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ADDITIONS TO THE RECORDED HYMENOPTEROUS FAUNA
OF THE PHILIPPINE ISLANDS, WITH DESCRIPTIONS OF
NEW SPECIES.

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In my previous papers on the Hymenopterous fauna of the Philippine Islands, I find that I overlooked many species recorded from the archipelago. Below, therefore, I give a list of these omissions and follow with descriptions of two new genera and twenty-eight new species received recently from Father Robert Brown, S. J., of the Philippine Weather Bureau, Manila, Prof. Charles S. Banks, of the Government Laboratories, Manila, and Dr. E. A. Mearns, U. S. A.

Family APIDÆ.

TRIGONA BIROI Friese.

Trigona biroi FRIESE, Termes Füzetek, XXI, 1898, p. 42, female.

This is the only stingless honeybee recorded from the islands, although several are known from India. Undoubtedly other species will be found.

Family NOMADIDÆ.

NOMADA PHILIPPINENSIS Vachal.

NOMIA DIMIDIATA Vachal.^a

Family XYLOCOPIDÆ.

The following carpenter bees were described by Mr. J. Pérez:^b (1) *Xylocopa fuliginosa* Pérez, female, p. 41, Mindanao, (2) *X. amauroptera* Pérez, female, Palauan, (3) *X. sulcifrons* Pérez, female, Palauan, (4) *X. cachali* Pérez, male, Palauan, (5) *X. euchlora* Pérez, male, Palauan, (6) *X. adusta* Pérez, female, Mindanao, and (7) *X. occipitalis* Pérez, Mindanao.

^a Miscell. Entom., V, 1897, p. 8.

^b Actes de la Société Linnéenne de Bordeaux, LVI, 1901.

Family MEGACHILIDÆ.

Ctenoplectra vagans COCKERELL, Ann. and Mag. Nat. Hist., (7) XIV, 1904, p. 204, male.

Superfamily Formicoidea.

An important paper by Prof. C. Emery,^a treating of the ants from the island of Luzon, was overlooked by me. He gives a list of the species and describes some new varieties and species. Here they are: (1) *Diacamma geometricum*, var. *viridipurpureum*, Emery, female, Antipolo; (2) *Odontoponera transversus* Smith, female, Antipolo; (3) *Ponera latipes* Mayr, female, Antipolo; *Ponera*, sp.? (4) *Odontomachus hematodes* Linnaeus, female, Manila; (5) *O. infandus* Smith, female, Antipolo; (6) *O. papuanus* Emery, var. Manila; (7) *Bothroponera glabripes* Emery, female, Mindanao; (8) *Sima alborans* Walker, Manila, Antipolo; (9) *Monomorium destructor* Jerdon, female, Manila, Antipolo; (10) *Cremastogaster ochracea* Mayr, female, Antipolo; (11) *C. simoni* Emery, female, Manila, Antipolo; (12) *C. semperi* Emery, female, Manila; (13) *C. longiclava* Emery, female, Antipolo; (14) *C. crassicornis* Emery, female, Manila; (15) *C. bicolor* Mayr, subsp. *imbellis* Emery, female, Manila; (16) *Pheidologeton pygmaeus* Emery, var. *albipes* Emery, female, Antipolo; (17) *Solenopsis geminata* Fabricius, female, Manila, Antipolo; (18) *Pheidole simoni* Emery, (soldier), Manila; (19) *P.* sp., female, Antipolo; (20) *Tetramorium pacificum* Mayr, subsp. *subscabrum* Emery, female, Antipolo; (21) *Dolichoderus tuberculatus* Mayr, female, Manila, Antipolo, Quruña; (22) *Tapinoma melanocephalum* Fabricius, female, Manila, Antipolo; (23) *Technomyrmex albipes* Smith, female, Manila; (24) *Plagiolepis longipes* Jerdon, female, Antipolo; (25) *Ecophylla smaragdina* Fabricius var. *subnitida* Emery, female, Antipolo; (26) *Preulepis*, sp., female, Antipolo; (27) *Campnotus pallidus* Smith, female, Manila; (28) *C.* sp., female, Antipolo; (29) *C.* (*Colobopsis*) *pubescens* Mayr, female, Manila; (30) *C. quadrisectus* Smith, female, Mindanao; (31) *C. platypus* Roger, female, Mindanao; (32) *C. nigricans* Roger, female, Jolo; (33) *C. pennsylvanicus* var. *japonicus* Mayr, female, Mindanao; (34) *C.* n. sp., female, Mindanao; (35) *Polyrhachis trinar* Roger, subsp. *saigonensis* Forel, female, Manila, Antipolo; (36) *P. thrinar* subsp. *javana* Mayr, female, Quruña; (37) *P. bihamata* Drury, female, Antipolo; (38) *P. pubescens* Mayr, female, Antipolo; (39) *P. bicolor* Smith, female, Antipolo; (40) *P. dives* Smith, female, Manila; (41) *P. argentea* Mayr, female, Manila, Antipolo.

^aAnn. Soc. Ent. France, LXII, 1893, p. 261 et seq.

DESCRIPTIONS OF NEW SPECIES.

Family BOMBIDÆ.

Genus BOMBUS Latreille.

1. BOMBUS MEARNSI, new species.

Female.—Length 9 mm. Black, clothed with a long, grayish pubescence, that on the abdomen more or less yellowish, mixed with some black hairs, that on the tibiae and tarsi ferruginous; ventral segments at apex narrowly testaceous; all tarsi and the middle and hind tibiae ferruginous; claws black and cleft. The head is smooth and shining, but sparsely and minutely punctured on the face; the malar space is distinct, fully as long as wide; the first joint of the flagellum is about as long as joints 2 and 3 united, while the second joint is only a little longer than thick and much shorter than the third. Wings hyaline, with the stigma, costal and median veins blackish, the other veins flavo-testaceous.

Type.—Cat. No. 8323, U.S.N.M.

Mindanao. This species is described from a single specimen taken by Dr. E. A. Mearns on Mount Apo, at an altitude of 6,000 feet. It is the first species to be described from the Philippines, and is named in honor of its discoverer.

Family PROSOPIDIDÆ.

Genus PROSOPIS Fabricius.

2. PROSOPIS TAGALA, new species.

Female.—Length 6 mm. Black, the head and thorax finely, closely punctate, the triangular area on metanotum rugulose, the abdomen smooth and shining, impunctate; the triangular lateral plates on each side of the elytra, a stripe on each side of the upper margin of the prothorax, the prothoracic tubercle, a small spot on the tegulae anteriorly, and the tibial spurs are white, rest of legs black, but the sutures of the tarsal joints and beneath are more or less ferruginous or brownish. Wings hyaline, the stigma and veins dark brown, the former being nearly black; the first and second recurrent nervures are, respectively, interstitial with the first and second transverse cubital nervures, the second cubital cell being quadrate, or very nearly.

Type.—Cat. No. 8200, U.S.N.M.

Manila. Described from a single specimen received from Mr. Charles S. Banks, of the Bureau of Government Laboratories.

Family OXYBELIDÆ.

Genus NOTOGLOSSA Dahlbom.

3. NOTOGLOSSA BANKSI, new species.

Female.—Length, 4 mm. Opaque, black, closely, confluent punctured, the face below the antennæ and the sternum clothed with sparse, silvery-white hairs; the clypeus has a median ridge and is slightly emarginate anteriorly; the mandibles are testaceous; the prothoracic tubercles, the tegulæ, a spot on front femora beneath toward apex, the apex of the middle femora, a broad annulus at the base of the hind tibiæ, and all the other tibiæ and tarsi are yellowish-white; the scales on each side of the scutellum and the apical margins of the emarginate scale at its apex are also white or yellowish-white; the abdomen is black, but there is an oblong white spot on each lateral apical margin of the first and second segments. Wings hyaline, the stigma and veins brown.

Type.—Cat. No. 8201, U.S.N.M.

Manila. This species closely resembles the North American species *N. emarginata* Say, but the prothoracic tubercles in that species are not white and the emarginated scale at the apex of the scutellum is shorter, more deeply emarginate, and quite different in shape.

Only a single specimen is known and was sent me by Mr. Charles S. Banks, in honor of whom the species is named.

Family LARRIDÆ.

Genus PISON Spinola.

4. PISON PUNCTULATUS, new species.

Male.—Length 7 mm. Black and shining, the forehead and the thorax finely, microscopically punctulate, and clothed with a silvery pubescence, the metathorax striated, the striae on the metanotum oblique, the basal area not defined, the median sulcus only slightly indicated, with a delicate carina basally; the median sulcus on the truncature is well defined; legs, including tibial spurs, entirely black; the abdomen is black and impunctate, with a faint silvery pubescence at the sides and at the apex of the segments, very distinct in certain lights, but absent on the pygidium and the two preceding segments. Wings hyaline, faintly tinted at apex, the stigma and veins black; the second cubital cell is longly petiolated and receives the first recurrent nervure very near its basal angle; the second recurrent nervure is interstitial or nearly with the second transverse cubitus.

Type.—Cat. No. 8338, U.S.N.M.

Manila. (Father Robert Brown.)

Allied to *P. lagunæ* Ashmead, but quite distinct in punctuation and in metathoracic differences.

Genus PISONOIDES Smith.

5. PISONOIDES BROWNI, new species.

Male.—Length 6 mm. Black and shining, nearly smooth, and clothed with a silvery white pubescence, the clypeus with a slight triangular process anteriorly, the mesonotum with two short, grooved lines near the lateral middle, the metathorax with a crenate-grooved line down the middle and a grooved line on its oblique apical truncature, the truncature being transversely striated, the metanotum being smooth; the tegulae, the subcostal vein, all knees, the front tibiae and tarsi, the tital spurs, extreme apex of middle tibiae, the apices of the joints of the middle tarsi, and the last joint of the hind tarsi are yellowish; the abdomen is shining, but distinctly, minutely punctulate, the outer margins and the apices of the segments *laterally* being clothed with a fine, silvery pubescence. Wings hyaline, the stigma and veins, except the subcostal vein, black; there are only *two* cubital cells; the second recurrent nervure is nearly interstitial with the first transverse cubitus, the first recurrent joins the second cubital cell at its lower hind angle.

Type.—Cat. No. 8332, U.S.N.M.

Manila. (Father Robert Brown.)

Pisonoides is a good genus and to it belong the Indian species placed in *Pison* by Colonel Bingham, under his section B, namely: *P. erythropus* Kohl, *P. agile* Smith, *P. rothmeyeri* Cameron, and *P. obliteratum* Smith, the last mentioned being the type of the genus.

Family TRYPOXYLIDÆ.

Genus TRYPOXYLON Latreille.

6. TRYPOXYLON ELONGATUM, new species.

Female.—Length 16.5 to 17 mm. Very elongate, black and shining; the mandibles, flagellum beneath, a spot at base of all tibiae, the extreme base and apex of the second dorsal abdominal segment, the lateral margins of the same broadly, and the base and lateral margins of the third dorsal abdominal segment, are red; the front and middle tarsi and all tibial spurs are yellowish; the head anteriorly, the clypeus (densely), the temples and the sides of the thorax (sparsely) are clothed with a silvery white pubescence; the very longly petiolated abdomen is fully twice as long as the head and thorax united, the petiole alone being nearly as long as the thorax. Wings hyaline, the stigma and veins black.

Type.—Cat. No. 8334, U.S.N.M.

Manila. (Father Robert Brown.)

Family VESPIDÆ.

The specific name of the *Leiria*^a recently described by me should read *Cagayanensis* instead of *Cagayanensis*. I am indebted to Mr. Charles S. Banks for calling my attention to this typographical error.

Family EUMENIDÆ.

Genus LEIONOTUS Saussure.

7. LEIONOTUS XANTHOZONATUS, new species.

Female.—Length 9 mm. Black, the head and thorax coarsely punctate, the abdomen impunctate, but microscopically coriaceously sculptured; the clypeus is covered with a short yellowish-white pubescence; there is an oblique oblong spot on each side at base of clypeus, a small spot in the incision of the eyes, a stripe back of eyes, two nearly confluent spots on the upper middle of the pronotum, a spot at base and apex of the tegulae, a spot on the hind angle of the mesonotum next to the tegulae, a spot beneath the tegulae, the post-scutellum, the apical margins of the first and second dorsal segments of the abdomen, a large spot at the apical third of the front and middle femora beneath, and a stripe on the front, middle, and hind tibiae outwardly, all yellow; wings smoky hyaline with the stigma and veins black. The first joint of the flagellum is the longest joint, being nearly one-half longer than the second, the following joints to the last gradually shortening, the four joints before the last being a little wider than long.

Type.—Cat. No. 8335, U.S.N.M.

Manila. (Father Robert Brown.)

Family MUTILLIDÆ.

Genus TROGASPIDIA Ashmead.

8. TROGASPIDIA BICOLOR, new species.

Male.—Length, 17 to 19 mm. Head, thorax, legs, and the first and last two segments of the abdomen black; the rest of the abdomen is red; the head and the thorax are rugosely punctured; the scutellum has a smooth, conically elevation at apex above; the metanotum has a broad, smooth, median sulcus, which is broadly widened out at its base; the face, cheeks, legs, and the mesopleura are clothed with rather long, somewhat dense, white hairs, almost silvery beneath the eyes; the clypeus is smooth and shining, broadly and shallowly or subsemi-circularly emarginate anteriorly; the scape is bicarinate beneath; the wings are brown black, with a purplish tinge, the tegulae being large and smooth, with only a few scattered punctures; the first segment of the abdomen is rather strongly, closely punctured, has a large tooth

^a Can. Ent., XXXV, 1905, p. 3.

beneath, and is clothed with long, sparse, whitish hairs; the other segments are smooth and shining, although with some sparse punctures, the two apical segments being black and clothed with black hairs.

Type.—Cat. No. 8202, U.S.N.M.

Manila. Described from five specimens received from Mr. Charles S. Banks.

9. TROGASPIDIA MINOR, new species.

Male.—Length 12–13 mm. Resembles *T. bicolor* very closely, but is considerably smaller and not so closely sculptured on the head; the abdominal segments 1 to 4 and the base of the fifth are red, the rest black; the median sulcus on the metanotum is not so broadly dilated at its base as in *T. bicolor*, the wings not so dark, and with only the faintest tinge of purple in certain lights.

Type.—Cat. No. 8203, U.S.N.M.

Manila. Described from several specimens taken by Mr. Charles S. Banks. The species is evidently allied to *Mutilla analis* Lepel, described from India.

Family SCELIONIDÆ.

Genus MACROTELEIA Westwood.

10. MACROTELEIA MANILENSIS, new species.

Male.—Length 2.2 mm. Black, clothed with a sparse whitish pubescence, the head closely punctured, the thorax more finely punctured, the parapsidal furrows indicated by two punctate lines; the apex of the scutellum has two tufts of long white hairs; the abdomen is opaque, very finely sculptured, but with the extreme apex of the segments shining; the legs, including the coxæ, are pale brownish yellow. The wings are hyaline, but with a faint smoky tinge, the veins being brown-black; the marginal vein is only about half the length of the postmarginal; the stigmal vein is short and delicate, slightly curved, a little shorter than the marginal, and ends in a small knob.

Type.—Cat. No. 8341, U.S.N.M.

Manila. (Father Robert Brown.)

Genus SCELIO Latreille.

11. SCELIO PHILIPPINENSIS, new species.

Male.—Length 2.8 mm. Black, the head and thorax umbilicately punctate, the mesonotum with parapsidal furrows, but not sharply defined; the scape of the antennæ, except at apex, the tegulæ, and the legs, except the hind tarsi, which are fuscous, are brownish yellow. The wings are hyaline, the apex of the subcostal vein, the small stigma, and the short poststigmal and stigmal veins are brown-black.

The first joint of the funicle is the longest joint; it is obconical and about thrice as long as thick at apex, or nearly twice as long as the pedicel; the second joint is hardly two-thirds the length of the first; the following six joints constitute the club, the joints of which, except the first and the last, which are longer than thick, are not or hardly longer than wide. The abdomen is longitudinally striated, the striae being very distinct on all the ventral segments.

Type.—Cat. No. 8336, U.S.N.M.

Manila. (Father Robert Brown.)

Family PLATYGASTERIDÆ.

Genus ANOPEDIAS Förster.

12. ANOPEDIAS LUZONICUS, new species.

Female.—Length 0.8 mm. Polished black, impunctate; the antennæ, except the club joints, and the legs, except the coxæ, tips of middle and hind femora, and tips of hind tibiæ, are yellow; the joints of the antennal club and the coxæ are black, while the middle and hind femora toward apex, and the tips of the hind tibiæ, are brownish.

The abdomen is conically pointed, a little longer than the head and thorax united, the basal segment being clothed with a whitish pubescence.

Type.—Cat. No. 8315, U.S.N.M.

Manila. (Father Robert Brown.)

Family CHALCIDIDÆ.

Genus CHALCIS Linnæus.

13. CHALCIS BANKSI, new species.

Male and female.—Length 2.6 to 2.8 mm. Black, the head and thorax closely, opaquely punctate, the metathorax coarsely reticulated, clothed with a sparse whitish pubescence; the tegulæ, the apices of the femora, and the tibiæ, except a black spot on the front and middle tibiæ *beneath*, and a black stripe on the hind tibiæ *beneath*, a narrow black annulus at the base and at the middle of the hind tibiæ, and all the tarsi, except the pulvilli, are white. Wings hyaline, the veins black; the marginal vein is nearly four times as long as the stigmal vein, the latter being only about half the length of the postmarginal. The legs, including the coxæ, are highly polished, impunctate. The abdomen is also highly polished, but dorsal segments 4 to 7 exhibit some fine punctures toward apex.

Type.—Cat. No. 8392, U.S.N.M.

Manila. Described from 3 specimens (Chas. S. Banks). Allied to *C. albotibialis* Ashmead, but is quite distinct in the opaquely punctate head and thorax, and in the color of the legs.

Family EURYTOMIDÆ.

Genus EURYTOMA Illiger.

14. EURYTOMA BANKSI, new species.

Female.—Length 1.6 mm. Stature and general appearance of *E. manilæ*, but differs decidedly in the color of the antennæ and legs. The scape, except at the extreme apex, the trochanters, more or less, the front tibiæ, and the middle and hind knees are honey-yellow; the tips of the middle and hind tibiæ, and all tarsi, are snow-white; the tip of the scape and the rounded pedicel are black; the flagellum is brown-black and pubescent, the first joint the longest, about twice as long as thick, the following joints to the club shortening, the last being scarcely longer than thick.

Male.—Length 1.3 to 1.4 mm. Readily recognized by the structure of the antennæ, or flagellum, and the abdomen. The flagellum is a little more than thrice as long as the scape, the funicle joints being nodose, pedicellate at apex, the nodose part of the joints with whorls of long hair; the knees of the middle and hind legs are honey-yellow, the front tibiæ, except a brown spot in front near the base, the tips of middle and hind tibiæ and all tarsi, being white. The abdomen is short, oval, highly polished, and attached to the thorax by a petiole which is as long as the hind coxæ.

Type.—Cat. No. 8204, U.S.N.M.

Manila. (Charles S. Banks.) Many specimens.

15. EURYTOMA ALBOTIBIALIS, new species.

Female.—Length 4 mm. Black, the head and thorax closely, umbilicately punctured, clothed with a fine, sparse, white pubescence; the scape, tegulæ, and tips of all the femora are honey-yellow, the tibiæ and tarsi white, the tibiæ toward base faintly tinged with brown, the rest of the antennæ black. The first joint of the flagellum is the longest joint; it is a little more than twice longer than thick, the following joints to the club imperceptibly shortening, the club about one-half longer than the first funicle joint. Wings clear hyaline, the veins pale yellowish, the marginal vein being longer than the post-marginal and thicker; the stigmal vein, with its knob, is about half the length of the marginal. The abdomen is subpetiolate, conic-ovate, subcompressed, pointed at apex, polished black, with the extreme tips of the sheaths of the ovipositor honey-yellow.

Type.—Cat. No. 8215, U.S.N.M.

Manila. (Charles S. Banks.)

Family EULOPHIDÆ.

NESOLYNX, new genus.

This new genus falls into my tribe *Elachertini*, and in my table of the genera^a falls between the genera *Scotolinx* Ashmead and *Olynx* Först. The table may be modified to contain it as follows:

11. Mesonotum a little longer than wide.

Abdomen ovate; flagellum not compressed, the joints cylindrical, not or scarcely longer than thick.....*Nesolynx* Ashmead.

Abdomen conic-ovate; flagellum compressed, the joints longer than wide.

Olynx Förster.

16. NESOLYNX FLAVIPES, new species.

Female.—Length 0.8 mm. Black and shining, impunctate, the mesonotum and abdomen with a metallic aeneous tinge in certain lights; scape, pedicel and legs, including the coxæ, pale yellowish, the flagellum brown or brown-black; palpi and tegulæ white. Wings hyaline, the veins brown; the marginal vein is long, about six times as long as the short stigmal vein, which terminates in a small rounded knob; the postmarginal vein is long and slender. The ovate abdomen is as long as the head and thorax united, the basal segment being the longest, the following segments being subequal.

Type.—Cat. No. 8328, U.S.N.M.

Manila. (Father Robert Brown.)

Family ICHNEUMONIDÆ.

Genus CHIODES Förster.

17. CHIODES OCULATUS, new species.

Male.—Length 4.5 mm. Head and thorax black and shining, impunctate, the metathorax long, areolated; the eyes are very large and occupy the whole sides of the head, converging anteriorly, the malar space wholly wanting; the palpi, tegulæ, front coxæ and trochanters, front tibiæ and tarsi, middle and hind trochanters, more or less of the middle tibiæ and tarsi, an annulus at base of hind tibiæ, the ventral segments 1 to 4, inclusive, and the base of dorsal segments 1 and 2, are white; base of dorsal abdominal segments 3 and 4 yellowish; the rest of the legs, except as hereafter noted, brownish-yellow; the hind coxæ have a black spot at base, the second joint of their trochanters, their femora, tibiæ, and tarsi being fuscous or dark reddish-brown. The antennæ, except the first four joints, which are yellow, are black; the first joint of the flagellum is a little longer than the second. The wings are hyaline with the veins, except near the tegulæ, brown, the costal vein blackish.

Type.—Cat. No. 8316, U.S.N.M.

Manila. (Father Robert Brown.) One male specimen.

^a Classification of the Chalcidoidea, p. 354.

Genus MESOSTENUS Gravenhorst.

18. MESOSTENUS LEUCOZONATUS, new species.

Male.—Length 6.5 mm. Black and shiny, impunctate, with the orbits slightly interrupted at apex of eyes, the face below antennae, the clypeus mandibles, except teeth, palpi, an annulus on the antennae, tegulae, a spot beneath, hind margin of prothorax, a large spot on disk of mesopleura, and the large spot on lower hind end, a line on the hind margin of the same, a large triangle spot at base of the insertion of the hind wings, the apical half of the metathorax, the apical margins of all the abdominal segments, the front and middle coxae and trochanters, the apex of the hind coxae, basal two joints of front tarsi and the hind tarsi, except base and apex of the first joint, the apex of joints two and three and the following joints, which are black, pure white, the rest of the legs, except the three terminal joints of front tarsi, apex of middle tibiae, their tarsi, apex of hind femora, apex of hind tibiae, and all tibial spurs, which are black, being red; the antennae, except the first four or five joints beneath and the broad white annulus, occupying joints 14 to 16, are black. Wings hyaline, the stigma and veins black, the areolate small, nearly quadrate, receiving the second recurrent nervure a little beyond its middle.

Type.—Cat. No. 8330, U.S.N.M.

Manila. (Father Robert Brown.)

NESOMESOCHORINI, new tribe.

NESOMESOCHORUS, new genus.

This curious new genus is based upon a single female specimen received recently from Father Brown, and its position is uncertain. It is remarkable in several particulars and difficult to classify. In venation and in the petiolated, compressed abdomen it shows some affinity with the tribes *Anomalini* and *Campoplegini*, but it certainly can not belong to either of these tribes, and in my perplexity I have made it the type of a new tribe next to the *Mesochorini*.

The head is transverse, the eyes being abnormally large and occupying the whole sides of the head, converging anteriorly and reaching to the base of the mandibles, there being no malar space; the clypeus is represented by a small convex prominence; the mandibles are small and bidentate at apex; the thorax is about two and a half times as long as thick, narrowed posteriorly, the mesonotum with two sharply defined parapsidal furrows that converge posteriorly; the metathorax is as long as the scutellum, the meso- and pro-notum united, and is distinctly areolated, the basal area being triangular, the areola being long and hexagonal; the abdomen is about twice as long as the head and thorax united, strongly compressed and longly petiolated, and

ends in a prominent ovipositor. The wing venation is similar to that in *Mesochorus*, only the stigma is not so well developed but linear, while the areolet is absent, as in some *Hemitelesini*.

19. NESOMESOCHORUS OCULATUS, new species.

Female.—Length about 6 mm.; the ovipositor about one-third the length of the abdomen. Black and shining, impunctate, except the metathorax posteriorly, where the surface is wrinkled transversely; the mesopleura have a long oblique, crenate furrow; the antennae are ringed with white, the white ring occupying joints 13 to 16, the joints beyond, and the 5 or 6 before, being black; the other joints, except the pedicel, which is white, being brownish or yellowish; the palpi, the tegulae, front coxae and trochanters, the first joint of the middle and hind trochanters, and a narrow annulus at base of hind tibiae are white; the rest of the legs, except the second joint of the hind trochanters, hind femora, and tibiae, which are dark fuscous, and the basal third or more of the abdominal petiole, are reddish-yellow; the second and third dorsal segments of the abdomen narrowly at the extreme base, and the venter, are whitish; the first and second abdominal segments are very long, about equal in length; the third and fourth segments subequal, united not longer than the second, while the following segments are still shorter. Wings hyaline, iridescent, the costal and internal veins brown.

Type.—Cat. No. 8337, U.S.N.M.

Manila. (Father Robert Brown.) One specimen.

Family BRACONIDÆ.

Genus METEORUS Haliday.

20. METEORUS BROWNII, new species.

Female.—Length 3.5 to 4 mm. Brownish-yellow, with the dorsum and apex of the metathorax, the apex of the abdominal petiole, and the base of the second dorsal abdominal segment black; the palpi and the base of the abdominal petiole are white; eyes brown or purplish brown in certain lights. The metathorax is regulose, while the abdominal petiole is longitudinally striated; wings hyaline, iridescent, the costal vein black, the stigma and internal veins light brownish.

Type.—Cat. No. 8317, U.S.N.M.

Manila. (Father Robert Brown.) Three specimens, all females.

Genus CHELONUS Jurine.

21. CHELONUS ALBICINCTUS, new species.

Male.—Length 2.8 mm. Head, thorax, and abdomen, except the basal two-fifths, which is white, black, the mandibles red with black teeth, the palpi, trochanters, front tibiae and tarsi, basal two-thirds of

middle tibiae, their tarsi, a very broad band on the hind tibiae, and the hind tarsi, are white; the front femora are more or less reddish, the middle and hind femora, and the base and apex of the hind tibiae, are fuscous black. The wings are hyaline, the internal veins reddish-brown, the stigma piceous. The abdomen is finely regulose with a transverse groove or slit at apex.

Type.—Cat. No. 8318, U.S.N.M.

Manila. (Father Robert Brown.)

Genus PHANEROTOMA Wesmael.

22. PHANEROTOMA ALBISCAPA, new species.

Male.—Length 2.2 mm. Black, the head and thorax finely, closely, punctate; mandibles yellowish; the palpi, the scape and pedicel of the antennae, the tegulae mostly, the ventral membrane, and the legs, except as hereafter noted, are white; the hind femora, except at extreme apex, and the hind tibiae, except a broad annulus at base, are black. The wings are hyaline, but the apical two-thirds of the front wings have a faint smoky tinge; the costal vein, the stigma, the basal vein, and the veins beyond are black or dark brownish-black, while the median and submedian veins are, for the most part, yellowish; the second cubital cell is long triangular and rather narrow.

Type.—Cat. No. 8338, U.S.N.M.

Manila. (Father Robert Brown.)

Genus PSEUDAPANTELES Ashmead.

23. PSEUDAPANTELES AGILIS, new species.

Female.—Length, 1.7 mm.; ovipositor slender, as long as the abdomen. Black and shining, the head and scutellum smooth and shining, impunctate, the thorax, except the scutellum, being finely, minutely punctate; the face has a delicate median carina; the palpi, tegulae, and median veins basally are yellowish-white; the legs, except the front and middle coxae basally, the hind coxae, hind femora, tips of hind tibiae, and hind tarsi, which are black or fuscous black, are yellow or light brownish yellow; the abdomen is smooth and shining, the plate of the first segment being long trapezoidal. Wings hyaline, the costal vein, stigma, and post stigmal veins being brown, the internal veins paler.

Type.—Cat. No. 8339, U.S.N.M.

Manila. (Father Robert Brown.)

Genus *BIOSTERES* Förster.24. *BIOSTERES LONGICAUDATUS*, new species.

Female.—Length, 3.2 mm.; ovipositor longer than the whole insect. Uniformly brownish-yellow, the eyes brown, the antennæ very long, gradually becoming black from the basal fourth, the sheaths of the ovipositor black.

The head and the thorax, except the metanotum, are smooth and impunctate; the parapsidal furrows are deep and converge and meet or unite just in front of the scutellum, the latter with a broad deep furrow at base, which is separated into two by a delicate median carina; the metanotum is areolated and punctulate. Wings hyaline, the stigma and veins brown. The abdomen is a little longer than the head and thorax united; it is smooth and impunctate, except dorsal segments 1 and 2, which are more or less longitudinally striated.

Type.—Cat. No. 8319, U.S.N.M.

Manila. (Father Robert Brown.)

Genus *RHYSSALUS* Haliday.25. *RHYSSALUS UNICOLOR*, new species.

Female.—Length 1.5 mm.; ovipositor shorter than the hind tarsi. Brownish yellow, the sutures of the three-segmented abdomen blackish; stemmaticum black; eyes purplish brown; antennæ toward base (the first five or six joints), the palpi, and the legs white or yellowish white. Wings hyaline, the stigma, except at apex, and the internal veins, except as hereafter noted, yellowish white; the apex of the stigma, the radius, and the costal veins brownish. Head and thorax smooth, the metanotum with a forked carina. The abdomen is longitudinally striated, the segments subopaque.

Type.—Cat. 8320, U.S.N.M.

Manila. (Robert Brown.) One specimen.

Genus *RHOGAS* Nees.26. *RHOGAS MELANOSOMA*, new species.

Male. Length 4.5 mm. Head and thorax brownish yellow, the ocelli pale and placed on a black spot, the eyes black; the antennæ, except the first two joints, a spot at apex of the middle and hind femora, more or less of the base and apex of the hind tibiæ, the hind tarsi, and the whole dorsum of the abdomen, are black. The abdomen is rugulose, the first, second, and third segments with a median longitudinal carina, that on the third subobsolete. Wings hyaline, the stigma and veins brown.

Type.—Cat. No. 8321, U.S.N.M.

Manila. (Father Brown.)

Genus BRACON Fabricius.

27. BRACON VAU, new species.

Female.—Length 2 mm.; ovipositor about two-thirds the length of the abdomen. Black; the venter, a V-shaped mark on the second dorsal segment of the abdomen, and a median line on the following segments are yellow; the scape of the antennæ, the mandibles—except the teeth, which are black, the palpi, the tegulæ, and the legs entirely, except the hind tarsi, are yellow; the hind tarsi are dark fuscous or black.

The head and thorax are smooth and shining, impunctate, the parapsidal furrows being indicated by depressed lines that converge posteriorly and nearly meet at the base of the scutellum; the dorsum of the abdomen is finely, opaquely sculptured or shagreened.

Wings hyaline; the stigma and the veins, except the median and submedian veins basally, are dark brown; the second cubital cell is rather narrow, only about two-thirds longer than wide at apex, the second transverse cubitus being shorter than the first.

Male.—Length 1.8 mm. Agrees well with the female, except that the antennæ are longer, the legs entirely yellow, the hind tarsi not fuscous, while the median yellow line is absent on the two last segments.

Type.—Cat. No. 8340, U.S.N.M.

Manila. (Father Robert Brown.)

Family SELANDRIIDÆ.

Genus PARASELANDRIA Ashmead.

28. PARASELANDRIA IMITATRIX, new species.

Male.—Length 3 mm. Black and shining, impunctate, the anterior tibiæ in front and the apex of middle tibiæ yellowish; apices of the joints of middle tarsi are also yellowish; the head has two broad antennal sulci; the third joint of the antennæ is the longest, a little longer than the two preceding joints united or a little longer than the fourth, the following joints shortening. Wings smoky black, the stigma and veins brown black.

Type.—Cat. No. 8322, U.S.N.M.

Manila. (Father Robert Brown.) One specimen.

This is the first sawfly I have seen from the Philippines.