

## HYMENOPTERA

## NEW SPECIES OF GUAM CHALCIDOIDEA

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The material upon which these descriptions are based was in the hands of A. B. Gahan at the United States National Museum for determination and description. However, due to the pressure of his other duties, it was arranged that I describe the new species. Holotypes are to be deposited in the United States National Museum; paratypes, where available, are in the collection of the Hawaiian Sugar Planters' Association Experiment Station.

## FAMILY CHALCIDIDAE

1. *Haltichella swezeyi*, new species.

Female: 2.5 mm. long, shining black, the abdomen largely polished, antennal scape, tegulae, and tarsi brown, base and apex of the femora and tibiae, apex of the coxae and the trochanters brownish. Head and thorax (pronotum, mesoscutum, scutellum, and axillae) rather coarsely, closely and shallowly punctuate, the sculpture on the occiput becoming so coarse and that on the front and face so shallow that the punctuations disappear and reticulations take their place; propodeum areolate on the disk, coarsely reticulately sculptured on the lateral wings; mesepisterna for the most part coarsely sculptured but partly smooth and polished or striate, the posterior sclerite somewhat grooved or eroded and the diagonally directed anterior margin marked by a long row of minute shallow foveae. Abdomen smooth above to apical margin of 2d segment although this is finely aciculate on the side, following segments finely sculptured and shining, 1st segment at base fluted, hind coxae and femora finely sculptured also; a silvery pubescence accompanies the punctuation.

Head wider than thorax, transverse; as viewed from above, width about three times length, eyes fairly large, short oval, convex, naked, reaching to top of head and to a point on side which is 0.75 their length removed from base of mandibles; antennae fairly long, slender, cylindrical, attached fairly close together near the mouth opening, 13-segmented, scrobes united in a deeply eroded smooth groove which reaches to the top of the head, below a short ridge between antennal sockets; scape reaches top of head and is as long as five following segments, pedicel obconic, 2.5 times as long as wide, following joint the shortest and globular in shape, remaining joints of the flagellum are each a little longer than wide and very gradually increasing in thickness outwardly, the last one pointed apically. Frontoververtex and face confluent, both slightly convex, mandibles moderately stout, 1.5 times as long as wide at base, apical margin toothed; malar space four to five times width of mandibles; genae wide below but narrowing above middle of eye; occiput convex but eroded in middle; ocelli in form of obtuse triangle, lateral members one diameter removed from eye margin, two from anterior member.

Thorax twice as long as wide and as wide as deep; pronotum transverse, convex above and at sides, declivous in front where it narrows into a short neck, mesoscutum twice as wide as long, anterior margin arcuate, the curve outward, posterior margin straight, convex, parapsidal grooves distinct, converging posteriorly but quite far apart at posterior margin, scutellum scutate, rounded behind, the disk convex, posteriorly

margined and slightly overhanging, axillae triangular, inner angles meeting at center, metanotum transverse, declivous, propodeum extended in horizontal plane but convex, wide at base narrowing to a fairly broad neck.

Abdomen about same length as thorax, suboval but apically extended and pointed, convex above, compressed laterally, first segment occupying nearly half the length, following segments 2 to 5 transverse, more or less narrow, ovipositor concealed beneath; front and middle legs slender, hind legs stouter, especially the coxae, femora, and tibiae; the femora flattened, lenticular and with a toothlike projection and a finely denticulate, wide, flat comb on the lower margin; tibiae with grooved upper surface.

Forewings more or less spatulate, hyaline with brownish suffusions in middle interrupted by an upper and lower round clear area; submarginal vein long, marginal shorter, less than half the length of the submarginal, stigmal short, postmarginal still shorter, the venation not reaching beyond middle of anterior margin of wing; marginal ciliation inconspicuous, discal fine but in the proximal infumate area under the marginal vein it is longer.

In the male, the small third joint of the antennae is transverse instead of globular and the pedicel is less than twice as long as wide.

Piti, Nov. 7, ex bean leafminer, holotype female, one paratype male, Swezey; Piti, Aug. 16, ex bean leafminer, allotype male, Swezey. Three additional specimens, Agana, May 15, Swezey; Agana, May 25, Usinger; Piti, June 13, Swezey.

#### FAMILY EUPELMIDAE

##### 2. *Zaischnopsis usingeri*, new species.

Female: 2.5 mm. long, metallic blue-green, the legs fuscous to the tarsi which are pale yellow, the coxae and antennae metallic green, antennae fuscous outwardly, hind femora golden-yellow at base. Mostly smooth and shining, fine pin-point punctuation on head, scutellum shagreened and dull; patches of short appressed silvery hairs on the face and episternae in front, on the axillae and hind coxae, also on underside of abdomen.

Head semiglobular, the eyes large oval, reaching top of head above, and below three fourths the distance to base of mandibles, the inner margins diverging anteriorly, the outer curved and forming lateral margin of head; frontovertex small, just large enough to enclose the ocelli, which are arranged in the form of an equilateral triangle, the lateral members placed close to the eye margin; face narrow above, widening below to three to four times its upper width and occupied largely by the antennal scrobes, which are deeply excavate; below, a triangular flat-topped ridge lies between basal third of the scapes; genae and occiput fairly wide and convex, a distinct carina separating the genae from the face; antennae long (reaching apical margin of thorax), slender, geniculate, attached to lower face not far from mouth opening and rather widely separated at base, 13-jointed, the scapes long, slender, curved, and somewhat flattened (concave inner side, convex outer), the flagellum slender, filiform, widening somewhat outwardly, the distal three segments comprising the club flattened to some extent; mandibles fairly long and stout, apically toothed.

Thorax several times longer than wide, somewhat flat, prothorax longer than wide and narrowed apically to a slender neck, the dorsal surface longitudinally furrowed down the middle; mesonotum slightly convex on the sides, sunken in the center behind a triangular boss and between two sharp longitudinal ridges; scutellum scutate, apically rounded and declivous behind, hardly convex, rather flat and bearing on the disk an extensive brush of short, stiff, erect black hairs posteriorly; axillae small, triangular flat sclerites lying in longitudinal rather than transverse direction with saw-toothed basal margin and widely separated so that the inner angles are far apart; episternum elongate,

convex; metanotum and propodeum depressed, conspicuously elevated and convex at the posterior lateral angle.

Abdomen shorter than thorax, oval, depressed, ovipositor extruded but slightly.

Forewings three times as long as greatest width, spatulate, marginal and submarginal veins nearly of equal length, postmarginal longer than stigmal, which diverges from the costal margin at 15-degree angle beyond middle of wing; marginal and discal ciliation short, fine, and complete; a large part of the wing infumate, only the apical fourth and a triangular area behind stigma hyaline.

Legs fairly stout, femora and tibiae compressed or flattened to some extent.

Piti, Oct. 5, reared from eggs of a katydid, holotype and two paratypes, all females, Swezey.

#### FAMILY TORYMIDAE

### 3. *Sycoryctes guamensis*, new species.

Female: 3 mm. long, from head to tip of ovipositor, the body itself being only 0.75 mm., aeneus, antennae fuscous beyond the pedicel but it and the scape yellowish brown, legs also, except the coxae, which are mostly concolorous with the body. Wings hyaline.

Head and thorax shagreened, abdomen more finely sculptured. Head transverse, more than twice as wide as long, eyes oval, convex, red, frontovertex twice as wide as long, ocelli in form of obtuse angle on vertex, the lateral members close to eye margin (less than one diameter removed). Face equally wide. Antennae attached in lower center, on line with lower level of eyes and close together, the genae, postgenae and occiput full and rounded. Antennae rather short (hardly longer than thorax), composed of scape, pedicel, ring joint, 5-jointed funicle and 3-jointed club; scape somewhat expanded basally, more than three times as long as pedicel, which is obconic and twice as wide at apex as the transverse ring joint, funicle joints no wider and subequal in length, which is about twice the width, club not as long as scape but more than twice length of pedicel, all these outer joints bearing whorls of stout hairs and many sensory pits.

Body depressed; prothorax transverse, about three times as wide as long behind but narrowed in front; mesonotum transverse, twice as wide as long, with parapsidal grooves extending inward from the anterior lateral angle less than half the length of the sclerite; scutellum large, with wide base and rounded apically, almost flat; metanotum transverse. Abdomen elongate-ovate, with wide base and pointed apically. Ovipositor extending beyond the tip four times the length of the abdomen, reddish brown for most of its length, but black at base and apex, where it is a little swollen. Legs normal, hind ones stout and flattened throughout, fore tibiae with a strong spur, middle tibiae quite long and with two spurs, tarsi 5-jointed. Forewings short, fairly wide and rounded apically, the disk beset with fine short hairs resembling puncture points, and hind margin bearing a fringe of rather short hairs less than one tenth as long as greatest width of wing; marginal and postmarginal veins subequal and together not much longer than the submarginal; radius diverging at an angle which is quite wide but less than ninety degrees, its length about one half the postmarginal vein, thin at base but expanded apically to form a triangular spur and with four pustular organs in a line extending inward from outer edge near apex. There are also a number of setaceous hairs on the vein and in the field of the disk lying beneath the marginal nervure.

Barrigada, June 24, holotype; Yigo, Oct. 21, six paratypes; Mt. Chachao, May 16, one paratype; Sumay Road, June 15, 10 paratypes; all ex figs of large-leaved *Ficus*, Swezey.

#### 4. *Megastigmus mariannensis*, new species.

Female: 2 mm. long, with ovipositor which is somewhat curved, and extended beyond the tip of the abdomen; yellowish brown, abdomen infuscated; antennae also, outwardly, legs straw-yellow; ovipositor black. Wings hyaline. Microscopically fine sculpture present throughout but still dully shining; some extremely fine transverse striae on pro and mesonotum.

Head orbiculate, viewed from above transverse and nearly twice as wide as long; eyes laterally placed, fairly large, convex, red; the rather wide occiput, thin frontovertex and quadrate face, together with the rather full cheeks, comprising a continuous, convex, smooth and shining surface, broken only by the antennal scrobes, which join in upper half, are there quite deep, and reach as far as the ocelli. These are located on frontovertex in the form of an obtuse triangle, the lateral members removed from each other about two diameters and from the eye margin about one; sparse hairy clothing present, the most notable feature of which is the line of black setae on either side of the face lying about midway between the inner eye margin and the outer scrobal margin; antennae are of moderate length, composed of scape, pedicel, five funicle joints and three-jointed club. Scape long and slender, more than twice as long as pedicel which is obconic, both pale straw-yellow; funicle joints, except slender first joint, short, hardly longer than wide, gradually increasing in size outwardly; club as long as funicle and twice as thick, clothed with hairs; clypeus not definitely set off by a suture; oral opening small; mandibles short triangular, apical margin bearing several teeth.

Thorax of rather slender build, not as wide as head, more than twice as long as wide, convex; the prothorax nearly as long as the mesothorax, fairly wide behind but narrowed in front; mesonotum divided into three lobes by rather prominent and well-marked parapsidal grooves; scutellum roughly hexagonal in outline, separated from middle lobe of mesonotum by a shallow groove; the axillae triangular and obscurely separated from the lateral lobes of the mesonotum; metanotum transverse and declivous; all sparsely clothed with black setaceous hairs.

Abdomen depressed above and compressed laterally, plowshare-shaped with a strong curved ovipositor of equal length, all clothed with pale or blackish hairs. Legs normal, of moderate length, rather slender. Wings long and narrow, marginal and postmarginal of equal length and shorter than submarginal, which receives a thin, straight nervure identified as pseudo-basal; stigmal vein with a rather large round knob, which is almost sessile; marginal setae short, rather fine on posterior margin but stouter on anterior; discal ciliation rather dense clothing of very short hairs beyond basal nervure, sparser proximad.

Male: similar to female except in secondary sexual characters.

Yigo, Oct. 21, ex small fig, holotype female; Tarague, May 17, ex larger fig, one female, one male; Barrigada, June 24, ex *Ficus mariannensis*, one female, one male, paratypes. All collected by Swezey.

#### 5. *Otitesella swezeyi*, new species.

Female: 1.5 mm. long, metallic green, shagreened, punctuate, the punctuations minute and rather sparse, the mesonotal sculpture appearing as fine transverse striae, basal segments of the antennae and the legs distally from the coxae yellowish brown, eyes red, wings hyaline.

Head orbiculate, viewed from above transverse, somewhat menisciform, width about three times the length; occiput, frontovertex, face, and genae forming one continuous moderately convex surface; frontovertex and occiput both rather narrow, the ocelli situate on the former and arranged in form of a very obtuse triangle, the lateral members less than one diameter from eye margin and more than three from the median, anterior

member; eyes lateral, oval, long diameter vertical, convex, antennae attached in middle of face, above line drawn from lower margin of eyes, short, not as long as thorax, composed of scape, pedicel, several ring joints, five funicle joints and three-jointed club; the antennal scrobes are rather deep but short, not nearly reaching the ocelli; the scape is several times longer than wide, pedicel obconic, 1.5 times as long as wide, funicle joints transverse, increasing in thickness outwardly, the club a little more so, its three joints combined less than one half the length of the funicle, both well clothed with short, stiff, gray hairs, cheeks and postgenae fairly wide, the latter narrowing down to the slighter width of the occiput.

Thorax twice as long as greatest width, moderately deep, convex dorsally and ventrally, pronotum transverse, wide behind but narrowed in front, quite short; mesonotum considerably wider than long, with well-marked, inwardly (front to back) curved parapsidal grooves and a deep sulcus on the scutellar margin; axillae small; scutellum quite large, scutiform and only moderately convex; metanotum narrow in the middle but widening considerably at sides.

Abdomen sessile, as long as thorax and head together, fairly wide basally, compressed from the sides, only the first tergite more or less flat dorsally, the following are knife-edged, sparsely hairy on sides; ovipositor slightly protruded, the valves flat and heavy.

Legs normal, the coxae, femora, and tibiae somewhat flattened, of equal length, the tarsi slender and a little longer.

Wings fairly wide and long, the veins thin and pale, marginal much shorter than submarginal and twice as long as either the postmarginal or stigmal, which are subequal in length, discal and marginal ciliation inconspicuous.

Piti, Oct. 10, ex fruit of small-leaved fig, holotype, Swezey.

#### FAMILY ENCYRTIDAE

##### 6. *Ooencyrtus guamensis*, new species.

Female: 1 mm. long, stout, black with metallic bluish or greenish reflections, antennae and legs outwardly to tibiae fuscous, the latter as well as tarsi pale yellowish brown.

Head transverse, moderately lenticular, frontovertex lying in the horizontal plane, a little longer than wide, ocelli in form of an equilateral triangle, the lateral members close to the vertical and ocular margin, surface finely shagreened and sparsely punctuate with fine pin-point punctuations, eyes lateral, short oval in shape, large, convex, hairy, face in the vertical plane widening considerably toward mouth and rather deeply excavate above where antennal scrobes join, below separated by a rather wide flat ridge. Antennae fairly long (as long as head and thorax together), and only moderately stout, more or less filiform, scape elongate, slender, and extending a little beyond upper limit of face; pedicel short, only twice as long as wide at apical end, obconic, nearly twice as long as any of the funicle joints, which are scarcely if any longer than wide, club as long as the last three joints of the funicle together, somewhat expanded and flattened, ending in a blunt point, all clothed with short silvery hairs, mandibles short and stout, toothed apically on outer third of apposed edges, the remainder of the cutting edge truncate and blunt, genae long and narrow, three fourths length of eye.

Pronotum transverse, narrow above, declivous in front, mesonotum convex, transverse, ovoid in shape with front and hind margins both curved outward, therefore longest down the middle line where the length is less than half the width, smooth and shining but uniformly and rather closely punctuate, the fine pin-point punctuations bearing short, stiff, appressed silvery hairs, scutellum rather large, convex, triangular, with rounded apex, shagreened and a dull black, also sparsely clothed with rather long black hairs, axillae triangular, smooth, and shining, apices not meeting medially, metanotum short, transverse, pleura large, discoid, convex, both shining blue-green. Abdomen short, hardly

as long as thorax and widest along apical margin of first segment where width exceeds that of thorax, abruptly narrowing beyond to terminate in a blunt point, much depressed and dorsally sunken. Ovipositor scarcely extruded.

Wings hyaline, long ovate in shape with the posterior margin straight from beyond middle to base, marginal vein punctiform, stigmal vein short but twice as long as postmarginal and hooked at apex, discal ciliation fine and close to speculum, which widens posteriorly, basally beyond speculum the ciliation is not so close and fine and extends only half way to base of wing, where the wing is quite bare, submarginal vein bearing a few setiferous hairs, marginal ciliation short and close. Legs moderately long and stout.

Male: smaller, the frontovertex wider than long, antennae and legs yellowish brown, the former decidedly filamentous, the funicle joints twice as long as wide, club not expanded and shorter than the last two funicle joints, clothed with whorled hairs on flagellum.

Piti, Sept. 15, reared from puparium of a syrphid fly, on corn leaf, 13 females, 6 males (holotype, allotype, and paratypes), 15 other specimens, Swezey.

#### 7. *Ooencyrtus swezeyi*, new species.

Females: 0.7 mm. long, cadmium yellow to fuscous on head and thorax, but with scutellum dark metallic green, metanotum and pleurae, also apical segments of abdomen, eyes, antennae, and hind tibiae black or blackish.

Body compact, head not decidedly lenticular but somewhat so in outline when viewed from above; seen from the side, the outline is that of an isosceles triangle with the line of the front and face forming the two short sides. Eyes lateral, short oval in shape, large, convex; frontovertex more than twice as long as wide (shorter and wider in male) with the ocelli in the vertical end arranged in an equilateral triangle; front half punctuate along the eye margins, the punctuations fine pin-point punctures bearing short black hairs; front not meeting face abruptly but the two planes merging gradually in a well-rounded junction; face widening considerably in the direction of the mouth, the antennal scrobes rather broad and shallow. Antennae fairly long and stout, nearly as long as the thorax, scape long and slender, somewhat fusiform, reaching a little beyond the upper limit of face, pedicel obconic, more than twice as long as the apical width, twice as long as any of the six funicle joints, which are separately a little longer than wide, club as long as the last three funicle joints, entire funicle cylindrical, the club a little stouter, all the joints clothed with black hairs (individual joints flecked with white in some specimens). Pronotum declivous, separated from mesonotum by a distinct carina which is transverse, three times as wide as long, smooth and shining but uniformly punctuate, the fine pin-point punctuations bearing short black hairs; scutellum rather large, convex, nearly as long and as wide at base as mesoscutum, scutiform, with shagreened surface and fine pin-point punctuations seating short black hairs as in mesonotum; axillae small, narrow, not meeting medially; metanotum and pleurae smooth and shining. Abdomen small, shorter by one half than the thorax, triangular in shape, depressed; ovipositor scarcely extruded. Wings hyaline, marginal vein punctiform, not much longer than wide, stigmal vein a little longer than postmarginal, expanded some at apex and hooked or clawed, longer than the body and about one third as wide, long ovate in shape with the posterior margin straight from beyond middle to base; discal ciliation fine and close to speculum, which widens posteriorly; basally beyond the speculum the ciliation is not so close and fine and extends only half way to base of wing where the wing is quite bare; submarginal vein bearing seven or eight fairly long and stout hairs; marginal ciliation short and close. Legs moderately long and stout, generally concolorous with body.

Piti, July 30, six specimens reared from eggs of *Herse convolvuli* (Linnaeus) on *Ipomoea* leaves, holotype female and allotype male on one tag, four

paratype females on separate tags; Orote Peninsula, July 19, one male paratype, head missing, ex sphingid egg on *Caesalpinia*; Dededo, May 11, one female paratype collected from *Piper guahamense*; Dededo, Sept. 7, one female paratype, reared from sphingid egg on *Guettarda*. All collected by Swezey.

#### 8. *Cheiloneurus chrysopae*, new species.

Female: 1.5 mm. long, golden-yellow with metallic green infuscations on head (cheeks and frontovertex), thorax (mesonotum), and abdomen basally. Antennal club, eyes and scutellar brush black, legs pallid, the femora and tibiae slightly fuscous.

Head approaching the hemispherical in shape, viewed from above nearly circular in outline, from the side the outline is that of an obtuse triangle with the line of the occiput forming the long side and that of the face and the frontovertex respectively the two shorter sides, the respective planes of the frontovertex almost at right angles to each other, the former being horizontal and the latter nearly vertical; the eyes are of moderate size, oval, convex, naked; frontovertex elongate, hourglass-shaped, twice as wide in front and behind as in the middle and six times as long as the width there, with its surface coarsely shagreened; ocelli small, the anterior member marking the point of an acute angle, the lateral members close to the eye margin and not far from the vertex. Face considerably excavated to form the widely separated antennal scrobes, central field elevated and convex. Antennae attached not far from the mouth opening, generally cylindrical and rather short and stout, consisting of nine segments (scape, pedicel, six funicle joints, and undivided club). Scape long and slender, somewhat fusiform, reaching beyond the upper margin of the face and to lower margin of eye, pedicel obconic, less than one sixth length of scape, funicle joints all transverse and widening outwardly, the sixth twice as wide as the first, all six together shorter in length than the scape, club still wider at mid length, flattened and equal in length to the funicle, all the joints clothed with short silvery pile; cheeks coextensive with the lower part of frontovertex, rather wide and convex, and shagreened; mandibles short, blunt and three-toothed.

Pronotum short, transverse, convex; mesonotum transverse, twice as wide as long, convex, shagreened and heavily clothed with short, appressed, silver-gray hairs; scutellum scutiform, convex, also clothed with longer, coarser hairs which form a brush at apex; axillae triangular, apices touching in middle line; metanotum transverse, declivous.

Abdomen roughly ovate, pointed apically, considerably shorter than the thorax, widest at apical margin of first segment, median segments considerably depressed, sparsely clothed with silvery hairs apically. Ovipositor not projecting beyond tip of abdomen.

Forewings spatulate, three times as long as wide, marginal vein only half as long as submarginal, reaching halfway along costal margin, stigmal and postmarginal short, marginal ciliation short outwardly, a little longer on caudal margin basally, eight to ten longer setaceous hairs on submarginal vein, the discal ciliation close and fine, the disk of wing infumate in outer two thirds almost to apical margin with a short clear streak below stigma. Legs fairly long and stout, the spur on median pair as long as metatarsus.

Male: smaller and more dusky, head entirely metallic green, frontovertex wider than in female, wider than eyes but still longer than wide; antennae pallid, filiform, clothed with whorls of long hairs, all the funicle joints twice or more longer than wide, club not enlarged or flattened; wings hyaline, entirely without infumation.

Described from five females and three males (holotype, allotype and paratypes) as follows: holotype female and allotype male mounted on a single point, two more points, each with one male and one female paratype, and one point with two female paratypes, labeled Merizo, June 11, reared from a *Chrysopa* cocoon, Swezey. Six other specimens.

### 9. *Cerchysius guamensis*, new species.

Female: length 2.75 mm. exclusive of ovipositor which is 1.75 mm. long; robust, metallic blue-green in color, eyes and antennae black, sheaths of ovipositor and legs brown, tarsi, however, particularly hind tarsi, infuscated; wings hyaline, slightly infumate.

Head semiglobular, convex in front, concave behind, vertical in position (viewed from above lenticular in outline, from the side approaching the semicircular, from front sub-circular), transverse (width more than twice length anteriorly-posteriorly and about equal the depth), occipital margin rounded, eyes fairly large, oval, touching occipital margin above and reaching three fourths the distance to oral margin; frontovertex and face confluent, convex, frontovertex not as wide at narrowest to greatest width of eye but widening both behind and in front (if anterior margin is fixed at upper limit of antennal scrobes it is twice as long as narrowest width), finely shagreened, ocelli placed in an equilateral triangle in posterior part, the lateral members touching ocular margin but removed several diameters from the occipital; face twice as wide below as above, with the antennae attached fairly close together at about the middle, the scrobes therefore short (less than one third length of scape) with a prominent ridge between, both frontovertex and face sparsely punctuate with fairly large but shallow punctuations, these occurring for the most part above in a double line along the ocular margin but more widely spread on the lower face which is clothed with short silvery hairs; antennae filiform, long and slender (if extended would reach beyond thorax), scape elongate, as long as depth of head, pedicel obconic, about one sixth length of scape, funicle joints six and with club all of equal or nearly equal length and each more than twice as long as the funicle, about three times as long as wide, somewhat flattened outwardly and clothed with a fine pile; mandibles stout, twice as long as wide and toothed on the broad cutting edge; genae distinctly separated from the face, fairly wide and convex, narrowing to a point above middle of eye where it meets occiput.

Prothorax transverse, short anteriorly-posteriorly and convex, declivous in front, posterior margin arcuate; mesonotum also convex, nearly as long as wide, both anterior and posterior margins arcuate, the curve being outward, finely shagreened and finely, evenly and fairly closely punctuate, the punctuations bearing short black appressed hairs; scutellum scutiform, convex and rounded apically, also finely but more sparsely punctuate and hairy; axillae triangular, apices meeting medially; metanotum transverse, declivous behind, smooth and shining, the side pieces with conspicuous spiracle, pleura also smooth and shining, convex.

Abdomen as long as thorax and as wide at first segment but beyond gradually narrowing to a point and depressed dorsally; ovipositor extended strongly and quite stout.

Wings spatulate, 2.5 times as long as wide, marginal vein quite short, not as long as the short postmarginal and stigmal, submarginal not nearly reaching middle of costal margin of wing and bearing about 20 setaceous hairs, which become more crowded outwardly; marginal ciliation inconspicuous, discal ciliation fine and close outwardly from the wedge-shaped speculum which extends diagonally inward from stigma; proximad of this the ciliation is a little sparser and uneven. Legs long and stout, the spur on the middle tibiae almost as long as the metatarsus.

Male: similar to female in most respects but with following differences: smaller in size, the frontovertex wider (width between eyes almost equaling length and just short of the width of the eye); ocelli arranged in an obtuse triangle, distance between the laterals greater than distance between laterals and anterior member; antennae more heavily clothed with whorls of long hairs, shorter, the scape about half the depth of the head.

Fadian, Sept. 18, ex *Ceresium* larvae, Swezey. Described from two females and one male (holotype, allotype, and paratype) mounted on pin points; two additional specimens, one male, one female.

All specimens issued from the same host. They had pupated within the dried skin of the larva of *Ceresium unicolor* which was found in wood of an unidentified tree (native name *paipay*).

#### 10. *Pseudhomalopoda guamensis*, new species.

Female: 1 mm. long, metallic blue-green on head and thorax dorsally, abdomen and ventral surface of thorax bluish black without metallic reflections, legs fuscous except at the joints where they are a dirty white, antennae dusky with the club and distal joint of the funicle sordid white. Head: frontovertex rather coarsely shagreened, face and cheeks finely so, mesonotum microscopically reticulately sculptured, a few fine pin-point punctuations bearing fine black hairs scattered over the surface, scutellum shagreened on the triangular disk and bearing three hairs in a row on both lateral margins; otherwise body so finely sculptured as to appear smooth and shining.

Head transverse, viewed from above lenticular, width three times length anteriorly-posteriorly, flat, lying in horizontal plane, in side view triangular with the frontal and occipital margins forming the short sides, the retracted face the long side; eyes fairly large, oval, convex, partly on the top and partly on side of head, the lowest point in the margin lying beneath the attachment of the antennae; frontovertex occupying a third of the top of the head, nearly quadrate in form, the posterior (occipital) margin rather deeply incised, the anterior (frontal) margin carinate; the ocelli are situated in the middle and form an obtuse triangle, the lateral members less than one diameter removed from the ocular margin and several diameters from the anterior member, a stout, erect, black scalelike hair arises from the occipital margin on either side behind eye; the face widens considerably below eyes; the antennae are attached at about the middle of the face and are far apart; the upper part of the face is excavated to form the scrobes although between the lower scapes there is a short flat ridge; the genae are quite wide; the mandibles are small, slender, and pointed apically; antennae short and fairly stout (as long as width of head) consisting of nine segments, scape as long as head and with a leaflike expansion downward apically, pedicel obconic, less than a third the length of the scape and less than twice as long as apical width; of the four funicle joints, the 1st and 4th are quadrate, the 2d and 3d transverse or wider than long, the combined length of the four less than that of the scape and about equal to that of the club, which is somewhat flattened and apically pointed, the apical joint shorter than the other two.

Thorax longer than wide and not very deep (more or less depressed), pronotum transverse, crescentic, both anterior and posterior margins arcuate, the curve in both cases being cephalad; mesonotum also transverse, twice as wide as long, anterior margin coinciding with hind margin of pronotum, posterior margin nearly straight, more or less convex; scutellum scutate, posteriorly rounded, and bearing two stout scalelike hairs on posterior margin; axillae small, triangular, apices directed inward and touching at about midline; metanotum and propodeum declivous and rather flat behind, as wide as the mesonotum and fairly long, the posterior angles full and bearing a prominent spiracle.

Abdomen as long as the thorax and at base as wide but narrowing apically to a blunt end with the ovipositor projecting behind about a fourth the abdominal length, the abdomen itself generally flat or depressed.

Legs only moderately long and not particularly stout, the spine on the middle tibiae longer than the metatarsus.

Forewings nearly three times longer than greatest width, spatulate, the marginal vein within the proximal half of wing short and thick and bearing many crowded stiff black hairs or bristles, submarginal long, probably 10 times longer than the marginal, with nine stout bristles evenly distributed along its length, stigmal half the length of marginal and very thin, diverging from costal margin at a 15-degree angle and bearing a line of three sensory pits apically, postmarginal vein indistinct; marginal ciliation short to apex of wing where it increases in length several times and on caudal margin becomes even

longer, probably one tenth the width of the wing; discal ciliation follows generally the pattern of infumation although apically and caudally there is a ciliated area not obfuscated; there are three hyaline areas along the costal margin and three corresponding areas along caudal margin; the base of the wing is also hyaline and the outer costal hyaline area is triangular in shape with apex directed apically.

Piti, Oct. 27, swept from scale-infested bamboo, Swezey. Described from 12 specimens, all females, six mounted on points and six on a slide (holotype and paratypes) ; 12 additional specimens, mounted on points, from same source.