EIGHTH CONTRIBUTION TO THE COLEOPTERA FAUNA OF THE PHILIPPINES

By W. SCHULTZE

Of Manila, P. I.

ONE COLORED PLATE AND ONE BLACK PLATE

In this paper I wish to make known among others a series of new and rather conspicuous Philippine Cerambycidæ. Our present knowledge of the identified longicorns of the Philippine Islands, aside from those herein described, comprises some two hundred eighty species of which about one-third was originally described by Newman [1] from material collected by Hugh Cuming during 1836 to 1840. Several other series of cerambycids, as well as other Coleoptera, of the Cuming material were described by Westwood, G. R. Waterhouse, Pascoe, and various other authors; and in no instance is the exact locality for the species given, except in some cases "Manilla," and for obvious reasons this locality name should be disregarded unless verified by new records. Concerning the localities of, as well as other data on, H. Cuming's collections from the Philippine Islands, useful references are given by Merrill.[2]

The following species are herein described:

CERAMBYCIDÆ

Megopis sanchezi sp. nov.
Nemophas rosenbergii ramosi subsp. nov.
Pachyteria ilocana sp. nov.
Aphrodisium luzonicum sp. nov.
Aphrodisium panayarum sp. nov.
Bicon luzonensis sp. nov.
Clytellus benguetanus sp. nov.
Neocollyrodes macgregori g. et sp. nov.
Pharsalia mindanaoensis sp. nov.
Euclea panayana sp. nov.
Euclea variolosa sp. nov.
Chlorisanis benguetanus sp. nov.

CURCULIONIDÆ

Pachyrrhynchus erosus sp. nov.
Calidiopsis affinis sp. nov.

DYNASTIDÆ

Xylotrupes mindanaoensis sp. nov.

[1] Newman, Edward, Cerambycitum Insularum Manillarum Dom. Cuming captarum enumeratio digesta, The Entomologist (1840–2) 243.

[2] Merrill, E. D., Genera and species erroneously credited to the Philippine flora, Philip. Journ. Sci. § C 10 (1915) 171; page 183 (an account of the localities of H. Cuming's collections in the Philippine Islands).

Megopis (Baralipton) sanchezi sp. nov. Plate 1, fig. 6, ♂.

Grayish brown, head, prothorax, and elytra covered with very fine pubescence. Head with a dimplelike depression on the front from which a well-pronounced medial line issues, reaching on to vertex. Antennary bases strongly produced. Antennæ of male slightly longer than body; of female one-fourth shorter than body. First joint twice as long as broad; first, third, and fourth joints closely granulated, finely and rather sparsely pubescent; last seven joints somewhat glossy. Third joint of male as long as fourth, fifth, and sixth joints together; third joint of female longer than fourth, fifth, and sixth joints together. Extreme apical part of each joint, except the last, blackish. Prothorax constricted anteriorly, gaining in width toward the base. Posterior-lateral angles produced, forming a flattened toothlike projection. Discal area with an irregular broad swelling toward the posterior margin. Elytra with inner and middle costæ strongly raised, castaneous brown, connected by a cross branch at the apical fourth. Outer costa faintly indicated in the basal half, but shortly before the middle it is more distinct, continued in two branches, the inner one of which runs into the medial costa, the outer one ending near the apex. A short spine at the apical termination of the suture. Abdominal segments and legs less densely pubescent. Last ventral segment of male strongly emarginate.

Male, length, 42.5 millimeters; width, 10.8. Female, length, 51.5 millimeters; width, 15.

LUZON, Benguet, Baguio (*W. Schultze*). Types in my collection.

This species is very destructive to the Benguet pine. On several visits to the pine-clad mountains of Benguet around Baguio and on the trail to Mount Santo Tomas I came across a number of old trees of *Pinus insularis* Endl., which were badly infested by a species of cerambycid. In 1917 I succeeded in rearing an adult of *Megopis sanchezi* from some larvæ that were kept in a piece of pine log.[3]

[3] In my Catalogue of the Coleoptera of the Philippine Islands, page 106, the above new species was erroneously identified as *Megopis cingalensis* White; therefore, the latter name should be eliminated from the Philippine list, and *M. sanchezi* is to be added.

Nemophas rosenbergii ramosi subsp. nov. Plate 2, fig. 2.

Head, prothorax underside, and legs densely covered by ocherous pubescence. Elytra dark metallic green, very coarse, confluent and somewhat granulate, deeply impressed punctures basally, which become less and less pronounced toward the apex. A narrow irregular pale ocherous band at the base, another creamy white, somewhat broader band before the middle, and a very broad band behind the middle. The anterior margin of the latter nearly straight, but the posterior margin forming an arch on each elytron. Still another band at the apex with a narrow bare spot.

Length, 34 millimeters; width at shoulder, 11; antenna, 54.

MINDANAO, Surigao, Surigao (*M. Ramos*). Type in my collection.

The close relationship of this species to *N. rosenbergii* Rits.[4] from Toelabollo, North Celebes, according to the description of the latter is apparent, but the markings seem to differ.

Pachyteria ilocana sp. nov. Plate 1, fig. 1, ♂.

Head punctulate and rugulose, black, except the front, which is rufescent-ochraceous. Interantennary ridge strongly concave and divided by a well-pronounced medial groove, the latter reaching from front to vertex. Palpi and antennæ rufescent-ochraceous and finely setose. Prothorax closely punctured, constricted and transversely grooved anteriorly and posteriorly. Lateral margins acute tuberculate. A distinct groove circumscribes a somewhat tumid area, which is finely coriaceous and of a rufescent-ochraceous color. This area extends dorsolaterally from the anterior transverse groove to the tubercle, thence to the posterior groove, and is continued ventrally, passing anterior to the intercoxal process of the prosternum. Discal area of prothorax more or less covered with short black velvety pubescence, except two small oblong glossy depressions, at the middle, near the anterior, and near the posterior transverse groove. Scutellum black. Elytra densely punctured, covered with velvety pubescence, black, except the basal area, which is rufescent-ochraceous. Each elytron showing slight traces of three longitudinal costæ. Body beneath glossy, dark violet blue and irregularly punctured. Along the posterior margin of the first abdominal segment an oblong patch of silvery gray pubescence. Legs rufescent-ochraceous, irregularly punctured, rugose and finely setose. A fringe of setæ on the

[4] Ritsema, Notes Leyd. Mus. (1881) 148; Heller, Tijdschr. voor Entom. 62 (1919) 102.

underside of the tibiæ, more strongly pronounced in the posterior tibiæ; claws black.

Length, 37 millimeters; width, 11.

LUZON, Ilocos Norte, Bangui. Type in my collection.

Aphrodisium panayarum sp. nov. Plate 1, fig. 8, ♀.

Female.—Head, prothorax, and scutellum metallic purplish bronze, very glossy; elytra and legs, except tarsi, dark blue. Head with front strongly concave, densely punctured, a medial groove which terminates between the eyes on vertex, the latter as well as sides of head densely rugulose-punctate. Antennæ dark blue, first joint densely punctulate, the following joints faintly black pubescent. Prothorax constricted and transversely grooved anteriorly and posteriorly, with a strongly pronounced tubercle at the middle of each lateral margin. Discal area densely and coarsely rugulose-punctate, very faintly pubescent, somewhat raised, forming a rather sharp ridge posteriorly. Anterior and posterior grooves in the middle smooth. Lateral margins rugulose-punctate. Scutellum with a shallow indistinct medial groove, punctured toward the margins. Elytra with basal area sparsely and scatteredly punctured, glossy and with a violet sheen; toward the middle densely punctured and black pubescent, and gradually less so toward the apex. Medial area with a faint greenish, the apical area with a steel-blue, sheen. Abdominal segments scatteredly and sparsely punctured, very glossy greenish blue. Femora irregularly finely and coarsely punctured and faintly pubescent, tibiæ densely punctured, especially posterior tibiæ densely blackish pubescent with a fringe of setæ. Tarsi rufescent ochraceous, claws black.

Female, length, 35 millimeters; width, 9.

PANAY, Antique, Culasi (*R. C. McGregor*). Type in my collection.

Aphrodisium luzonicum sp. nov. Plate 1, fig. 4, ♀.

Head, prothorax, and scutellum glossy metallic greenish bronze, elytra metallic blue with a green reflection. Head with front concave, irregularly coarsely punctured, a medial groove which terminates between the eyes on vertex. The latter irregularly punctate, sides of head rugulose-punctate. Prothorax similar in form to *A. panayarum*, the sculpture more pronounced. At the disk a well-pronounced bifid patch of black pubescence. Elytra, basally, sparsely and scatteredly punctured, toward the middle densely punctured and sparsely

black pubescent, less so toward the apex. Meso- and metathorax of female and in the male also the abdominal segments finely, somewhat iridescent, whitish pubescent. Abdominal segments of female glossy dark blue. Legs dark blue, except foretibiæ below, and tarsi, which are rufescent-ochraceous.

Male, length, 24.5 millimeters; width, 6.5. Female, length, 35 millimeters; width, 9.8.

LUZON, Ilocos Norte, Bangui (my collector). Types in my collection.

Aphrodisium semiignitum Chevr.[5] Plate 1, fig. 10, ♀.

As belonging to this species I identified several specimens that were caught with specimens of *Aphrodisium luzonicum* and *Pachyteria ilocana*, which are described in this paper. It is easily distinguished from *A. luzonicum* and *A. panayarum* by its strikingly different coloration: Head, prothorax, and elytra metallic reddish bronze, medial area toward lateral margins of elytra dark purple; antennæ and legs dark blue, except tarsi, which are rufescent-ochraceous. All the above-mentioned species were collected near Bangui, Ilocos Norte, Luzon, from certain flowers, on which they were feeding.

Bicon luzonensis sp. nov.

Head, antennæ, scutellum, elytra, and legs black; prothorax red. Head asperate, antennæ densely and irregularly punctured, third joint longest. Prothorax longer than broad, asperate, with a narrow blackish anterior marginal band. Elytra coarsely and densely punctured, especially toward the base, also somewhat granulated. Apex bispinose. Legs closely and strongly punctured and sparsely setose.

Male, length, 7.5 millimeters; width, 2. Female, length, 8.2 millimeters; width, 2.5.

LUZON, Bulacan, Angat (*M. Ramos*). Types in my collection.

Clytellus benguetanus sp. nov.

Black, very glossy. Head with front rugulose, with a well-pronounced medial carina and sparsely setose. Antennæ irregularly punctured, rugulose and sparsely setose, second joint half as long as third, third to sixth joints subequal in length, seventh to tenth joints shorter and broader than the former joints, eleventh joint longest. Prothorax impunctate, broadest anteriorly, strongly constricted at the posterior third, gaining

[5] Chevrolat, Rev. Zool. (1841) 227.

slightly in width again toward the posterior margin. Elytra strongly constricted before the middle, a few coarse punctures and a few white setæ at the constriction. At the apical triangle a small patch of silky white pubescence. Underside white pubescent. Legs sparsely whitish setose.

Length, 5.8 millimeters; width, 1.5.

LUZON, Benguet, Baguio (*W. Schultze*). Type in my collection.

Genus **NEOCOLLYRODES** novum

Head with the eyes very much produced; front concave, deeply notched between antennary bases, head slightly constricted behind the eyes. Antennæ filiform, reaching to basal fourth of elytra. First joint twice as long as broad; second joint one-third as long as first; third joint longest, twice as long as first and about equal in length to fourth and fifth together. Prothorax twice as long as broad, subcylindrical, slightly constricted posteriorly. Elytra subparallel in basal half, somewhat broader in apical half. Apex of each elytron with two acute angles. Legs slender, hind femora twice as long as front femora, the former reaching well beyond apex of elytra. Tibiæ with two spines at the apex. First tarsal joint of hind legs longer than the following joints together. This remarkable genus, resembling in aspect, and having a mimicry relationship to, the genus *Collyris* of the Cicindelidæ, I propose to place near *Collyrodes* Pascoe.[6]

Type, *Neocollyrodes macgregori* sp. nov.

Neocollyrodes macgregori sp. nov. Plate 1, fig. 5.

Glossy bluish black, femora dark red. Front with a strongly raised glossy medial ridge forming a triangle, laterally irregularly punctured; sides of head irregularly punctured, behind the eyes rugose. A bluish white tomentose spot on vertex. Antennæ with first and second joints glossy, third to fifth joints dorsally bluish white tomentose. Prothorax with an anterior and posterior submarginal groove, the surface strongly asperate and rugose, toward the base an irregular oblong smooth area. Apical third in female with a large black pubescent patch. At the middle laterally a small round bluish white tomentose spot and another at the base. Scutellum white tomentose. Elytra with a small round bluish white tomentose spot at the

[6] Pascoe, Trans. Ent. Soc. London II 5 (1859) 25.

basal fourth, a fascia interrupted at the suture and not reaching lateral margins, being located behind the middle. Two other roundish tomentose spots on each elytron in apical area. Basal area, up to the fascia, glossy, coarsely and confluently punctured and rugose toward the lateral margins, the sculpture similar to that found in species of the genus *Collyris*. Apical half finely and densely punctured and beset with black pubescence, which disappears toward apex. Underside irregularly punctured and finely setose. Episterna of metathorax with a white tomentose patch. First abdominal segment with a bluish white spot toward each lateral margin. Legs sparsely punctured and finely setose. Apical part, dorsally, of femora, tibiæ, and tarsi entirely, bluish white tomentose.

Male, length, 21 millimeters; width, 3. Female, length, 22 millimeters; width, 3.3.

PANAY, Antique, Culasi (*R. C. McGregor*). Type in my collection.

Three other specimens from Luzon, Paete, Laguna Province, and Bosoboso, Rizal Province, differ from the typical specimens of Panay in the following respect: The punctation on the basal half of the elytra is distinctly less pronounced and is sparser and less confluent.

Pharsalia mindanaoensis sp. nov. Plate 1, fig. 7.

Black, prothorax reddish brown, elytra with numerous pale reddish and very irregular narrow bands or spots. Head black, finely and sparsely silvery gray pubescent, front finely and densely punctured with a few scattered coarse punctures. A fine medial groove reaching to vertex. Antennæ black, finely pubescent, last five joints entirely white. Prothorax much broader than long, densely reddish brown pubescent. The spine at the lateral margins is located slightly behind the middle. An anterior and posterior submarginal groove. Discal area with some coarse scattered punctures, an indistinct ridge in the posterior half. Elytra black with numerous irregular combinations of pale reddish bands, which are more condensed toward the apex. Black areas with scattered coarse punctures. Underside pale reddish brown, middle of abdominal segments blackish. Last abdominal segment strongly emarginate. Legs black, finely and sparsely silvery gray pubescent.

Length, 25 millimeters; width, 7.5.

MINDANAO, Surigao, Surigao. Type in my collection.

Euclea panayana sp. nov. Plate 1, fig. 3.

Black. Head irregularly punctured. Front with a medial carina and two narrow tomentose stripes, forming the letter V; terminating on vertex. Prothorax irregularly punctured except a narrow oblong area discally impunctate. An oblique stripe extending from anterior margin, somewhat lateral, to lateral-posterior margin, gaining in width toward the latter margin. Elytra coarsely and densely punctured, less so in the apical half discally. A broad fascia of pale pinkish white extending from the suture posteriorly of scutellum obliquely to lateral margins, and beyond the middle from the margins oblique-posteriorly to the suture. Inside the fascia, at the suture and toward the base a small subtriangular bare spot. Apical third with a small triangular tomentose spot at lateral margin and another larger oblong subsutural spot at apical triangle. These spots as well as stripes on head and prothorax dark cream color, also pro-, meso-, and metasternum. Abdominal segments and femora finely whitish pubescent, in the former more pronounced along the posterior margins. Tibiæ and tarsi black pubescent.

Length, 17.5 millimeters; width, 5.5.

PANAY, Capiz Province, mountains near Jamindan. Type in my collection.

This species is nearly related to *E. mesoleuca* Pascoe.[7] Manila, the locality given for this species by Pascoe, seems very doubtful, since specimens which I identified by comparison with the type in the British Museum as *E. mesoleuca* Pasc. were collected by R. C. McGregor in Sibuyan Island. In Pascoe's species the bare spot at the suture of the elytra is located in the middle of the fascia and is large and roundish as compared to the very small bare sutural spot of *E. panayana* Schultze which is located close to the scutellum.

Euclea variolosa sp. nov. Plate 1, fig. 9.

Glossy black; head sparsely, irregularly, coarsely punctured. A well-pronounced medial carina from front to vertex. Front rufescent tomentose, at vertex this color intermixed with white. Small irregularly scattered bare spots are generally located around the punctures. Prothorax one-fifth broader than long, a small tubercle at lateral margins, irregularly scatteredly punc-

[7] Pascoe, Trans. Ent. Soc. London III 3 (1865) 150.
"*Euclea mesoleuca.*

"E. nigra, nitida, pube sparse niveo-irrorata; elytris punctatis, fascia latissima dense niveo-pubescente, adsuturam interrupta, ornatis.

"Hab.—Manila."

tured, rufescent and whitish tomentose with irregularly scattered bare spots. Elytra irregularly punctured, confluent pale rufescent and white tomentose.

Length, 27.5 millimeters; width, 8.7.

PANAY, Antique, Culasi (*R. C. McGregor*). Type in my collection.

This species is easily distinguished by its much stouter form and larger size from the other Philippine representatives of this genus.

Chlorisanis benguetanus sp. nov. Plate 1, fig. 2.

Dark metallic blue. Head sparsely and scatteredly punctured. Antennæ dark blue. Prothorax irregularly and scatteredly punctured. Discal area with two small roundish and an oblong callosity, the latter in the basal half. Elytra very densely and coarsely punctured, the punctures growing less toward apex. Lateral margins abruptly set off by a carina. Subsutural and apical areas finely pubescent, apical end of each elytron with two obtuse spines. Margins of apical fourth beset with rather long black setæ. Underside glossy green, finely whitish pubescent. Femora rufescent-ochraceous, glossy; tibiæ and tarsi black, pubescent, and setose, more pronounced on the posterior legs.

Length, 17 millimeters; width, 4.5.

LUZON, Benguet, Baguio (*F. Sanchez, S. J.*) Type in my collection.

From *C. viridis* Pascoe,[8] the type of the genus from Sarawak, the above species is easily distinguished by the rufescent-ochraceous femora.

Pachyrrhynchus erosus sp. nov.

Black, glossy; elytra with a series of fine longitudinal grooves, which form loops as in *Macrocyrtus erosus* Pasc. Head with rostrum in the basal half strongly depressed with a scale spot which is divided by a longitudinal groove extending to the front. Prothorax subglobular with a strongly pronounced anterior and a posterior submarginal groove. Elytra with nine or ten longitudinal grooves, respectively, one at the suture being common to both elytra, closely beset with creamy white scales, the grooves forming five loops. The shortest loop is located subsuturally, the others extend from near the base to the apical fourth. Near the apex and subsuturally another short oblong loop and at the apical triangle a triangular loop. Legs with a scale spot at the femora apically.

[8] Pascoe, Trans. Ent. Soc. London III 3 (1867) 413, pl. 16, fig. 7.

Male, length, 12 millimeters; width, 5. Female, length, 14 millimeters; width, 6.6.

LUZON, Benguet, mountain trail near Atoc (*W. Schultze*). Types in my collection.

The species is closely related to *P. annulatus* Chevr., *anellifer* Heller, and *schuetzei* Schultze. On a recent collecting trip to the Benguet mountains, during October to December, 1919, I was fortunate in finding a good series of this species, which varies very little, and in obtaining some data on its peculiar habits. This species was found near the trail at the steep mountain sides on tall, coarse grass growing between the rocks. All specimens were collected from about 4 o'clock in the afternoon until dark, in the act of crawling up. Several specimens found had recently emerged and were quite soft. A number were found in copula. Together with this species and from the same grass I collected a hitherto unidentified *Metapocyrtus* sp. in appearance very much resembling the former.

Pachyrrhynchus pinorum Pasc.

In a former paper [9] I omitted to mention from Baguio, Benguet, the species *P. chevrolati* Eyd. et Soul. and the commonest, *P. pinorum* Pasc. Many specimens of the last-mentioned species were collected at and around Baguio. These specimens have the broad grooves beset with very indistinct and little-pronounced rudimentary scales. On my recent trip I collected near Atoc, Benguet, a number of specimens of *P. pinorum* which have the grooves closely beset with small white scales. In structure, these specimens do not vary from those from Baguio.

Calidiopsis affinis sp. nov.

Closely related to *C. lineata* Schultze. Black, with longitudinal white stripes on the elytra. Antenna with the scape with scattered whitish scales and densely beset with fine black bristles, funicular joints whitish, the second joint being the longest. Prothorax very coarsely and irregularly punctured. A white medial line and another ill-defined line and a patch of scales at each lateral margin. Elytra with much coarser sculpture than in *C. lineata*, beset with black bristles which are slightly longer than in the above species. A white sutural stripe from the base to the apex, and three stripes on each elytron, and another stripe at the lateral margin surrounded by scattered scales. Underside and legs closely covered with greenish white scales.

[9] Philip. Journ. Sci. § D 12 (1917) 252.

Length, 10 millimeters; width, 4.2.

MINDANAO, Zamboanga, Malangas (my collector). Type in my collection.

DYNASTIDÆ

Xylotrupes mindanaoensis sp. nov. Plate 2, fig. 1, *a*, *b*, *c*.

Black, pronotum and elytra pale grayish brown, velvety iridescent pubescent, less pronounced in the female. Male: Head with a suberect, slightly curved horn, which is laterally slightly compressed and terminates in two diverging branches. Lateral basal angles of the horn forming a strongly pronounced toothlike projection. Pronotum, the anterior lateral angles very strongly projecting, at the disk a short, stout horn directed forward and bifid at the extremity. The pronotum irregularly and confluently punctured and densely beset with a short velvety pubescence, except the horn, which is bare toward the extremity above. Scutellum coarsely, irregularly punctured, with a posterior submarginal groove. Elytra irregularly punctured and very densely beset with velvety iridescent pubescence. Pygidium also densely pubescent. Metathorax beset with reddish hair. Abdominal segments irregularly punctured. Female: Head at the vertex with a very small obtuse tuberculate projection. Pronotum very coarsely and confluently punctured, toward the margins coriaceous, and sparsely pubescent. Elytra also velvety iridescent pubescent, but less pronounced than in the male.

Male, length, 34 millimeters; width at shoulder, 17.5. Female, length, 34 millimeters; width at shoulder, 16.5.

MINDANAO, Surigao, Surigao (*J. Ramos*), found in copula. Types in my collection.

This species is readily distinguished by the peculiar scalelike velvety iridescent pubescence, somewhat similar to that of species of cerambycids belonging to the genus *Aeolesthes*.

NOTES ON SOME PHILIPPINE DYNASTIDÆ

In my Catalogue of Philippine Coleoptera, page 173, I included *Dipelicus deiphobus* Sharp (det. C. Felsche). This species should be eliminated from the Philippine list since the species in question is *Dipelicus robustus* Heller.[10]

Furthermore, *Xylotrupes pubescens* Waterh.[11] is a valid species and not a synonym of *X. phorbanta* Oliv. The last mentioned is considered by Arrow [12] as a synonym of *X. gideon* Linn.

[10] Heller, Notes Leyden Mus. 19 (1897) 172.

[11] Waterhouse, Proc. Ent. Soc. London (1841) 17; Ann. & Mag. Nat. Hist. 7 (1841) 539.

[12] Arrow, Fauna Brit. India, Col. (1910) 262.

ILLUSTRATIONS

PLATE 1

[Original drawings by W. Schultze.]

FIG. 1. *Pachyteria ilocana* sp. nov., male.
2. *Chlorisanis benguetanus* sp. nov.
3. *Euclea panayana* sp. nov.
4. *Aphrodisium luzonicum* sp. nov., female.
5. *Neocollyrodes macgregori* g. et sp. nov.
6. *Megopis* (*Baralipton*) *sanchezi* sp. nov., male.
7. *Pharsalia mindanaoensis* sp. nov.
8. *Aphrodisium panayarum* sp. nov., female.
9. *Euclea variolosa* sp. nov.
10. *Aphrodisium semiignitum* Chevr., female.

PLATE 2

FIG. 1. *Xylotrupes mindanaoensis* sp. nov., *a*, male, dorsal view; *b*, male, dorsolateral view; *c*, female, dorsal view.
2. *Nemophas rosenbergii ramosi* subsp. nov.

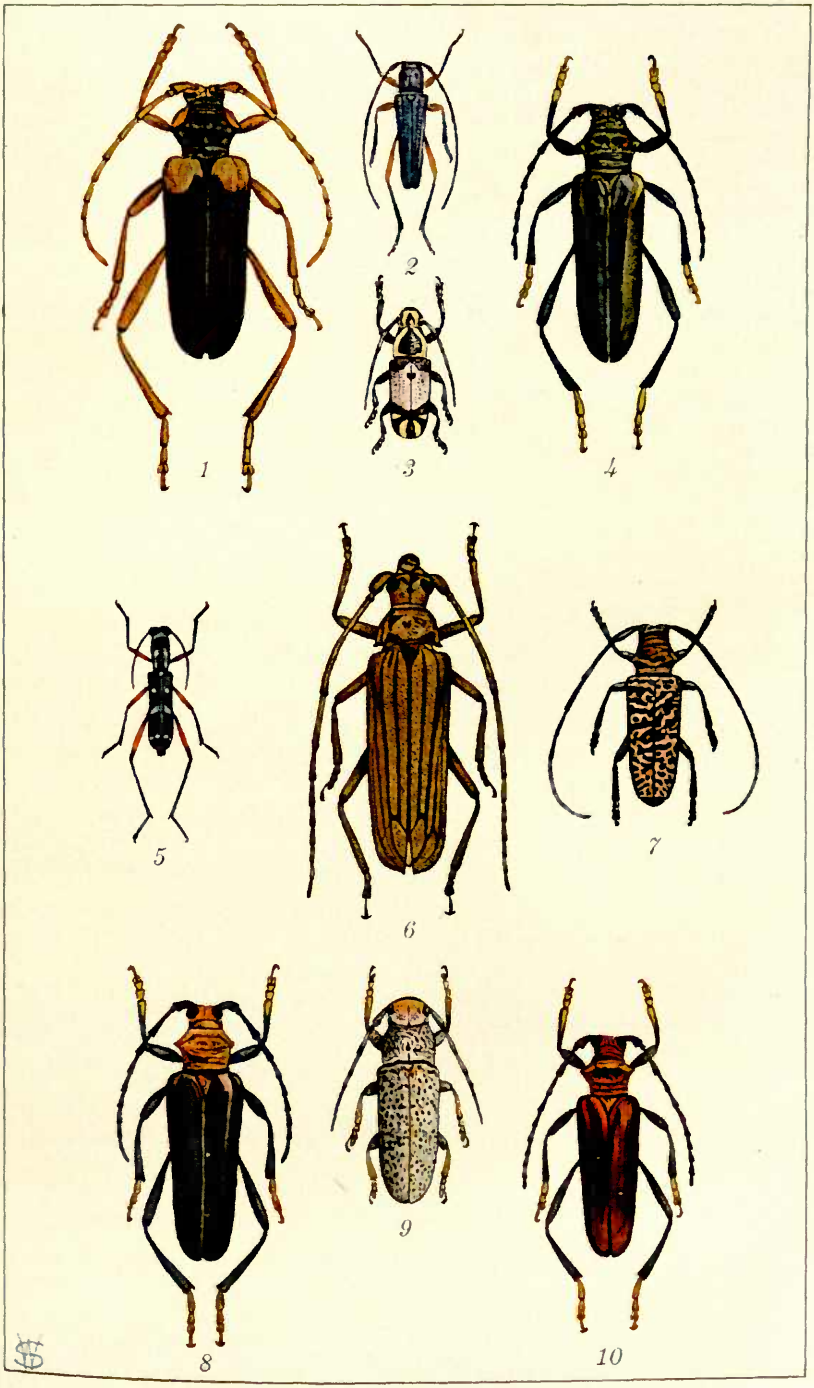

PLATE 1. PHILIPPINE COLEOPTERA.

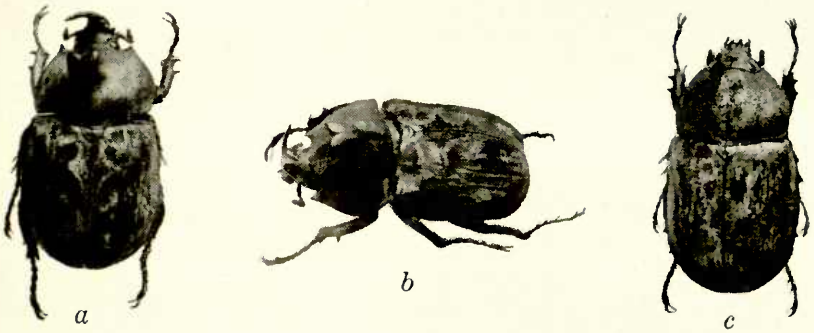

Fig. 1. Xylotrupes mindanaoensis sp. nov.

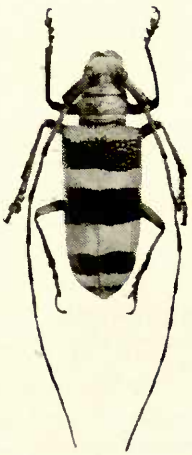

Fig. 2. Nemophas rosenbergii ramosi subsp. nov.

PLATE 2. PHILIPPINE COLEOPTERA.