HEMIPTERA HOMOPTERA

By G. W. Kirkaldy.

The few Hemiptera discussed in the following pages were collected merely on account of their being the hosts of certain parasites and were indeed not always in the best condition for describing, being parasitized by Dryinidae, and often dried up.

The thirteen specimens belong to twelve species, eleven genera, and five families. Two genera and seven species are apparently new to science.

The species are as follows:

- I Gypona ramosa sp. nov.
- 2 Oncometopia lateralis (Fabr.)
- Ceratagallia bigeloviae (Baker)
- Poblicia thanatophana sp. nov.
- Scolops cockerelli (Fowler)
- 5 Scolops cockeretti (150 6 Oliarus pima sp. nov.
- Cochise apacheanus g. and sp. nov.
- Amphiscepa bivittata (Sav)
- A. immaculata sp. nov.
- 10 Bruchomorpha mormo sp. nov.
- 11 Picumna ovatipennis (Walker) ?
- Mistharnophantia sonorana g. and sp. nov.

TETIGONIIDAE.

Gypona Germar.

I. ramosa sp. nov.

Allied to G. marmorata Fowler, as regards the position of the ocelli, the condition of the head and tegmina, &c.

Pale green, or greenish-testaceous; vertex with a short, narrow, longitudinal, brownish-yellow line on each side from the ocelli almost to the apical margin. Ocelli brownish-yellow. Pronotum with a transverse, sinuate pale fuscous line, also a blackish dot in the middle on each side below the eyes. Tegmina greenish testaceous, subhyaline, reticulate, all the areas ramose; veins green, margined narrowly with yellowish-testaceous; outer margin vellowish-testaceous, apical margin from apex of clavus to a corresponding point on the opposite side, very narrowly blackish.

Vertex transverse, produced nearly as far in front of the eyes in the middle as its basal length, subangulate, a little shorter than the pronotum, longitudinally sulculate in the middle. Ocelli placed in the middle of the vertex, about as far from the eyes as from one another. Head in profile, acute anteriorly and sublaminate. Tegmina apically acute, without appendix.

Female: ultimate segment somewhat deeply bisinuate, the cen-

tral projection also notched.

Length 87 mill.

HAB. Arizona, Nogales; (Koebele's no. 2466).

The only specimen before me is carded, but the metapleura appear to be lobately ampliate (not at all in the same plane as the subventral pleurites), a character I do not find mentioned in descriptions of the genus.

Oncometopia Stal.

I. lateralis (Fabr.).

O. lateralis (Fabr.) Ball 1902 P. Iowa Ac. VIII, 45.

This species is distributed "from the Mackenzie River and Nova Scotia south throughout the whole continent, and to northern South America at least."

HAB. Arizona, Nogales (Koebele's no. 2445, August).

Ceratagallia Kirkaldy.

1 bigeloviae (Baker).

Agallia bigeloriae Baker, 1896 Psyche VII, suppl. 26. A. bigelovia Osborn & Ball, 1898 Proc. Davenport Ac. Sci. VII,

Previously described from New Mexico, Mexico and California baja. The single specimen is distorted by parasitization, but I think the determination is correct.

HAB. Arizona, Nogales; (Koebele's no. 2457).

FÜLGORIDAE.

Poblicia Stal.

I thanatophana sp. nov.

Allied to P. pallidoconspersa Distant, but the head is partly pale and the tegmina are colored and conspersed differently.

Black; apical margin of vertex and basal margin of frons, testaceous. Sterna and legs minutely speckled with white, the latter with a few larger white spots, also the bases of the lateral spines on the tibiae. Subcostal cell and apical third of tegmina with numerous (mostly transverse) minute hyaline spots. Wings apically hyaline, veins blackish, apical margin narrowly smoky, basal third opaque black, base pale blue. Abdomen laterally, and above (except basally), red, the pleurites spotted with black.

Length 14 mill. to apex of tegmina, closed. HAB. Arizona, Nogales; (Koebele's no. 2519).

Scolops Schaum

Scolops Schaum 1850 Ersch. & Grub., Cycl., Art. Fulg.

Ornithissus Fowler 1904 B. C. A., Hom. II, 114.

Fowler has redescribed Scolops and wrongly placed it in the Issidae.

1 cockerelli (Fowler).

Ornithissus cockerelli Fowler op. c., 122, Pl. 12, f. 14.
Previously recorded from Juarez on the northern frontier of Mexico. Fowler has omitted mention of the fuscous marks on the tegmina, but figures some.

HAB. Arizona, Nogales; (Koebele's no. 2487 Sept.).

Oliarus Stal.

I pima sp. nov.

Blackish, keels of head and pronotum more or less ferruginous. Pronotum (except laterally), tegulae, antennae, the lateral extension apicalwards of the frons, etc., ferruginotestaceous. Tegmina hyaline, veins dark-brown, closely and minutely studded with blackish granules, some of which bear black hairs; subcostal vein ferruginotestaceous, narrowly bordered within with black; stigma black, whitish basally; there is a black spot, or rather suffusion, at the first forking of the brachial vein, and there is some brownish suffusion on parts of the apical third, both of cells and veins. Penultimate segment of rostrum, tibiae and tarsi, posterior margin of sternites, etc., dark ferruginous.

Vertex longer than wide, feebly carinate medianly, scarcely extending in front of the eyes; lateral margins forking at about three-fourths of the length of the eyes, the inner forks connected

with frons by short longitudinal keels before meeting, the fossettes thus being pyriform, rather large, and partly visible dorsally. The frons is much shorter than the clypeus medianly, but is produced laterally nearly as far apically as the middle length of the frons, the apical margin thus being deeply emarginate apically in a rounded manner. Axillary vein of clavus, taken from its curving at the commissure, about three-fourths of the length of the stalk of the anal, running into the anal, basal of the middle of the latter. Brachial vein forked distinctly nearer the base than is the radial. Stigma narrow, elongate triangular. First and second segments of hind tarsi each with 5 uneven, rather large spines.

Length 8 mill. HAB. Arizona, Nogales; (Koebele's no. 2518 Sept.).

Fam. ASIRACIDAE.

Cochise gen. nov.

Vertex very transverse, keels obsolescent, impressed transversely on the basal margin, about one-fifth wider than an eve; with the eyes very distinctly wider than the pronotum. Frons medianly impressed transversely by a deep line, the basal part with 2 widely separated keels (a puncture between them in the middle), uniting on the middle of the apical part, which narrows concavely towards the apex, where it is truncate. Genae almost obsolete. Antennae arising almost at the exterior apical ocular angle, flattened and carinately foliaceous, one-third longer than the maximum width of the frons, first segment wider apically than basally, second five-eighths longer than the first. Clypeus rather swollen, carinate medianly. Pronotum scarcely longer medianly than the head, hind margin obtuse angularly emarginate, median keel entire, a puncture on each side; lateral keels distant apically and basally, arising anteriorly at the interior margin of the eve, curving at an acute angle near the hind margin to meet the eve again, enclosing a puncture. Scutellum with the lateral keeis obsolescent. Legs simple. Tegmina with the radial forked a trifle nearer the base than is the brachial; 7 apical cells; the second and third apical veins have a common base, the third reforking near the apex. Hind tibiae with a small spine near the base, four uneven, large spines at the apex; the spur large and broad, three-sided, each side flat not foliaceous, there are a number of very minute spines, scarcely visible, on one edge. The first segment of the hind tarsi is longer than the others together and has about 6 spines.

I apacheanus sp. nov.

Yellowish, browner on the frons. Clypeus and longitudinal lines on the fore and middle legs dark fuscous, hind legs testaceous. Metanotum and tergites subsanguineous. Tegmina hyaline testaceous, veins and granules concolorous; an elongate spot at apex of clavus, the inner margin broadly of apical third of tegmen, curving around to apex and a long suffused smudge on second apical vein, dark fuscous, but although the veins on these suffused parts are fuscous, the granules remain testaceous.

Pygophor long and narrow, lateral margins parallel.

Length 5 mill.

HAB. Arizona, Nogales; (Koébele's no. 2478).

Unfortunately only a single female, in bad condition owing to parasitization, of this interesting form. It is allied to *Perkinsiella* Kirkaldy and *Aracopus* Spinola, but is very different from anything hitherto described.

ISSIDAE.

Bruchomorpha Newman.

I mormo sp. nov.

Black, partly with a brassy gleam. Legs yellowish, coxae and femora partly at least suffused with blackish. Vertex sublinear. From not very long, not extending outwards farther than the abdomen, in profile. Head nearly one-half higher than its width at the base between the eyes; sublateral keels of from enclosing an oval, curved but not sinuate laterally. Puncturation much as in *B. oculata* Newman (probably generic). Tegmina formed much as in the latter species, or a trifle shorter, truncate apically, venation almost obsolete.

Length (female) 3 mill.

HAB. Arizona, Nogales: (Koebele's no. 2483).

The coloring agrees with the laconic description of *B. nasula* Stal, but the frons is apparently much shorter.

Picumna Stal.

1 ? ovatipennis (Walker).

? P. ovatipennis (Walker) Fowler 1905 B. C. A. Hom. II 128, Pl. XII. f. 29.

A single male may be this, but seems to have a longer vertex and scutellum. Fowler gives no structural details and has confused at least two species, for his var. (f. 30) is certainly not conspecific.

HAB. Arizona, Nogales; (Koebele's no. 2524).

Amphiscepa Germar.

Melichar, in his monograph, does not clearly differentiate between this and *Acanalonia* Spinola, which I believe to be synonymous.

1 bivittata (Say).

HAB. Arizona, Nogales: (Koebele, Sept.). Widely distributed from Canada to Mexico.

2 immaculata sp. nov.

Brownish-yellow, tegmina and legs greenish, wings milkwhite with fuscous veins. Head dorsally twice as broad as long, gently rounded anteriorly, the vertex sublinear, separated from the frons by a transverse keel. Frons apically subrectanglarly (a little acutely) emarginate, not nearly so deeply, however, as in A. bivittata. No median keel on the frons, lateral margins acutely keeled, fairly straight for over half the length. Scutellum with 2 sublateral keels, but no trace of a middle one. Costal margin of tegmina arched.

Length 6½ mill.

HAB. Arizona, Nogales: (Koebele).

Distinguished from any other "Amphiscepa" by the absence of stripes or spots, and from any "Acanalonia" by the short head and absence of a middle keel.

POEKILLOPTERIDAE.

Mistharnophantia gen. 110v.

Vertex transverse, about as wide as the eyes together, subtruncate apically, carinate in the middle, lateral margins sub-

parallel, scarcely extending before the eyes. Frons medianly keeled, and (with the exception of narrow, laterally rounded, lateral margins which are a continuation of the lateral margins of the vertex) raised, sloping flatly backwards and upwards, a part of the base, nearly as long as the vertex, being visible dorsally in front of the latter. This dorsal part of the frons is semicircular and impressed entirely within the margins, and, as implied above, is narrower than the vertex. Antennae small. Pronotum transverse, wider and a little shorter than the head, roundly arched anteriorly, slightly emarginate posteriorly. Scutellum bicarinate. Tegmina strongly decumbent, medianly convex, reaching posteriorly much farther than the abdomen. Costal cell broad, with cross veins; the radial and median springing from a common, short stalk, close to the brachial, but soon forking, the radial almost immediately reforking. The venation is rather obscure and ill-defined in places. There is no proper subapical line. The costal vein runs almost at right angles to the body, then curves roundingly to form the apical margin, almost at right angles again, meeting the commissure at, apparently, a very acute angle. Wings rudimentary (?). Hind tibiae with one spine.

i sonorana sp. nov.

Brownish testaceous; a broad, dark fuscous stripe running from apex of head (dorsally) to hind margin of scutellum. Tegmina opaque, coriaceous, pale brownish yellow, veins partly concolorous, partly dark fuscous.

Length about 35 mill.

HAB. Arizona, Nogales; (Koebele's no. 2498).

Only one specimen in bad condition, unfortunately, of this

curious form; it is parasitized.

It is very Issine in appearance, but the granulation of the clavus and the structure of the head proclaim it to be Poekiliopterine. It is probably allied to *Hypancyius* Fowler, which that author places, apparently incorrectly, in the Issinae.