

Article VIII.—SOME PARASITIC HYMENOPTERA FROM
VERA CRUZ, MEXICO.

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The following notes and descriptions are based on a small, but extremely interesting collection of Parasitic Hymenoptera made in the state of Vera Cruz, Mexico, by Dr. Alexander Petrunkevitch, and now contained in the American Museum of Natural History. As would be expected from the very meager knowledge which we have of the small Hymenoptera of this region, the majority of the specimens in the present collection represent hitherto undescribed species.

Family PLATYGASTERIDÆ.

Metanopedias gen. nov.

Antennæ of female 9-jointed, with loose, slender, 4-jointed club; second flagellar joint long, and very closely united with the first. Eyes bare, ocelli in a broad triangle, the lateral ones distinctly nearer to the eye than to the median ocellus. Thorax long, pronotum visible in front and on the sides of the mesonotum. Mesonotum long and narrow, with deep, parallel parapsidal furrows; its median lobe projecting over the scutellum from which it is not separated by any suture. Scutellum rounded at the tip, compressed from the sides, so that anteriorly its surface is much below the parapsides leaving these declivous behind and angularly produced laterally. Metathorax very short. Abdomen with four visible segments, one-half longer than the head and thorax together, subpetiolate; first segment about as long as broad, with four longitudinal carinæ above, giving it a very coarsely fluted appearance; second segment very long; third narrower, short; fourth long and narrow, produced as a flattened spatulate ovipositor nearly as long as the rest of the abdomen. Legs as usual; wings veinless.

Metanopedias sicarius sp. nov.

Female. Length 2 mm. Black, the scape of the antennæ and the legs, except coxæ and clavate part of hind femora, reddish yellow. Head broad, twice as wide as thick, and fully one-third wider than the thorax. Front smooth and polished, except for a shagreened sculpture near the insertion of the antennæ, along the inner margins of the eyes and within the ocellar triangle. Head behind circularly striated, the occipital foramen small, margined. Mesonotum smooth and highly polished,

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the parapsidal furrows parallel and complete. Scutellum microscopically rugulose, thinly pubescent apically. Pleuræ smooth and highly polished, except the metapleurae, which are thinly yellowish pubescent. Mesopleura above with a narrow longitudinal furrow, below with a broader, less sharply defined one which extends on to the metapleura. Abdomen flattened, especially on its apical half; second and third smooth and polished, the disk of the third with a curved discal transverse row of coarse punctures. Fourth segment densely longitudinally aciculate on its basal third, apically smooth, its sides



Fig. 1. Antenna of *Metanopedius sicarius* sp. nov., ♀.

slightly convergent until near the tip which is bluntly pointed.

Vera Cruz, collected by Dr. A. Petrunkevitch at Buena Ventura, near Santa Rosa, July 13, on herbage.

This peculiar species undoubtedly represents an undescribed genus in this family, which is so richly represented in the American tropics.

Family SCELIONIDE.

Idris quadrispinosus sp. nov.

Male. Length $1\frac{1}{2}$ mm. Ferruginous, head, except near the mouth, and antennæ, except scape, black; abdomen dark at tip, and yellow medially on the third segment; legs brownish-yellow. Head large and broad, twice as wide as thick, sharply margined behind on the sides, but not above. Viewed from above, the eyes occupy one-half of the side of the head. Ocelli in a triangle, the lateral ones nearer to the eye-margin than to the median one. Eyes pubescent. Front above the insertion of the antennæ smooth and polished halfway to the ocellus; with a slight median depression; above thinly whitish hairy, and coarsely, densely punctate to the occiput. Head behind the eyes less closely punctate. Mandibles tridentate; cheeks smooth, with a distinct malar furrow just in front of which is a delicate fan-shaped series of striæ diverging from the base of the mandible. Antennæ 12-jointed, slender, with cylindrical joints; scape as long as the three following joints; pedicel narrowed at the base, as long as the second flagellar joint; first flagellar joint thicker, and one-fourth longer than the second; second and following about equal, each twice as long as thick; last one-third longer. Mesonotum entire, closely and coarsely punctate, without any traces of parapsidal furrows. Scutellum simple, twice as broad as long, sculptured like the mesonotum; postscutellum simple. Metathorax with a pair of lateral carinæ that diverge behind; each one produced as a sharp tooth at each extremity, giving the metathorax a quadrispinose appearance. Viewed from the front the upper pair of teeth are seen to be conspicuously white pubescent. Pleuræ with scattered coarse punctures, the mesopleura with a deep smooth femoral furrow below; metapleura with a sharp carina along its anterior margin. Abdomen shining, subpetiolate, sparsely beset with white hairs; petiole twice as long as wide, finely longitudinally fluted; second segment one-half longer, striate basally, the striæ short on the sides, but nearly reaching the tip near the

from the insertion of the antennæ. Antennæ 12-jointed, with a 6-jointed club; pedicel long, nearly as long as the two following joints together; first, second and third flagellar joints decreasing in length, the third quadrate, fourth very small, moniliform; first and second club joints short, widening, the second three times as wide as long; third to fifth about equal, large, each twice as broad as long; last conic, twice as long as the penultimate. Head margined behind, punctato-strigose, behind the eyes. Occiput faintly shagreened. Thorax above minutely punctulate or shagreened. Mesonotum with the parapsidal furrows very distinct posteriorly, but not indicated on the anterior half. Scutellum broad, rounded behind; about twice as broad as long; near the apex with a foveate line. Postscutellum very short, semi-circular, with a prominent median tooth at the apex and a foveate line across the base. Metathorax very short, deeply emarginate posteriorly, with the lateral apical angles produced as teeth. Abdomen one-third longer than the head and thorax together; oval in outline, its base being one-half as broad as its widest part; first segment twice as broad as long, deeply striated longitudinally for its entire length. Second segment nearly twice as long as the first, more finely striated; the striæ obsolete behind on each side. Third segment the longest and widest, one-half longer than the second; still more finely striated than the second, except on its apical and lateral fourths which are smooth; following segments (4-6) nearly equal in length and together as long as the third although rapidly narrowing, finely shagreened. Venter shagreened. Legs, including all coxæ, yellow. Wings hyaline, with a faint brownish tinge. One basal cell very faintly indicated; marginal vein short, three times as long as thick, about two-thirds as long as the knobbed stigmal; post-marginal fully twice as long as the stigmal.

Male. Differs from the female by its paler, more testaceous legs, and by brownish color on the metathorax and abdomen basally. The antennæ are filiform with the flagellar joints of about equal length except that the first is quite distinctly longer and thicker; pedicel subtriangular, two-thirds as long as the first flagellar joint. Abdomen with seven visible segments.

Described from two specimens from Vera Cruz collected by Dr. Alexander Petrunkevitch.

Scelio guatemalensis Kieffer.

Berliner. entom. Zeitschr. 50, p. 270 (1905).

A specimen from Buena Ventura is referable to this species, originally described from Guatemala. It differs from the type in having the abdomen tinged with reddish brown medially both above and below.

Scelio erythropoda Cameron.

Biol. Centr.-Amer., Hym. Paras. p. 436 (1888).

There are four specimens of *Scelio* from Buena Ventura which agree with Cameron's species in size and other characters given in his brief description, although they will not run to this species in Kieffer's recent table (Ann. Soc. Sci. Bruxelles, 32, part 2, p. 132), and may possibly represent an undescribed species.

Family ENCYRTIDÆ.

Anusioptera gen. nov.

Male. Body rather slender, with long legs and antennæ; wings fully developed. Head of moderate size, rostriform, much produced below the eyes into a short beak. Mandibles small, bidentate. Maxillary palpi short, four-jointed; labials also short, three-jointed. Malar furrow obsolete, faintly indicated above. Eyes bare, twice as high as wide, emarginated on their posterior border. Antennæ inserted in small depressions near the base of the mandibles, with very short grooves above for the reception of the first joint. Front long and narrow, gradually widening below, its surface punctulate. Ocelli in a triangle, the lateral ones near the eye-margin and closer to one another than to the median ocellus. Antennæ long; basal joint (presumably homologous to the short joint which articulates the scape to the head) as long as the width of the eye, slender; scape as long as the head height, very slender, cylindrical. Pedicel small; no ring joints; flagellum strongly flattened, seven-jointed, nearly as broad as the eye. Prothorax visible from above, mesonotum large, nearly as long as broad; axillæ nearly meeting medially, scutellum convex, smooth. Metathorax smooth and shining above, finely sculptured on the sides; the pleural piece large, twice as long as high. Abdomen short, compressed, with three long, bristly hairs on each side near the middle. Legs very long and slender. Metatarsus of middle legs slender, with scarcely evident fenticles. Wings hyaline, with a dark transverse cloud and dusky apex. Marginal vein long, stigmal and post-marginal short, about equal, the former nearly perpendicular.

This peculiar insect shows a considerable similarity to *Anusia* Forster, known from the Palearctic and Nearctic regions, but differs greatly in several respects. The elongation of the basal articulation of the antennal scape is quite extraordinary, and the scape is simple, not dilated as in *Anusia* although the flagellum has the greatly flattened form seen in this genus. The rostriform mouthparts are also peculiar, and the metathorax is much longer than in *Anusia*. Type *A. aureocincta* sp. nov.

Anusioptera aureocincta sp. nov.

Male. Length 4 mm. Clear honey-yellow, except the antennal flagellum, metapleuræ, small dorsal spot near center of abdomen, and double (one internal and one external) stripes on the femora and tibiæ, which are black. Tarsi, except basal joint of middle pair, also black. Head seen from in front slightly longer than wide across the eyes. Mandibles tipped with black; apical joint of both pairs of palpi black; projecting mouth parts yellowish white. Basal joint of antennæ not quite half as long as the scape, which is somewhat blackened above. Pedicel short; one-fifth the length of the first joint of the flagellum, fuscous. From the base, the flagellum gradually widens on the first three joints which decrease in length, the third being three-fifths the length of the first and twice as wide at the tip; fourth joint subequal to the third, about quadrate; following shortening and rapidly narrowing to the tip. Pro- and mesothorax smooth, sparsely covered with microscopic

hairs. Metanotum with two very delicate black, divergent carinae near the middle; metapleuræ finely rugulose, spiracle large, circular. Abdomen with the basal and apical segments elongated, the median ones short and not distinctly delimited. Middle femora reaching well beyond the tip of the abdomen. Wings hyaline on their basal two-fifths, then with a cross band of shining golden pubescence which extends beyond the middle and is fuscous by transmitted light; then with a narrow black band, followed by a hyaline band before the infuscated tip. Hind wings hyaline.

Collected by Dr. Petrunkevitch at Buena Ventura, near Santa Rosa, Vera Cruz, July 13; swept from grass and bushes.

This is a most striking and bizarre form.

Enasius Walker.

Key to the species.

1. Mesonotum with coarse punctures, like those of the head *A. chapadæ* Ashm.
Mesonotum smooth or shagreened 2.
2. Marginal vein short, almost wanting; head black *A. hyettus* Walk.
Marginal vein nearly as long as the stigmal; head metallic blue.
A. cæruleus sp. nov.

Enasius cæruleus sp. nov.

Female. Length 3 mm. Head, mesonotum and scutellum bright metallic blue; abdomen bluish, with a purple cast. Head broadly transverse, fully three times as wide as thick; viewed from above, the narrowest part of the front occupies less than one-fifth of the width of the head. Ocelli in a large, equilateral triangle, the lateral ones touching the eye margin. Eyes thickly covered with dark pubescence. Occipital margin sharp. Front closely covered with large, thimble-shaped setigerous punctures each bearing a single glistening white seta. Facial depression nearly smooth; the antennal grooves converging above, finely transversely aciculate. Mandibles small, acute, with three teeth; piceous. Palpi black. Antennæ black; scape nearly two-thirds as long as the flagellum, with a broad thin cleaver-shaped expansion below which is as wide as the narrowest part of the front between the eyes. Basal joints of the flagellum very short, rapidly widening and strongly transverse to the first club-joint which is as broad as the dilated scape and about three times as wide as long; from thence the club is very obliquely truncate, the truncate surface flat, so that it appears triangular when seen perpendicularly and when seen from the side the tip of the antenna appears conical. Pronotum narrow, but visible from above as a transverse band of even width. Mesonotum over twice as broad as long, medially fully one-half longer than laterally at the anterior angles of the axillæ; its surface shagreened, with sparse delicate punctures, each bearing a fine black seta; its narrow posterior border entirely smooth. Scutellum about one-fourth longer than the mesonotum; the axillæ separated by only a very delicate suture, well apart at their inner angles; forming together with the scutellum a regularly shield-shaped piece, as long as wide at the base and sculptured like the mesonotum. Median longitudinal furrow of scutellum reaching to the basal fourth. Abdomen short and conically pointed, extending for the length of the scutellum from the tip of the latter.

Second segment quite long, one-third as long as the remaining ones taken together; third with a spiracle bearing two long black bristly hairs; following segments sharply triangularly narrowed, with a very distinct lateral rim. Entire abdomen shining, smooth, or nearly so, with a purplish cast. Legs slender, black; tibiae with indistinct longitudinal brownish stripes; denticles on middle metatarsus minute, but very distinct. Anterior wings strongly infuscated, paler at the apex and posteriorly on the apical one-half. Submarginal vein reaching to the middle of the wing; marginal and postmarginal veins of equal length, together more than one-third as long as the submarginal; stigmal slightly longer than the postmarginal with a small knob at the tip. Posterior wings hyaline; marginal cell terminated at the apical third of the wing.

Described from a specimen collected by Dr. Alexander Petrunkevitch at La Buena Ventura, near Santa Rosa, Vera Cruz, July 13, in sweepings from grass and bushes.