# FOUR NEW AMERICAN HEMIPTERA. 

By E. Bergroth,<br>Turtola, Finland.

Among some determinanda communicated by Prof. C. F. Baker were the following undescribed species.

## Family Pyrrhocoride.

Largus latus sp. nov.
Broadly ovate, black, above remotely punctured, shortly and sparingly pilose, the impunctate head and the middle of the venter more longly pilose, an oblong impunctate lateral spot near the anterior angles of the pronotum, the commissure of the clavus, the membrane (except border and veins), the posterior border of the metasternum, the whole first ventral segment and the border of the abdomen buff, the broadly pale ochraceous lateral border of the corium not reaching the base, inwardly angularly dilated a little before the middle. Head narrower than anterior lobe of pronotum, eyes shortly stylated, rostrum reaching middle coxæ, second and third antennal joint together shorter than first joint but a little longer than fourth, second half as long again as third. Pronotum at the base twice as broad as the head. Breast rugose. Hemelytra a little shorter than the abdomen, laterally strongly rounded. Anterior femora beneath with one strong spine and some smaller ones. Middle and posterior femora unarmed. Length, \& 15 mm .

Locality: Bolivia.
Structurally allied to L. balteatus Stål which I know only from description, but it is so quite differently colored that it cannot be a variety of that species.

Dysdercus fervidus sp. nov.
Red, above crimson, antennæ, lateral margins of prothorax, a broad subbasal fascia to pronotum, clavus, a fascia just behind the middle and the apical angle of the corium, membrane, and legs (except coxæ and trochanters) black, membrane bordered with white, rostrum gradually becoming piceous towards the tip. Head behind with a fine longitudinal impressed line extending to the base of the tylus, rostrum passing the middle of the third ventral segment, first joint of antennæ distinctly longer than the head, second joint somewhat shorter than first and twice as long as third, fourth rather thick, about as long as first. Pronotum, clavus, and corium punctate, underside of body impunctate. Sixth male ventral segment in the middle very little shorter than fifth and fourth together. Length, or 9.5 mm .

Locality: Cuba (Havana).
Among the numerous American species of this genus I am unable to find a description fitting this pretty little species. Its nearest ally seems to be $D$. fervens Walk.

## Family Myodochide.

Pamera hondurana sp. nov.
Sparingly pilose, black, hind lobe of pronotum dark castaneous, clavus with a white streak near the outer margin, corium white, in the basal half with two longitudinal blackish streaks meeting anteriorly, and a little behind the middle with a rather broad transverse cinnamon-brown band which turns black at the costal margin, an exteriorly widening black fascia occupying the apical margin of the corium, membrane fuscous black with an oval rather obscure whitish spot behind the middle, hind acetabula and posterior angles of metasternum white, abdomen fuscous toward the base, antennæ testaceous, last joint fuscous, rostrum and fore legs dark ferruginous, fore femora blackish toward the base, middle and hind legs black, trochanters and base of femora whitish, tarsi pale fuscous. Head extremely finely rugulose, a little broader than anterior lobe of pronotum, postocular part very short, eyes rather large but moderately prominent, first joint of antennæ reaching apex of head, second joint more than twice the length of first, third distinctly shorter than second, fourth as long as second. Pronotum impunctate, very strongly constricted and deeply transversely impressed behind the middle, basal margin straight, anterior lobe subglobose, not quite twice the length of posterior lobe. Scutellum sloping backwards, its basal half shining, transversely convex, finely and sparsely punctate, apical half dull, impunctate. Hemelytra reaching apex of abdomen, corium with a few almost colorless punctures, its costal margin slightly and broadly sinuate a little before the middle. Fore femora strongly incrassated, with a double row of spines beneath, fore tibio slightly curved; first joint of hind tarsi two times longer than the other joints conjoined. Length, ơ 4.5 mm .

Locality: British Honduras (Belize).
This elegant species is very distinct from the other Central American forms. Owing to the very strongly constricted pronotum it differs somewhat in habitus from most species of the genus.

## Family Velifde.

Rhagovelia bakeri sp. nov.
Above black, beneath greyish black, legs greenish black, somewhat aenescent, pronotum with an apical whitish fascia interrupted in the middle, abdomen at the sides immediately within the margin narrowly and obscurely streaked with yellowish brown, basal part of first antennal joint, anterior acetabula, all coxæ and trochanters, and basal part of fore femora yellow, hind femora at the base above and beneath also tinged with yellow. Head with an impressed median line in front, rostrum passing the middle of the mesosternum, antennæ with the first two joints pubescent, with scattered longer hairs, outer margin of the last three joints straight, inner margin slightly convex, first joint one-half longer than second, third a little shorter than second, fourth hardly shorter than third, pointed at tip. Mesosternum with the ridges between the anterior and the middle coxæ well marked, pubescent, curved inwardly, strongly divergent posteriorly. Abdomen gradually tapering to the tip, not carinated beneath. Legs pubescent, with scattered longer hairs, middle femora thickened toward the base, middle tarsi a little longer than the tibix, the second joint a little shorter than the third, posterior tibix with a short straight spur at the apex.


#### Abstract

Apterous male: Pronotum a little broader than long, rounded behind. Last dorsal segment of abdomen truncate at apex, last ventral segment arcuately emarginate at apex. First genital segment ferruginous beneath at the base. Posterior, femora very strongly incrassate, not reaching the tip of the apical genital segment spined beneath from the apex to a little beyond the middle, the first spine (near the middle) the longest, the following gradually diminishing in length toward the apex. Posterior tibix straight, finely denticulate beneath down their whole length, without large teeth, the teeth of the middle third slightly longer, the apical third slightly narrower than the rest. Length, 4 mm .

Locality: Nicaragua (Granada). Allied to Rh. femoralis Champ., but the antennæ are differently constructed; the venter is not ridged in the middle; the posterior tibiæ have no large teeth, etc.


## NOTE ON THE HABITS OF LIOMYRMEX.

By William Morton Wheeler, Bussey Institution, Harvard University.

The ant genus Liomyrmex comprises four described species, caccus F. Smith, gestroi Emery, aurianus Emery and carinatus Stitz, all from New Guinea, except aurianus, which has been taken hitherto only on the island of Tenasserim, off the coast of Burmah. L. carinatus and gestroi are known only from female specimens, the other two species only from workers. The complete absence of eyes in the latter phase and its testaceous coloration show that these ants must be decidedly hypogæic, but no account of their habits has been published.

Recently Prof. C. F. Baker has sent me from Mt. Makiling, on the island of Luzon, Philippines, several worker specimens, which, except in their slightly smaller size, agree perfectly with Emery's description of the Burmese L. aurianus (Ann. Mus. Civ. Genova, XXVII, 1889, p. 504). Prof. Baker states in his letter that these ants were found in the forest, "abundant with termites-living in the same chambers with these in entire amity." The termites, of which a number were included in the same vial with the Liomyrmex, are workers and soldiers of Termes (Macrotermes) gilvus Hagen, which is widely distributed in the East Indies (Singapore, Java, Sumatra, Borneo, Philippines, etc.). This must be a formidable species, for the larger soldiers measure nearly 10 mm . and are furnished with acute and powerful jaws.


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