Aphis sp.? A small yellowish-green aphid which infested the common Euphorbia of the Bessarabian Steppe. I was unable to procure any winged representatives of this species, although I made several expeditions for that purpose. The apterous specimens have very distinctive abdominal protuberances or spines.

Cryptosiphum artemisiae Buckton. Apterous examples were taken under the leaves of Artemisia on the Steppes in July.

Dryobius croaticus Koch. This fine aphid was found in July on the shoots springing from the stump of an oak tree. According to Buckton, this is its typical habitat. He remarks: "They are usually stated to prefer the branches springing from oak stumps" (vol. iii, p. 76). This species was almost spider-like in its activity, and was numerously attended by ants.

Schizoneura ulmi Linn. Common on elm trees at Odessa in June.

Tetraneura ulmi De Geer. The characteristic flask-shaped galls were found on elms at Odessa in July, but were then all empty.

Zoological Laboratory, Cambridge. August 16th, 1918.

NOTES ON THE DERBIDAE IN THE BRITISH MUSEUM COLLECTION.—I. ZORAIDINAE.

BY FREDERICK MUIR, F.E.S.

(Concluded from p. 177.)

PAMENDANGA Distant.

Both the original description and the figure of the type species are wrong, for the clypeus is longer than the face, and the face is narrow and formed by the two carinae in contact from base to near apex, and it is not centrally carinate. It is synonymous with *Paraproutista* Muir.

P. distanti, sp. n.

Brown; legs lighter, clypeus darker; abdominal tergites with a transverse dark mark across each segment. Tegmina and wings light brown, darker and fuscous over costal and subcostal cells; some faint light marks along costal and in subcostal cells, subcosta and radius red, other veins brown with a slight red tint.

Ventral edge of pygofer straight, lateral edges angularly produced beside the anal segment, the apices curved inward and embracing the anal segment, length of anal segment equal to width at base, triangular, anus in the middle; genital styles longer than the anal segment, broad, dorsal edge produced into an angular process in middle, a groove runs parallel and near to the dorsal edge, ventral edge convex, a round emargination near the apex, apex bluntly pointed and curved inward.

Length 4.2 mm.; tegmen 10.8 mm.

Hab. CEYLON (J. P. Maskeliya).

One male, in the B.M. coll., labelled "Zoraida egregia Melichar," but it is not that species.

P. grahami, sp. n.

Stramineous with a greenish tint; slightly fuscous over lateral portion of the pronotum, apex of rostrum, and tarsi; the green darker over the basal portion of abdomen. Tegmina hyaline with a stramineous tint, with light fascous mottlings, darkest over subcostal cell, veins stramineous, light brown where the fuscous mottling touches them; wings half the length of the tegmina, byaline, veins stramineous.

Ventral edge of pygofer angularly produced, lateral edges subangular beside the anal segment; anal segment long, narrow, anus in middle, basal half tubular, distal half produced into a point sloping ventrad, a small transverse ridge over the anus; genital styles large, broadly sublanceolate, widest in middle, where they are slightly more than half the length; apex narrow, rounded; ventral edge entire, convex to near apex; dorsal edge subangularly produced to middle, where it is produced into a small flattened process with a rounded apex.

Length 3.9 mm.; tegmen 9.6 mm.

Hab. Ashanti, Obuasi (W. M. Graham, iv, 1906); Uganda, Durro Forest (S. A. Neave, x, 1911).

Two males, in the B.M. coll., the one from Ashanti taken as the type.

P. pseudoabscissa, sp. n.

Zoraida abscissa Dist., nec Walk.

Brown, slightly lighter over the carinae of head and thorax, rostrum, legs, and ventral surface; apex of rostrum and genitalia darker; abdomen reddish. Tegmina reddish brown, veins darker; twelve light marks along the costal call, a lighter mark at the base of the fourth, fifth, and sixth sectors; four mall marks in radial cells, the one in the apex slightly larger and extending beyond the vein.

Genital styles abortive; anal segment very minute; lateral margin of genital area produced into a ridge; pregenital plate large, produced well beyond the genital area into a stout quadrate process with a narrow emargination at the apex; the medio-basal area produced conically.

Length 4.5 mm.; tegmen 10.8 mm.

Hab. SULA.

One female (B.M. coll.).

PSEUDOHELCITA, gen. n.

Antennae longer than face, cylindrical or very slightly flattened; arista about one-third from apex; in profile the face produced conically between the eyes; subcostal cell very narrow, radial cell narrow to cross-vein, four cubital veins entering the hind margin, four median sectors all simple. The female genital styles normally developed.

This genus holds the same position to Zoraida Kirk. as Helcita Stal does to Pamendanga Dist.

P. walkeri (Distant).

Zoraida walkeri Dist.

NEODIOSTROMBUS, gen. n.

Antennae slightly longer than face, cylindrical; four cubital veins reaching the hind margin, median sectors all simple. Pronotum long in the middle, the hind margin straight, not emarginate, carinae on thorax very faint.

This genus approaches such forms as Zoraida walkeri Dist., but the straight hind margin of the pronotum is very distinctive.

N. basalis (Walker).

Thracia hasalis Walk.

ZORAIDA Kirkaldy.

I have sunk the genus *Peggiopsis* Muir to a subgenus, and erected another subgenus, *Neozoraida*, for those forms having six cubital veins, as this at present appears to be the most convenient and natural way of dealing with the species, especially as at present I am unable to exactly locate the genus *Peggia* Kirk. (= *Nebrissa* Stål).

Z. distanti, sp. n.

Zoraida sinuosa Dist., nec Boh. .

Antennae one and one-half times the length of the face, narrow, flattened; four cubital veins reaching the hind margin; wings slightly less than half the length of the tegmina.

Light brown, slightly darker over the pronotum and abdomen; pronotum with a few minute pustular marks; abdominal tergites irrorated with fine light spots. Tegmina fuscous over costal, subcostal, radial, and the basal half of radial and claval cells, the infuscation being darker along the media; vein concolorous as the membrane or slightly yellowish, the median sectors somewhat fuscous, the gradate cross-veins fuscous, five small black spots on the veins near apex; wings fuscous, slightly darker over costal area, a small black spot on costa.

Anal segment longer than broad, sides slightly convex, apex roundly emarginate; pregenital plate large, longer than wide, angularly produced on hind margin, the sides of the angle being slightly concave, projecting beyond the base of the styles, slightly tumid along the basal edge.

Length 5 mm.; tegmen 13 mm.

Hab. Portuguese East Africa, Valley of the Kolo River (S. A. Neave, viii, 1913); Natal, Durban.

One female from each locality, the type being from the Kolo River. There are specimens from West Africa in the British Museum which are distinct from this species, and which I consider to be Z. sinuosa; they are both related to Z. pterophoroides (Westw.).

Z. ridleyi, sp. n.

Antennae slightly longer than face, cylindrical; four cubital veins stering the hind margin; wings one-half the length of the tegmina.

In coloration this species is similar to Z. ruftvena Dist. and Z. cumulata (Walk.).

Brown; legs, antennae, and carinae of mesonotum lighter, abdomen thickly incrated with lighter spots. Tegmina light fuscous, thickly mottled with lighter pots, veins reddish, the lighter marks numerous along the median sectors, cumerous in radial cell, and occupying most of the costal and subcostal cells; vings fuscous with reddish veins.

Anal segment long and narrow, sides sloping steeply except at the apex, which is truncate and, in lateral view, curved into a semicircle, anus in the middle of segment, in lateral view deep until the curved apex; genital styles long, narrow, reaching to the apex of the anal segment, narrowest at base and apex, widest in the middle, apex truncate, ventral edge as seen from the side lightly sinuous, entire, dorsal edge angularly produced to the middle.

Length 4.2 mm.; tegmen 10 mm.

9. Tegmina darker in colour than in the male, the light spots not so large. Pregenital plate large, about as long as wide, posterior edge slightly and angularly produced.

Length 4.8 mm.; tegmen 12 mm.

Hab. SINGAPORE (H. H. Ridley, 1903).

One male, the type, and one female, both in the B.M. coll.

Z. kirkaldyi, sp. n.

Zoraida cumulata Dist. nec Walk., Fauna Brit. Ind., Rhynchota, iii, 301.

Antennae a little longer than the face, cylindrical; carinae of face not meeting. In coloration it is very near Z. ridleyi, the brown is darker and on the tegmina the light marks are much smaller along the median sectors and milital veins; a large dark patch in the apical, subcostal, and radial cells.

Wings half the length of tegmina, slightly fuscous with a few small spots along the costal margin.

Anal segment large, a little longer than wide, anus near the base, side subparallel or slightly converging towards the apex, apex truncate with the median half roundly produced, a small ridge runs from beside the anus to each apical corner; pregenital plate considerably longer than broad, in profile concave towards the base, posterior edge moderately and subangularly produced.

Length 5.7 mm.; tegmen 14.4 mm.

Hab. CEYLON, Kandy.

Two females, one of them the type, in the B.M. coll.

Z. aburiensis, sp. n.

Face three-fourths the length of the antennae, antennae cylindrical; four cubital veins entering the hind margin; wings half the length of the tegmina.

Light brown; legs, anal segment, and abdominal sternites lighter; antennae darker; abdominal tergites reddish. Tegmina light brown, veins red, a transverse, diagonal light mark from costa through the middle of radial cell, over the base of the first median sector to the hind margin slightly distad of clavus, a faint light mark in the middle of the cubitus and on hind margin between the median veins; wings fuscous with brown veins.

Anal segment slightly longer than wide, rotundate, anus at base; pregenital plate broader than long, hind margin slightly and broadly angularly produced.

Length 3.7 mm.; tegmen 9.6 mm.

Hab. Gold Coast, Aburi (W. H. Pattison, 1912).

One female, in the B.M. coll.

Z. wallacei, sp. n.

Zoraida walkeri Dist. in part.

Antennae four and one-half times the length of the face, flat, thin, apex pointed, edges crassate, arista subapical; four cubital veins reaching the hind margin; wings one-eighth the length of the tegmina.

Stramineous; antennae and genitalia tinted with red, a small black spot at base of antennae and black on the lateral margins of the pronotum, a small black dot on pleura at the base of abdomen, white over median portion of pronotum. Tegmina hyaline, veins light brown, slightly yellowish over costal and subcostal cells; wings hyaline, veins brown.

Medio-ventral process of pygofer subturbinate, apex pointed, lateral margins of pygofer acutely angularly produced beside the anal segment, length of anal segment two and one-half times the width, anus in the middle, a carina from the middle over the anus runs back to each basal corner dividing the basal portion from the distal half, distad of the anus subspatulate with the apex slightly emarginate; genital styles long, narrow, narrowest at base, apex

pointed, ventral margin convex, entire, dorsal margin with a small round potch in the middle.

Length 4.2 mm.; tegmen 12 mm.

Hab. SINGAPORE (A. R. Wallace).

One male, in the B.M. coll.

ZEUGMA Westwood.

This genus has the wings more than half the length of the tegmina, and the cubital and claval areas are normal with normal claval and cubital reins, and so it does not come into the *Zoraidinae* where I placed it formerly.

PHENICE Westwood.

Phenice was erected by Westwood for three species—Derbe fritilleris Boh., Derbe fasciolata Boh., and Derbe stellulata Boh. The generic description was based upon D. fasciolata Boh., and figures of that species were given and specially referred to. In the same work Westwood remarks:—

"On various previous occasions I have endeavoured to establish a fixed principle relative to the selection of the typical species in genera, established by our predecessors, which combined several distinct forms under one generic name. For this purpose, I have considered that the species which could be proved to have been more especially under the examination of the founder of such genera, ought to retain the old generic name; and where this could not be learned from any particular expression, that we should resort to the first species in the genus."

This constitutes a type fixation, and so Derbe fasciolata Boh. must be the type of Phenice Westw. The two species belong to different ections of the Derbidae: fritillaris to the Zoraidinae and fasciolata to the Cenchreinae.

Note on the habits of Cryptophagus populi Payk.—On July 25th last, while randering about the New Forest in company with Mr. F. Muir, we came across number of burrows of Dasypoda hirtipes, with the bees busy at work, as shown by the frequent upheaval of the sandy soil in the holes made by them. Two smales of the bee were taken home, one living, the other dry and imperfect. These were subsequently pinned, placed in a small box, and forgotten. Some days afterwards, on casually opening the box, a living Cryptophagus populi rus found beneath the imperfect example of the bee, to which it must have been attached when the latter was secured. It is possible that this beetle preys upon the bees, as a mounted Jassid in the same box had been partly devoured by it. In any case, the Cryptophagus must live in association with the Dasypoda. I have twice found specimens of an allied insect, Antherophagus pallens, attached to living Bombi, these beetles being thus carried on the hairs of the bees from the flowers visited by them to their nests. In 1875 the capture of a very long and extremely variable series of C. populi about the