

Nachdruck verboten.

Übersetzungsrecht vorbehalten.

Beiträge zur Kenntnis der Hymenopterenfauna von Paraguay

auf Grund der Sammlungen und Beobachtungen von
Prof. J. D. ANISITS.

Unter Mitwirkung mehrerer Spezialisten.

Von

Embrik Strand,
Berlin, Kgl. Zool. Museum.

IX. New Chalcidoid Genera and Species from Paraguay.

By

A. A. Girault (University of Illinois, Urbana, Illinois, U. S. A.).

The following species comprised a small collection of 61 specimens of this superfamily sent to me for identification by Herr Dr. EMBRIK STRAND through the director of the Königl. Zoolog. Museum at Berlin on behalf of Herr Prof. J. D. ANISITS, their collector. The specimens were all excellently mounted on minuten mounts and all were in good condition excepting two of the family *Torymidae* which were too mutilated to allow generic determination. The types have been deposited in the forementioned museum and when duplicates existed they were selected as cotypes and deposited in the collections of the Illinois State Laboratory of Natural History, affiliated with the University of Illinois at Urbana, Illinois, U. S. A. With the

types and cotypes are also balsam mounts of various appendages, made while studying the specimens.

The author much appreciates the courtesy of the director of the Königl. Zoolog. Museum for his patience in waiting so long a time for the results herewith given.

Family *Chalcididae*.

Subfamily *Chalcidinae*.

Tribus *Chalcidini*.

Tumidicoxa n. g.

Normal position.

Female. Near to *Megalocolus* KIRBY but the antennae 11-jointed, the abdomen normal, only the lateral projections of the metathorax hairy.

Head normal, the occipital foraminal depression margined laterad but the occipital margin of the vertex obtuse, the vertex sloping caudad from the ocelli, the latter disposed in a flat triangle along the top ridge of the vertex, round, the lateral ocelli nearly their own diameter from the respective eye margins. Eyes ovate, practically naked. Antennal scrobes sharply defined, deep, reaching to the edge of the cephalic ocellus, their outer and ventral edges margined, separated from each other near base. Antennae 12-jointed, normal scape, pedicel, 1 ring-joint, 7 funicle joints and a 2-jointed club; pedicel small, not half as long as the first funicle joint, which is the longest antennal joint excepting the scape; antennae cylindrical, the funicle joints shortening distad, there subquadrate. Antennae inserted somewhat below the middle of the face but slightly above an imaginary line drawn between the ventral ends of the eyes.

Pronotum large, at the meson nearly half the length of the mesoscutum. Parapsidal furrows complete, gently curved. Scutellum at the median line slightly longer than the mesoscutum, rounded, unarmed with the exception of a projected plate caudad which is emarginate at the meson. Metanotum in the lateral aspect on each side with a humped projection covered with pubescence. Abdomen sessile, plump, ovate, about as long as the thorax, its second segment largest, occupying a third of the surface, the third segment only

half as long, with minute punctures, the fourth and fifth segments reticulated; punctures more scattered on the second segment. Legs normal, the tibial spurs single, the posterior femora armed beneath with about 11 teeth, the first largest, three or four times the size of the others, the second to ninth moderately distinct, the tenth and eleventh small. Posterior coxae above near apex with a small blade-like projection or spur. Between anterior legs on the prosternum is a vertical plate resembling the horizontal plate of the scutellum, emarginate at middle.

Fore wings clear or more or less infuscated, the submarginal vein nearly twice the length of the marginal, the postmarginal vein short but distinctly longer than the sessile stigmal vein which is barely more than a dot, barely pushed out from the marginal vein. Discal ciliation uniform, dense, short; marginal ciliation inconspicuous, minute. Head and thorax umbilicately punctate, the metanotum rugose. Ovipositor not exerted. Species black, marked with yellow, non-metallic.

Male. The same but abdomen is less acute at apex.

(Type. *Tumidicoxa nigra* n. sp., described beyond.)

Table of species.

Fore wings hyaline	2
Fore wings more or less infuscated	1

1. Fore wings stained with duskiess only; tegulae more than half yellow.

Anterior tibiae interiorly with only their middle black, the distal end yellow for some distance proximad, the neighborhood of the spur yellow. From direct lateral aspect, posterior tibiae black at proximal end and along the inner margin, the yellow spot of femur subreniform *nigra*

Fore wings conspicuously clouded; tegulae more than half black.

Anterior tibiae interiorly nearly black for their whole length only the extreme ends showing a trace of yellow, the black going to the spur distad. From direct lateral aspect, posterior tibiae as in *nigra*, the band along the inner margin broader, nearly extending across, the femoral yellow spot slenderer; intermediate tarsi brownish (male)

fuscipennis

2. Tegulae with only the extreme cephalic angle edged with black, sometimes wholly yellow.

Anterior tibiae black interiorly only in the middle; from direct lateral aspect, posterior tibiae as in the other species but the band of black along the inner margin is very narrow and there is a transverse black ring across the tibia at its middle

hyalinipennis

1. *Tumidicoxa nigra* n. sp.

Female. Length 6.25 mm. Opaque black, the second abdominal segment, the posterior coxae and the mesopleura shining. Marked with yellow as follows: The distal half of the tegula, the distal third of the cephalic femur, the distal fourth of the intermediate femur, a moderately large subreniform spot at the extreme distal outer angle of the caudal femur; all of the cephalic tibia except the middle and proximal portion interiorly, all of the middle tibia except interiorly which is black nearly to each end, the black not extending to the spurs, however, and all of the posterior tibia excepting the proximal end, the ventral side (excepting a band of yellow near proximal end, the inner lateral side excepting for the same yellow band and at tip and the ventral edge of the outer, lateral side); tarsi all yellow excepting the extreme tip of the distal tarsal joint. Antennae black. Body bearing short golden-yellowish pubescence, more or less clumped at the apex of the scutellum. Fore wings slightly fuscated throughout, a somewhat more pronounced longitudinal streak along the venation and along the caudal wing margin opposite the submarginal vein; also a minute darker projection from the apex of the stigmal vein on a line with it.

Ring joint of antennae short, scape nearly as long as the pedicel, ring joint and first two funicle joints combined; funicle joint 1 longest, one and a half times longer than 2, the latter and 3 subequal, 4 times the size of the pedicel; 4, 5, 6 and 7, subequal, each somewhat shorter than the one preceding, 6 and 7 somewhat wider than long; funicle joints projected somewhat at their disto-lateral angles; club quadrate ovate, the distal joint longest, the proximal joint not as long as joint 7 of the funicle and wider than long; club blunt at end, truncate.

(From 1 specimen, $\frac{2}{3}$ -inch objective, 1-inch optic, BAUSCH & LOMB).

Male. Unknown.

Described from a single female specimen labelled "Paraguay, S.Amerika. Villa Morra, 25./11. 1905, J. D. ANISITS".

Type. Katalog No. 31930, Zoolog. Museum Berlin, 1 ♀, minutien.

2. *Tumidicoxa fuscipennis* n. sp.

Normal position.

Male. Length 5 mm.

The same as the type species (*nigra*). Differing as follows: Tegula wholly black except the caudal margin which is yellow; distal fifth of cephalic femur, extreme tip of intermediate femur yellow, the yellow spot of the posterior femur smaller; cephalic tibia with only the cephalic and outer lateral (dorsal) aspects yellow, the intermediate tibia with only the dorsal aspect yellow and the extreme tips and the posterior tibia with the dorsal aspect yellow excepting proximad; cephalic and intermediate tarsi brownish, the posterior tarsi blackish. Fore wings distinctly fumated, the fumation clearing distad toward tip and not uniform; venation walnut black. Smaller, less robust. Proximal club joint of antennae quadrate, not wider than long.

(From one specimen, the same objective and optic.)

Female. Unknown.

Described from a single male specimen labelled "Paraguay, S.Amerika. Villa Morra, 25./11. 1905, J. D. ANISITS".

Type. Katalog No. 31932, Zoolog. Museum, Berlin, 1 ♂, minutien mounted.

3. *Tumidicoxa hyalinipennis* n. sp.

Normal position.

Female. Length 4,5 mm.

The same as the type species (*nigra*) but differing as follows: Smaller, less robust; wings hyaline; tegulae nearly all yellow only the extreme cephalic apex black in some cases; cephalic femur with the distal half yellow, intermediate tibia with the distal fourth yellow beneath, the yellow extending somewhat farther proximad in a narrow line, posterior femur with its yellow spot nearly the same; cephalic tibia all yellow except interiorly in the middle, intermediate tibia the same, the interior black somewhat longer, the posterior tibia

with cephalic aspect all yellow excepting proximad and a black ring around the middle, caudal aspect the same only the ring has become considerably broader. Tarsi brownish. Venation brownish.

(From three specimens, the same objective and optic.)

Male. Unknown.

Described from three female specimens labelled respectively „Paraguay, S.Amerika. Villa Morra, 7./12. 1904, J. D. ANISITS”; „Asuncion, Paraguay, 24./11. 1905, Garten, J. D. ANISITS”; and the same as the latter + “4./10. 1905”.

Types. Katalog No. 31931, Zoolog. Museum, Berlin, the first two females as listed, minutien mounted.

Cotype. Accession No. 44183, Illinois State Laboratory of Natural History, Urbana, Illinois, U. S. A., the last female listed, minutien mounted.

Ceyxia n. g.

Normal position.

Female. Near to the genus just described (*Tumidicoxa*) but differing in having the scutellum armed behind with a more emarginate plate, the plate bilobed and brownish, in having decidedly shorter antennal scapes which do not reach to the cephalic ocellus, the scrobicular cavity terminating before that ocellus at a point nearly the diameter of the ocellus away (in *Tumidicoxa* the cephalic ocellus touches the apex of the scrobicular cavity), in being generally smaller in stature and in having the posterior femora beneath armed with five to six moderately large subequal or unequal teeth followed by three minute ones near the apex and close together. Scape ringed or marked with whitish or yellowish white; the funicle joints are shorter, after the third, wider than long; club obtusely pointed or else subtruncate and sometimes longer than wide. Vertex somewhat broader. Species black, non-metallic, marked with yellow or whitish.

(Type. *Ceyxia fumipennis* n. sp., described beyond.)

Table of species. — Females, males.

Fore wings fumated; posterior femur yellow above only at its distal end near knee (natural position)

Fore wings hyaline; posterior femur yellow or whitish yellow along its whole upper margin (natural position) 2

1. Cephalic tibia partly black interiorly; posterior tibia nearly entirely ringed with black in the middle, but not wholly: Species marked with yellowish white.

Posterior coxae beneath nearly all whitish yellow; antennal scape with the proximal half whitish yellow *fumipennis*
Cephalic tibia entirely yellow; posterior tibiae not at all ringed with black in the middle, black only proximad near the knees. Species marked with lemon yellow.

Posterior coxae beneath nearly all yellow; antennal scape nearly wholly lemon yellow *flaviscapus*

Posterior coxae beneath nearly all black, barely a streak of yellow present, or wholly black; antennal scape nearly all yellowish; caudal coxae beneath with a streak of faint yellow. Yellow spot across the outer proximal end of caudal femur only two times longer than wide

paraguayensis

2. Cephalic and intermediate tibiae entirely yellow; caudal coxae wholly black; antennal scape nearly all yellowish; tegula yellowish except at its extreme cephalic mesal border; posterior tibia yellow exteriorly except at the proximal end near knee (male) *ventrispinosa*

1. *Ceyxia fumipennis* n. sp.

Natural position.

Female. Length 4 mm.

Opaque black, the second abdominal segment, caudal coxa above, mesopleura and portions of the metanotum shining. Projection of scutellum brown. Posterior coxa laterally and the lateral aspect of the caudal femur with minute pin punctures like those of the abdominal segments. Marked with whitish or yellowish white as follows: Proximal half of scape; all of anterior femur excepting proximal two-thirds laterad, all of the intermediate femur excepting distal fourth dorsad and laterad, most of the ventral surface of the caudal coxa except at each end, a transverse spot which is about twice longer than wide across the proximo-ventral end of the posterior femur and a subreniform spot at the disto-dorsal end before the

knees; all of the cephalic and intermediate tibiae except at the middle interiorly; the outer (caudal) margin of the posterior tibia excepting at base and distad of the middle where the black expands from each side nearly forming a ring at the point; all of the tarsi excepting the distal joint or much of it. Tegulae whitish yellow with some black at the lateral and mesal margins. Fore wing nearly uniformly slightly infuscated; posterior wing hyaline, with slight fumation at the extreme tip. Ventrad at the meson between the cephalic and intermediate coxae, nearer the former, is an erect, bidentate plate, the teeth not acute but formed by a middle emargination. Pubescence greyish, not dense. Venation black. Distal club joint over twice longer than the proximal, conical, longer than wide, as long as the second funicle joint.

(From a single specimen, $\frac{2}{3}$ -inch objective, 1-inch optic, BAUSCH & LOMB).

Male. Unknown.

Described from a single female labelled "Asuncion, Paraguay, 19./IV. 1905, Garten, J. D. ANISITS".

Type. Katalog No. 31933, Zool. Museum Berlin.

2. *Ceyxia flaviscapus* n. sp.

Natural position.

Female. Length 4 mm.

The same, differing as follows: Wings somewhat less distinctly fumated. Body marked with lemon yellow as follows: Antennal scape, anterior legs except coxae, intermediate legs except femur proximad (lateral aspect), all of posterior tibia except at base, a yellow subreniform spot at disto-dorsal angle of posterior femur before knees and a rectangular spot across the base which is not quite twice longer than wide. Tegulae with black only at the lateral and mesal margins, deeper on the latter margin. In the same position as in *fumipennis* a plate with two teeth.

(From 1 specimen, the same objective and optic.)

Male. Unknown.

Described from a single female specimen labelled "Asuncion, Paraguay, 7./5. 1905, J. D. ANISITS", and "No. 34. 19 7./5. 1905".

Type. Katalog No. 31934, Zool. Museum Berlin.

3. *Ceyxia paraguayensis* n. sp.¹⁾

Natural position.

Male. Length 4,2 mm.

The same as *flaviscapus* but differing in that the posterior coxae beneath are nearly all black with barely a longitudinal streak of yellow beneath, the antennal scape is distinctly yellowish in the lateral aspect. Marked as follows with yellow: All of cephalic legs excepting a brownish area above at base of femur and the coxa itself, which is concolorous; intermediate legs all yellow excepting coxa and basal half of femur which is fuscous, and a dark spot interiorly proximad of middle on tibia; spots of the posterior femur as in the previous species, the proximal one transverse-rectangular, about thrice longer than wide; caudal tibia distad of the middle with a faint reddish ring. Wings uniformly slightly fuscous. Mesal margin of tegula with some blackish, otherwise yellow. Ventral plate beneath with two acute stylus-like teeth which are not large and similar to those of the previous species nearly. Apical antennal joint subtruncate.

(From 2 specimens, same objective and optic.)

Described from two male specimens, minutien mounted labelled respectively "Asuncion, Paraguay, 4/V. 1905, J. D. ANISITS" and "No. 34. 19 4./5. 1905" for the one; and the other "Asuncion, Paraguay, 10/7. 1905" and "No. 54. 19 10/7. 1905" and "54".

Type. Katalog No. 31935, Zool. Museum Berlin, the second male as listed above.

Cotype. Accession No. 44184, Illinois State Laboratory of Natural History, Urbana, Illinois, U. S. A., the first male listed. For description of female, see following.

4. *Ceyxia ventrispinosa* n. sp.

Natural position.

Male. Length 4 mm.

The same but differing at once from all other species of the genus in having hyaline wings, in having the caudal femur marked with yellow along the entire upper margin, the caudal coxae wholly black, the antennal scapes nearly wholly yellow, tegulae black only at the cephalo-mesal margin and slightly discally; cephalic legs,

1) For female, see page 386.

except coxae and trochanters, yellow; intermediate legs the same excepting latero-dorsad at basal half; caudal femur laterally more than half yellow, the black in a large spot disto-ventrad, coming to the base of the tibia; the latter black only at base. The bidentate vertical plate beneath nearly as in the previous species. Apical club joint truncate, the truncation bearing some irregular teeth, wider than long, shorter than the proximal club joint.

(From 1 male specimen, the same objective and optic.)

Female. Unknown.

Described from a single male specimen, minutien mounted and labelled "Paraguay, S.Amerika. Villa Morra, 23./12. 1905, J. D. ANISITS".

Type. Katalog No. 31936, Zool. Museum Berlin. 1 ♂, minutien.

5. *Ceyxia paraguayensis* n. sp.

Natural position.

Female. Length 4,5 mm.

The same, differing from male in having the antennal scape nearly all yellowish, a faint yellowish streak along the caudal coxae beneath and on the caudal femur, the rectangular spot laterad at base is only about twice longer than broad; the small black dot on middle tibia interiorly is absent. Otherwise about the same. Terminal club joint conical, obtusely rounded, longer than wide. The bidentate plate ventrad present.

(From 1 specimen, the same objective and optic.)

From a single specimen labelled "54", "No. 54. 19 10./7. 1905" and "Asuncion, Paraguay, 10./7. 1905, J. D. ANISITS".

Type. Katalog No. 31935, Zool. Museum Berlin, 1 ♀, minutien. For description of male, see foregoing.

Tribus *Smicrini*.

Genus *Spilochalcis* THOMSON.

1. *Spilochalcis anisitsi* n. sp.

Natural position.

Female. Length 5,10 mm, average.

Immaculate, or nearly, varying in color from pink to fulvous or

brown-pink, either wholly pink with brown-pink abdomen, metanotum, tibiae, scape, pedicel, tarsi and head and with the flagellum brownish, or else brown-pink, the caudal femora and tibiae alone pinkish. Wings hyaline, the venation brown. Eyes very dark garnet, naked. In one pink specimen only, the mesoscutum with a trace of blackish at anterior margin, the scutellum with a little irregular blackish and the caudal coxae with longitudinal traces of black streaks, none of these markings well defined, obscure. In other specimens immaculate with the exception of the black tip of the hypopygium, black tips of the teeth along the under side of the caudal femora and the black on the distal tarsal joints.

Mesonotum umbilicately punctate. Head not much wider than long (cephalic aspect). Abdomen smooth, face with feeble punctures beside the eyes; remainder of body without sculpture other than feeble reticulation. Posterior coxae above with 2 equal tuberculate teeth near tip, in a longitudinal line. Posterior coxae beneath armed with 14 teeth, the first large, the second to tenth subequal, much smaller, the eleventh to fourteenth minute, black, close together. Petiole of abdomen short, about twice longer than wide, not as long as the second abdominal segment, as seen from lateral aspect with a very minute spine above and below at base; abdomen somewhat longer than the head and thorax combined. Postmarginal vein long, as long as the marginal, or slightly longer, the submarginal vein nearly twice the length of the marginal, the stigmal sessile, minute. Scutellum and metathorax simple, unarmed, weak. Lateral ocelli not touching the eye margins, the ocelli in a weak triangle. Discal ciliation of wings dense, short, the marginal cilia very short, inconspicuous. Posterior tibia prolonged into an acute fuscous spine as usual.

Antennae with the scape long, projecting above the ocelli for a fourth of their length; scape slender, slightly bent caudad, as long as the pedicel and first six funicle joints combined or longer; pedicel obconic, not half the size of the first funicle joint; "ring-joint" subquadrate but wider than long, not as long as the pedicel, large, a third of the length of the following joint (here counted as funicle joint 1); the latter longest of the funicle, slightly longer than the second; second to sixth subequal, seventh a fourth shorter; second to seventh narrowed in the middle; funicle joints cylindrical, at one side distad slightly, acutely prolonged, ending in a short spine. Club ovate, slightly wider, its joints subequal in length, all

shorter than funicle seven. Pubescence not conspicuous. Terminal club joint obtusely pointed.

(From 3 specimens, $\frac{2}{3}$ -inch objective, 1-inch optic, BAUSCH & LOMB).

Male. Length 3.25 mm. Smaller.

The same, differing in the shape of the abdomen, the length of its petiole and in antennal structure. Abdomen from the dorsal aspect ovate, lateral aspect triangular, straight beneath, nearly acutely convexed above toward base, about as long as the thorax, the genitalia exerted, the petiole long and slender but not excessively so, thickening somewhat caudad, about threefourths the length of the posterior coxae and not as long as the body of the abdomen. Caudal tarsi with more of the distal joint black.

Antennal scape longer, projecting farther above the vertex, in the cephalic aspect, along one side it is marked with a thin longitudinal black line; scape and pedicel yellowish, flagellum brown-black, reddish distad. Scape straight, as long as, or nearly, the remainder of the flagellum; pedicel slightly longer than the first funicle joint; ring-joint slightly shorter than in the female; first funicle joint slightly wider than long, all funicle joints (one to five) subequal, all of them acute at both sides distad, joints two to seven with short petioles, six distinctly smaller and seven only half the size of one; club not differentiated, the flagellum cylindrical; club consisting of three weak joints more or less cemented together, though clearly defined by narrow incisions, obtuse distad.

(From 1 specimen, the same objective and optic.)

Described from 1 male and 3 female specimens, minutien mounted and all bearing the following label: "Paraguay, S. Amerika, Paraguay, 19./1. 1906, J. D. ANISITS". Named in honor of Prof. ANISITS who collected the specimens.

Types. Katalog No. 31937, Zool. Museum Berlin, 1 ♂, 1 ♀, minutien mounted.

Cotypes. Accession No. 44179, Illinois State Laboratory of Natural History, Urbana, Illinois, U. S. A., 2 ♀♀, minutien; also 1 slide, ♂, ♀ antenna.

Family *Perilampidae*.Genus *Perilampus* LATREILLE.1. *Perilampus paraguayensis* n. sp.

Normal position.

Female. Length 3,5 mm.

Metallic green with tinges of aeneous and bluish and with soft, short, greyish pubescence; mesoscutum and most of scutellum excepting along the median line, aeneous or coppery; face bluish-green as are also the thoracic pleura and abdomen; the latter darker above at proximal half; metanotum bluish; eyes dark; wings hyaline, their venation brown; antennae blackish, brownish distad; coxae greenish; all femora metallic bluish-green; knees brown; tibiae same as femora but brownish toward tips and at one side, the posterior tibiae brownish on three sides; tarsi pallid yellowish-brown, darker at the distal joint which at extreme apex is black. Antennal scape metallic bluish. Tegula dark brownish.

Antennal scrobes deeply excavated, including the cephalic ocellus within their apex, from dorsal aspect the vertex along its cephalic margin cleft at the meson as in *brasiliensis* ASHMEAD; cephalic ocellus barely advanced beyond the lateral ocelli, all about as far from each other as the lateral ocelli are from the respective eye margins; antennae inserted barely below the middle of the face. Eyes naked. Parapsidal furrows complete. Scutellum ending at the apex in two barely perceptible teeth formed by an emargination, one on each side, the apex obtusely pointed. Scutellum subequal in length to the mesoscutum. Abdomen normal to the genus.

Pronotum and the whole of the mesonotum uniformly, distinctly punctate, the metanotum glabrous discally on each side of the median line, the latter a weak median carina with large, rugose punctures on each side; metanotum irregularly rugose laterad. Abdomen smooth and shining. Vertex transversely striate, the face between the eyes and scrobes with weak longitudinal striations; clypeus pubescent, the greyish hairs arising from minute punctures; cheeks striate; lower half of face pubescent; each parapsidal furrow laterad margined with a broad apparently smooth area which is weakly punctate; axillae mesad punctate like the mesothorax but a middle small

triangular area with its base against the parapside is finely longitudinally striate, and a lateral triangular portion shows two short strong longitudinal striae (carinae).

Fore wings without marginal cilia around the apex but caudad on the caudal margin present, very short, the cilia straight and not close together, on the posterior margin of the hind wings slightly longer. Discal ciliation of both wings uniform, dense, the cilia crossing each others tips. Submarginal vein $2\frac{1}{2}$ or more times the length of the marginal, the latter barely longer than the postmarginal which is long, twice the length of the stigmal, the latter not sessile but moderately short, with a small knob. Posterior tibia with two apical spurs.

Antennae 13-jointed, the club not differentiated, flagellum subclavate. Scape long, slender, with a small tubercle at tip above, as long as pedicel, ring-joint, first three funicle joints and half of the fourth combined; pedicel short obconic, not half as long as the first funicle joint; ring-joint moderately long but of course more than twice wider than long; proximal funicle joint longest, a third longer than the second, the latter and third subequal, subquadrate, barely longer than wide, the fourth wider than long, a third shorter; 5, 6, 7 and 8 subequal, a fourth shorter than 4 and each slightly shorter than the one preceding; club joints about equal in length but the apical joint conical, each slightly shorter than the eighth funicle joint. Pubescence short.

(From a single specimen, $\frac{2}{3}$ -inch objective, 1-inch optic, BAUSCH & LOMB).

Described from a single female specimen labelled as follows: "Asuncion, Paraguay, 11/12. 1905, J. D. ANISITS".

Type. Katalog No. 31926, Zool. Museum Berlin, 1 ♀, minutien mounted.

Family *Eurytomidae*.

Tribus *Eurytomini*.

Genus *Eurytoma* ILLIGER.

Eurytoma paraguayensis n. sp.

Female. Length 2.75 mm. Caudal tibiae with 2 apical spurs. Opaque black, the abdomen alone shining; scape, pedicel, all

tibiae and the tegulae brown, the tarsi white except at extreme tip, the cephalic tarsi brownish; the femora black, brown at each end, the coxae concolorous with the body; trochanters brown; extreme tip of abdomen brown; venation pallid yellowish; eyes dark garnet, the ocelli pale pinkish. Wings hyaline.

Head and all of the thoracic notum umbilicately punctate with fine punctures between, the metanotum, however, with a rounded concaved area in its disk which is finely punctate, the punctures on the metanotum dorsal aspect coarser, dorso-lateral aspect finer than those of the mesonotum; the abdominal petiole moderately coarsely striate; coxae finely reticulated. Abdomen glabrous, excepting in the lateral aspect where there is some reticulation along the bases of the segments. Eyes with very sparse, minute hairs. Thoracic pleurum punctate and striate. Parapsidal furrows complete.

Wings finely ciliate discally, the marginal cilia practically absent; marginal vein short, slightly longer than the postmarginal which is very slightly longer than the stigmal. At the apex of the metathorax just cephalad of the abdominal petiole, a minute spine.

Abdomen with a short petiole, its 5th segment (lateral aspect) shorter than wide. Pubescence sparse, golden yellow.

Antennae inserted slightly below the middle of the face, the scrobes not separated, forming an oblong smooth groove which extends to cephalic ocellus but does not include it; bulbs barely separated. Lateral ocelli distinctly not touching the eye margin. Antennae 10-jointed, scape, pedicel, 1 ring-joint, 5 funicle joints and a 2-jointed club. Scape obclavate, with a tubercle at tip beneath, longer than the first three funicle joints united; pedicel cup-shaped, not a fourth the size of the first funicle joint; ring-joint distinct; funicle 1 long, narrower proximad, subequal in length to the distal club joint; joints 2, 5 subequal, gradually shortening and widening, 5 subquadrate, 2 longer than wide, a third shorter than 1; proximal club joint shorter than funicle 5, wider than long, the distal joint long, conical, obtuse distad. Pubescence of antennae sparse, rather long, yellowish white bristles. Antenna nearly cylindrical, the club barely wider.

(From 3 specimens, $\frac{2}{3}$ -inch objective, 1-inch optic, BAUSCH & LOMB).

Male. Unknown.

Described from three female specimens transmitted by Dr. E. STRAND, Zool. Museum Berlin, minutien mounted, reared from an

ichneumoid cocoon of a parasite of a lepidopterous larva and labelled: "Asuncion, Paraguay, 30./3. 1906, J. D. ANISITS" and "No. 29. 19 30./3. 1905", 1 female and the other two the same + "24./3. 1905" and "No. 29. 31./4. 1905" for the one; and for the third "25./3. 1905" and "No. 29. 31./3. 1905", respectively.

Types. Katalog No. 31927, Zool. Museum Berlin, 2 females, minutien.

Cotypes. Accession No. 44180, Illinois State Laboratory of Natural History, Urbana, Illinois, U. S. A., 1 female, minutien + 2 slides (female antenna and legs).

Family *Eucharidae*.

Genus *Stilbula* SPINOLA.

1. *Stilbula semifumipennis* n. sp.

Normal position.

Male. Length 4.50 mm. Moderate in size.

General color opaque black, patterned with brown ocher, the abdomen smooth and shining, pale brownish red varying to blackish above and at extreme tip, the slender abdominal petiole pale brownish, the intermediate and posterior legs concolorous with the petiole or somewhat darker, the cephalic legs still darker, dark brownish to fuscous; antennae uniformly reddish-brown, including the scape. Cephalic aspect of the head metallic green, the whole head in fact metallic green, but less noticeably on the vertex and cheeks; coxae concolorous with the remaining joints of the legs excepting their proximal halves which are decidedly darker brown. Mandibles brown. The outer portion of the fore wing uniformly slightly infuscated, the clouded area occupying slightly more than the whole distal half of the wing; its proximal margin is oblique (disto-proximad) and extends from the stigma (cephalad) obliquely across the wing to a point on the caudal wing margin slightly proximad of the slight bend of the submarginal vein or to within three-fourths of the distance from the extreme wing apex to the extreme base. Venation of the fore wing brown. Posterior wings hyaline. Thorax opaque, black: An oblique line of brown ocher along each side of the mesoscutum, converging but not joining caudad at its apex; a somewhat wider line along each lateral margin of the parapsides,

curved to follow the outlines and cephalad joining those along the mesoscutum; a transverse spot across the base of each axilla, sub-reniform; and a large round spot on each dorso-lateral aspect of the scutellum, which nearly joins beneath or behind the pronged apex; in the dorsal aspect of the metathorax, a small, fainter dot on each side of the median line, near base and a light touch at the extreme apex, at base of the abdominal petiole. In the lateral aspect, the lateral line bounding each parapside is continued ventrad, marking all of the lateral aspect of the prothorax brown ocher; an oblique line across the mesopleurum from the base of the fore wing and a spot in the extreme latero-cephalic angle of the metapleurum. The two spines of the apex of the scutellum black. Eyes practically naked.

Cephalic aspect of the head, or the face, circularly striated with moderately fine striae, the bulbs of the antennae being about in the center of the circle of striae; vertex with similar striae placed transversely, especially at the occipital margin; malar space with finer striae placed longitudinally, but really outlying finer circles of the other striae. Clypeus glabrous, quadrate and small, apparently prolonged into an oblong ridge which reaches dorsad up to a point between the antennal bulbs and which extension is crossed by the circles of the striae. Head elliptical (cephalic aspect), not wider than the greatest width of the thorax; eyes comparatively small, nearly round; ocelli in the center of the vertex, the cephalic one slightly advanced, equidistant from each other, the lateral ocelli three or more times their own diameter from the eye margins. Vertex wide; all margins of head obtuse.

The whole of the thorax umbilicately punctate, in the center of each cavity of the puncture a minute seta; the punctures are fainter laterad and ventrad, the metathorax rugose, usually transversely and the base and median line of the scutellum is inclined that way.

Parapsidal furrows complete, distinct. Scutellum subconical, its margins obtuse, slightly longer than the mesoscutum, terminating in two spines or forked, each spine longer than wide, moderately stout but not long and arising beneath a slight humped projection (lateral aspect); a small humped elevation on each side of the median line of the metanotum, their cephalic aspects brown ocher, their tops or ridges seen from the side inclined to be toothed but merely roughened; each hump bears greyish short hairs; no median carina on the metathorax. Pubescence of body not distinct.

Petiole of abdomen long and slender, slightly longer than the body of the abdomen or the thorax; abdomen (lateral aspect) ovate, acute ventrad, from dorsal aspect elliptical oval; compressed, the genitalia concealed, the second segment enclosing all of the rest.

Legs disproportionately small, slender throughout, femur, tibia and tarsus subequal in length, cylindrical; tarsi 5-jointed; tibial spurs of the posterior legs double, minute, weak. Proximal tarsal joint longest, on the posterior legs equal to any two of the others taken together. Mandibles very slender, falcate, weak, with at least one tooth within near base, this tooth triangular and conspicuous.

Only the caudal margin of the posterior wings bears marginal cilia, which are short and weak. Discal ciliation of fore wing also weak, the cilia irregularly arranged, single, the ciliation not sparse but scattered, confined to the infuscated area. Marginal and submarginal veins very slender, the former somewhat wider and only about three-fourths the length of the latter, the postmarginal vein short, the stigmal vein sessile, forming a distinct triangular stigmated area against the cephalic wing margin. Venation of the posterior wing comparatively short and broad.

Antennae 12-jointed, inserted slightly above the middle of the face, about on an imaginary line drawn through the middle of the eyes, the bulbs slightly separated from each other, central, distant from the eye margins by at least the diameter of the eye. Antennae moderately long, slender, filiform, three-fourths the length of body, weak, not elbowed; scape short, not reaching up to the apex of the vertex or barely to the cephalic ocellus, cylindrical ovate, twice longer than wide, not more than a fourth the length of the first funicle joint but about thrice the length of the pedicel; the latter weak, small, subcupuliform; no ring-joints; funicle 9-jointed, filiform, the first joint long and slender, about one and a half times longer than the second; joints 2 to 7 of funicle subequal, slightly shortening distad, 8 and 9 subequal, about a fifth shorter, the single club joint longer, conic-ovate, a fifth longer than the preceding joint, terminating in a pair of short teeth-like spines. Scape and pedicel naked, smooth; flagellum clothed uniformly with moderately dense, short grey hairs, not whorled or regularly arranged but similar to normal wing ciliation; all flagellar joints distinctly longer than wide.

(From a single specimen, $\frac{2}{3}$ -inch objective, 1-inch optic, BAUSCH & LOMB).

Female. Unknown.

Described from a single male specimen, minutien mounted, labelled "Asuncion, Paraguay, C. S. Miguel, 7./5. 1905, J. D. ANISITS".

Type. Katalog No. 31928, Zool. Museum Berlin, 1 ♂, minutien, + 1 slide (appendages).

Family *Encyrtidae*.

Subfamily *Eupelminae*.

Tribe *Eupelmini*.

Paraguaya n. g.

Normal position.

Female. Head viewed laterally hemispherical, from cephalic aspect rounded triangular, the antennae inserted slightly below the middle of the face but slightly above the ventral ends of the eyes, their bulbs somewhat nearer to the respective eye margins than to each other, the eyes converging slightly above, the vertex subquadrate, inclined, the ocelli in a small triangle in its center, the lateral ocelli their own diameters from the respective eye margins; head slightly wider than the thorax; eyes practically bare. Parapsidal furrows complete, not distinct. Scutellum abruptly inclined ventrad, its plane nearly vertical. Metathorax exceedingly short, concealed by the upward inclination of the abdomen. The latter sessile, inclined upward at an angle of 50° to 80° or even more, barely longer than the thorax, depressed above, flat ventrad but somewhat convexed near base, its segments unequal; ovipositor not exerted; abdomen broadly ovate.

Antennae somewhat compressed, thirteen-jointed, without a ring-joint, scape, pedicel, 8 funicle joints and 3 club joints, subcapitate, the funicle cylindrical, enlarging gradually distad, the club thicker and conic-ovate; proximal funicle joint subquadrate, shorter than the pedicel and the following joint, the scape long and slightly bowed; pubescence short and close. Posterior tibiae with two spurs, one thrice the size of the other; anterior tibiae with a single curved spur, long, delicately forked at its tip. Cephalic femora swollen, unarmed beneath. Proximal tarsal joint of intermediate legs armed beneath with black teeth with hairs distad, the teeth and hairs

present also on the next three joints, but less extensively. Proximal joint of posterior tarsi slender, not compressed.

Fore wings smoky from the bend of the submarginal vein to the apex, the smokiness clearing up somewhat at the apex and divided by a transverse crescentic clear line at the center of the marginal vein, clear proximad. Marginal and submarginal veins slender, moderately long, the postmarginal vein somewhat longer than the short stigmal. Discal ciliation of fore wings uniform, short, close and dense, the marginal ciliation very short, fine. Posterior wings with the discal ciliation coarser but still fine, moderately dense, its marginal ciliation somewhat more distinct; the wings hyaline.

Sculpture of the body rugoso-punctate but not coarsely so.
(Type. The following species.)

1. *Paraguaya pulchripennis* n. sp.

Normal position.

Female. Length 3 mm, average.

General color dark metallic bluish, the front of the head bluish green, the antennal scape brownish, the flagellum coppery excepting the pedicel beneath, which is brownish, the legs dark with metallic greenish reflections, the tarsi brownish-black; flagellum nearly like the legs. Tip of the ovipositor yellowish-brown; beneath, the abdomen with a transverse silvery band near base. Fore wings sooty from the bend of the submarginal vein distad to apex but the fumated area becomes considerably clearer beyond the apex of the venation, and at the middle of the marginal vein is divided by a convex clear path, the convexity proximad. Venation brownish-black.

Antennae clavate, scape long, somewhat longer than pedicel and first three funicle joints combined, slightly curved; pedicel obconic, twice the length of the first funicle joint; the latter quadrate; second and third funicle joints cylindrical, moderately long, subequal, each about thrice the length of the proximal joint; fourth funicle joint of about the same length but thicker; fifth and sixth subequal, a half shorter; seventh and eighth subequal, slightly shorter than the sixth, decidedly longer than the first; club wider, ovate, obliquely rounded from one margin, the joints wider than long and subequal

in length; funicle widening at the fourth joint, thence but slightly to the club. Clothing of antenna short.

(From 4 specimens, $\frac{2}{3}$ -inch objective, 1-inch optic, BAUSCH & LOMB).

Male. Unknown.

Described from four female specimens labelled "Asuncion, Paraguay, Villa Morra, 1., 2./11. 1905, J. D. ANISITS" and "Villa Morra, No. 56", 2 females; the same + "9./11. 1905", 1 female and the same + "7./11. 1905", 1 female. Specimen labelled "9./11. 1905" = cotype female.

Types. Katalog No. 31939, Zool. Museum Berlin, 3 ♀♀, minutien (the first two and the last in the foregoing list).

Cotypes. Accession No. 44182, Illinois State Laboratory of Natural History, Urbana, Illinois U. S. A., 1 ♀, minutien (the third specimen as listed) + 1 slide (antenna, cephalic and posterior legs).

Ooderoidea n. g.

Normal position.

Female. With all the characters of the subfamily and tribe. Ovipositor very long and slender, curled over the body and twisted.

Head (cephalic aspect) rounded triangular, about as wide as long, widest across the eyes at their middles, the ventral or distal edge of the clypeus nearly straight, slightly convexed, the face longitudinally depressed but the depression obtuse, the antennae inserted distinctly below the middle of the face, slightly below an imaginary line drawn between the ventral ends of the eyes, nearly touching the cephalic margin of the clypeus, their bulbs distinctly separated, their scrobes short, moderately deep, running up to a point opposite the middle of the eyes and forming a grooved area somewhat like the Greek letter upsilon; ocelli visible. Lateral aspect, head also flatly triangular, the back forming the base, the apex at the antennal bulbs, from thence ventrad the face receding; eyes large, oval, practically hairless but with very minute sparse hairs, the malar spaces moderately large; from dorsal aspect, head four times wider than long, not wider than the thorax, the eyes widely separated, the occipital margin acute, straight, the vertex inclined cephalo-ventrad, the ocelli small, round, in a triangle on the front edge of the slope of the vertex, the lateral ocelli as far apart each from

the cephalic one as each is distant from the respective eye margin and still farther apart from each other. Antennae 11-jointed scape, pedicel (no ring joint), 8 funicle joints and a single club joint, filiform, compressed from the base of the scape out to the second funicle joint, from thence cylindrical, the scape long, extending above the vertex, the pedicel minute, the first funicle joint subquadrate, nearly a half shorter than pedicel, the second funicle joint as long as the scape, distinctly longer than the following joint, the funicle joints distad shortening, not much longer than wide, the club distinctly longer than the distal funicle joint, ovate, not wider, ending in an obtuse point; antennae clothed with soft, short, brownish hair which is moderately dense.

Prothorax distinct, with a short neck; parapsidal furrows complete, not deep, not straight but forming a somewhat broken line; parapsides peltate convexed at their middles, raised and projected ventrad over the axillae, truncate caudad, the space between them concave longitudinally but not acute. Scutellum small, ovate, narrow at its base, the small triangular axillae nearly meeting there, barely separated. Metathorax with a faint median carina, its caudal margin margined, its spiracle moderate in size, quadrate-oval; no spiracular sulci but just laterad of the spiracle is an obtuse carina. Abdomen about as long as the head and thorax combined, stout, conic-ovate, convexed beneath, flat above, the second segment the longest, occupying a third of the surface, the others gradually shortening, the caudal margins of the segments in the dorsal aspect convex; abdomen sessile, terminating in a very long, slender, needle-like ovipositor, over twice the length of the body and whose equally long valves (2) are curled over the body and twisted. Body not punctate, reticulated.

Fore wings clouded throughout with the exception of a small clear triangular area just opposite the base of marginal vein, without marginal cilia along the cephalic margin distad of the venation excepting an occasional isolated cilium, and elsewhere it is very short and close, denser along the caudal margin and apparently the discal ciliation projecting beyond the margin; discal ciliation very dense, somewhat matted, short and fine. (Through a hand lens no marginal ciliation visible, the discal ciliation exceedingly fine.) Venation straight, slender, marginal vein slightly shorter than the submarginal, both long and slender, the postmarginal vein also long, but only half as long as the marginal vein, gradually narrowing distad,

at least two and a half times the length of the stigmal vein which is well developed, slender, ending in a small triangular knob. Posterior wings with long marginal and submarginal veins, also clouded and similarly ciliated.

Legs all slender, the posterior coxae largest, conical, not especially large, all of the tibiae compressed at the apex, the cephalic femora curved, slightly swollen but not noticeably so, all tarsi 5-jointed, the proximal joint of the intermediate tarsi ventrad convexed, with very dense black teeth and brush-like pectinated whitish hairs, the second, third and fourth joints similarly armed but less extensively; also the large tibial spur of the intermediate legs is coarsely serrated or toothed along the whole of its ventral surface and above peculiarly sculptured with rather coarse radiating striae. Claws slender, simple; cephalic tibial spur curved, slender, at the end delicately divided. Tibial spurs of caudal legs double, straight, single elsewhere, the tarsi of the cephalic and posterior legs and the terminal tarsal joint of the intermediate legs armed beneath with straight, stiff setae.

Mandibles with at least one tooth, a lateral, outer, acute one.

Male. Unknown.

A genus distinguished by the long exerted ovipositor, the peculiar armature of the intermediate tarsal joints, the 11-jointed antennae, the long postmarginal vein, the slightly swollen cephalic femora brilliant metallic color, clouded wings and the non-compressed caudal tarsal joints.

The type species is described herewith.

1. *Ooderoidea purpurea* n. sp.

Female. Length 6,35 mm, exclusive of ovipositor. Large, ichneumonoid.

General color brilliant metallic purple, breaking into French blue at different angles, the abdomen darker, black-blue with purplish reflections, its tip dorsad metallic blue; all coxae and cephalic femora concolorous with body, the cephalic tibiae and tarsi brownish, the antennae excepting the scape which shows metallic blue and purple, the intermediate femora excepting extreme tip and a yellowish ring near base, the posterior legs excepting the femora which are like the antennal scapes nearly, all black, the intermediate tibiae half yellowish white (proximad) and half black; tarsi of intermediate and posterior legs with some brownish. Venation dark brown.

Wings with a darker soiled brownish streak longitudinally through the middle of the blade which at a point opposite the base of the marginal vein shifts to the caudal margin; just proximad of it is a triangular naked area with its apex against the apex of the submarginal vein, its base ending near the caudal margin, the proximal basal angle extending proximad and widening, the opposite angle terminating in a short, acute projection into the discal ciliation distad.

Valves of the ovipositor clothed with fine hairs. Face and thorax with fine whitish pubescence, also the venter and the sides of the abdomen near apex, the posterior coxae with silky whitish hairs. Mesopleurum finely, longitudinally lined.

Scape as long as first and second funicle joints combined; pedicel half longer than first funicle joint, the latter short, slightly wider than long; second funicle joint very long, over seven times longer than the first, the third long, a fourth shorter, fourth nearly half shorter than third; fifth and sixth subequal, nearly half shorter; seven and eight subequal to joint five of funicle, conic-ovate.

(From a single specimen, $\frac{2}{3}$ -inch objective, 1-inch optic, BAUSCH & LOMB).

Described from a single female specimen, minutien mounted and labelled "S.Amerika. Matto Grosso, Friè, 19./1. 1905, J. D. ANISITS" and „Matto Grosso, 19./1. 1905, Friè”.

Type. Katalog No. 31938, Zool. Museum Berlin, 1 ♀, minutien (+ 1 slide).

Family *Pteromalidae*.

Subfamily *Pteromalinae*.

Tribe *Pteromalini*.

Genus *Catolaccus* THOMSON.

1. *Catolaccus cyaneus* n. sp.

Normal position.

Female. Length 2,5 mm.

General color opaque French blue, the abdomen coppery-black, excepting at base where it is metallic green, polished, the coxae concolorous with the thorax, the legs whitish-yellow excepting the

femora which are greyish-black and the dark tips of the distal tarsal joints. Wings hyaline, the venation whitish. Scape fulvous, the flagellum coppery. Ocelli pinkish, the eyes carmine. Nearest in color to *nigroaeneous* ASHMEAD and in kind of thoracic pubescence to *incertus* ASHMEAD. Pubescence of mesonotum white but the individual hairs not broadened or depressed and directed cephalad but slender, inclined caudad, yet with the same appearance as the others against the blue background, namely like burnished metallic elongate dots; on the pronotum a single line of them transversely; on the scutellum sparse; present also on the face and vertex. Abdomen with pubescence on the sides of the segments ventrad only.

Parapsidal furrows half complete from the cephalic margin, faint; scutellum simple. Metanotum with median and lateral carinae; abdomen somewhat longer than the head and thorax combined, conic-ovate, not produced much beneath. the posterior margin of segments 2 and 3, dorsad, not excised medially, straight. Clypeus finely longitudinally lined, its anterior margin glabrous, with three lobes, one of which is median, its posterior margin regularly convexly rounded. Lateral ocelli elliptical, more than their own length from the eye margin. Eyes bare. Head and thorax umbilicately punctate, including the metanotum between the lateral carinae and also its neck, the cephalic halves of the abdominal segments and metanotum laterad delicately reticulated. Metathoracic spiracle moderately large, subreniform. Median carina of metathorax complete, simple, not crossed by a transverse carina. Spiracular sulcus short and broad.

Fore wings with fine discal ciliation, the marginal cilia exceedingly fine. Postmarginal vein a third longer than the stigmal, over half the length of the marginal, the submarginal distinctly longer than the latter. Posterior wing with the ciliation of the fore wing. Tibial spurs single; genal sulcus distinct; mandibles with four distinct teeth, the outer, lateral tooth acute, the second and third shorter, subobtus, the inner broader, broadly obtuse.

Antennae inserted about in the middle of the face, the bulbs separated but little, the scapes reaching to the cephalic ocellus, 13-jointed scape, pedicel, 3 ring-joints, 5 funicle joints and 3 club joints. Scape somewhat longer than the pedicel, 3 ring-joints and first funicle joint combined, cylindrical; pedicel obconic, moderately long but slightly shorter than the first funicle joint; 3 ring-joints gradually, reciprocally enlarging distad, button-like, distinct; first funicle joint longest of funicle, a fifth longer than the second, the

latter a fourth longer than the third; third, fourth and fifth gradually shorter, the third and fourth nearly subequal; club ovate, broadest at the apex of the proximal joint, the latter subequal to the second joint and the apical joint short, like a cup, conically triangular. Funicle very slightly enlarged distad; club wider but not conspicuously so; pubescence bristly, some of the setae depressed.

(From 8 specimens, $\frac{2}{3}$ -inch objective, 1-inch optic, BAUSCH & LOMB).

Male. Unknown.

Described from eight female specimens mounted on two cards labelled "Asuncion, Paraguay, 10/10. 1905, No. 55, J. D. ANISITS" and "*Systasys* sp."

Types. Katalog No. 31940, Zool. Museum Berlin, 4 ♀♀ on a card.

Cotypes. Accession No. 44181, Illinois State Laboratory of Natural History, Urbana, Illinois U. S. A., 3 ♀♀ on a card + 1 slide (antennae, posterior legs).

Family *Eulophidae*.

Subfamily *Entedoninae*.

Tribe *Entedonini*.

Genus *Horismenus* WALKER.

1. *Horismenus cyaneoviridis* n. sp.

Normal position.

Female. Length 1.5 mm.

General color bright metallic blue-green, the venter of abdomen darker, the color of the body from dorsal aspect uniform but varying to aeneous at certain angles of vision, in direct vision blue-green; ocelli ruby red; eyes garnet, clothed with a moderately dense greyish pubescence which is short and erect; wings hyaline, iridescent, the venation pale brownish-yellow; legs all white excepting the metallic, concolorous coxae and the extreme tips of the apical tarsal joint, which is brownish. Scape white, remainder of antenna metallic blue-green tinged with cupreous.

Body from dorsal aspect shaped as in the species *microgaster* ASHMEAD; ocelli nearly in an equilateral triangle, the lateral ones their own width distant from the eye margin, the vertex long. Parapsidal furrows as in *microgaster* ASHMEAD but somewhat longer, distinct, but not complete, running two-thirds the length of the mesonotum. Scutellum with a midlongitudinal grooved line and a long fovea bearing a long seta at the caudo-lateral corner; no lateral grooved or punctured line. Metathoracic spiracle round, small; metathorax with a smooth median carina as in *microgaster*, bordered on each side with a sulcus but the carina is at least subacute, the sulci not roughened, bordered laterally by a carina or an acute margin. Abdomen conic-ovate, convexed ventrad, above slightly convexed, about equal to the thorax in length, its petiole short, not conspicuous, its second segment long, occupying slightly over half of the surface, the remaining segments all short, their incisions wide and dark, each segment bearing a transverse row of greyish hairs. Ovipositor not exerted.

Body polygonally reticulated, the large second segment of the abdomen and the metanotum smooth, polished; vertex with some small punctures, present but much more scattered on the thoracic dorsum, also; these minute punctures are setigerous. Eyes with moderately dense minute greyish pubescence which is short and erect.

Fore wings hyaline, the marginal vein over twice the length of the submarginal vein, straight, long and slender, the postmarginal and stigmal veins very short, mere spurs. Discal ciliation uniform and dense, the marginal cilia short. Posterior wings similarly ciliated discally. Legs normal, tarsi 4-jointed.

Antennae 8-jointed: scape, pedicel, 1 minute ring-joint, 3 funicle joints and 2 club joints; submoniliform, cylindrical. Scape cylindrical, longer than the pedicel and the first funicle joint combined; pedicel obconic, shorter than the first funicle joint; the latter cylindrical ovate, a fourth longer, the second joint of funicle cylindrical, slightly shorter and narrower, the third oval, still somewhat shorter, the proximal club joint a little longer and broader, the terminal joint dome-shaped, smaller than the pedicel, terminating in a short stout spur (considered erroneously by many a third club joint). Antennae clothed with stiff white setae from whitish setigerous tubercles which are minute.

(From 3 specimens, $\frac{2}{3}$ -inch objective, 1-inch optic, BAUSCH & LOMB).

Male. Unknown.

Described from 3 females mounted together on a card and labelled "Asuncion, Paraguay, 10./10. 1905, J. D. ANISITS".

Types. Katalog No. 31941, Zool. Museum Berlin, 3 ♀♀.

Subfamily *Tetrastichinae*.

Tribe *Tetrastichini*.

Genus *Tetrastichodes* ASHMEAD.

1. *Tetrastichodes hyalinipennis* n. sp.

Normal position.

Female. Length 2,60 mm, Slender.

General color glossy black, the head brownish, the eyes dark red, the wings hyaline, their discal ciliation giving them a somewhat greyish appearance; the legs concolorous, excepting the tips of the femora, the tibiae and the tarsi, which are greyish or yellowish; scape, pedicel and proximal ring-joint of antennae brownish, the flagellum black; distal tarsal joint slightly darkened. Venation pallid yellowish.

Thorax delicately longitudinally grained, giving a velvety appearance, the pronotum, however, densely finely polygonally reticulated, the vertex and head delicately reticulated, the abdomen practically smooth but with very faint, minute polygonal reticulation; mesopost-scutellum, the metathorax, coxae and pleura reticulated.

Face with a flat concavity centrally, subtriangular in outline, bounded by obtuse ridges, the apex ventrad and containing the antennal bulbs along its base cephalad; the antennal scrobes shallow, broad depressions extending from the base of this concavity up to the vertex; malar space large; clypeus with two lobe-like projections from its ventral margin; eyes very convex, nearly round, with a few very minute hairs. Head (dorsal aspect) wider than the thorax, the ocelli together in the center of the vertex, triangularly disposed, the lateral ocelli distant from the eye margins by at least thrice their own length, the cephalic ocellus at the extreme cephalic margin of the vertex; lateral ocelli elliptical. Pronotum moderately long, not as broad as the mesonotum, much narrower. Parapsidal furrows distinct, complete, curved, the part of the caudal margin of the

mesonotum included by them, straight; mesoscutum without a median grooved line, longer than the scutellum; the latter with a straight longitudinal groove on each side of the median line, otherwise simple, peltate, with a more or less obscure, round fovea laterad of each grooved line about two-thirds down toward the apex. Metanotum with a distinct, complete median carina which at the caudal margin divides and runs laterad around that margin; also a lateral carina mesad of the spiracle and a more obscure confused one laterad of it; metathoracic spiracle round, moderately large, near the cephalic margin. Metathorax with a slight, collar-like neck. Abdomen sessile, with no trace of a petiole, pointed conic-ovate, longer than the head and thorax combined, its apex acute and acuminate, the ovipositor not exerted, the segments not distinct, convexed ventrad near base, concaved dorsad, none of the segments very long.

Fore wings hyaline but with a dusky appearance from the discal ciliation which is moderately dense and uniform, absent proximad of the proximal fourth of the marginal vein with the exception of a broken oblique line running from the break of the submarginal vein and a long straight single line running from the caudal end of this, along the caudal wing margin, forming a caudal boundary to the discal ciliation out beyond a point opposite to the distal end of the venation.

Marginal ciliation moderately short, not short. Marginal vein subequal to the submarginal, or slightly longer, the postmarginal vein absent, the stigmal vein well developed, slender, slightly curved, terminating in an oblong uncus pointing disto-cephalad, narrower than the marginal vein and between a fourth and a fifth of its length. A small naked area disto-cephalad of the stigmal vein. Posterior wings with discal ciliation similar to that of the fore wing, its marginal ciliation also similar at the caudal margin but at the cephalic margin the cilia are shorter and closer. The posterior wing is shaped like the blade of some hunting knives. Legs normal, tarsi 4-jointed.

Antennae 10-jointed: scape, pedicel, 2 ring-joints, 3 funicle joints and 3 club-joints; inserted about in the middle of the face and somewhat above an imaginary line drawn between the ventral ends of the eyes, the bulbs widely separated both from each other and from the respective eye margins. Scape moderately thick, cylindrical, nearly twice the length of the pedicel, subequal in length to the long first joint of the funicle; pedicel long obconic, slightly shorter

than the second funicle joint; 2 ring-joints distinct, subquadrate, the second nearly twice the size of the first; first funicle joint very long, cylindrical, one and two-thirds times longer than the second joint, distinctly longer than the club, nearly as long as the two following joints combined; third funicle joint a fourth shorter than the second, distinctly longer than the proximal club joint; funicle nearly uniform in width; club not much wider, long conic-ovate, its two proximal joints about equal, the apical joint conic, a third smaller. Flagellum (excluding pedicel and ring-joints) clothed with scraggly, pale, slender setae and also with thicker, spine-like ones which resemble white carinae or grooves in balsam mounts. Funicle the longest antennal region.

Mandibles with two teeth, the outer one acute, the inner acute laterad, its margin then forming a sinus, after which it is straight, forming a relatively broad subtruncate inner lobe.

(From 20 specimens, $\frac{2}{3}$ -inch objective, 1-inch optic, BAUSCH & LOMB).

Male. The same. Abdomen flat, depressed, from dorsal aspect elliptical ovate, from lateral aspect linear, the genitalia exserted; abdomen slightly longer than the head and thorax combined.

Antennae 11-jointed, filiform, the funicle joints loose, clothed with very long, exceedingly fine hair scape: pedicle, 2 ring-joints, 4 funicle joints and 3 club joints; scape slightly dilated ventrad, long, equal to the combined length of funicle joints 1 and 2; pedicel as in the female but shorter, subequal to first funicle joint; 2 ring-joints weak, the first longest, the second minute, triangular; second, third and fourth funicle joints subequal, longest, a third longer than the first, each over half as long as the scape; the 3 club joints subequal, slender, the third somewhat shorter, the others slightly longer than the first funicle joint.

(From 3 specimens, the same objective and optic.)

Described from 3 males and 20 females labelled as follows: "Asuncion, Paraguay. Villa Morra, 27./2. 1905, J. D. ANISITS".

Types. Katalog No. 31929, Zool. Museum Berlin, 2 ♂♂, 17 ♀♀, minutien.

Cotypes. Accession No. 44178, Illinois State Laboratory of Natural History, Urbana, Illinois, U. S. A., 1 ♂, 3 ♀♀, minutien + 1 slide (antennae, legs and fore wing).

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Zoologische Jahrbücher. Abteilung für Systematik, Geographie und Biologie der Tiere](#)

Jahr/Year: 1911

Band/Volume: [31](#)

Autor(en)/Author(s): Strand Embrik

Artikel/Article: [Beiträge zur Kenntnis der Hymenopterenfauna von Paraguay auf Grund der Sammlungen und Beobachtungen von Prof. J. D. Anisits. 377-406](#)