NEW HYMENOPTERA FROM THE PHILIPPINE ISLANDS.

By J. C. CRAWFORD,

Assistant Curator, Division of Insects, U. S. National Museum.

The species described in this paper were for the most part collected by the Rev. Robert E. Brown, S. J., although a few are from the material gathered by the Rev. William A. Stanton, S. J. Under each species credit has been given to the collector. In the Philippine Journal of Science ^a Father Brown has given a list of the species of Hymenoptera found in the islands and has cited several names sent him by the late Dr. W. H. Ashmead which are manuscript names. In describing these species, of which no manuscript has been found, the names used by Doctor Ashmead have been adopted.

Superfamily APOIDEA.

Family CERATINIDÆ.

CERATINA TROPICA, new species.

Female.—Length 6-6.5 mm. Black, with the following yellow markings: A transverse line on anterior margin of clypeus, slightly wider medially, one on anterior margin of supraclypeal area, a spot on each side of face below, one opposite insertion of antennæ, two small spots back of antennæ, a long line on posterior orbits, collar, tubercles, a large spot on scutellum, narrow transverse line on abdominal segments 1-5, those on segments 1, 4, and 5 dilated medially, those on 2, 3, and 4 narrowly interrupted medially; head coarsely punctured; mesothorax closely, more finely punctured, the punctures crowded, the disk impunctured; base of metathorax very finely longitudinally wrinkled, the wrinkles not reaching the apex, the apex finely lineolate; mesopleuræ closely punctured; wings slightly dusky; tegulæ almost black, veins of wings dark brown; legs black, knees, outer side of anterior tibiæ, and first joint of hind tarsi yellowishwhite; tarsi reddish; first three segments of abdomen closely punctured, following segments rugoso-punctate.

Male.—Length 5.5 mm. Similar to the female, markings differing as follows: Labrum yellow; mark on clypeus with a longer upward

a Vol. 1, pp. 683 to 695.

extension; spots on sides of face connected; outer side of all tibiæ yellowish-white; front tibiæ reddish; bands on segments 2 and 3 widely interrupted; a band on sixth segment.

Manila, P. I. (Robert E. Brown, collector.)

Type.—Cat. No. 12885, U.S.N.M.

Family ANDRENIDÆ.

Subfamily HALICTINÆ.

NESOHALICTUS, new subgenus.

Closely resembles *Halictus*, but differs by the greatly elongate tongue, which is about as long as the antennæ, by having the inner spur of the hind tibiæ in the male armed with a few large teeth, and by having all the transverso-cubital veins, the cubitus beyond the second transverse cubital, and the upper two-thirds of the second recurrent vein, obsolescent.

Type.—The following species.

HALICTUS (NESOHALICTUS) ROBBII, new species.

Male.—Length 6–6.5 mm. Black, head and thorax finely lineolated, covered with long, whitish, plumose pubescence, clypeus greatly produced, with scattered large, weak punctures, punctures of the supraclypeal area closer; above antennæ the punctures fine, crowded; antennæ reddish beneath, joints two and three short, together hardly as long as the fourth; mesothorax finely reticulated with scattered fine punctures, the reticulations appearing as punctures, except under a high power; median and parapsidal furrows apparent; metathorax irregularly rugulose, with an indistinct basal inclosure, which is not pubescent; truncation surrounded by a hexagonal carina; wings slightly dusky, stigma and veins light colored; legs brown, tarsi reddish, hind inner spur with a few large teeth; abdomen closely, finely punctured; segments 2–4 with small basal hair patches.

Female.—Unknown.

Manila, P. I. (Collected by M. L. Robb and R. E. Brown.)

Type.—Cat. No. 12886, U.S.N.M.

Named for M. L. Robb, the collector.

Superfamily SPHECOIDEA.

Family PHILANTHIDÆ.

CERCERIS LUZONENSIS, new species.

Male.—Length 7 mm. Black, coarsely and closely punctured, more closely so on pleuræ; enclosed place at base of metathorax longitudinally striate; scape except a line above, broad inner margins of eyes to above level of insertion of antennæ, spot at base of

clypeus, a spot on each side of prothorax, spot on tegulæ, postscutellum almost entirely, anterior and middle tibiæ and tarsi, basal half of hind tibiæ, spot at base of segment 2, small spot on each side of segments 2 and 4 at apex, apical half of segments 3 and 6, yellow; lateral angles of clypeus strongly produced; wings dusky, the anterior margin with a more deeply infuscated band; bases of abdominal segments strongly constricted; venter black, first segment with a median keel basally, third segment with a transverse yellow band.

Manila, P. I. (R. E. Brown, collector.) One specimen.

Type.—Cat. No. 12887, U.S.N.M.

NO. 1733.

Superfamily VESPOIDEA.

Family TIPHIIDÆ.

TIPHIA ASHMEADI, new species.

Male.—Length 4.75-6 mm. Black, sparsely pubescent, the pubescence at apex of abdomen golden; head and thorax finely reticulated; antennæ reddish beneath, joints two and three subequal, together longer than four; clypeus produced, with small, wellseparated punctures; punctures immediately above antennæ close, in front of ocelli, sparse; those along inner orbits close almost up to ocelli; thorax, including scutellum and postscutellum, sparsely punctured; propleuræ finely lineolated, mesopleuræ reticulated and punctured, metapleuræ longitudinally striated except at front beneath where they are strongly lineolated; metathorax with three straight, longitudinal carinæ, the outer ones converging slightly towards apex, between them coarsely sculptured, lateral areas transversely rugulose basally; truncation of metathorax closely sculptured all over; tegulæ black with a broad reddish margin, reticulated; wings slightly dusky, veins light brown, stigma dark brown; legs black, front and middle femora at apices together with the tibiæ and tarsi, brownish; abdomen shiny, sparsely punctured, more closely so on apical segments; segments 2 to apex reticulated.

Manila, P. I. (R. E. Brown and W. A. Stanton, collectors.)

Type.—Cat. No. 12824, U.S.N.M.

Named for the late Dr. W. H. Ashmead.

TIPHIA LUCIDA, new species.

Male.—Length about 6 mm. Closely related to T. ashmeadi; head and thorax not reticulated; joint three of antennæ distinctly longer than two; clypeus not produced, with large, close punctures; punctures along inner orbits close almost up to ocelli; tegulæ reticulated at rear; mesopleuræ not reticulated; truncation of metathorax at top smooth, below coarsely sculptured; punctures of scutellum close, coarse; of postscutellum close, very coarse; metathorax with three longitudinal carinæ, the outer ones converging toward apex and

curved inwardly; between them not coarsely sculptured; the apical part of inclosure smooth, the median carina not reaching apex; abdomen sparsely punctured, not reticulate.

Manila, P. I. (R. E. Brown, collector.) Type.—Cat. No. 12825, U.S.N.M.

TIPHIA SEGREGATA, new species.

Male.—Length 6 mm. Closely related to the two species described above; head and thorax not reticulated; joints two and three of antennæ subequal; clypeus not produced, with small, well-separated punctures; punctures along inner orbits not close; punctures of thorax, including scutellum and postscutellum, sparse; metathorax with three carinæ, the outer ones straight, converging toward apex, between them coarsely sculptured; truncation sculptured all over; tegulæ smooth; mesopleuræ not reticulated; abdomen sparsely punctured, not reticulated.

Female.—Length 6.5 mm. Similar to the male, below antennæ finely roughened and with scattered punctures, the clypeus apically smooth; above antennæ with sparse coarse punctures; metathoracic carinæ, as in male; sculpture of metathorax, entirely fine.

Manila, P. I. (R. E. Brown and W. A. Stanton, collectors.) Type.—Cat. No. 12826, U.S.N.M.

Superfamily PROCTOTRYPOIDEA.

Family DIAPRIIDÆ.

LOXOTROPA TRICORNUTA, new species.

Female.—Length 2.5 mm. Deep mahogany brown, head black, the face brown; antennæ, legs, and abdomen apically lighter brown; head in front of ocelli with lateral and a median processes; the lateral ones larger; all the prominences with sharp points; from the median one a carina runs downward between antennæ; prominence on which antennæ are inserted large, front of prominence with a median carina extending down to mouth parts; antennæ about 2 mm. long; scutellum at base unifoveate; prothorax and metathorax covered with pubescence; metathorax with a median carina and lateral carinæ, forming two depressed areas; median carina at base elevated into an angular prominence; metathorax at apex produced, emarginate; wings slightly yellowish; first segment of abdomen occupying most of surface.

Male.—Length 2.5 mm. Similar to the female; antennæ over 3 mm. long.

Manila, P. I. (R. E. Brown, collector.) Type.—Cat. No. 12888, U.S.N.M.

LIPOGLYPTUS, new genus.

Antennæ thirteen-jointed in both sexes, inserted on a strong frontal prominence, very slightly enlarged toward apex in female, filiform in male; the scape very long in the female; prothorax long, truncate in front; mesothorax without furrows; scutellum foveate at base, each side with an elongate fovea extending to the apex of the scutellum, these foveæ with carinate sides; metathorax with median and lateral longitudinal carinæ; submarginal vein reaching the anterior margin of wing slightly before the middle of the wing; marginal vein long, stigmal vein very short, hardly visible; basal vein indicated by an infuscated line in the female, not at all indicated in the male; petiole long, fluted.

In Doctor Kieffer's classification of the Diapriinæ this genus comes near *Hemilexodes* Ashmead.

Type of genus.—Lipoglyptus primus Crawford.

LIPOGLYPTUS PRIMUS, new species.

Female.—Length 3-3.5 mm.; antennæ over 2 mm. Black, smooth, shiny, head and thorax with sparse, long hairs; scape of antennæ dark brown, pedicel and first four joints of funicle lighter brown; beyond, orange; pedicel short, about two-thirds as long as the first joint of the funicle; joints two to five of funicle gradually decreasing in length, the following joints subquadrate, the apical joint over twice as long as wide; median carina of metathorax greatly elevated, especially at base; pro- and mesopleuræ smooth; metapleuræ with large longitudinal grooves; wings deeply infuscated, marginal fringes short; tegulæ and legs, including coxæ, brown; femora and tibiæ pedunculate; first segment of abdomen occupying most of surface.

Male.—Length about 2.5 mm.; antennæ over 5 mm. Similar to the female; antennæ reddish brown; pedicel short, as long as the first joint of the funicle; following joints of antennæ greatly elongate; second joint of funicle near base above with a short carina; median carina of metathorax less elevated than in female; grooves of metapleuræ indistinct, the surface finely roughened; legs lighter in color; wings not so deeply infuscated.

Manila, P. I. (R. E. Brown, collector.)

Type.—Cat. No. 12889, U.S.N.M.)

COLOGLYPTUS, new genus.

Antennæ with thirteen joints, the club four-jointed; submarginal vein reaching the anterior margin of the wing about one-third the distance from the base of the wing to the apex; eyes hairy; wing without a basal vein; parapsidal furrows visible only posteriorly, deep; scutellum with two foveæ at base and along each side a fovea;

metathorax with a median carina which basally is elevated into an angulated prominence.

Type of genus.—Cologlyptus kiefferi Crawford.

In Doctor Kieffer's table of the Diapriinæ ^a this genus runs nearest to Basalys.

COLOGLYPTUS KIEFFERI, new species.

Female.—Length about 2 mm. Deep brown, the abdomen at base of second segment and along sides more or less inclining to reddish testaceous; the whole insect smooth and shining, head and thorax with long pubescence, abundant on prothorax, metathorax, and petiole; antennæ light brown, flagellum inclining to reddish, the club dark brown; joints of flagellum, except first, almost subquadrate; the first about as long as the pedicel; scutellum at apex with a transverse row of punctures; postscutellum with a median longitudinal carina; metathorax on each side of median carina with a longitudinal carina having a branch on each side, the one directed laterad at about the middle, the one directed mesad near base, so that the metathorax is areolated; petiole fluted; legs yellow, the femora strongly pedunculate; first segment of the abdomen occupying most of the surface.

Male.—Unknown.

Manila, P. I. Three specimens collected by R. E. Brown.

Type.—Cat. No. 12890, U.S.N.M.

Dedicated to Dr. J. J. Kieffer.

Family SCELIONIDÆ.

Subfamily BAEINÆ.

ACOLUS LUTEIPES, new species.

Female.—Length 1 mm. Black; face with a vertical carina extending from the anterior ocellus to the mouth parts, upper part of face closely punctured, the lower part vertically striate; flagellum four-jointed, joints of club so closely fused as to make the club appear one-jointed; mesonotum closely punctured, punctures of the scutellum sparse, fine; scutellum apically margined; wings slightly dusky; the submarginal vein long; basal vein short; legs yellow; first segment and second segment of abdomen medially with longitudinal striæ, rest of abdomen closely punctured with the apical margins of segments narrowly impunctured.

Manila, P. I. (R. E. Brown, collector).

Type.—Cat. No. 12891, U.S.N.M.

This species in Father Brown's catalogue of the Philippine Hymenoptera is listed under the manuscript name used by Doctor Ashmead of *Hadronotus luteipes*.

Subfamily TELEASINÆ.

PROSACANTHA ROBERTI, new species.

Male.—Length 1 mm. Black, petiole and base of first abdominal segment yellow; head smooth and shiny; below antennæ vertically striate; the antennæ almost twice the length of the body, the scape testaceous, rest of antennæ brown; mesothorax finely punctured, the scutellum smooth; metathorax with a distinct median carina; sclerites of mesopleuræ separated from each other by a row of pits; wings very long and narrow, dusky, the marginal fringes very long, front wings on the posterior margin near base produced to a distinct point; petiole, basal half of first segment, and base of second with longitudinal striæ.

Manila, P. I. (R. E. Brown, collector.) Type—Cat. No. 12892, U.S.N.M.

PROSACANTHA STRIATICEPS, new species.

Male—Length 1.5 mm.; antennæ 2.5 mm. Black, the first segment of the abdomen red; face except medially above antennæ, vertically striate; clypeus transversely striate, the lateral angles produced; head behind eyes finely punctured; mandibles testaceous; antennæ brown, the third joint of the funicle at base with an elevated carina and not excised; mesonotum finely punctured; scutellum just before apex with a transverse row of large punctures, behind them smooth, shiny; metathorax rugose; wings dusky; legs rufo-testaceous; first and second segments of abdomen and the third basally and laterally, longitudinally striate.

Manila, P. I. (R. E. Brown, collector.) One specimen. Type.—Cat. No. 12893, U.S.N.M.

Subfamily SCELIONINÆ.

HABROTELEIA BROWNI, new species.

Female.—Length 4.5 mm. Black, scape, tegulæ and legs including coxæ, rufo-testaceous; head coarsely punctured; parapsidal furrows consisting of a row of large punctures; middle lobe of mesonotum with a median longitudinal depressed area which is finely punctured; mesonotum along sides and anterior margin with a single row of large punctures, anteriorly the middle lobe finely punctured; elsewhere the mesonotum is almost impunctured, smooth, polished, scutellum at base with a row of large pits, coarsely punctured, near apex with a transverse row of punctures, back of this smooth; postscutellum with large pits and a short median spine; metathorax with a long median spine and the sides greatly prolonged caudad to form the socket for the abdominal spine; wings deeply infuscated, reaching beyond the apex of the fourth abdominal segment; abdomen including basal horn,

longitudinally striate, between the striæ with punctures, the second segment near base with a semicircular row of large pits; venter longitudinally striate and punctured between the striæ.

Manila, P. I. Two specimens. Tupe.—Cat. No. 12894, U.S.N.M.

Named in honor of Father R. E. Brown, who collected the specimens.

PLATYSCELIO ABNORMIS, new species.

Male.—Length about 3.5 mm. Black, shiny, greatly flattened, the antennæ twelve jointed, filiform, rufo-testaceous; scape flattened, enlarged toward apex, pedicel short, not longer than wide; joints of the flagallum elongate, the third with a short carina on one side; three ocelli present, the ocellar triangle longitudinally striate; head with a strong median carina bifurcated at each end, the bifurcations at the posterior end embracing the anterior ocellus, those at the anterior end running to each antenna; head smooth, polished, a single row of punctures along the anterior orbits of the eyes; middle lobe of mesothorax longitudinally punctate-striate, the lateral lobes punctured only anteriorly, the disk smooth but with a short indistinct furrow; scutellum near apex with a single transverse row of punctures, interrupted medially; metathorax striate laterally, the median area smooth, with a longitudinal furrow which posteriorly bifurcates; wings slightly dusky, reaching beyond the apex of the fourth segment, the marginal vein long, the stigmal short, the postmarginal wanting; legs testaceous; abdomen closely longitudinally striate-punctate; the lateral carinæ distinct to the middle of the fifth segment.

Manila, P. I. One specimen collected by R. E. Brown. Tupe.—Cat. No. 12895, U.S.N.M.

MACROTELEIA STRIATIVENTRIS, new species.

Female.—Length 5 mm. Black, the scape of antennæ and the legs, including the coxæ reddish-testaceous; pedicel brown, the apex lighter, funicle brown, the club black; head and thorax with rather close, coarse punctures; meso- and metapleuræ longitudinally striate, the striæ of the anterior part of the mesopleuræ with punctures in the interstices; wings slightly dusky reaching beyond the middle of the fourth segment; veins brown, the postmarginal about twice as long as the marginal; abdomen longitudinally striate, the third segment distinctly longer than second, the fourth about as long as the second and longer than the fifth; sixth segment longer than fifth, viewed in profile, slender, the line of the dorsum straight.

Male.—Length 4.5 mm. Similar to the female, the wings reaching almost to the apex of fourth segment; sixth and seventh segments

short, the seventh segment without prongs at apex.

Manila, P. I. (R. E. Brown, collector.) Four specimens. Type.—Cat. No. 12896, U.S.N.M.

MACROTELEIA KIEFFERI, new species.

Female.—Similar to M. striativentris; black, scape and legs, including coxæ reddish-testaceous; meso- and metapleuræ punctured; wings reaching beyond apex of fourth segment; veins light, the postmarginal not much longer than the marginal; segments two and three of abdomen subequal, the fourth shorter, longer than the fifth; sixth segment about as long as fourth, viewed in profile the line of the dorsum slightly curved.

Male.—Unknown.

Manila, P. I. (R. E. Brown, collector.) Two specimens.

Type.—Cat. No. 12897, U.S.N.M.

Named for Rev. J. J. Kieffer.

MACROTELEIA MANILENSIS Ashmead.

Female.—Length 3.25 mm. Very similar to the two species described above, the mesopleuræ punctured, the metapleuræ striate; wings reaching beyond the apex of the fifth segment, the veins light colored, the postmarginal not much longer than the marginal; segments two and three of abdomen subequal, the fourth much shorter but longer than the fifth, the sixth about as long as the fourth and viewed in profile with the line of the dorsum strongly curved.

Male.—Similar to the female in structure of the pleuræ; last segments of abdomen with two prongs at apex.

Manila, P. I. (R. E. Brown, collector.)

Doctor Ashmead, when describing this species, had before him only a male specimen.

Superfamily CHALCIDOIDEA.

Family TORYMIDÆ.

Subfamily MONODONTOMERINÆ.

DIMEROMICRUS, new genus.

Antennæ 13-jointed with two ring joints; in the male these ring joints so minute as to appear as one, except under high magnification; funicle six-jointed; occipital foraminal depression margined; scutellum without a cross furrow; abdominal segments incised medially; front femora normal; pronotum short; hind femora almost smooth beneath, excised at apex; eyes bare; marginal vein about as long as submarginal; stigmal knob subsessile; postmarginal vein hardly longer than stigmal knob.

Plesiostigmodes the only other genus in the subfamily having two ring joints, differs in having the front femora much swollen and the

pronotum longer than the mesonotum.

Type of genus.—Dimeromicrus ashmeadi Crawford.

DIMEROMICRUS ASHMEADI, new species.

Female.—Length 1.6 mm. Head and thorax bluish green; abdomen medially brown; head finely lineolated; antennæ brown; scape yellow; thorax transversely lineolated; legs yellow; coxæ and hind femora except tips green; abdomen very finely lineolated; ovipositor about as long as abdomen.

Male.—Length 1.4 mm. Similar to female, but more brassy green; mesothorax more coarsely sculptured, abdomen more yellowish.

Manila, P. I. (R. E. Brown, collector.)

Type.—Cat. No. 12898, U.S.N.M.

Dedicated to the late Dr. W. H. Ashmead.

Subfamily PODAGRIONINÆ.

PODAGRION PHILIPPINENSIS, new species.

Female.—Length 2.25 mm., ovipositor 3 mm.; deep blue, antennæ brownish, scape lighter, ring joint small; head and thorax closely reticulated by slightly raised lines, becoming stronger toward rear of mesonotum and on scutellum; parapsidal areas almost smooth, the reticulation very indistinct; scutellum posteriorly and axillæ impunctate; base of metathorax with two diverging carinæ running backward from medial anterior margin, these joined by two running forward from apex of metathorax forming a diamond-shaped area; this area finely rugose, rest of metathorax coarsely rugose; front and middle femora brown, hind bluish; tibiæ mostly brownish, tarsi light; hind femora with nine teeth.

Manila, P. I. (R. E. Brown, collector.) Type.—Cat. No. 12899, U.S.N.M.

PODAGRION ASHMEADI, new species.

Female.—Length 2.75 mm.; ovipositor about 4 mm.; head and thorax dull green, abdomen yellowish, with the base metallic and apical half brown; head closely and strongly punctured; antennæ yellowish, club dark, ring joint longer than wide; pro- and mesothorax finely rugoso-punctate, becoming larger, distinct punctures on rear of meso notum and scutellum; rear of scutellum and axillæ impunctate, finely roughened; parapsidal grooves obscured by roughness of sculpture; metathorax irregularly rugose, slightly back of middle with a transverse ruga stronger than the rest; front and middle legs, including coxæ, yellow; hind coxæ at base metallic, rest yellowish; hind femora and tibiæ more or less obscured with dusky, their tarsi yellowish; hind femora with eight teeth.

Manila, P. I. (R. E. Brown, collector.)

Type.—Cat. No. 12900, U.S.N.M.

Named for Dr. W. H. Ashmead.

Family CHALCIDIDÆ.

Subfamily CHALCIDINÆ.

Tribe CHALCITELLINI.

ANACRYPTUS STANTONI Ashmead.

This species was described by Doctor Ashmead in the genus Arretocera, but the specimens show on the hind tibiæ the tooth which characterizes the genus Anacryptus.

ANACRYPTUS SCULPTURATUS, new species.

Female.—Length 2.5 mm. Black, petiole, base of abdomen and lower margins of the segments brown; face punctured, the medial part finely transversely lineolated; antennæ brown, the scape yellow; back of head finely lineolated; thorax with large punctures, those on scutellum stronger; anterior part of mesopleuræ rugose, the posterior part very coarsely rugoso-punctate; wings slightly yellowish; anterior and middle legs, including coxæ, testaceous; hind coxæ black, tips reddish, hind femora and tibiæ reddish, the femora black medially; hind femora with about eight teeth following the large one; abdomen smooth, polished.

Male.—Length 2.5 mm. Similar to female except in sexual characters.

Manila, P., I. (R. E. Brown and W. A. Stanton, collectors.) Type.—Cat. No. 12901, U.S.N.M.

Family EURYTOMIDÆ.

Tribe EURYTOMINI.

EURYTOMA FULVIPES, new species.

Female.—Length 2 mm. Black, head, including face below antennæ and thorax, umbilicately punctured; pubescence white; antennæ brown, the scape reddish-testaceous; joints of funicle almost quadrate, the first slightly longer than wide; prothorax about twice as wide as long; metathorax rugose, median groove with an indistinct double row of transverse pits; wings hyaline, nervures almost white; legs red, the coxæ black, tarsi whitish; petiole short; abdomen polished, the third segment much the longest, the fourth showing only slightly.

Male.—Length 2 mm. Similar to the female; scape and pedicel reddish-testaceous, flagellum brown; joints of the funicle excised above; legs reddish, coxæ black, tarsi whitish; petiole about as long as hind coxæ.

Manila, P. I. (R. E. Brown, collector.)

Type.—Cat. No. 12902, U.S.N.M.

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EURYTOMA BRUNNEIPENNIS, new species.

Female.—Length 3 mm. Black, closely, strongly umbilicately punctured, with yellowish pubescence; carinæ along inner orbits not high, but distinct, with a row of punctures between them and the eyes; face below antennæ with striæ converging toward mouth; antennal fossa strongly carinate at sides, these carinæ continued below to the mouth; antennæ long, dark, the scape testaceous except apical half above; first joint of funicle about as long as scape; following joints of funicle about twice as long as broad; prothorax about twice as wide as long; mesopleuræ weakly, irregularly rugose; metathorax coarsely, irregularly rugose, with a median longitudinal depression, but no differentiated area; wings strongly infuscated; coxæ black, trochanters, bases, and apices of femora and tibiæ and the tarsi reddish-testaceous, the hind tarsi more whitish; femora and tibiæ medially dark brown or black; petiole longer than hind coxæ, rugulose above; abdomen polished, segment 3 longer than 4.

Male.—Length 2.5 mm. Similar to female; antennæ longer, the joints of funicle more elongate, the first longer than the scape; scape at apex below with a projecting, rounded elevation; joints of funicle not excised above, and covered with hairs not arranged in whorls;

petiole longer than in female.

Manila, P. I. (R. E. Brown, collector.) Type.—Cat. No. 12903, U.S.N.M.

EURYTOMA BROWNI, new species.

Female.—Length 2.5 mm. Black, head and thorax strongly umbilicately punctured; face below antennæ with striæ converging toward mouth; antennæ black, joints of funicle distinctly longer than wide, the first almost twice as long as wide and over one-half as long as scape; inner orbits with high carinæ running from just below lateral ocelli to the lower level of eyes; carinæ at sides of antennal fossa extended beneath, converging, to the mouth parts, the area between them smooth, shiny; carinæ at rear of cheeks running to vertex; pronotum about twice as wide as long; metathorax with posterior face distinctly separated from sides, irregularly rugose and finely roughened, the median groove distinguished by a row of transverse pits and by the non-roughened surface; wings hyaline, nervures light; legs black, knees, most of front tibiæ and apices of middle and hind tibiæ testaceous; tarsi more whitish; abdomen polished, greatly compressed, petiole short; third and fourth segments subequal in length, each about as long as segments 1 plus 2.

Male.—Length 2 mm. Similar to female; antennæ elongate, joints of funicle excised above, hair in whorls; petiole longer than hind coxæ.

Manila, P. I. (R. E. Brown, collector.)

Type.—Cat. No. 12904, U.S.N.M.

Named for Father Brown.

EURYTOMA SYSTOLOIDES, new species.

Female.—Length 2.5 mm. Black, umbilicately punctured, pubescence white; face below antennæ with striæ converging toward mouth; no distinct carinæ along inner orbits; antennæ black, joints of funicle almost quadrate, the first slightly longer; pronotum about twice as wide as long; mesopleuræ finely sculptured with thimble-like punctures, at rear above with horizontal striæ and a row of large punctures; metathorax irregularly rugose, medially with a double row of transverse pits; wings milky hyaline, nervures light testaceous; legs black, knees, and extreme tips of tibiæ yellowish; tarsi whitish; petiole short; abdomen polished, segments 1–3 subequal in length, segment 3 slightly longer; segment 4 as long as segments 1–3 together.

Male.—Length 2 mm. Similar to female; antennæ longer, joints of funicle excised above at apex, hairs arranged in whorls; nervures almost white; petiole as long as hind coxæ.

Manila, P. I. (R. E. Brown, collector.)

Type.—Cat. No. 12905, U.S.N.M.

EURYTOMA CARINATIFRONS, new species.

Female.—Length 2.5 mm. Black; head above antennæ and thorax strongly umbilicately punctured; face below antennæ with striæ converging toward mouth; face with a greatly elevated carina on each side running parallel to inner orbits, from just in front of lateral ocelli to below level of eyes; between these carinæ and the eyes impunctured; antennal fossa strongly carinate at sides; below the insertion of the antennæ these carinæ continue, converging toward the mouth, the space between them, smooth, shiny, and with a single vertical stria; carinæ on posterior edge of cheeks running to vertex; antennæ long, black, the scape short, reddish, the first joint of flagellum twothirds the length of scape, following joints of funicle about twice as long as broad; pronotum twice as broad as long, wider anteriorly; metathorax irregularly rugose, with a median groove with transverse pits; wings greatly infuscated; legs black, femora pedunculate; trochanters, bases and tips of both femora and tibiæ reddish; tarsi whitish; abdomen greatly compressed, petiole as long as posterior coxæ; segment 3 longer than 4.

Male.—Length 2.5 mm. Similar to female; antennæ longer, first joint of flagellum as long as scape; joints of funicle not excised above, hairs not arranged in whorls; petiole longer than hind coxæ; legs red, hind femora medially black; occasionally front and middle legs with femora infuscated medially.

Manila, P. I. (R. E. Brown, collector.) Type.—Cat. No. 12906, U.S.N.M.

Family PTEROMALIDÆ.

Subfamily SPHEGIGASTERINÆ.

Tribe PACHYNEURONINI.

PACHYCREPIS ORIENTALIS, new species.

Female.—Length 1.75 mm. Bluish green, the abdomen more bluish and in certain lights bronzy; head and thorax with fine thimble-like punctures, those on the head coarser; antennæ yellowish, the funicle five-jointed, the antennæ with three ring joints so minute as to be distinguishable only under very high power; head slightly wider than thorax; prothorax anteriorly carinate, not rounded; parapsidal grooves very distinct; metathorax with a very distinct neck, between the lateral folds punctured; laterad of the lateral folds smooth; the spiracles long oval; anterior part of mesopleuræ punctured, the posterior part smooth and shiny; wings hyaline; the stigmal vein about as long as the marginal, the postmarginal longer; legs entirely testaceous; petiole slightly shorter than the hind coxæ; abdomen smooth, polished.

Male.—Length 1.5 mm. Similar to the female, the last ring joint

large, the sculpture of the head and thorax stronger.

Manila, P. I. (R. E. Brown, collector.)

Type.—Cat. No. 12907, U.S.N.M.

Family ELASMIDÆ.

ELASMUS ALBOPICTUS, new species.

Female.—Length 2.5 mm. Yellow with an orange tinge, the face below, tegulæ and legs, ivory white; head and thorax closely clothed with short black hairs, except on scutellum and postscutellum; antennæ brown, scape and pedicel yellow; ocellar area together with a median stripe running backward on rear of head, a triangular spot on upper posterior orbits connected with the median stripes, axillæ, scutellum except sides and rear, median and lateral spots on metathorax, a spot on mesopleuræ, and a spot on each side of first abdominal segment, black; apical part of scutellum and base of postscutellum, yellow; hind coxæ with a green spot above; bristles of legs black, those on rear of posterior tibiæ arranged in diamond shaped figures; abdomen with a few black bristles.

Male.—Unknown.

Manila, P. I. (R. E. Brown, collector.) One specimen.

Type.—Cat. No. 12908, U.S.N.M.

Family EULOPHIDÆ.

Subfamily EULOPHINÆ.

SYMPIESIS RUGITHORAX, new species.

Female.—Length 2 mm. Head and thorax dark green, abdomen at base blue, the apex black, the disk yellow; antennæ brown, the scape at base whitish; face smooth shiny; in front of ocelli reticulate; thorax strongly rugoso-punctate, the axillæ smooth; metathorax strongly rugose, with a median carina and on each side a lateral one running out onto the neck of the metathorax; mesopleuræ almost entirely smooth; wings slightly dusky; legs white; venter testaceous.

Manila, P. I. (R. E. Brown, collector.)

Type.—Cat. No. 12909, U.S.N.M.



Crawford, J. C. 1910. "New Hymenoptera from the Philippine Islands." *Proceedings of the United States National Museum* 38, 119–133.

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