# New Javanese Hymenoptera

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Received from Dr. W. Roepke and Herr P. van der Goot of Java. Types in U. S. National Museum. From females.

#### CHALCIDOIDEA.

#### EPOMPHALE JAVAE.

Length, 0.60 mm. Differs from genotype thus: But one rather broad cross-stripe on dorsal abdomen a little distad of middle which is broadly interrupted along meson, thus abdomen "2-spotted"; club bears a small terminal spine, the funicle joints subequal and twice wider than long; club divided a little distad of basal fourth, as long as scape, its 1 a little longer than wide, each joint with a whorl of moderately long hairs. Pedicel nearly as long as funicle and club 1 united. Longest marginal cilia of fore wing a half greatest wing width. Scape slender, antennae white. Mandibles inconspicuous or absent. No lateral carina on propodeum. Cephalic coxae more or less purple. Reared from Thrips on Cacao, Salatiga, July. Catalogue No. 20619.

#### PSEUDACRIAS CARINATISCUTUM.

Length, 1.50 mm. Brilliant purple, wings hyaline; scape, tibiae and tarsi pale yellow to whitish, the tibiae frequently dusky above, especially at base, the scape dusky above at apex. Pedicel subequal to funicles 1 or 2 which are each twice longer than wide, 3 a third longer than wide, larger than club 1, club 2 small, conic, scarcely longer than its terminal spine. Occiput finely scaly, a smooth median groove from centre to occipital margin of vertex; vertex glabrous, from and upper face scaly, glabrous below antennae which are inserted below middle of face but above eye ends; the eyes very large yet the checks are distinct. A V-shaped suture, its apex ventrad, on frons between cephalic ocellus and antennae. A short curved carina to occipital margin from mesal apex of each lateral ocellus (and which really encircles the mesal and cephalic sides of it and thus turned runs latero-caudad to eye margin and limits a pyriform depression, glabrous, within whose large end is the ocellus). Prothorax rather large, its ceph-

alic face scaly, the notum glabrous, its cephalic margin very acute. Scutum rather strongly constricted cephalad, the parapsidal furrows distinct for cephalic half only; parapsides convex and mostly caudad of the furrows and inclosing a subquadrate depressed, flat, glabrous part of scutum which bears a median carina and acute lateral margins; this part is somewhat longer than the densely scaly part cephalad of it. Parapsides scaly. Scutellum longitudinally striate, the striae not dense, conspicuous, the whole meson broadly glabrous except apex. Axillae subglabrous. Propodeum glabrous, strongly tricarinate, the carinae connected along caudal margin, the median forking before apex, the spiracle small, elliptical. Petiole somewhat wider than long, finely scaly. Segment 2 of abdomen occupying about a third of surface, glabrous, others scaly. Mandibles with two acute teeth and three minute inner ones. A seta on each side of median carina of scutum; long, single setae from cephalic margin of pronotum. Abdomen above distad of 3 with numerous stiff setae of some length (a row across each segment). Hind tibial spur long, stout, nearly a third the length of hind tarsus. Venation normal for the genus. Salatiga. From spider's egg-sac. Catalogue No. 20623.

The scutum similar to that of Amestocharis cariniscutum Girault. Pleurotropsis bifoveolatus similar but the area smaller than rest of scutum, scutellum uniformly sculptured, porpodeum bicarinate at meson.

#### EUPELMUS JAVAE.

Length, 3.20 mm., excluding ovipositor which is as long as half the abdomen or nearly, the valves white except proximal fifth and distal fourth. Dark metallic, wings hyaline, venation yellow; scape and legs reddish brown except first and last coxae, cephalic femora, hind femora except at apex, cephalic tibiae above at base and hind tibiae above lightly except at each end. Maxillary palpi black. Head scaly, face with numerous umbilicate punctures, the scrobes joined, coarsely transverse scaly, the wedge between not reaching their apex. Eyes nearly naked. Scutum coarsely scaly, the lateral ridges obtuse but distinct, with thimble punctures along them, the raised triangular part cephalad not reaching quite to middle and not extended to apex as a median carina. Scutellum scaly, the scaliness with a longitudinal lineolation. Abdomen scaly, 2 occupying a fourth of the surface, deeply bilobed at apex, so 3-5, 2 longest. Postmarginal vein a little longer than stigmal, neither long. Mandibles tridentate. Scape slender; pedicel over twice longer than wide at apex, somewhat longer than funicle 3 or 4 which are longest, each nearly twice longer than wide, slightly longer than 2, 1 a little wider than long; distal funicle joint a little wider than long. Frons moderately broad, lateral occllus some little distance from eyes. Bulla black. Scutellum either

declivous or horizontal. Head and thorax with silvery pubescence.

Hind tibial spur single.

Male same but the antennae wholly concolorous, scape somewhat compressed and shorter, the frons wide, the scutum convex and with complete, obtuse parapsidal furrows, the abdomen much shorter, also the segments and only segment 2 has a small sinus. The propodeum long and with a distinct median carina. Also the middle coxa and femur is concolorous. Reared from larval Araecerus fasciculatus in pods of Tephrosia candida, Salatiga. Catalogue No. 20648.

#### CHEILONEURUS JAVENSIS.

Length, 1.00 mm. Slender. Dull orange, the venter of thorax, mesopleurum except cephalic third and legs except middle knees broadly and hind femora at distal two-thirds, white, the exception purple. The following additional purple parts: Abdomen, cheeks, vertex to cephalic ocellus, pronotum, propleurum, scutum, tegulae (sometimes) and propodeum (washed). Disk of scutellum often purplish. Scape greatly foliaceously dilated, its distal fourth and the rest of the antenna except the club, white. Fore wings infuscated as in Cristatithorax latiscapus but the cephalic margin is broadly hyaline from the venation (more widely than is the caudal margin), the postmarginal vein is a trifle longer and that part of the discal ciliation proximad of hairless line between the base of marginal vein and a hairless line is much coarser and black (forming a rather wide area of coarse, black setae along the proximal side). Flagellum as in latiscapus but the pedicel is slightly longer. Mandibles with three nearly equal, subacute teeth. Otherwise the same but cephalic ocellus is not so advanced, being not quite twice the distance from the others as they are wide apart. (In latiscapus, somewhat over twice that distance). From cocoons of a Dryinid, Salatiga. Catalogue No. 20651.

#### HOMALOTYLUS ORCI.

Similar to microgaster Girault but only the club (of the antenna) is white, the funicle joints are a little longer and the postmarginal and stigmal veins somewhat shorter, the marginal a little longer than wide. Types compared. Head with scattered thimble-From larval Orcus janthinus, Salatiga. Catalogue punctures. No. 20655.

#### AXIMOPSIS JAVENSIS.

Length, 2.35 mm. Habitus of Eurytoma.

Hind tibial spurs double. Black, the wings hyaline; scape at proximal half, knees, cephalic tibiae (suffused only) and tips of all tibiae, reddish; extreme tips of tibiae and the tarsi white. Venation pallid yellow, marginal vein a little thickened, nearly half longer than stigmal, the latter somewhat shorter than the

postmarginal. Umbilicately punctate and with white pubescence. Pedicel small, globular; funicle 1 a little over twice longer than wide, 2-4 each shortening a little, 5 half longer than wide; club solid, longer than funicle 1. Funicle 5-jointed. Scrobes united, the cavity deep, smooth, with carinated margins, a little longer than wide, not quite reaching cephalic ocellus. "Cornuted head" formed by a distinct carina along eyes on the face (and continuing over vertex and down the occiput). Propodem rugosopunctate, with a rectangular, deep median basin which is rugose but not densely so (like shallower rugose punctures); a pair of longer than wide foveae at base. Hind coxae above finely punctate. Petiole quadrate. Abdomen dorsad glabrous, segment 5 longest, occupying nearly a third of surface, 4 a third shorter than it, subequal to 6. Mesopleurum obliquely rugulose-striate, with small punctures between. Lateral margin of occiput strongly carinated but not so above.

Male same but somewhat more of the distal scape black, the petiole is over twice longer than wide and finely punctate, the propodeal basin is narrower and with the rugosity cross-wise. Flagellum 7-jointed, club 2-jointed, the joints a little unequal. Funicle joints long, 5 a little shortest, twice longer than wide, not as nodular as the others which are as in Eurytoma. From pods of Tephrosia candida, with larval Araecerus fasciculatus, Salatiga. Catalogue No. 20656.

Aximopsis tephrosiae. Like javensis but legs red except coxae and caudal femora, these black and the last two pairs of tarsi and tips of the last two pairs of tibiae, these white; pubescence on face is golden, the channel-like median basin of propodeum has at base on each side of meson three foveae, the first largest, then sulci across the basin, the basin rectangular, opaque laterad; the abdominal petiole twice longer than wide, flat above and opaque (no sculpture), its basal margin rimmed (about same in javensis but shorter); mesopleurum punctate, the punctures sparser and coarser caudo-dorsad. Male as in javensis except that the sculpture of median basin of propodeum is coarser than in female tephrosiae but nearly similar. With javensis. Catalogue No. 20657.

Neomphaloidella java. Like kurandensis but not so large, scape and legs (except coxae) golden yellow, pedicel as black as rest of antenna, the funicle joints shorten distad, 3 a third longer than wide, a little longer than pedicel, 1 twice longer than wide; the punctures on upper head sparse and inconspicuous (on vertex more distinct.) Club with distinct terminal spine, 1 and 2 subequal, subquadrate. Mandibles with two nearly equal acute teeth and an inner, shorter, oblique truncation. Sculpture usual; a row of setae from small punctures across caudal margin of pro-

notum and a row of four setae from similar punctures along the lateral margin of the scutum; two minute setigerous warts in a line, middle of scutellum near the lateral side of the first groove. Propodeum rather coarsely scaly, the three carinae strong, thickened at apex where they fork to run along margins. Abdomen subglabrous, conic-ovate, as long as rest of the body. Propodeal spiracle elliptical, moderate in size, its own width laterad of the lateral carina. Stigmal vein moderate.

Male scape not dilated, with a pustular "blister" along nearly the whole of ventral edge; four funicle joints subequal, about twice longer than wide, clothed with longer and softer hairs than in female. Pedicel a little shorter than funicle 1. Club 3-jointed, 2 longest, subequal to the funicle joints, or nearly. The male is smaller. From cocoons of Acrocercops cramerella Sn., Salatiga. Catalogue No. 20667.

Paracopidosomopsis javae. Like coleophorae (Mayr) but: The caudal tibia is concolorous only at proximal third (but sometimes entirely metallic); ovipositor not shortly extruded; pedicel much longer, twice longer than wide at apex, much longer than any funicle joint (a little longer than wide at apex, in the other, subequal in length to funicle 2); funicle joints are shorter and as in floridana; postmarginal vein as long as marginal. Body coarsely scaly. Cephalic and middle knees and tibiae yellow, also all tarsi. Compared with specimen of the European species in U. S. National Museum. From larval Plusia, Salatiga. Catalogue No. 20676.

#### PTEROSEMOPSIS.

Runs to Pterosemoidea Girault but segment 2 of abdomen is over five times the length of 3 and conceals most of the latter, its caudal margin conically produced, reaching segment 4, 3 transverse, 4 a little shorter than 2 and reaching middle of abdomen, no longer than 5 which is large (somewhat wider than long). Also the abdomen is much narrower than thorax and cylindrical, the petiole thrice longer than wide or just exceeding hind coxae. The propodeum with weak lateral carinae only and spiraclar sulci, the spiracle small, oval, the neck small but distinct; also a dorsolateral carina and the extreme caudo-lateral angles terminate in a small tooth. Head distinctly wider than thorax, the occiput immargined, the antennae inserted a little above middle of face, the clypeus weakly separated, at apex bisinuate, the median lobe longest and abruptly tipped with an acute point, or mucronate. Mandibles 3- and 4-dentate. Postmarginal vein a fourth shorter than marginal, longer than the long stigmal. The ovipositor concealed until near apex; it is inserted proximad of middle.

#### PTEROSEMOPSIS JAVENSIS, GENOTYPE.

Length, 1.25 mm. Dark metallic, wings hyaline, venation yellow, the tegulae and antennae also, the legs white except coxae. Third ring-joint twice the size of 1 or 2, a little wider than long, distinctly smaller than the funicle joints which are a little longer than wide, subequal, somewhat shorter than pedicel. Head and thorax densely scaly-punctate, the clypeus also, the propodeum and hind coxae dorsad, similarly sculptured, the petiole and abdomen subglabrous. Head hairy, the dorsal thorax less so. From a dryinid, Salatiga, June 16. Catalogue No. 20644.

#### NEOBRACHISTA JAVAE.

Length, 0.80 mm. Black, wings clear; vertex lemon, the trochanters, apex of pedicel, knees, tibiae and tarsi silvery, the hind tibia with a dusky spot dorsad between knee and middle. Venation black. Funicle 1 somewhat wider than long, 2 twice wider than long, both a little paler and combined shorter than pedicel which is somewhat longer than wide; club long, but its middle joint a little wider than long, the other two subequal, about thrice longer than wide, longer than pedicel. Scape slender, pale beneath. Hind wings short, with three lines of discal cilia, the cephalic two more Oblique line of cilia from the stigmal vein with six cilia, the fore wing with about eighteen lines of discal cilia, all regular, the marginal vein narrow or linear, thrice longer than wide, distinctly much shorter than the long stigmal. Mandibles tridentate. Marginal cilia of fore wing nearly as short as in Ufens. Second ring-joint attached to the funicle rather than to the pedicel.

Male a third smaller, middle and hind tibiae black except tips, antennae yellowish and subfiliform, the first club joint belonging to funicle whose joints are nearly twice longer than wide; club 2 as long as in female, 1 next longest being next in length after the funicle joints. Flagellum clothed with scraggly hairs, much longer, stouter and more conspicuous than with female. Associated with Lecanium viride, Salatiga. Catalogue No. 20645.

#### PROMUSCIDEA.

Eunotinae. Like the description of Amuscidea Girault but antennae 10-jointed, three ring-joints (which enlarge in succession, 1 extremely short, others distinct, 3 not half the length of funicle 1, twice wider than long), club 2-jointed, the division a little before middle. Mandibles bidentate, 2 broadly truncate; scutellum simple; marginal vein moderately long, over twice the length of the long stigmal, latter somewhat longer than postmarginal. Cephalic tibial spur moderately stout, curved, not forked, the caudal not strong, distinct. Maxillary palpi 3-, labial, 2-jointed. Head shaped

as in *Tomocera*, the antenna inserted on a level with the eye ends or slightly higher, scrobes deep, not reaching cephalic ocellus, separated by a long-cuneate carina. Propodeum short, weakly tricarinate. Abdomen ovate, depressed, 2 no more than fifth of surface, others shorter. Scutum much longer than the linear pronotum, the scutellum convex, long. Ovipositor concealed and sex therefore not certain.

## PROMUSCIDEA UNFASCIATIVENTRIS, GENOTYPE.

Length, 0.70 mm. Black; abdomen dorsad with a moderately broad white stripe across a little out from base, the head (except occiput and caudal vertex), antennae and legs (except coxae and femora), pale yellow. Pedicel somewhat longer than wide at apex, longer than any funicle joint; funicle 1 a little wider than long, 2 and 3 subequal, quadrate, somewhat smaller than club 1. Autennae practically naked. Fore wings lightly dusky, densely ciliate in the disk. Head and thorax scaly. From Lecanium viride, Salatiga. Catalogue No. 20647.

Omphalomomyia thymus javae. Like typical form but marginal purple of abdomen much more distinct, funicle and club black, head entirely metallic except mouth broadly while the male is wholly dark above, its abdomen purple except for a large yellow area at base. Secondary on *Photoptera erythronota* Viereck and Mesostenus zarathae Roepke, Salatiga. Associated with cocoons of Acrocercops cramerella Sn. Catalogue No. 20632.

Pseudacrias secundus. Similar to carnatiscutum but nearly half smaller, the scape is concolorous, the scutellum scaly along meson except at base, the areas large, the median carina of propodeum paired and the tibiae are concolorous except broadly at apex. Pedicel somewhat shorter than funicle 1 which is longest, 2 and 3 each shortening slightly. From egg-case of spider, Salatiga. The male similar. Catalogue No. 20633. Same as Pleurotropis.

#### ACERATONEURELLA.

Like *Tetrastichus* but abdomen with distinct subquadrate petiole, scutum and scutellum with a faint median sulcus, the scutellum otherwise simple. Propodeum with median carina only, the spiracle rather large, round, cephalad. Abdomen conic-ovate, somewhat longer than thorax.

## ACERATONEURELLA CINCTIVENTRIS, GENOTYPE.

Length, 0.90 mm. Orange, wings hyaline, the vertex and upper occiput against the eye margin only (the two continuously), lateral margin of abdomen from base to first cross-stripe but not conspicuously, four stripes across abdomen (1 at apex of basal third, 2 a little beyond middle, 4 some little distance before apex,

1 and 2 spreading at the margin), purple or blackish; apex of abdomen more or less black. Scutellum with four large bristles, scutum with one on each side distad and with numerous fine setae over its surface, also pronotum. Club dusky, with a terminal spicule, its joints wider than long; funicle joints somewhat wider than long, subequal, a little shorter than pedicel. Mandibles bidentate and with an inner truncation; stigmal vein rather short. From spider eggs, Salatiga. Also from larval Orcus janthinus, same place. Catalogue No. 20636.

# PROCTOTRYPOIDEA. NEOTELENOMUS JAVAE.

Length, 0.50 mm. Postmarginal vein absent. The male funicle abnormally thick at base. In Dodd's table to Australian species runs to anthereae but differs: The tibiae slightly infuscated above; funicle 3 like 2; club 1 smallest, 2-4 all a little wider than long, 5 longest, conical; fore wings with only twenty lines of discal cilia, venation pale, the marginal vein third the length of the very lorg stigmal; marginal vein about two and a quarter times longer than wide; male club joint conical and longer than funicle 2 (much narrower), funicle 4 distinctly wider than long, 5-9 slightly wider than long, subglobular; male antenna wholly brown. Scutum finely reticulated and pubescent, the scutellum glabrous, its margins finely foveolate except the basal; 2 of abdomen over twice wider than long, striate for its entire length except toward each margin but sometimes striate only at base, the latter with fine foveae; 3 with finer striae at base only, otherwise glabrous, occupying two-thirds of the surface, longer than wide; others transverse, glabrous, a row of very fine punctures along their cephalic margins. Head finely reticulate, eye sparsely hairy. Genal furrow wide. Postscutellum with longitudinal striae which are not crowded. Propodeum glabrous, with a carina on each side of base of meson which proceeds caudo-laterad in a convex curve to caudolateral angle; it is met by a short carina from the mesal side of spiracle, a carina parallel, or nearly, with the cephalic margin; spiracle in one angle of a triangle whose longest side is the curved carina from near mesal base. Spiracle not large, oval. Maxillary palpus with its clavate, second and last joint much longer than 1, labial palpi cylindrical, 1-jointed. Mandibles acutely tridentate, teeth small. Habitus of Telenomus.

Male antennae remarkable, the flagellum after funicle 3 (which has a lip from one side of apex) abruptly narrow, filiform, funicles 1-3 being comparatively very large, wide. Ring-joint present but in female it is embedded into the apex of the pedicel. Male scape compressed somewhat. From egg of Pseudosphinx or Acherontia, Salatiga. Catalogue No. 20677.

#### CERAPHRON JAVENSIS.

Length, 0.80 mm. Runs to achilles Dodd (p. 99, Trans. Royal Society South Australia, XXXVIII, 1914) but abdomen dark brown like rest of the body and funicle 1 is distinctly longer than 2, distinctly somewhat wider than long while antennae yellow except last two (or three) joints. Head and thorax distinctly scaly but mesopleurum glabrous. Head and thorax downy. Abdomen glabrous but with short striae at base whose margin is carinated, 2 occupying more than half surface. Scutellum subconvex, extending to base of abdomen, its margins carinated, subacute at apex. Median groove of scutum present. Axillae joined. Ocelli in a small triangle, center of vertex. Propodeum visible only laterad of scutellum, long with irregular, long rugulae, a long dorsolateral carina and carinated caudal margin. Scape obclavate. Mandibles acutely bidentate. Fore wings rounded at apex; their marginal fringes short, the blade subhyaline, stigmal vein at apex broadly separated from cephalic margin. Male antennae with long hairs, filiform, some of the funicle joints swollen along one side.

Hyperparasitic on Pseudococcus crotonis infested with

Diplosis, Salatiga.

Male funicle 1 twice longer than wide, longer than pedicel, subequal to club, longest of funicle. The male more brownish and the antennae more uniform in color. Catalogue No. 20649.

#### EULAGYNODES.

In Kieffer's table (1909, Genera Insectorum, Fasc. 94) runs to Lagynodes Foerster but winged and there are three stout, conspicuous, blunt, moderately long spines in a row across metathorax, the median one just under apex of scutellum (thus probably from a subobsolete postscutellum and projecting over base of the abdomen), the lateral ones not far from lateral margin of propodeum. Also the eyes are large, as seen from cephalic aspect, no space between them and occiput. Too, antennae but 10-jointed, abdomen at base longitudinally striate broadly across meson, the striae extending along proximal fourth of the abdomen, the latter dorsad unsegmented. Wings like Ceraphron, the stigmal vein at apex well separated from the costal wing margin. Ocelli large, in a small triangle in center of vertex. Head longer than wide, the antennae inserted at the mouth, scrobes deep and distinct, crosslined above. Maxillary palpi long, 4-jointed, labial 2-jointed, Mandibles acutely bidentate. Cheeks much shorter than eyes. Three grooves on scutum. Axillae joined.

### EULAGYNODES BICOLOR, GENOTYPE.

Length, 2.35 mm. Stout. Reddish brown, fore wings slightly uniformly infuscated, venation and legs honey yellow; distal twothirds of abdomen dorsad and extreme upper sides (except at apex distinctly, more than distal two-thirds at lateral margin) and middle of venter, black. Head black, mouth and proximal twothirds of scape reddish, funicle 1 suffused with reddish. Scape long, somewhat compressed; pedicel with a neck-like elbow at base, over twice longer than wide at apex, longer than any following joint save club and funicle 1; the latter over four times longer than wide; funicle 2 half longer than wide; club a little longer than pedicel; funicle 5-7 of equal width, widest, somewhat longer than wide, 4 subquadrate. Head hairy, very hairy ventrad; scutum downy, the surface smooth, the parapsidal furrows half complete from cephalad, represented by carinae. Scutellum and axillae shining, the latter hairy, the scutellum mesad sparsely so, as see i from above with a lateral fringe of short white hairs. Metathorax densely wooly, wool white. Abdomen glabrous but with dense pinpunctures dorso-laterad at apex. A line of fovae around extreme apex of scutellum. From the cocoons of Acrocercops cramerella Sn., Salatiga. Catalogue No. 20650.

#### ODONTACOLUS LONGISPINOSUS.

Length, 1.50 mm. Differs from genotype: Spine on each side of meson of metathorax moderately long, reaching as high as apex of abdominal horn. Like australicus Dodd but entirely honey yellow except dusky apex of club, the head is finely granulatepunctate, clypeal region radiate-striate, a narrow median carina from the cephalic ocellus to mouth; head (cephalic aspect) triangular, thorax sculptured like head. Abdomen pointed long-ovate, not as wide as thorax, but longer, ovipositor usually extruded slightly; finely long-striate (including the large obtuse horn) to apex of segment 4, segment 5 scaly. the others obscurely sculptured; the horn is much more finely striate in dorsal aspect. Metathorax with a pair of separated median carinae, the spine nearly dorso-laterad. Segment 4 of abdomen longest, a little longer than wide. Occipital margin of vertex acute. Lateral ocellus barely separated from eye. Pedicel nearly twice longer than wide at apex, club fully as long as body of the scape. Fore wings not quite reaching the apex of the abdomen, lightly infuscated, venation yellowish; marginal vein somewhat longer than wide, subequal to the distinct postmarginal, stigmal very long and slender, with small round knob. Mandibles long, acutely tridentate. From spider eggs, Salatiga.

Male similar but antennae filiform, 11-jointed, club solid and longest of flagellum, funicle 1 longer than wide, others moniliform. The horn of abdomen and the metathoracic spines much reduced, abdomen truncate at apex, the striae dorsad on segment 4. Catalogue No. 20634.

#### ACOLOIDES TRISPINOSUS.

Length, 1.10 mm. Black, abdomen, legs and antennae golden, wings hyaline, venation dusky, also club distad; pedicel thrice longer than wide at apex; funicle 1 over twice longer than wide, shorter than pedicel, 2-4 quadrate. Marginal vein twice longer than wide, much shorter than stigmal, postmarginal absent. Sculpture as in arachnophagus but striae on face nearly reaching cephalic ocellus laterad; postscutellum like a frenum (yellow), flat and acute at apex, appearing as if scutellum was spined at apex; propodeum covered mesad by postscutellum, with a yellow spine at each caudo-lateral corner; abdomen with a short petiole; 2 four times wider than long, glabrous, its proximal margin carinated; 3 twice length of 2, densely scaly-punctulate and mesad with longstriae (6-8) extending nearly to its apex which is near middle; 4 subequal to 3, scaly, the rest transverse, scaly. Segment 2 as wide as apex of propodeum. Like arachnophagus. From spider eggs, Salatiga. Catalogue No. 20659.

#### ACOLOIDES JAVENSIS.

Length, 0.65 mm. Deep orange, abdomen, legs and antennae pale yellow, contrasting, the wings subhyaline, venation pale yellow. Pedicel nearly twice longer than wide, longer than funicle 1 which is somewhat longer than wide, other funicle joints subequal and distinctly wider than long. Head and thorax very finely granulate-punctulate, propodeum and 1-2 of abdomen longitudinally striate; segment 4 (or third body segment) scaly, scalines with a longitudinal lineolation; rest of dorsal abdomen with very obscure sculpture. Segment 4 a little wider than long, occupying nearly half of surface; 2 narrower than propodeum. Dorsal thorax and head with short white pile, eyes also. Lateral ocellus against eye. Scutellum large, hemispherical. Mandibles acutely tridentate. Venation does not attain costa, the long stigmal vein distinctly oblique, the marginal vein subquadrate or even longer, postmarginal vein absent. Palpi apparently 2-jointed (maxillary, the labials very minute). Marginal fringes of fore wing not a sixth the greatest wing width, not very short, longer on hind wings which bear eight lines of discal cilia where widest. Parapsidal furrows absent. Abdomen depressed, oval. Eyes large, round.

Male same; antennae 11-jointed, club long, solid, over twice length of pedicel, the funicle moniliform except 1 which equals the shorter pedicel. From spider eggs, Salatiga. Catalogue No. 20635.

Acoloides fasciatipennis. Like javensis but marginal vein about half length of the long stigmal, the orange parts dusky, there is a narrow cross-stripe from apex of stigmal vein, the marginal and stigmal veins infuscated along their sides. The cross-

Types comstripe fainter centrally. Also club entirely dusky. pared. With javensis. Catalogue No. 20638.

Black, legs Acoloides arachnophagus. Length, 1.00 mm. honey, wings hyaline but from apex of stigmal vein there projects distad a large brownish V. Pedicel elongate, over thrice longer than wide at apex, distinctly longer than funicle 1 which is nearly thrice longer than wide; 2 subquadrate, 3 and 4 each widening a little. Club longer than usual, as long as rest of flagellum. Marginal vein subquadrate, stigmal very long, oblique. Head and thorax scaly-punctate, clypeal region with radiating striae, a long narrow carina from mouth to cephalic ocellus. Scutellum scaly. Propodeum longitudinally striate, the median two striae strongest and projecting beyond apex like a claw, the striae disappearing laterad toward a straight, complete carina in dorso-lateral aspect. Segments 2-3 of abdomen (first two body segments) likewise striate but not quite to apex, 3, scaly-punctate toward lateral margin, 4 finely densely rugulose-punctulate except at apex, a little wider than long, 2 narrowest, twice wider than long, 5 transverse, sculptured like 4, the latter largest, as long as 2 and 3 united; apex of abdomen subtruncate. Eyes very sparsely hairy. Face, vertex, scutum and scutellum downy. Mandibles long, tridentate. Maxillary palpi apparently 2-jointed. Segment 2 of abdomen twice wider than long. From spider eggs, Salatiga. Catalogue No.

The apparent male has filiform, brown antennae, club darker, 20639.longer than pedicel, 2-jointed, funicle moniliform except 1 which is nearly as long as pedicel. Antennae 12-jointed.

### MEGACERATONEURA.

#### (Chalcid.)

Like Euplectrotetrastichus but hind tibia normal, one ringjoint, marginal vein distinctly longer than submarginal, stigmal elongate. Propodeum with a median ruga, the lateral forking distad, the fork of each irregularly connected by a ruga. Petiole longer than wide, with median and lateral rugae.

Megaceratoneura inusitata. Length, 1.15 mm. Red, wings subhyaline, coxae 2 and 3 silvery, antennae and femora purplish (washed); petiole, tibiae, tarsi yellowish. Abdomen black. Sculpture very fine. Funicle 1 thrice longer than wide, others shorter, all narrowing distad; pedicel nearly as long as funicle 1. Club 1 longer than wide, 2 quadrate, 3 conical, its long spine equalling it. Antennal hair moderate, scattered. Tjibodas, Mt. Gede (4,500 feet), Bryant and Palmer. Catalogue No. 20941.