, prothorax and body beneath pale, the antennae with the three terminal joints pale, ninth joint in male widened and middle tibiae excised.

Head with the interocular space half width of head, occiput finely punctate, frontal tubercles somewhat swollen and a narrow carina that is lost in the somewhat swollen and smooth lower front, that is paler than the dark occiput and rather densely punctate, in the male a deep pore in middle below the antennal sockets, eyes large and rather bulging. Antennae long, slender and hairy, extending beyond the middle of the elytra, in the male the third joint shorter than the second and cup shaped, and the ninth widening in a triangular shape towards apex, basal joints yellowish brown, terminal three joints pale yellow with the apex of the last dark. Prothorax with the sides slightly curved, a scooped-out depression in lower half, surface shiny and distinctly punctate along anterior and basal margin but not in the depression, entirely pale. Scutellum dark brown. Elytra smooth, without depressions except the short intrahumeral one, rather densely and somewhat rugosely punctate, piceous with the pale margin along the sides becoming brownish at apex. Body beneath pale yellow with the tip of the abdomen dark, the femora at base pale brown, becoming piceous outwardly, tibiae and tarsi piceous, middle tibiae of the male notched, anterior coxal cavities open, claws appendiculate, no spine discernible on the tibiae. Length 4 mm.; width 2.2 mm.

Type, male, in Riksmuseum, Stockholm, Sweden, from Rio Purus, Amazon, Roman collector.

Remarks: This is closely related to *Porechontes albiventris* (Blake).

Simopsis, new genus

Type species: *Simopsis neobroticoides*, new species.

Elongate oblong oval, head with the face rather flat, only a trace of a carina and the frontal tubercles only outlined. Antennae in the male with the third joint short and compressed, the fourth joint longest of all, and joints four to eight somewhat thicker than the rest. Pro-

thorax faintly depressed in the basal half and with rounded sides and explanate margin. Elytra wider apically and somewhat costate, the punctation confused and rugose. Anterior coxal cavities open, middle tibiae in the male excised, first tarsal joint of hindlegs longer than the rest together, claws appendiculate.

This genus has been erected for a beetle that does not fit into any genus although closely resembling the genera *Platymorpha*, *Romanita*, and *Porechontes* in having in the male a short, compressed third antennal joint. It differs from all of them in general shape as well as in having a different face without any spine or pore or swollen lower front. Superficially it resembles species of *Neobrotica* in its markings and somewhat costate elytra, but does not belong in this genus because of its excised middle tibiae and short third antennal joint.

The name *Simopsis* is derived from the Greek *σιμός*, meaning "flat nosed," and *ὄψις*, meaning "face."

Simopsis neobroticoides, new species

FIGURE 24

About 5 mm. in length, oblong oval, shiny, the prothorax feebly depressed in basal half, the elytra somewhat costate and with rugose punctation, pale yellow brown with a piceous head and piceous markings at base and apex of elytra, the breast dark, the middle tibiae in the male excised and the intermediate antennal joints a little widened.

Head with the interocular space half width of head, occiput smoothly rounded, a faint depression over the obscure frontal tubercles, and on each side near the eye a deep fovea, lower front rather flat with an inconspicuous carina, dark piceous except the neck and the palpi which are yellow. Antennae extending to the middle of the elytra, joints four to eight deeper brown and in the male a little widened, the third joint short and compressed, the fourth joint longer than the rest. Prothorax with rounded sides and feebly depressed in the lower half, shining, pale yellowish brown. Scutellum bicolored. Elytra wider towards apex, feebly costate along the sides and with coarse rugose punctation, pale yellowish brown with piceous basal markings covering humerus and extending down the side and middle a quarter the length of the elytra, other piceous markings at the apex consisting of two spots, more or less joined, on each elytron. Body beneath pale with the breast dark, legs entirely pale, anterior tibiae and first tarsal joint in the male swollen, middle tibiae excised near the apex. Anterior coxal cavities open, claws appendiculate. Length 5 mm.; width 2.5 mm.

Type, male, BMNH, from Rio Purus, Amazon region, taken in October 1874.

Remarks: In general shape, color, and markings this strongly resembles a species of *Neobrotica*.

Oroctes wilcoxi, new species

FIGURE 18

About 6 mm. in length, elongate oblong oval, shining, very minutely punctate, the male with the face excavated, antennal joints only ten in number, the third and fourth antennal joints excavated near the end, and the pronotum with a median knob anteriorly, none of these abnormalities present in the head, antennae, or pronotum of the female; pale yellow brown with dark brown antennae in the female and pale yellow brown, except basal joint, in the male, elytra with basal third yellow brown, the rest deep violet.

Head with interocular space more than half width of head, in female smoothly rounded over the occiput, polished, the lower front flat, paler yellow, without trace of carina or tubercles, in the male the lower front below the antennal sockets hollowed out with a flattish oval side piece extending from the antennal sockets to labrum, the mouthparts yellowish brown. Antennae 10-jointed in male, the first joint robust, very swollen, second short, third short, excavated at the end, fourth longer than basal joint with a cutout incision near the basal end, remaining joints long and becoming more slender towards apical joint, terminal joint very elongate and deeper brown, the rest yellowish. In the female the basal joint more slender, second and third joints short and about equal, remainder long and a little more slender than in the male. Prothorax wider than long with slightly rounded sides and a scooped-out depression in the basal half, in the male a prominence on either side anteriorly and the anterior margin produced a little in the middle with a knoblike swelling having a small hole in it and setae about the edges; in the female the side humps less developed and no such median knob; shiny pale yellow. Scutellum pale yellow. Elytra wider behind the middle with small humeral prominences and wide explanate margin, shiny, very finely punctate, pale yellow in basal third, the remainder of elytra deep violet. Epipleura not extending much beyond the middle; body beneath and legs entirely yellow, the middle tibiae of the male notched near the apex, all tibiae with a tiny spine; anterior tibiae in the male stouter, and the first tarsal joint enlarged and cylindrical; claws appendiculate, anterior coxal cavities open. Length 5.5–7.5 mm.; width 2.5–3 mm.

Type, male, USNM 66852, and 1 female paratype, both from Rurrenabaque, Rio Beni, Bolivia, collected October 1921 by W. M. Mann.

Remarks: This species is the second of the genus to be described. *Oroctes flavicollis* Jacoby was described from specimens from Chon-

tales, Nicaragua, and Bugaba and David, Panama. In the present species the elytra instead of being entirely deep violaceous are violaceous with the basal third pale yellow. Also in the structure of the male antennae the third and fourth joints are a little differently formed, with a smaller round incision near the apical and basal ends of the joints. Otherwise the two species bear a strong resemblance to each other in spite of the widely separated regions in which they were collected. Like *Phyllecthrus*, both species have only ten joints in the male antennae. John A. Wilcox unearthed the specimens in the U.S. National Museum collection and has generously handed them over to me to describe.

Deuterobrotica atlanta (Bechyne)

FIGURE 25

Neobrotica allanta Bechyne, Ent. Arb. Mus. G. Frey, vol. 7, p. 318, 1950.

Deuterobrotica allanta (Bechyne).—Bechyne, Ent. Arb. Mus. G. Frey, vol. 9, p. 596, 1958.

About 5 mm. in length, oblong oval, shining, the elytra rather coarsely punctate, antennae in the male with the terminal joints enlarged and the middle tibiae excised near the apex. Head and prothorax tan colored, head with a short dark piceous mark on either side of the tan-colored occiput, elytra piceous with pale margins and suture and a short incurving pale vitta on each elytron, body beneath and legs except coxae black.

Head with the interocular space more than half width of head, occiput rounded, frontal tubercles swollen, a slight depression over them, a very short carina and a rather long lower front, pale except for two piceous marks at the base of the occiput. Antennae in male with the last three joints somewhat enlarged, third joint shorter than fourth, entirely dark. Prothorax nearly rectangular, the explanate margin visible from above entire length; very shiny with the transverse sulcus shallow and not conspicuous except at the ends. Scutellum pale. Elytra piceous, the margin and suture pale yellow and a short incurving pale vitta extending down from the intrahumeral sulcus and not reaching the middle of the elytron. Body beneath and legs except coxae dark. Coxal cavities open, claws appendiculate, middle tibiae of the male with a small notch. Length 5.5 mm.

Type, male, in G. Frey Museum, Tutzing bei München, Germany, collected at Nova Teutonia, St. Catarina, Brazil, Nov. 5, 1950, F. Plaumann collector.

Remarks: Bechyne has described the genus *Deuterobrotica* as having the terminal joints of the antennae in the male enlarged and the pronotum with seta-bearing punctures on the side. He did not note the excised middle tibiae in the male.

Deutero-brotica bechynei, new name

FIGURE 22

Neobrotica lineigera Bechyne (not Bechyne 1956, not Jacoby 1887), Ent. Arb. G. Frey Mus., vol. 9, no. 2, p. 600, 1958.

About 6 mm. in length, oblong oval, shining, the elytra with rather rugose punctation, pale with dark antennae and legs and dark under-surface, two small dark spots at base of head and dark elytra having a pale sutural vitta and a pale median vitta extending to apical curve and a pale margin.

Head with the interocular space more than half its width, occiput broad, a shallow depression above the well-marked tubercles, carina very short, barely reaching below the antennal sockets; occiput tan colored with two small dark vittate spots on either side of base, the front becoming paler, labrum piceous. Antennae long and slender and entirely dark in female. Prothorax approximately twice as broad as long with the lateral margin visible its entire length when viewed from above, the sides nearly straight, the transverse sulcus well marked, entirely pale. Scutellum reddish brown. Elytra alutaceous, but shiny, with large dense shallow punctures forming somewhat short rugose transverse ridges; pale yellow with a wide piceous lateral vitta united three-quarters of the way down with a broad median vitta of irregular shape, the margin and suture being pale. Body beneath and legs entirely dark except the pale trochanters; anterior coxal cavities open, claws appendiculate. Length 5.8 mm.

Type, female, from Santa Catarina, Brazil, in G. Frey Museum, Tutzing bei München, Germany.

Remarks: Bechyne has described two different species under the name *Neobrotica lineigera* within two years of each other. The second species was published in 1958. Jacoby has already described a *Neobrotica linigera* in 1887 (Biol. Cent. Amer. Coleopt., vol. 6, pt. 1, p. 574, 1887), a quite different species from either of Bechyne's two *lineigeras*. The name *lineigera* is essentially the same as *linigera* and according to the rules of zoological nomenclature, art. 58, no. 2, it should not stand as distinct. Therefore I am renaming the first species of Bechyne's as *Neobrotica atrilineata*, which is a manuscript name attached by Bowditch to specimens of this species. The second species described by Bechyne in 1958 (Ent. Arb. vol. 9, no. 2, p. 600, 1958), from a female specimen which is not a *Neobrotica* but a *Deutero-brotica*, I am naming *D. bechynei*.

Bechyne in keying out this species distinguishes it and *Neobrotica latifrons* from *Deutero-brotica amplicornis* by the fact that the terminal joints of the antennae are not thickened. He overlooks the fact that both *latifrons* and *bechynei* were described from single females, and the

male alone in this genus shows the thickening of the antennal joints. All three species occur in the same region, are congeneric and very closely related. Undoubtedly the males of both *latifrons* and *bechynei* have thickened antennal joints and the middle tibiae are excised near the apex.

Deuteroibrotica latifrons (Bechyne)

FIGURE 26

Neobrotica latifrons Bechyne, Ent. Arb. Mus. G. Frey, vol. 9, no. 2, p. 600, 1958.

About 6 mm. in length, elongate oblong oval, shiny, faintly alutaceous, sparsely but distinctly punctate, pale yellow, the prothorax with a broad anterior piceous spot on each side, each elytron with two piceous vittae not reaching the apex, one lateral, the other median. Antennae dark brown, tibiae and tarsi dark.

Head with the interocular space more than half width of head, occiput smoothly rounded, nearly impunctate, tubercles distinct, carina broad and rather flat, lower front short. Antennae long, slender, deep reddish brown, third joint shorter than fourth. Prothorax about one-third wider than long, with the lateral explanate margin visible from above all the way, the pores of this margin of which Dr. Bechyne writes not visible in the British Museum specimen although seen in the type in the Frey Museum; surface shining, finely punctate, a broad shallow transverse sulcus, pale yellow with a broad piceous area extending from the anterior margin to the sulcus and a little farther along the side but not reaching the middle on either side. Scutellum pale. Elytra with three faint costae on outer half of each elytron, finely and rather sparsely punctate, pale yellow with a median piceous vitta, wider near the base, and a lateral vitta from the humerus to apical curve, wider at the apical curve. Body beneath pale, shiny, not pubescent, anterior coxal cavities open, femora pale, tibiae and tarsi dark, claws appendiculate. Length 5.7-6 mm.; width 2.8 mm.

Type, female, in G. Frey Museum, Tutzing bei München, Germany, from Santa Catarina, Brazil. A second specimen, also a female, in the British Museum, from the same locality is a better specimen than the type which appears to be immature with the elytra and abdomen shrunken. In the British Museum specimen the elytra are clearly but sparsely punctate.

Remarks: The British Museum specimen bears the label "♀? *amplicornis*." It is not *D. amplicornis* but a closely related species with slightly different pronotal markings, in that the dark areas do not extend to the base, and the elytral vittae are not joined at the apex. *Amplicornis* is also more coarsely punctate. I believe that the male will have excised middle tibiae and enlarged antennal segments.

Deinocladus, new genus

Type species: *Diabrotica pectinicornis* Baly.

Elongate oblong oval, the head with well-defined frontal tubercles and a prominent carina down the lower front. Antennae in the male with the third joint short and compressed, fourth joint very long, joints five to eight becoming gradually larger, usually with a spur on the outside, ninth joint much widened and lengthened, tenth joint usually not quite so wide but also deformed, eleventh joint long and slender. Prothorax with a lateral edge and a more or less transverse sulcus across the disc, narrow but distinct in two species and only apparent at the ends in the third species. Elytra a little wider in apical half, in all three species the elytra piceous with a transverse pale fascia or a large pale spot, the margin and apex pale. In one species the elytra feebly costate. Anterior coxal cavities open, legs long and slender, the middle tibiae in the male notched, first joint of the hindlegs longer than the remaining joints together. Claws bifid.

The unusual development of the antennae in the males of these beetles together with the excised middle tibiae sufficiently differentiate it from other genera. No female specimen of any of the three species has been examined.

The name *Deinocladus* is derived from the Greek *δεινός*, meaning "terrible," and *κλάδος*, meaning "branch."

Deinocladus pectinicornis (Baly)

FIGURE 16

Diabrotica pectinicornis Baly, Ent. Monthly Mag., vol. 25, p. 252, 1889; Trans. Ent. Soc. London, p. 15, 1890.

About 6 mm. in length, elongate oblong oval, shiny, the elytra rather finely but distinctly punctate with faint costae along sides, the intervals having a suggestion of geminate striate punctation, pale yellow with the head, antennae, except tenth joint, tibiae and tarsi, and two wide elytral bands piceous. Antennal joints in male with apical spurs on the outside gradually widening, ninth and tenth joints long, broad and distorted, terminal joint cylindrical and thin, legs long, middle tibiae of male excised; claws bifid.

Head with interocular space half width of head, entirely dark, shiny, finely alutaceous with coarse dense punctures about median line and depression on occiput, and a few finer scattered punctures on the sides. Frontal tubercles much swollen, lower front with a prominent carina down it, punctate on either side, lower front only moderately long, not so long as in many *Diabrotica*. Antennae of male very irregular, antennae of female unknown. In male the second and third joints compressed into short rounded segments, with the

third the shorter, fourth joint very long with a tooth at apex on outside, fifth, sixth, seventh and eighth joints with an increasingly long apical spur, ninth joint much thickened, broad and longer and with a peculiar constriction or notching at apical end, tenth joint not so thick as ninth, with a tooth near the base on the outer side. Terminal joint long, thin, and cylindrical. All joints except the tenth, which is pale, dark brown and very hairy. Prothorax not twice as broad as long, somewhat rectangular, with only slightly curved sides, a blunt tooth at each angle, a shallow depression on either side as if the ends of a transverse sulcus, surface alutaceous and distinctly punctate, pale yellow. Scutellum pale. Elytra widened somewhat towards apex, an intrahumeral depression, faintly costate laterally with distinct semistriate punctures between the ridges; surface alutaceous, pale yellow with two wide piceous bands, the basal one extending to the middle, and a broad apical one with a narrow pale yellow band between and a pale margin and apex. Body beneath shiny, pale brown, not pubescent, abdomen paler; femora pale, tibiae and tarsi brown. Anterior coxal cavities open, femora and tibiae long and slender, no spine on any of the tibiae, middle tibiae in the male excised near the apex. Front tibiae in the male somewhat thickened, and the first tarsal joint wide, claws bifid. Length 6 mm.

Type, male, BMNH from Cauca, Colombia. A second specimen, also a male, in the Bowditch collection, from "Bolivia."

Remarks: Baly wrote that he had two specimens, both males, one of which is in the British Museum, and the other one in the Bowditch collection, and these are the only specimens known to the writer. The bifid claws, the peculiar antennal formation in the male, the long slender legs, and the excised middle tibiae differentiate this from related genera.

Deinocladus cartwrighti, new species

FIGURE 15

About 5 mm. in length, oblong oval, shining, the elytra confusedly punctate, the prothorax with a short median transverse sulcus, in the male the ninth and tenth antennal joints much enlarged and the middle tibiae excised, pale yellow brown with a piceous head and antennae, except the tenth and eleventh joints, brown breast and deep brown elytra having the margin and apex and a large median spot on each elytron pale.

Head with the interocular space half width of head, occiput shiny, smooth, finely punctate and with a median depression over the frontal tubercles, carina extending narrowly down the front, entirely piceous. Antennae in the male (female unknown) long and irregularly shaped, the second and third joints short and compressed, fourth joint long

with the apex prolonged on one side into a spur, fifth joint shorter and also spurred, sixth, seventh and eighth joints gradually thickening and wider at apex, ninth much thickened with a longitudinal cavity below, tenth also thick and pale, also with a long concavity beneath, eleventh joint long, slender and pale, also with the tip dark. Prothorax almost rectangular, the sides only slightly rounded, the explanate margin visible its entire length from above, a tooth at each angle; median transverse sulcus shorter and less pronounced than usual in *Neobrotica*; surface shining, finely punctate. Scutellum bicolored. Elytra with prominent humeri and short intrahumeral sulcus, densely and confusedly punctate, without costae, dark brown with pale margins and apex, and pale along the basal margin, a large median roundish pale spot on each elytron. Body beneath pale, the femora brownish, tibiae and tarsi dark; middle tibiae of male excised; anterior coxal cavities open, claws bifid. Length 4.8 mm.; width 2.2 mm.

Type, male, USNM 66851, collected at Turrialba, Costa Rica, May 25, 1951, by O. L. Cartwright.

Remarks: This species is closely allied to *D. pectinicornis* (Baly). The development of the antennal joints in the male is not quite so extreme but similar, the excision of the middle tibiae the same, and even the general color pattern very similar.

Deinocladus fascicollis, new species

FIGURE 13

About 4 mm. in length. oblong oval, the pronotum with a transverse sulcus, elytra shallowly and densely punctate, yellow brown with a piceous head and antennae, a deep brown band across anterior half of pronotum, elytra with a basal and apical piceous fascia, tibiae and tarsi, breast and apex of abdomen piceous, in the male the antennal joints much enlarged and the middle tibiae excised.

Head with the interocular space about half width of head, occiput rounded without depressions, densely punctate, frontal tubercles well marked, a strong carina down lower front, on the sides punctate. Antennae in the male (female unknown) long and distorted, second and third joints very short, fourth joint as long as the first three together, fifth to eighth joints becoming gradually wider with a prolonged outer spur at apex, ninth joint long and much widened, tenth a little shorter and not so wide, eleventh long, narrow, all entirely dark. Prothorax almost rectangular with slightly curved sides, a transverse sulcus, surface distinctly punctate in places, shining yellow brown with a broad brown fascia across anterior half not reaching the side margins. Scutellum dark. Elytra broad towards apex, densely punctate, with a tendency to being striate, humeri with a short intrahumeral sulcus, yellow brown with a broad basal and apical

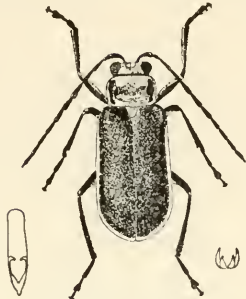
piceous fascia, not reaching margin or apex. Body beneath pale yellow with the breast and last segments of the abdomen piceous, anterior coxal cavities open, femora and tibiae slender, middle tibiae excised in the male, the femora pale except the hind ones which are dark at the apex, tibiae and tarsi dark, without spines, claws bifid. Length 4.2 mm.; width 2 mm.

Type, male, CAS, collected in the valley of the Rio Monzon, Tingo Maria, Peru, Oct. 9, 1954, by E. I. Schlinger and E. S. Ross.

Remarks: This is the third species of the genus to be described. All three are known only from male specimens. All three have a similar yet different striking antennal development in the male, and all are with a similar elytral pattern.



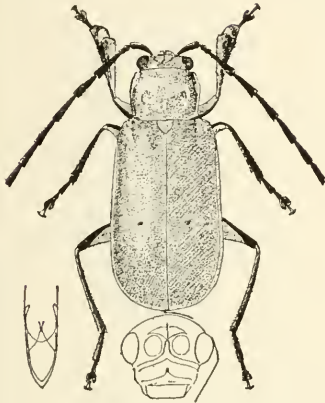
1 *Trichobrotica pallida* (Jacoby)
(Type *Neobrotica pallida*)



2 *Trichobrotica nigripennis*, n.sp.



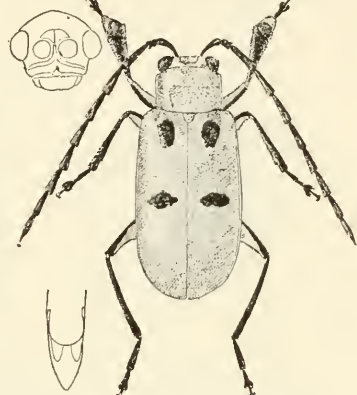
3 *Trichobrotica nymphaea*
ssp. *flavicollis*, n.ssp.



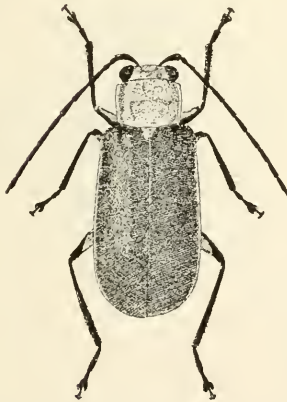
4 *Platymorpha homoia*, n.sp.



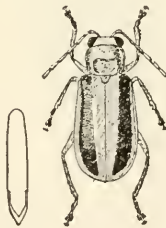
5 *Trichobrotica egensis*, n.sp.



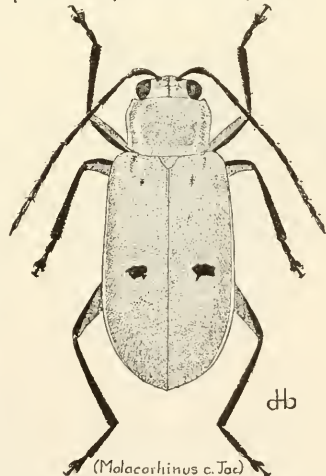
6 *Platymorpha ?centromaculata* (Jacoby) ♂



7 *Platymorpha variegata* Jacoby

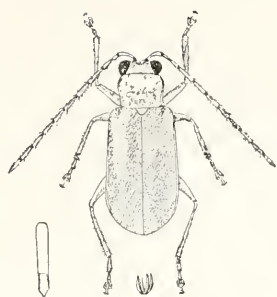


8 *Trichobrotica rhabdota*, n.sp.

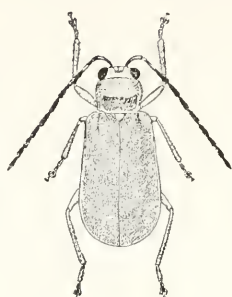


9 *Platymorpha centromaculata* (Jacoby) Type

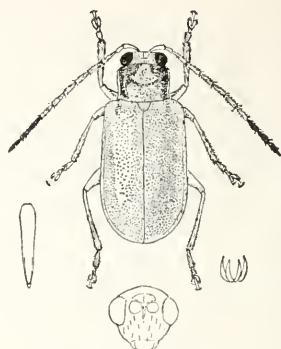
FIGURES 1-9.—1, *Trichobrotica pallida* (Jacoby) (type of *Neobrotica pallida*); 2, *Trichobrotica nigripennis*, new species; 3, *Trichobrotica nymphaea flavicollis*, new subspecies; 4, *Platymorpha homoia*, new species; 5, *Trichobrotica egensis*, new species; 6, *Platymorpha ?centromaculata* (Jacoby), male; 7, *Platymorpha variegata* Jacoby; 8, *Trichobrotica rhabdota*, new species; 9, *Platymorpha centromaculata* (Jacoby), type.



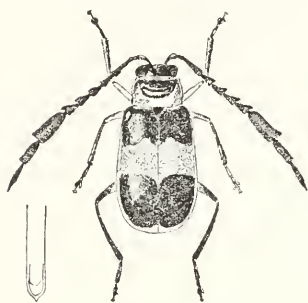
10. *Neotrichota subtilis* (Weise)
(Type: *Phyllobrotica subtilis*)



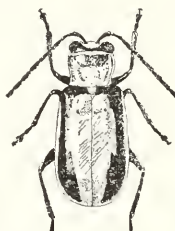
11. *Neotrichota subtilis* (Weise)
(Type: *Neobrotica achroma* Bechyne)



12. *Neotrichota flavipennis*, n.sp.



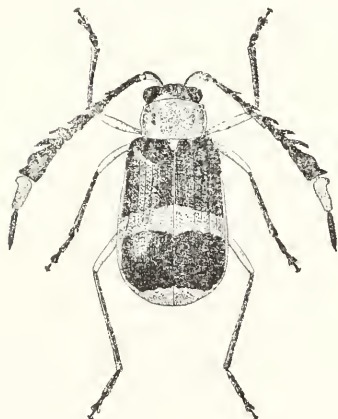
13. *Deinocladus fascicollis*, n.sp.



14. *Trichobrotica fenestrata*, n.sp.



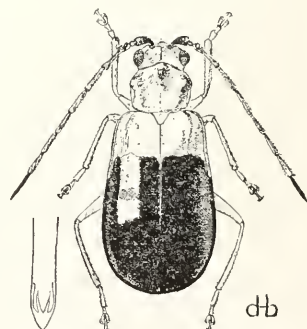
15. *Deinocladus cartwrighti*, n.sp.



16. *Deinocladus pectinicornis* (Baly)
(Type: *Diabrotica pectinicornis*)

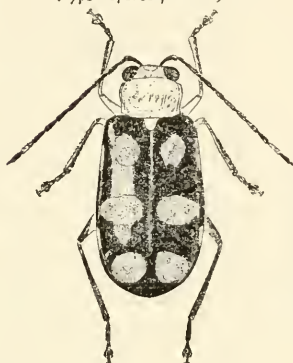
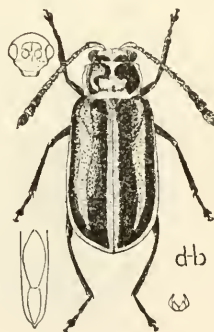


17. *Trichobrotica nigrosignata* (Jacoby)
(Type: *Diabrotica nigrosignata*)

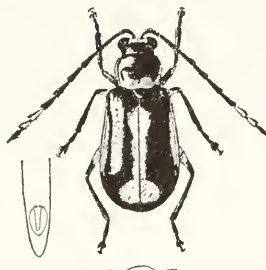
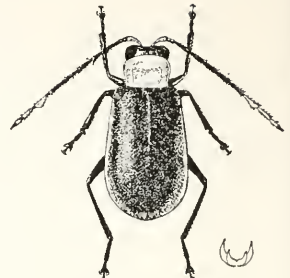
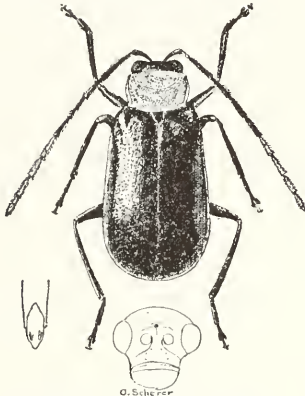
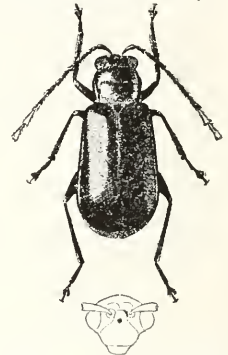
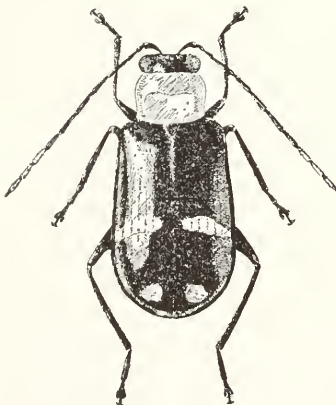
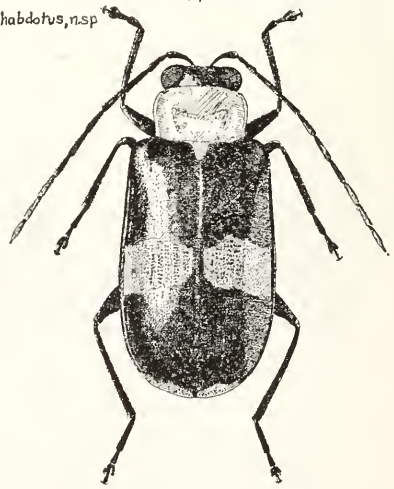


18. *Oroetes wilcoxi*, n.sp.

FIGURES 10-18.—10, *Neotrichota subtilis* (Weise) (type of *Phyllobrotica subtilis*); 11, *Neotrichota subtilis* (Weise) (type of *Neobrotica achroma* Bechyne); 12, *Neotrichota flavipennis*, new species; 13, *Deinocladus fascicollis*, new species; 14, *Trichobrotica fenestrata*, new species; 15, *Deinocladus cartwrighti*, new species; 16, *Deinocladus pectinicornis* (Baly) (type of *Diabrotica pectinicornis*); 17, *Trichobrotica nigrosignata* (Jacoby) (type of *Diabrotica nigrosignata*); 18, *Oroetes wilcoxi*, new species.

19. *Luperosoma vittatum*, n.sp.20. *Luperosoma parvulum* (Jacoby)
(Type *Luperus parvulus*)21. *Luperosoma nigricolle*, n.sp.22. *Deuterobrotica bechynei*, nomen nov.
(Type *Neobrotica lineigera* Bechyne)23. *Trichobrotica analis* (Weise)
(Type *Neobrotica analis*)24. *Simopsis neobroticoides* n.sp.25. *Deuterobrotica atlanta* Bechyne26. *Deuterobrotica latifrons* (Bechyne)
(Type *Neobrotica latifrons*)27. *Deuterobrotica amplicornis* (Baly)
(Type *Diabrotica amplicornis*)

FIGURES 19–27.—19, *Luperosoma vittatum*, new species; 20, *Luperosoma parvulum* (Jacoby) (type of *Luperus parvulus*); 21, *Luperosoma nigricolle*, new species; 22, *Deuterobrotica bechynei*, new name (type of *Neobrotica lineigera*); 23, *Trichobrotica analis* (Weise) (type of *Neobrotica analis*); 24, *Simopsis neobroticoides*, new species; 25, *Deuterobrotica atlanta* (Bechyne); 26, *Deuterobrotica latifrons* (Bechyne) (type of *Neobrotica latifrons*); 27, *Deuterobrotica amplicornis* (Baly) (type of *Diabrotica amplicornis*).

28. Type *Romanita vittata* Bechyne29. *Porechontes wilcoxi*, n.sp.30. *Porechontes limbella* (Weise)
(Type *Chthoneis limbella*)31. *Romanita amazonica* Bechyne32. *Ectmesopus rhabdotus*, n.sp.33. *Porechontes albiventris* (Blake)
(Type *Platymorpha albiventris*)34. Type *Romanita ornata* Bechyne35. ? *Romanita fasciata* (Weise)
(Type *Neobrotica fasciata*)

FIGURES 28-35.—28, *Romanita vittata* Bechyne; 29, *Porechontes wilcoxi*, new species; 30, *Porechontes limbella* (Weise) (type of *Chthoneis limbella*); 31, *Romanita amazonica* Bechyne; 32, *Ectmesopus rhabdotus*, new species; 33, *Porechontes albiventris* Blake (type of *Platymorpha albiventris*); 34, *Romanita ornata* Bechyne, type; 35, *Romanita fasciata* (Weise) (type of *Neobrotica fasciata*).