NEW GENERA AND SPECIES OF MUSCOID FLIES.

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During the past year or two many new forms of muscoid flies have been described by the writer, and the manuscripts placed with various scrial publications. A large part of the descriptions has already been published, but a considerable portion of them has not yet appeared. The present paper contains descriptions of the most noteworthy remaining new muscoid genera thus far studied in the United States National Museum collection. The forms here treated are from North and South America, Eurasia, and Malaysia, with one from Australia.

Family MUSCIDAE.

TRONGIA, new genus.

Genotype.—Trongia viridis, new species.

Seems to approach Catapicephala, differing in facialia thickly ciliate with ordinary bristles to a little above middle, and head but slightly broader than the thorax. Strong approximated proclimate occilar bristles. One strong reclinate inner orbital bristle in male; inner verticals cruciate, outer almost as long as inner. Vertex about one-sixth head-width. Oral margin very prominent; the strong vibrissae practically on same, and not narrowing the facial plate. Third antennal joint six or seven times second, narrow, of even width, rounded apically. Arista plumose almost to tip. Claws slender, extremely long, almost twice last tarsal joint. Two strong median marginal macrochaetae on second segment; marginal row of strong ones on third and fourth segments. Hypopygium not prominent. Cubitus subangular, last section of fourth vein evenly bent in, apical cell open well before wingtip. Proboscis short and fleshy. Tegulae bare.

TRONGIA VIRIDIS, new species.

Length of body, 13.5 mm.; of wing, 11.75 mm. One male, Trong, Lower Siam, February, 1899 (W. L. Abbott).

All metallic green; face and front lightly golden or brassy, cheeks silvery; antennae, palpi and pulvilli pale fulvous, the third antennal

joint fuscous on apical portion; venter, thorax, pleurae and outside of femora silvery, the silvery of venter showing narrowly above on sides of anal segment; thoracic vittae not defined. Tibiae and tarsi black; hind femora also black, middle femora only slightly greenish. Wings broadly smoky on veins. Tegulae white.

Holotype.—No. 20026, U.S.N.M.

HYPOPYGIOPSIS, new genus.

Genotype.—Hypopygiopsis splendens, new species.

Allied to Cynomya and Blepharicnema, differing as follows: Male. Arista plumose nearly to tip. Cheeks broad and yellow. Front of male narrow, with one reclinate fronto-orbital. Occllars present. Outer verticals absent. Flexor surface of femora and tibiae densely long hairy; hind femora enlarged and bowed. Body elongate. Hypopygium densely hairy, elongate but retracted, apparently very large, hinged from a small seventh segment, which is also pilose. Wings deeply infuscated, lighter area near base. Claws not extra long. Third vein bristled over halfway to small cross vein.

HYPOPYGIOPSIS SPLENDENS, new species.

Length of body, 14 to 17.5 mm.; of wing, 13 to 15 mm. Three

males, Trong, Lower Siam (Dr. W. L. Abbott).

Face, cheeks, and parafrontals satiny yellow, light golden pollinose; vertex and ocellar area metallic green to greenish-black. Palpi and third antennal joint deep clear fulvous-yellow. Frontalia, first two antennal joints, and arista brownish-yellow, the former shading to brown posteriorly. Occiput cinereous, with gray pubescence; cheek beard deep yellow. Thorax, scutellum, and abdomen varying from metallic purplish or bluish-green to bright green, the thorax very thinly dusted with silvery, the abdomen showing no pollen; first abdominal segment black. Front and middle femora more or less metallic greenish, rest of legs brown to blackish. Wings subuniformly yellowish-smoky, with subbasal area of pale yellowish. Tegulae pale watery-smoky.

Holotype.—No. 20027, U.S.N.M.

Family CALIRRHOIDAE.

THERESIOPSIS, new genus.

Genotype.—Theresiopsis ficorum, new species.

Belongs in Sardiocera group. Differs from Eutheresia as follows: Female. Face rather longer, the peristomal profile only slightly curved upward in front. Facial carina only slightly developed. Third antennal joint about three times the second. Front narrower, the parafrontals posteriorly only a little over one-half width of fron-

talia. Fronto-orbitals set farther back and close to frontalia. Outer verticals well developed. Parafacials slightly broader below than above. Palpi slender and only faintly thickened at tip. No median marginal pair of macrochaetae on second abdominal segment.

THERESIOPSIS FICORUM, new species.

Length of body, 8 mm.; of wing, 7 mm. One female, Pekalongan, Java, given with query as reared from *Ficus*-borer, March, 1912 (K. W. Dammerman, No. 304).

Pale testaceous to brownish, with satiny-silver pollen. Antennae and palpi fulvorufous. Frontalia brown. Head more or less pollinose over a fulvotestaceous ground color. Thorax pollinose, leaving three narrow vittae in middle before suture, and a heavy double-blotch vitta on each side; viewed from in front the posterior blotches are confluent along suture. Scutellum silvery on apical half, rich dark sepia on base. Abdomen rich dark sepia except oblique anterior corners of second segment, and irregular basal half of third and fourth segments, which are rufotestaceous and silvered. Legs brown to blackish. Wings subhyaline, but brown along first vein and basal half of third and fourth veins. Tegulae white.

Holotype.—No. 20028, U.S.N.M.

MESEMBRIOPHYTO, new genus.

Genotype. - Mesembriophyto magellana, new species.

Differs from Arctophyto as follows: Female. Head more elongate, the front more produced. Antennal and vibrissal axes equal. Vertex not over one-third head width. Frontalia not broader than one parafrontal. Antennae not separated, third joint scarcely longer than second, arista bare. Facial carina scarcely developed, epistoma narrower. Apical scutellar pair of bristles as long as the posterior of the two laterals, decussate at tips. No median marginal bristles on first abdominal segment, a weak median marginal pair on second; discal and marginal on last two segments, the discal of third in straggling row, but the marginal regular and rather strong. Apical cell closed in border a little before tip of wing; hind cross vein not so close to cubitus.

MESEMBRIOPHYTO MAGELLANA, new species.

Length of body, 7 mm.; of wing, 7.25 mm. One female, Sandy Point, Straits of Magellan (Acc. 21699 U. S. Fish Comm.).

Dark brownish, lightly cinereous pollinose. Frontalia, first two antennal joints, clypeus, facialia, and cheek-grooves brownish-rufous; palpi fulvous, third antennal joint and arista black, epistoma brownish. Parafrontals cinerous, parafacials and ocellar triangle dull golden pollinose; occiput and cheeks with grayish bloom. Pollen of mesoscutum and scutellum with a dull gold tinge; four

vittae, the inner pair nearly as heavy as the outer. Abdomen with silvery-gray pollen, most distinct on the broad bases of the two intermediate segments, the hind borders of first three segments with brownish-golden tinge. Legs brownish, the tibiae and tips of femora rufofulvous, the tarsi dark brown. Wings clear. Tegulae nearly white.

Holotype.—No. 20029, U.S.N.M.

This is the specimen mentioned by Doctor Williston ¹ in his report on Diptera collected by the United States Bureau of Fisheries steamer *Albatross* in 1887–88, as a *Tachinid* which he could not locate in any genus known to him.

OREOPHYTO, new genus.

Genotype.—Oreophyto ochreicornis, new species.

Differs from Arctophyto as follows: Male. Vertex about as wide as length of third antennal joint. Two or three pairs of ocellars, the front pair strongest. All macrochaetae strong. Head much longer, parafacials broader; epistoma broader, more widely separating the vibrissal angles; vibrissae more removed from oral margin. Palpi stouter, not markedly thickened apically. Third antennal joint quite twice as long as second. Three sternopleurals; three postsuturals, sometimes a fourth one developed. Two strong lateral scutellars with some weaker ones between them, a strong decussate apical pair, two discal pairs. Last three abdominal segments with strong discals. Legs stouter, and whole body stouter. No long hairs on abdomen. Wings more pointed at tip, the apical cell ending much farther before same. Cubitus forming a right angle, usually with stump, farther removed from hind margin of wing.

OREOPHYTO OCHREICORNIS, new species,

Length of body, 12 to 14 mm.; of wing, 9.5 to 10 mm. Four males; one Corvallis, Oregon, June 12; one Mount Angel, Oregon

(F. Epper); two Oregon.

Black, thickly to thinly silvery. Frontalia black. Third antennal joint clear light orange or ochreous, the arista black. Palpi rufous, more or less blackish basally. Parafrontals and parafacials thickly silvery white. Thoracic dorsum and scutellum rather thinly pollinose, outer vittae very heavy, inner ones moderately heavy and more or less confluent with a median one. Abdomen rather thickly silvery all over, as seen with varying light incidence, the segments appearing more or less broadly black from above. Legs black. Wings grayish. Tegulae white.

Holotype.—No. 20030, U.S.N.M. (Corvallis).

Genus MYOCEROPS Townsend.

Myocerops Townsend, Ent. News, vol. 27, 1916, p. 178.

Genotype.—Musca carinifrons Fallen, 1816, Vet. Acad. Handl.

for 1816, p. 243.

Differs from *Phorostoma* as follows: Male and female. Form more narrowed. Proboscis and palpi more slender. Head more elongate, the parafacials proportionately broader. Facial depression not so broad, the vibrissae nearer to oral margin. Front of female much wider, the vertex much exceeding one-third head width. Checks wider and longer. Three sternopleurals. Abdominal macrochaetae not so strong; median marginal pair of first segment long in male, vestigial in female. Wings narrower, apical cell less widely open.

Genus SUMICHRASTIA Townsend.

Sumichrastia Townsend, Ent. News, vol. 27, 1916, p. 178.

Genotype.—Hystrichodexia aurea Giglio-Tos, 1893, Boll. Mus. Zool. Anat. comp. Univ. Torino, vol. 8, p. 2; and 1894, Ditt. Mess., pt. 3,

p. 59.

Differs from Eudexia as follows: Female. Abdomen broad-oval, wider than thorax, thickly clothed with long golden-fulvous hair especially conspicuous on last two segments; macrochaetae heavy and spinelike; first segment with only a lateral bunch; second with thickly placed marginal row doubled at sides, and median discal triangle of closely placed ones; third segment with about posterior half covered with three irregular rows; anal with a discal pair or so, sometimes wanting, and marginal ones among the pile. Venter quite thickly set with black spines, except a broad area at base on each side. Coxae thickly set with fulvous hair and bristles, mixed with black bristles; the fulvous bristles predominating on anterior pair. Scutellum with black spines. Peristomal bristles nearly all rufo-fulvous, two or three of the anterior frontals same color. Palpi quite as long as clypeus, very narrow, a little widened on apical third, with long fulvous hairs on apical half. Parafacials very broad, about four-fifths as wide as middle diameter of one eye. The pile of base of abdomen is shorter than the rest; there is some shorter pile on parafrontals, occiput, pleurae, posterior part of mesoscutum and on scutellum. Cheeks nearly as wide as eye height. Arista plumose, third antennal joint nearly twice second. Facial carina moderately prominent, vibrissae well above oral margin, vertex about two-sevenths head width; frontalia very broad, only slightly narrowed posteriorly.

Named in honor of François Sumichrast, the eminent Swiss naturalist, who did so much valuable pioneer work in Mexico in and after

Maximilian's time, and who has been immortalized by Lucien Biart

in his fascinating "Adventures of a Young Naturalist."

One female, Real del Monte, Hidalgo, Mexico, 9,000 feet, September (H. T. Van Ostrand), donated by Mr. W. R. Walton. The holotype of *S. aurea* was collected by Sumichrast.

Family SARCOPHAGIDAE.

MELANOPHYTO, new genus.

Genotype. - Melanophyto maerens, new species.

Differs from Brachicoma as follows: Female. Vertex little over one-fourth head width. Frontalia broader than one parafrontal. Cheeks less than one-half eye-height. Lower breadth of clypeus nearly as great as length of facial plate, epistoma not projected between vibrissæ. Arista more than twice as long as third antennal joint, a little thickened on little more than basal third, short-plumose on thickened portion, the rest bare and hair-like. Antennal axis nearly equal to height of head. Four lateral scutellar pairs of bristles, the hindmost pair longest and widely separated; two discal pairs, no apical. Abdomen flattened, greatly broadened, subrounded in outline from above; first four segments short and of equal length, the first three of nearly equal width, the fifth still shorter. No median macrochaetae on first two segments. Wings long and rather broad; third vein bristled less than halfway to small cross vein; no costal spine. Small cross vein well before end of first vein.

MELANOPHYTO MAERENS, new species.

Length of body, 10 mm.; of wing, nearly 10 mm. One female, Mexico City, January 4, 1915 (R. H. Van Zwaluwenburg, No. Mx4).

Black, head soft deep black. Narrow irregular bar across parafrontals, area of parafacials inclosing the facio-orbital row of bristles, rather broad bar across cheeks deep soft gold. Frontalia, antennæ and palpi ordinary black. The soft black and gold vary with light incidence, the facial plate showing a gold coat in oblique lights. Occiput and hind border of cheeks of ordinary black, with thin coat of silvery. Five vittee on thorax; the middle one on each side linear, the others heavy. Mesoscutum and scutellum silvery, the pollen in front of suture with marked golden tinge, a gold stripe from humeri to suture, two pale golden vittae in middle before suture; the pollen thickening on margins of postsutural scutum into varying spots according to light incidence. Front half or so of pleurae brownishblack, without pollen. Abdomen rather shining; silvery pollinose, most pronounced on bases and middle of segments by direct view, varying with lights. Wings faintly infuscate in the region of the basal and small cross veins. Patagia cream-yellow. Tegulae white, margined with black; the front scale glassy, transparent.

Holotype.—No. 20031, U.S.N.M.

Family SALMACIIDAE.

Genus PILATEA Townsend.

Pilatea Townsend, Ent. News, vol. 27, 1916, p. 178.

Genotype.—Masicera celer Coquillett, 1897, Rev. Tach., p. 114 (footnote).

Differs from Masicera as follows: Male and female. Male vertex barely one-fourth of head width; that of female less than one-third of same. Male frontalia barely one-half as wide as one parafrontal; those of female somewhat less than same. Both sexes with two reclinate orbitals, no proclinate ones in male. Facial profile rather longer than frontal, parafacials long and of nearly even width. Arista thickened on basal half only. Two or three sternopleurals, the middle one weak when present. Discal macrochaetae on intermediate abdominal segments in both sexes.

Named in honor of Mr. G. R. Pilate.

Genus MASICEROPSIS Townsend.

Masiceropsis Townsend, Ent. News, vol. 27, 1916, p. 178.

Genotype.—Masicera pauciseta Coquillett, 1897, Rev. Tach., pp. 113-114.

Differs from Masicera as follows: Female. All macrochaetae weaker. Head nearly triangular in profile, the lower border very short. Frontal profile distinctly shorter than facial, frontal bristles not descending so low. Parafacials not so broad, of nearly even width, longer. Facialia ciliate over halfway up. Cheeks narrower, the eyes descending lower. Third antennal joint not over three times second; the latter short. The two middle sternopleurals very weak. Abdomen flattened and widened; median marginal pair of macrochaetae of first segment very weak. Cubitus very obtuse; hind and apical cross veins straight and not parallel with each other; the latter parallel with inner margin of wing.

MADREMYIA, new genus.

Genotype. — Madremyia parva, new species.

General form of head and its appendages much like that of *Chromatocera*, but evidently not nearly related to that genus. Differs as follows: All macrochaetae heavier. No proclinate orbitals, but some more or less reclinate bristles and long hairs outside frontal row. Face not so broad, widening but little from front. Frontals descending rather over halfway to cheek grooves, the parafacials otherwise bare. Arista sharply pointed, thickened to a little short of tip; second joint elongate, about or nearly half as long as the thickened

portion of third joint. Third antennal joint rather stout, of equal width, about five times as long as the very short second. Palpi moderately stout. Facialia sparsely ciliate to above lowest frontals. Eyes thickly hairy, more elongate dorsoventrally. Cheeks less than one-half of eye-height. Three sternopleurals, four postsuturals. Apical decussate scutellar pair erect. Median marginal pair on first abdominal segment; other segments with erect discals. Apical cell short-petiolate, ending far before wing tip; hind cross vein straight, nearly parallel with apical cross vein. Cubitus without stump, farther removed from hind margin; apical cross vein not so strongly bent in.

MADREMYIA PARVA, new species.

Length of body, 4.5 to 5.5 mm.; of wing, 3.5 to 4.5 mm. Two males. Head of Rio Piedras Verdes, Sierra Madre of Chihuahua, Mexico, about 7,300 feet, August 29, 1899 (Townsend); and Rio Tularosa, Sierra Blanca of New Mexico, about 6,400 feet, October 3, 1896 (Townsend).

Palpi, antennæ, and parafrontals black; last showing thinly silvery from behind; face and orbits more thickly silvery. Frontalia obscure rufous. Thorax and scutellum black, thinly silvery; four narrow vittae; scutellum more or less distinctly testaceous on margin. Abdomen brownish to black; the bases of last three segments distinctly silvery, the pollen spreading posteriorly in oblique lights. Legs blackish; tibiae tinged with brown. Wings clear. Tegulae watery-whitish.

Holotype.—No. 20032, U.S.N.M. (Sierra Madre of Chihuahua).

Genus CNEPHALOGONIA Townsend.

Cnephalogonia Townsend, Ent. News, vol. 27, 1916, p. 178.

Genotype.—Gonia distincta H. E. Smith, 1915, Psyche, vol. 22,

pp. 99-100.

Differs from Salmacia as follows: Female. Front not swollen, no more produced in profile than that of Cnephalia. No median marginal macrochaetae on first abdominal segment; no closely set marginal row on third segment. Parafacials below not over one-half greatest eye-width, widening above to nearly eye-width at base of antennae. Front marginal macrochaetae of parafacials sparse, few, and weak. Cheeks hardly one-third eye-height. Ground color of face, front, and cheeks yellow. Anterior part of front wider than lower part of face. Vertex narrowed to about one-half head-width. Abdomen like that of Cnephalodopsis and allied genera.

Genus DICHOCEROPSIS Townsend.

Dichoceropsis Townsend, Ent. News, vol. 27, 1916, p. 178.

Genotype.—Dichocera orientalis Coquillett, 1897, Rev. Tach., p. 138. Differs from Dichocera as follows: Female. Arista longer and tapered, second joint strongly elongate. Third antennal joint narrow. No discal macrochaetae present on intermediate abdominal segments, no median on first two segments. Cubitus without stump. Four postsuturals. No apical scutellars. The row of heavy macrochaetae on parafacials extending a little lower than eyes, the row on cheeks not so developed.

ATRACTOCEROPS, new genus.

Genotype.—Atractocerops ceylanica, new species.

Differs from Epidexia as follows: Female. Vertex about onethird head-width, frontalia a little wider than one parafrontal. inner reclinate orbitals. Antennae set much higher; cheeks much wider, about one-third of eye-height. Parafacials rather wide, somewhat sprung or bulged, of nearly even width or slightly widening below. Facial plate very long, narrow; facialia finely ciliate hardly halfway up. Second antennal joint not so elongate; the third four or five times as long and well narrowed. Three sternopleurals, four postsuturals. Apical decussate pair of scutellars nearly as strong as the three laterals. No discals on intermediate abdominal segments; no median on first two segments; discal and marginal rows on anal segment. Abdomen ovate. Tarsi short, claws short. Apical cell rather pointed at tip, closed in margin just before wing-tip; cubitus close to inner margin; apical cross vein nearly parallel with same; hind cross vein straight, slightly nearer to cubitus than to small cross vein.

ATRACTOCEROPS CEYLANICA, new species.

Length of body, 5.5 mm.; of wing, 5 mm. One female, Peradeniya, Ceylon, April 14, 1914 (A. Rutherford).

Palpi and antennae fulvo-rufous, the latter infuscate apically. Frontalia dark rufous. Parafrontals and face silvery. Cheeks and occiput ashy. Thorax and scutellum silvery, the latter fulvous except base; four vittae, the outer ones heavier; postsutural scutum and narrow base of scutellum appearing blackish from behind. Abdomen dark brown; the last two segments quite widely yellowish-silvery pollinose on base, the second showing only faint line of pollen on incisure. Legs dark brown. Wings clear. Tegulae white.

Holotype.—No. 20033, U.S.N.M.

EPIDEXIOPSIS, new genus.

Genotype.—Epidexiopsis orbitalis, new species.

Differs from Epidexia as follows: Male. Vertex nearly one-third head-width, front of equal width, face widening gently from same. Frontalia narrower than one parafrontal. Cheeks narrower, the eyes descending nearly or quite as low as vibrissae. Two proclinate orbitals, two reclinate orbitals, frontals less developed posteriorly; parafrontals of nearly equal width. Palpi longer. Three sternopleurals, the middle one weak. Apical pair of scutellars quite strong, longer than discal pair. Marginal macrochaetae of abdomen not so long, the discal rather stronger than in Epidexia, all erect; the discal shorter than marginal except that this is reversed on anal segment. Tarsi shorter, delicate; claws very short. Apical cell closed in margin, ending nearer to wing-tip; hind cross vein not straight, almost in middle between small cross vein and cubitus. Small cross vein nearly opposite tip of auxiliary vein.

EPIDEXIOPSIS ORBITALIS, new species.

Length of body, 4.75 mm.; of wing, 3.5 mm. One male, Miami, Florida, October 28, 1908 (Townsend). TD 562.

Black, palpi pale yellowish, second antennal joint rufous at tip. Head silvery, the occiput ashy. Thorax and scutellum thinlysilvery; two linear inner vittae, the outer ones of the semicolon type. Viewed from behind the postsutural mesoscutum appears black except the lateral margins and irregular broad hind border. Abdomen shining, the last three segments silvery-white pollinose on base, the silvery fasciae successively broadening slightly from second to anal segments. Hypopygium blackish. Femora and tibiae brownish. Wings clear. Tegulae white.

Holotype.—No. 20034, U.S.N.M.

MIAMIMYIA, new genus.

Genotype. - Miamimyia cincta, new species.

Differs from Houghia as follows: Male. Face hardly perceptibly widened from front, the vertex hardly one-third of head-width. Face much longer, the antennae set much higher. Frontalia much wider than one parafrontal. Three or four short but strong closely set proclinate orbitals on each side. Arista shorter than third antennal joint, porrect. Second antennal joint very short; the third six or seven times as long as second, much developed, reaching oral margin. Facial plate more than twice as long as wide, equal in width above and below. Facialia thickly ciliate more than halfway up. Palpi rather slender. Parafacials very narrow and elongate. Cheeks wider, the eyes not quite reaching the level of vibrissae below. Two

sternopleurals, three postsuturals. Apical cell ending almost in wing-tip; hind cross vein crooked and nearly in middle between small cross vein and cubitus. Tarsi rather tapered. First and third veins bristled same.

MIAMIMYIA CINCTA, new species.

Length of body, 5 mm.; of wing, 4 mm. One male, Miami, Florida, November 12, 1908 (Townsend). TD869.

Palpi and first two antennal joints fulvous; frontalia dark rufous. Third antennal joint blackish, more or less fulvous on lower border and base. Face, cheeks, parafrontals and orbits silvery, occiput ashy. Thorax blackish, rather thinly silvery, two narrow inner vittae, outer vittae heavy; postsutural dorsum appearing black from rear view, but showing lateral margin and broad hind border silvery-white. Scutellum faintly pollinose, but appearing blackish from behind. Abdomen dark brownish, the anal segment rufous; the narrow bases of intermediate segments silvery-white, the same silvery showing less distinctly on base of anal segment. Legs fulvous; tibiae rufous-brown, tarsi black. Wings nearly clear, the basal and costal cells lightly infuscate. Hind scale of tegulae smoky-translucent; front scale white.

Holotype.—No. 20035, U.S.N.M.

Family MINTHOIDAE.

ZOSTEROPSIS, new genus.

Genotype.—Zosteropsis rutherfordi, new species.

Differs from Zosteromyia as follows, Male. Vertex and posterior half of front about one-sixth of head-width, the anterior half of front slightly widening from same. Frontalia much narrowed posteriorly, averaging a little wider than one parafrontal. Ocellars hair-like and vestigial; all the other bristles of front and vertex strong, not hair-like. Outer verticals not developed. Four reclinate orbitals on each side in line with frontals and occupying about posterior three-fourths of front; frontals descending about to end of second antennal joint. Third antennal joint narrower. Facial plate and facialia normal, not smoothed; epistoma emarginate. Head more flattened, occiput not bulged below; eyes normal, their posterior margin not beveled off on lower extent. Three sternopleurals, the middle one weak. Middle one of the three lateral scutellars strong, a decussate apical pair of hair-like bristles. No long hairs on abdomen, macrochaetae not so long; no discals on intermediate segments, median marginal of first segment vestigial. Legs not so elongate, more slender. Wings not bulged on costal cells; apical cell very narrowly open to nearly closed well before tip, apical cross vein deeply bowed

in; cubitus at right angle, farther from margin; hind cross vein at about 45° to inner margin, halfway between small cross vein and cubitus. Tegulae not so enlarged.

ZOSTEROPSIS RUTHERFORDI, new species.

Length of body, 6 mm.; of wing, 4.75 mm. Two males, Peradeniya, Ceylon, June 16, 1913, and July 7, 1914 (A. Rutherford).

Black, rather shining. Face, cheeks, and orbits silvery; parafrontals, thorax, and scutellum thinly silvery; four thoracic vittae moderately narrow and nearly equal, the pollen inclosed by the two of each side with a dull golden tinge. Last three abdominal segments rather broadly but thinly silvery on base. Wings deeply smoky except area behind fifth vein, that outside hind and apical cross veins, and the distal half of apical cell. Tegulae dilute smoky, the outer portion of front scale whitish.

Holotype.—No. 20036, U.S.N.M. (July 7). Named in honor of Mr. A. Rutherford.

MUSCINOTHELAIRA, new genus.

Genotype. - Muscinothelaira lutzi, new species.

Differs from Euthelaira as follows: Female. Form Muscina-like. Eyes only thinly hairy. Head more flattened, the front not prominent in profile. Front and face a little wider in proportion to eyesurface, cheeks a little wider. Palpi bowed, well thickened apically. Second antennal joint rather short; third joint about four times second. Arista sparsely pubescent. Only two sternopleurals. Three lateral scutellars; only a pair of divergent hairs on apex of scutellum. Abdomen short-oval, about same length and width as thorax. Abdominal macrochaetae not so strong. Legs shorter, tarsi delicate, the front tarsi not dilated; claws short. Wings broad, extending far behind tip of abdomen, slightly bulged on costal border.

MUSCINOTHELAIRA LUTZI, new species.

Length of body, 7 mm.; of wing, 7.5 mm. One female, Sao Paulo, Brazil (Dr. A. Lutz).

Parafrontals, face, and cheeks silvery-white pollinose, with a watery uster. Frontalia brown. First two antennal joints dark rufous; palpi rufous. Third antennal joint and vertex black. Thorax and scutellum black, thinly silvery; four vittae nearly equal, the outer ones broadly interrupted. Abdomen brown to dark brown or blackish; very thinly silvery, showing most on sides, faintly on incisures, but apparent in oblique lights elsewhere. Legs dark brown; tibiae brown. Wings nearly clear, a deeply infuscate area extending from small cross vein and tip of auxiliary vein to tip of second vein. Tegulae smoky-translucent, the outer edge of front scale opaque.

Holotype.—No. 20037, U.S.N.M.

Named in honor of Dr. Adolpho Lutz.

ARGYROTHELAIRA, new genus.

Genotype.—Argyrothelaira froggattii, new species.

Differs from Thelaira as follows: Female. Face and front much narrower, the face of same width as anterior part of front, the front gradually narrowing behind, the vertex hardly over one-fifth headwidth. Antennae longer, reaching oral margin, third joint fully three times the second. Arista long, hair-like, bare. Parafacials very narrowed below. Two inner reclinate orbitals, posterior proclinate orbital set much farther forward, no ocellars. Outer vertical developed. Frontalia narrow, not as wide as one parafrontal. Palpi much thickened apically. Four postsuturals. Three strong lateral scutellars. No discals on intermediate abdominal segments. Wings not so broad, cubitus nearer to margin. Third vein bristly only at base, first vein bare. Seems allied to Euthelaira, from which it differs in the bare facialia, eyes only very thinly hairy, and other points.

ARGYROTHELAIRA FROGGATTII, new species.

Length of body, 7.5 mm.; of wing, 6 mm. One female, Solomon Islands, July-August, 1909 (W. W. Froggatt). Labeled "Masicera immersa Walker," by Coquillett, which species was described from Makassar, Celebes. The description does not apply.

Head black; face, cheeks, parafrontals, orbits, and occiput silvery white; palpi, antennae and frontalia black. Thorax and scutellum black, pleurae and humeri silvery white, the dorsum thinly pollinose leaving a pair of linear vittae. Abdomen black; the sides of intermediate segments broadly burnished silver-white not meeting on median line, the sides of anal segment narrowly silvered. Legs black. Wings smoky on costal border, diminishing along veins. Tegulae nearly white.

Holotype.—No. 20038, U.S.N.M.

Named in honor of Prof. W. W. Froggatt.

MEGISTOGASTROPSIS Townsend.

Megistogastropsis Townsend, Ent. News, vol. 27, 1916, p. 178.

Genotype.— Megistogaster wallacei, Brauer and Bergenstamm, 1889, Musc. Schiz., pt. 1, p. 127.

This is Brauer and Bergenstamm's sense of Megistogaster. For characters, see Brauer and Bergenstamm.² The authors accredit the species to Doleschall, but I can not find that he described it. It was probably a manuscript name of his.

The type of Megistogaster is fuscipennis Macquart, which Brauer states is identical with petiolata Wiedemann. The genus is thus a synonym of Cordyligaster.

Family LARVAEVORIDAE.

DEJEANIOPALPUS, new genus.

Genotype.—Dejeaniopalpus texensis, new species.

Differs from Leskiopalpus as follows: Female. Palpi elongate, subcylindrical, evenly narrowed on apical three-fifths, fully as long as facial plate; when retracted extending almost the length of third antennal joint beyond epistoma. Proboscis slender, the part below geniculation rather longer than head height. Vertex nearly one-third head width. Frontalia wider than posterior part of one parafrontal, about as wide as anterior part. Ocellars quite strong. First vein bristled completely, third bristled to or beyond small cross vein. Differs from Leskiomima principally in the long palpi; from Spathipalpus by arista short-plumose and only slightly thickened on basal third, the antennae inserted about on eye-middle; from Genea by cylindrical palpi, antennae inserted on eye-middle and arista plumose.

DEJEANIOPALPUS TEXENSIS, new species.

Length of body, 6.5 mm.; of wing, 5.25 mm. One female, Texas. Light fulvous to pale yellowish, including frontalia, antennae, palpi, proboscis and legs, the tarsi brown to blackish, the middle and front metatarsi yellowish. Parafrontals, face, cheeks and occiput thinly silvery. Third antennal joint faintly infuscate on edge. Pleurae silvery. Mesoscutum blackish in ground color, brassy pollinose, apparently with usual blackish vittae. Scutellum brassy pollinose. Abdomen without pollen, except very faint indications at the incisures. Wings grayish, with only the faintest infuscation; veins yellowish. Tegulae pale yellowish.

Holotype.-No. 20039, U.S.N.M.

GYMNOERYCIA, new genus.

Genotype.—Gymnoerycia rubra, new species.

Differs from Erycia as follows: Female. Vertex less than onefourth head width, the front and face widening quite evenly from
same; the face inferiorly rather more than twice as wide as vertex.
Facial depression not so broad, the facialia not so flattened. Only
one reclinate orbital; outer vertical but little longer than orbital
fringe. Frontalia a little narrower than one parafrontal. Facialia
ciliate halfway up or more. Parafacials narrow, the head shorter.
Third antennal joint fully three times second. Apical decussate
pair of scutellar bristles fine, erect. Median marginal pair of first
abdominal segment vestigial, that of second rather weak. Larvipositor in the form of a short spoonlike lobe, chitinous, broad at base
and narrowing apically. Hind tibiae rather closely pectinate, with
one longer bristle. Apical cell ending a little nearer to wing tip,
cubitus nearer to hind margin, apical cross vein bowed in.

GYMNOERYCIA RUBRA, new species.

Length of body, 6.75 mm.; of wing, 5 mm. One female, Miami, Florida, Nov. 16, 1908 (Mrs. C. H. T. Townsend). TD 957.

Whole head dull golden pollinose except the ashy occiput; the facial depression a little paler than the rest, the cheeks tinged with silvery in some lights; frontalia brown, antennae black, palpi fulvorufous. Thorax black, rather thickly pollinose, the pollen of scutum brassy; four nearly equal black vittae. Scutellum rufous except the blackish base, brassy pollinose. Abdomen rufous, median vitta and tip black; silvery to pale golden pollinose, the pollen most conspicuous on narrow bases of intermediate segments and most of anal segment; larvipositor rufous. Legs brown, tarsi blackish. Wings clear. Hind scale of tegulae watery, with faint infuscation; front scale whitish.

Holotype.—No. 20040, U.S.N.M.

STURMIOPSIS, new genus.

Genotype.—Sturmiopsis inferens, new species.

Differs from Sturmia as follows: Male and female. Parafacials with minute bristles, their profile full or slightly bulged. Facialia quite strongly ciliate not quite halfway up. Frontalia of female little over half as wide as one parafrontal; those of male narrower than one parafrontal. Eyes rather thickly hairy in male, thinly so in female. Antennæ inserted almost on eye-middle; frontal profile slightly more produced. Normally only two sternopleurals; some times two additional very weak ones. Only two lateral scutellars, but the long decussate apical pair with a pair of suberect shorter ones between them. Both sexes with no median macrochaetae on first two segments; no discals on any of the segments; only marginal row on third and anal segments. Hind tibiae ciliate, without longer bristle in either sex. Cubitus much approximated to hind margin of wing, at right to slightly acute angle; the apical cross vein strongly bent in. Hind cross vein more removed from cubitus.

STURMIOPSIS INFERENS, new species.

Length of body, 7 to 8.5 mm.; of wing, 5 to 7 mm. One male and one female, Buitenzorg, Java, Sept., 1913, reared from Sesamia inferens (K. W. Dammerman, No. 312).

Dark brown to blackish. Palpi, first two antennal joints and tip of scutellum rufous. Face, cheeks, and orbits silvery pollinose; the parafrontals, thorax, and scutellum rather less thickly so; two linear inner and two heavy outer vittæ. Last three abdominal segments broadly but very thinly silvery pollinose. Wings nearly clear. Tegulae white, the hind scale somewhat pearly.

Holotype.—No. 20041, U.S.N.M., female.

XANTHOZONOPSIS, new genus.

Genotype.—Xanthozonopsis vestita, new species.

Differs from Xanthozona as follows: Male. No proclinate orbitals. Vertex much less than one-third head-width. Second antennal joint not so long; second aristal joint not elongate. Anal segment short, thickly covered with fine appressed vestiture except the tip. No discal macrochaetae on third abdominal segment, none on fourth except fine marginal ones closely set amongst vestiture, four median marginal on second segment, marginal row of heavy spines on third. Abdomen not swollen, not so narrowed apically. Body proportionately broader and head proportionately narrower.

XANTHOZONOPSIS VESTITA, new species.

Length of body, 14.5 mm.; of wing, 12.5 mm. One male, Sapucay,

Paraguay, August 25, 1901 (W. T. Foster).

Head yellowish; face and cheeks silvery, a very faint golden tinge to the pollen of cheeks and parafacials; parafrontals shining blackish, with a very thin coat of pollen. Frontalia brown, rufous anteriorly. Antennae blackish. Thorax blackish, rather thinly pollinose; inner vittae narrow, outer ones rather heavy. Scutellum and first abdominal segment rich blackish-brown; the anal segment except tip, and the posterior half of third segment, of same color; rest of abdomen deep yellow. The brown of third segment is polished, and its front border is angular on median line. Venter concolorous with tergum. Vestiture of anal segment black. Legs blackish, the tibiae brownish. Wings lightly infuscate, a little darker at base; four to six closely-placed bristles at base of third vein. Tegulae smoky-blackish.

Holotype.—No. 20042, U.S.N.M.

PSEUDOSERVILLIA Townsend.

Pseudoservillia Townsend, Ent. News, vol. 27, 1916, p. 178.

Genotype.—Echinomyia flavopilosa Bigot, 1888, Ann. Soc. Ent. France (6), vol. 8, p. 80.

Differs from Servillia as follows: Two facio-orbital bristles present. Head, thorax, abdomen, and legs densely yellow-pilose; the venter, base, and tip of abdomen black-pilose in male.

Brauer states that this is apparently same as *Ech. rufoanalis* Macquart, but such is very doubtful. The two species are perhaps congeneric.

SERVILLIOPSIS, new genus.

Genotype.—Servilliopsis buccata, new species.

Differs from Servillia as follows: Vertex less than one-third headwidth. Front, parafacials and cheeks without the very long hairs,

but with the normal pubescence. Clypeus broadening below, scarcely marked off from facialia; epistoma broad, strongly produced between vibrissæ; latter rather more removed from oral margin. Cheeks less than eye-height, parafacials not as wide as clypeus. Two proclinate and one reclinate orbitals. Proboscis and palpi longer. All macrochaetae strong, those of scutellum and abdomen spinelike. Pile of under parts of body and legs not long or thick, that of abdominal tergum both long and thick. Three to four sternopleurals; four postsuturals. Bunch of erect spines on scutellum. Anal segment narrowed posteriorly, but distinctly though faintly emarginate. Ventral plates with spine bunches. A median discal pair of spines on anal segment, the margin with only a few black bristles among the pile. Front tarsi more distinctly widened.

SERVILLIOPSIS BUCCATA, new species.

Length of body, 15 mm.; of wing, 12.75 mm. One female, Tjibodas, Mount Gede, Java, 9,000 feet (Bryant and Palmer).

Head light golden pollinose all over; frontalia and antennae dark brown or blackish. Palpi yellow. Hairs of front mostly black; those of parafacials, cheeks, and occiput yellow. Thorax blackish, golden pollinose, with golden pile; scutellum rufofulvous, with same pile. Abdomen blackish; the anterior borders of segments yellowish, especially sides; the yellowish parts with golden pollen, the pile reddish-gold. Venter more deeply blackish, the incisures narrowly golden. Legs rufous; the femora black. Wings faintly smoky throughout; tegulae golden-smoky.

Holotype.—No. 20043, U.S.N.M.

Echinomyia rufoanalis Macquart ¹ is very distinct from this form. So also is Tachina fulva Walker. ² See Brauer. ³

Family EXORISTIDAE.

Genus SERICOTACHINA Townsend.

Sericotachina Townsend, Ent. News, vol. 27, 1916, p. 178.

Genotype.—Paratachina vulpecula Wulp, 1896, Tijdschr. Ent., vol.

39, p. 106, pl. 2, figs. 14-16.

Differs from Paratachina principally as follows: Palpi more elongate. Proboscis shorter and stouter, not as long as head-height. Second antennal joint over twice as long as third joint, very slender on basal portion. Head, thorax, scutellum, and base of abdomen thickly clothed with short yellow pile; third and fourth segments with short black pile. Macrochaetae very weak.

¹ Dipt. Ex., Suppl. 4. 2 Dipt. Saund. 3 Sitz, Ak. Wiss., Wien., vol. 107, p. 496.

UGIMEIGENIA, new genus.

Genotype.—Ugimeigenia elzneri, new species.

Differs from Macromeigenia as follows: Male. Vertex distinctly less than one-fourth head-width. Front not nearly so produced in profile; the parafrontals and parafacials not so wide, the latter about the width of clypeus. Frontalia practically same width as one parafrontal, narrowing posteriorly at same rate. Only one reclinate orbital; ocellars very small; hairs of parafrontals microscopic and not descending below frontals. Second antennal joint not so elongate, the third joint about four times as long as second. Eyes bare. Three to four sternopleurals. Apical decussate pair of scutellars very short, weak. No median macrochaetae on first two abdominal segments; no discal on either third or anal segments. Hind tibiae thickly ciliate. Hind cross vein nearly staight, not quite parallel with main course of apical cross vein. Abdomen less bristly, with only short appressed hairs besides the marginal bristles of third and anal segments.

UGIMEIGENIA ELZNERI, new species.

Length of body, 13 mm.; of wing, 10 mm. One male, Banks Island, off Cape York, Australia, 1910 (Elzner).

Head thickly deep golden pollinose, the occiput shading somewhat into silvery. Frontalia very dark velvet-brown. Palpi and first two antennal joints rufous, third joint and arista blackish. Thorax and scutellum rather thickly pale golden pollinose; four equally heavy dark-brown vittae, the two of each side closely approximated, the outer ones hardly interrupted and reaching nearly to scutellum, the inner ones beginning farther in front and reaching only halfway behind suture. Broad base of scutellum dark brown, the pollinose portion forming a perfect and well-defined crescent. Abdomen brown to dark brown, the rather narrow bases of last three segments pale golden pollinose. The ground color of bases of segments shows somewhat rufous. Legs blackish; the tibiae brown. Wings nearly clear; the basocostal portion rather broadly golden-smoky, following the veins more or less distinctly. Tegulae smoky-whitish, with narrow yellow margins; front scale appearing whiter than hind scale.

Holotype.—No. 20044, U.S.N.M.

Named in honor of Herr Elzner, the Malaysian collector.

EUCYRTOPHLOEBA, new genus.

Genotype.—Eucyrtophloeba rhois, new species.

Differs from *Cyrtophloeba* as follows: Male. Form rather more narrowed. Palpi considerably shorter than third antennal joint, somewhat enlarged apically. Antennae inserted almost on eyemiddle, second joint quite short; third joint over two and a half

times second, broadened, strongly and evenly convex on upper edge. Arista slightly longer, thin on apical third or so. Eyes with longer hair, descending barely to bend of facialia. Front at vertex fully one-third to three-eighths head-width; less than half same anteriorly. Parafacialia narrowed below to about one-third their upper width. Facio-orbitals descending nearly as low as the eyes. Cheeks fully one-third eye-height, wider than long. Wings a little shorter. First vein bristled on over the proximal half, ending opposite small cross vein. Third vein bristled far beyond small cross vein, on fully or more than its proximal half. Apical cell very narrowly open, ending as far before tip as length of apical cross vein. Cubitus halfway between front and hind margins and only a little farther from tip, with short stump; apical cross vein rather evenly curved in. Posterior cross vein curved outward, its insertion a little distad of its origin; latter a little nearer to small cross vein than to cubitus. Fifth vein bare, its last section barely half as long as preceding section. Claws shorter than last tarsal joint. Hypopygium somewhat larger.

EUCYRTOPHLOEBA RHOIS, new species.

Length of body, 6.5 to 7 mm.; of wing, 4.75 to 5 mm. Two males, head of Rio Piedras Verdes, Sierra Madre of Chihuahua, Mexico, about 7,300 feet, July 15 and 19, 1899, both on flowers of *Rhus cismontana* (Townsend).

Palpi and first two antennal joints fulvous to pale rufous; frontalia dark rufous to brownish; third antennal joint and arista black. Parafrontals black, thinly silvery to pale yellowish pollinose; face and cheeks thickly yellowish-silvery pollinose, the cheeks almost golden. Occiput ashy. Thorax and scutellum black, moderately silvery pollinose, with more or less of a very faint brassy tinge; four vittae showing, the inner ones narrower. Abdomen shining black, the rather narrow bases of last three segments silvery-white pollinose; the rest very thinly pollinose as seen in oblique view. Legs dark brown; tarsi blackish. Wings nearly clear, the costal border smoky, the cross veins narrowly infuscate. Tegulae lightly smoky, the front scale whitish.

Holotype.—No. 20045, U.S.N.M.

ZIZYPHOMYIA, new genus.

Genotype.—Zizyphomyia celer, new species.

Differs from *Doryphorophaga* as follows: Male. Vertex fully one-third head-width or rather more, the front and face widening evenly therefrom. Frontalia quite as wide as one parafrontal. Eyes bare. Two closely approximated reclinate orbitals, no proclinate ones. Frontals not so closely set; outside them some microchaetae or short bristles. Parafrontals and parafacials wide, of about equal width

throughout. Facialia with bristles on not more than lower third. Facial plate not triangular, nearly even in width. Vibrissae near oral margin; arista thickened on more than basal half; third antennal joint about two and a half times second, bulged on upper edge. Four sternopleurals and four postsuturals; apical erect scutellar pair decussate. No discals on any of abdominal segments; the last two segments rather thickly clothed with appressed pile-like hairs. Apical cell quite widely open, ending farther before tip; apical and hind cross veins parallel with each other, but not with hind margin of wing. Tegulae of normal size.

ZIZYPHOMYIA CELER, new species.

Length of body, 6.5 to 7.5 mm.; of wing, 4.75 to 5 mm. Two males, Kenedy, Texas, September 14; and Cuero, Texas, June 9, 1898, on flowers of Zizuphus obtusifolius (Townsend).

Blackish; head thickly dull silvery pollinose. Frontalia brown, showing bloom in oblique lights. First two antennal joints faintly rufous in one specimen. Palpi pale rufous. Thorax and scutellum silvery pollinose; four narrow vittae, the outer ones interrupted and but little heavier than inner ones. Abdomen shining brown to dark brown and black; base of second segment broadly silvery, the pollen fading out about halfway to hind margin on median portion, narrowing laterally; third segment with silvery only on median portion of incisure. No pollen on venter. Tibiae brownish. Wings clear. Tegulae white.

Holotype.—No. 20046, U.S.N.M. (Cuero.)

NEOPHRYXE, new genus.

Genotype.—Neophryxe psychidis, new species.

Differs from *Phryxe* as follows: Female. Vertex less than one-third head-width. Eyes bare. Antennae inserted on upper two-thirds of eye; third joint not widened, nearly three times second. Arista more delicate, basal joints short. Face below hardly one and one-third times as wide as one eye. Facialia and clypeus narrower, epistoma more bulged. Apical scutellars weaker. No true discals on intermediate abdominal segments. Hind tibiae subpectinate, tarsi short. Apical cell narrowly open, cubitus with strong wrinkle.

NEOPHRYXE PSYCHIDIS, new species.

Length of body, 5.5 mm.; of wing, 4.5 mm. One female, "emerged from Psychid cases coll. on Azaleas from Japan at Riverton, New Jersey, March 25, 1915" (H. B. Weiss).

Black, including antennae and frontalia. Palpi fulvous. Parafrontals, face, cheeks, and orbits silvery; occiput ashy. Thorax and scutellum thinly silvery; five vittae, three narrow ones in middle, two wider ones outside. Last three abdominal segments very broadly silvery on base; especially the intermediate ones, a median

vitta of black on same; second segment broadly rufous on sides. Wings clear. Tegulae nearly white.

Holotype.-No. 20047, U.S.N.M.

EUPTILOPAREIA, new genus.

Genotype.—Paraplagia erucicola Coquillett, 1897, Rev. Tach., pp. 77–78.

Differs from *Ptilopareia* as follows: Arista short, thickened nearly to tip. Third antennal joint three times second in both sexes. Face and front almost same width in female, the face widening considerably in male. First and fifth veins bare; third bristled only to small cross vein in female, short of same in male (Julietta, Idaho).

KUWANIMYIA, new genus.

Genotype.—Kuwanimyia conspersa, new species.

Related to the Admontia group and distinguished as follows: Distinct proclinate ocellar bristles, small, not widely divaricate. Arista short, thickened, second joint long. Female with two proclinate fronto-orbitals: male without, but with wide bristly front, the extrafrontal bristles reclinate on posterior portion. Facial depression long, deep, triangular, very wide below in male and depth better marked than in female. Antennae inserted very high in male. Female front as wide as both eyes, that of male only a little narrower, the face widening but slightly from front. Head rather flattened antero-posteriorly, short; male frontal profile subhorizontal, that of female very sloping. Parafacials wide in female, narrower in male; their profile bowed outward in both sexes. Cheeks in both sexes hardly one-fourth eye-height. Third antennal joint of female much more slender than that of male. Facialia strongly ciliate. No discal bristles on abdominal segments. Apical cell closed a little before wing tip. Hind cross vein in middle. Strong costal spine.

Named in honor of Dr. S. I. Kuwana, of Japan.

KIJWANIMYIA CONSPERSA, new species.

Length of body, 7 to 7.5 mm.; of wing, 5 to 5.5 mm. Two males and two females, Tokyo, Japan, reared from larva of Euproctis con-

spersa, July, 1912 (S. I. Kuwana, No. 85).

Head silvery-white pollinose, the black parafrontals and occillar area largely showing through the pollen. Palpi, first two antennal joints, and basal half or less of third joint rufous. Frontalia rufotestaceous. Thorax, scutellum, and abdomen silvery pollinose, the scutellum yellowish on apex; a median pair of well-separated linear vittae showing on thorax before suture, and two heavy interrupted outer ones. Pollen of abdomen shows most plainly on basal half or less of segments two to four. Legs blackish, femora slightly pollinose. Wings clear, faintly tawny on base. Tegulae white.

Holotype.—No. 20048, U.S.N.M., female. Allotype, male.

DIATRAEOPHAGA, new genus.

Genotype.—Diatraeophaga striatalis, new species.

Female. Form narrowed. Front strongly produced in profile, face very receding; head subtriangular in profile. Vertex fully onethird head-width; parafrontals and parafacials wide, the latter narrowed considerably below. One reclinate and two proclinate orbitals. Ocellars present. Frontals descending but slightly below base of antennae. Frontalia narrow. Facial depression very deeply hollowed, vibrissae on oral margin; facialia on edge and forming sides of depression, their crests flush with parafacials, bristled less than halfway up. Antennae about as long as facial plate, second joint short, upper edge of third joint prolonged into a point at tip. Arista swollen on basal three-fifths, second joint well elongated. Epistoma cut off, notched. Proboscis short, palpi normal. Two sternopleurals; four postsuturals, but the front two weak. Three lateral scutellars, a weak divergent apical pair, a weaker discal pair. Abdomen with a weak median marginal pair on second segment, and weak marginal on third and anal segments. Hind tibiae with sparse irregular bristles. Tarsi short, the metatarsi as long as remaining joints taken together. Claws rather short. Apical cell moderately shortpetiolate, ending well before tip. Apical and hind cross veins slightly curved and about parallel. Cubitus without stump, right-angled, hind cross vein well removed therefrom. Costal spine present, third vein with one rather long bristle at base.

DIATRAEOPHAGA STRIATALIS, new species.

Length of body, 8 mm.; of wing, slightly over 5 mm. One female, Pasoeroean, Java, August, 1913, reared from *Diatraea striatalis* (K. W. Dammerman, No. 385).

Very dark brown to black. The specimen is badly greased and shows no pollen, but the head, thorax, and bases of abdominal segments are almost certainly silvery to some extent in life. The tips of palpi and base of antennae show faintly rufous, the cheeks and broad margins of parafacials rather more so. Wings nearly clear. Tegulae whitish.

Holotype.—No. 20049, U.S.N.M.

The economic importance of this form justifies its description from this specimen.

METOPOSISYROPS, new genus.

Genotype. — Metoposisyrops oryzae, new species.

Differs from Diatraeophaga female as follows: Male. Front even more strongly produced in profile; the parafacials much narrower below and their profile more bulged, their planes almost at right angles with that of clypeus. Vertex a little less than one-third head-

width, the front scarcely widening from same, the face only slightly widening from front. Head almost evenly triangular in profile. Scars of what are apparently two reclinate fronto-orbitals, but no proclinate ones. Frontals descending to base of third antennal joint. Facial depression not quite so deeply hollowed, facialia not ciliate. Frontalia broad, of even width, wider than middle of parafrontal. Second antennal joint strongly elongate; the third only one and onehalf times second, truncate at tip but lower angle rounded while the upper is sharply pointed. Arista shorter than third antennal joint, porrect, thickened on hardly over basal half, the basal joints short. Epistoma not notched. Three sternopleurals. Apical scutellars more hairlike, erect, subdecussate. Median marginal pair of macrochaetae on first and second abdominal segments, median discal pair on second and third segments, marginal row on third and anal, the last also with a discal row. Tarsi elongate, normal; claws quite elongate. Apical cell widely open; the apical and hind cross veins more bent. Same single long bristle at base of third vein.

METOPOSISYROPS ORYZAE, new species.

Length of body, 7.5 mm.; of wing, 6 mm. One male, Bandoeng, Java, August, 1912, reared from "rice-borer?" (K. W. Dammerman, No. 313).

Dark brown to blackish. Parafrontals, face, cheeks, and orbits silvery pollinose; occiput ashy. Antennae and palpi black. Thorax and scutellum silvery, two narrow inner vittae and two very wide and heavy outer ones. Last three abdominal segments broadly silvery-white on base; the pollen broadening in middle on the intermediate segments, but leaving a wide median vitta on second and a narrower one on third. Wings very faintly tinged with smoky, almost clear. Tegulae nearly white.

Holotype.—No. 20050, U.S.N.M.

Genus CHAETONODEXODES, new genus.

Genotype.—Chaetonodexodes rafaeli, new species.

Seems allied to Oestrogastropsis, the male of which is unknown, differing from the female of that genus as follows: Male. Form very narrowed; the abdomen still narrower than head and thorax, sub-eylindrical but narrowed apically. Front of even width with vertex, a little over one-fifth head-width; frontalia wider than one parafrontal. Ocellars as strong as frontals. Three reclinate and two proclinate orbitals as in female of that genus. Facialia ciliate. Third antennal joint two and a half times second. Parafacials almost linear. No discal bristles on any of the abdominal segments. Tarsi delicate, claws very short. Wings more narrowed, costal spine distinct. Sternopleural, postsutural, and scutellar bristles same. Eyes descending just as low as vibrissae, 'less than twice as high as broad.

CHAETONODEXODES RAFAELI, new species.

Length of body, 5.5 mm.; of wing, 5.5 mm. One male, San Rafael, Vera Cruz, Mexico, March 23, 1896 (Townsend).

Brown to dark brown. Parafrontals, face, cheeks, and orbits ashy pollinose. Frontalia velvety dark brown. Thorax and scutellum blackish; the humeri, irregular hind border of presutural area, and broad disk of postsutural area brassy-cinereous; pleurae ashy. Abdomen faintly ashy on narrow bases of last three segments; rest of tergum rather dark brown, the venter and legs rather lighter. Wings faintly smoky throughout, the tegulae pale smoky-yellowish.

Holotype.—No. 20051, U.S.N.M.

Family RHODOGYNIDAE.

Genus EUTHEROPSIS Townsend.

Eutheropsis Townsend, Ent. News, vol. 27, 1916, p. 178.

Genotype.—Euthera mannii Mik, 1889, Wien. Ent. Zeit., vol. 8, p. 132, fig.

Differs from Euthera as follows: Second antennal joint not so elongate, the third joint over twice to nearly three times as long as second. Basal aristal joints distinct. Parafacials pilose. Facial carina sharp, acute, very prominent. Epistoma very prominent. Palpi clavate. Female with two proclinate orbitals. Male claws short. Female front tarsi flattened. Apical cell short-petiolate, ending far before wing apex. Alulae of wings very large, elliptical.

Genus GEROCYPTERA Townsend.

Gerocyptera Townsend, Ent. News, vol. 27, 1916, p. 178.

Genotype.—Trichoprosopa marginalis Walker, 1861, Journ. Proc. Linn. Soc. (London), vol. 5, p. 157.

For characters see Austen, and the original description by Walker.

FORMICOPHANIA, new genus.

Genotype.—Formicophania elegans, new species.

Differs from Orectocera as follows: Male. Much more slender, with petiolate abdomen. Cheeks narrower, about one-fourth eye-height. Vertex distinctly narrower. Facialia without sign of bristlets. Two sternopleurals. Two lateral scutellars, and a decussate apical pair; no discals. First two abdominal segments narrowed, second widening a little posteriorly, third widening from second, the fourth widest, the fifth narrowing rapidly behind. Aside from the narrowed basal part, the abdomen is strikingly swollen-suboval in form, the ventral profile nearly straight, the tergal profile very convex. The

second and third segments are nearly same length, the fourth is much longer; the fifth is shorter than fourth, but with arcuate front border increasing its tergal length on median line. No discal macrochaetae, no median on first three segments. Basal segments of hypopygium exposed with full posterior aspect, not ventral. Claws not much longer than last tarsal joint. Apical cell closed a little before wingtip, hardly petiolate; cubitus in a broad gentle curve, apical and hind cross veins parallel with hind margin of wing, the hind cross vein very sinuate and close to cubitus. Small cross vein opposite end of first vein. Tegulae small.

FORMICOPHANIA ELEGANS, new species.

Length of body, 12 mm.; of wing, 9 mm. One male, Khow Sai Dow, 1,000 feet, Trong, Lower Siam, Jan.-Feb., 1899 (W. L. Abbott). Head black, thinly silvery, the parafacials and cheeks showing more heavily silvery-white. Palpi, antennae, thorax, and scutellum black, with thin silvery coat; vittae of mesoscutum coalesced, forming a pair of very wide heavy black vittae before suture and separated by a brassy median vitta, joined in an unbroken black behind suture. Humeri brassy. Posterior margin of first abdominal segment, all of second, and broad anterior border of third deep yellow, the third with silvery-white pollen over the yellow; rest of abdomen soft black, the fifth segment with pale golden pollen visible in oblique view. Hypopygium rufous. Hind legs mostly yellow, the others mostly dark brown; the front tibiae and tarsi mostly yellowish, the middle femora considerably yellow. Wings deeply infuscate on costal half, the discal cell and a subcostal streak yellowish. Tegulae whitish.

Holotype.—No. 20052, U.S.N.M.