A New Genus and Two New Species of Peloridiidae (Homoptera) from New Zealand

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ABSTRACT

The present paper contains the descriptions of a new genus and two new species of the family Peloridiidae. This family now contains four genera and nine species, and is known to occur only in southern parts of Argentina, Australia, New Zealand, and Tasmania. Two genera and four species are recorded from New Zealand. The types of the new forms described below are to be deposited in the Dominion Museum, New Zealand.

Genus Oiophysa, nov.

Head strongly deflected and inflexed, broadly, roundly excised between the eyes, the excision filled by a short laminate membrane, without a large hyaline areolae in each side, and its anterior margin bi-arcuate and very shortly ciliate; eyes stylated, slightly convergent anteriorly, subglobose; ocelli absent; hind portion moderately thick, with median ridge, becoming subcylindrical laterally and directed a little obliquely anteriorly; anterior membrane distinctly notched at middle, at no place more than one-half as long as rest of head. Rostrum very long, stout. Antennae inserted on ridge beneath and between eyes, three-segmented, the terminal segment longest, the ridge distinctly grooved laterally from base of antennae to eyes; antenniferous tubercles conical.

Pronotum strongly narrowed anteriorly, indistinctly punctate and carinate on disc, the sides and behind coarsely punctate, some places almost areolate in appearance, the hind margin roundly excavated, the front margin straight. Paranota long, wide, slightly reflexed, not produced in front or behind, usually composed of short, wide, rectangular cells, sometimes irregularly divided into smaller cells.

Tegmina (sub-brachypterous form) abruptly widened at base, strongly narrowed posteriorly beyond middle, narrowly produced at apices, only slightly passing apex of abdomen, meeting within a straight line, slightly overlapping a little before apices; moderately convex on disc, the amplicated costal margin wide in front, there biseriate, thence posteriorly uniseriate and slightly reflexed. Cells large, more or less hyaline, the veins thick, raised, prominent. Wings greatly reduced or absent. Legs nearly cylindrical, moderately large; mesoscutum usually partly visible.

Genotype, Oiophysa ablusa n.sp., from New Zealand.

This genus may be separated from *Peloridium* Breddin (1897), *Xenophyes* Bergroth (1924), and *Hemiodoccus* China (1924) by the very short, non-areolate frontal membrane of the head, the anterior margin of which is shortly ciliate. The pronotal margins are not produced anteriorly. The hind margin of frontal membrane is composed of a row of tiny areolae (visible under high power).

Oiophysa ablusa, n.sp.

Fig. 1

General coloration brown, the paranota and costal margins of tegmina lighter, yellowish-brown, the areolae hyaline.

Eyes reddish. Head with an indistinct median carina which extends forward a little on frontal membrane, not deeply notched at middle, broadly rounded and arcuate on each side, at each side in front slightly protruding beyond front margins of eyes.

Pronotum slightly rugulose, truncate in front, roundly excavated behind, with median carina on disc, the sides narrowed anteriorly, the width of front margin three-fifths of hind margin; paranote wide, long, with lateral margins broadly rounded; areolae wide, largely rectangular, about three times as wide as long, some of the areolae at times divided into small cells.

Rostrum long, stout, brown, extending to base of metasternum. Legs brown, moderately long, slender. Scutellum raised, wider than long. Mesoscutum partly exposed.

Tegmina abruptly widened at base, very strongly narrowed posteriorly behind middle, narrowly rounded at apices; lateral margins abruptly expanded at base, there biseriate, uniscriate posteriorly, the widest part with one large, long cell within; cells in rest of tegmina large, the veins strong and raised, the areolae largely sub-opaque.

Length, 3.00 mm.; width, 1.70 mm. (sub-brachypterous form).

Type (male), allotype (female), and paratypes taken from moss and lichens, Leslie Valley track, 3000 feet elevation, 24th February, 1948. Coll. J. T. Salmon.

This species is very distinct and easily separated from the other peloridiids by the short frontal membrane of head. The hind margins of head on each side are obliquely narrowed anteriorly, which places the eyes a little distance in front of the anterior margins of paranota.

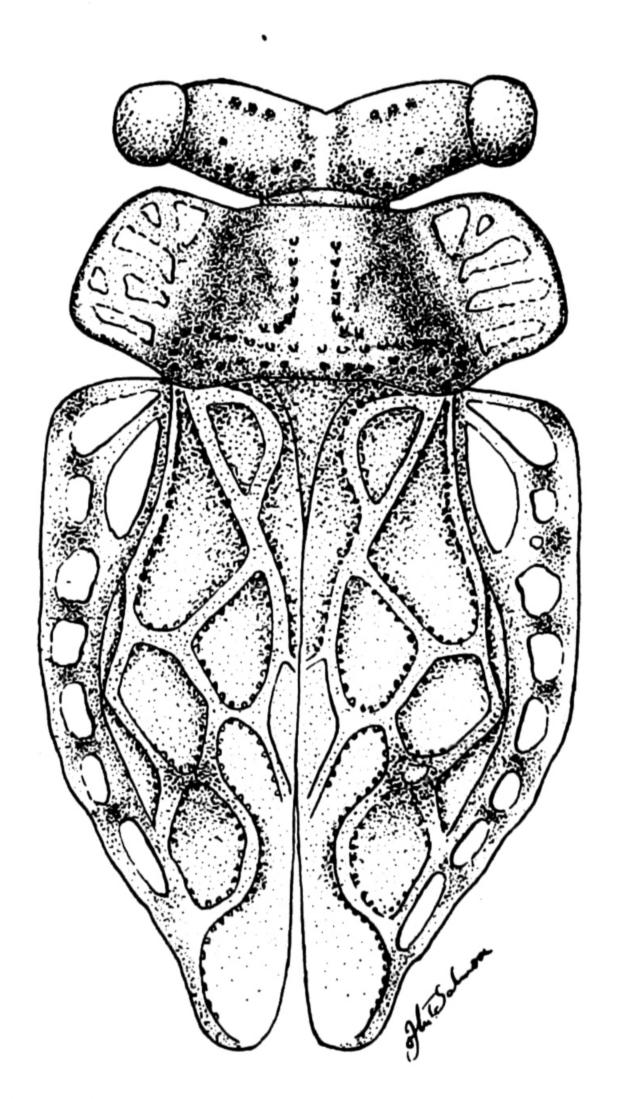


Fig. 1.—Oiophysa oblusa n.sp. drawn from Paratype.

Oiophysa fuscata, n.sp.

Fig. 2

Form and size very similar to O. ablusa. Head stramineous-brown, with median ridge, rather coarsely punctate towards the eyes; impunctate at middle; anterior membrane very narrow, about one-third as long as rest of head, bi-arcuate, not deeply notched at middle, shortly ciliate along front margin, without large areolae but finely areolate along hind margin; hind portion becoming subcylindrical laterally, slightly reflexed and directed anterio-laterally so as to leave a little open space between it and the front margins of paranota.

Pronotum largely dark fuscous, with disc raised, sparsely punctate and longitudinally ridged, impressed on each side of disc, the sides and behind very coarsely punctate, almost reticulate in appearance behind, the hind margin roundly excavated; paranota moderately wide, a little narrower in front, with outer margins widely rounded, the areolae irregularly arranged and mostly divided into areolets. Scutellum a little wider than long, punctate, dark fuscous, stramineous at apex.

Tegmina testaceous, the veins stramineous, stout, raised, with short cilia along sides; convex on disc, slightly darker, the arcolae large, more or less hyaline; explanate margin wide basally, there with one large long areolae within and three or four smaller arcolae along margin; then beyond base moderately wide, uniseriate, slightly reflexed with transverse veins dark fuscous, the darker colour of veins spreading a little into the arcolae. Venter dark fuscous. Rostrum brown, extending on first venter.

Length, 3.00 mm.; width, 1.65 mm.

Type (female; sub-brachypterous), Mount Arthur tableland, taken on lichens inside of cave, 20th February, 1948. Coll. J. T. Salmon.

This species is very closely related to O. ablusa, n.sp., but easily separated by fuscous colour marking, narrower paranota, and narrower frontal membrane of head. There is also a little open space between eyes and paranota. The tegmina are narrowed apically as in ablusa, and only slightly longer than abdomen. The hind portion of the pronotum is much more corsely punctate than in ablusa.

This is the first record of a peloridiid living on moss and lichens inside a cave. The colour markings make O. fuscata a rather striking species. It is also interesting to note that four of the nine known species of peloridiids of the world were described from New Zealand. Closer collections in other southern regions will undoubtedly reveal several more new species.

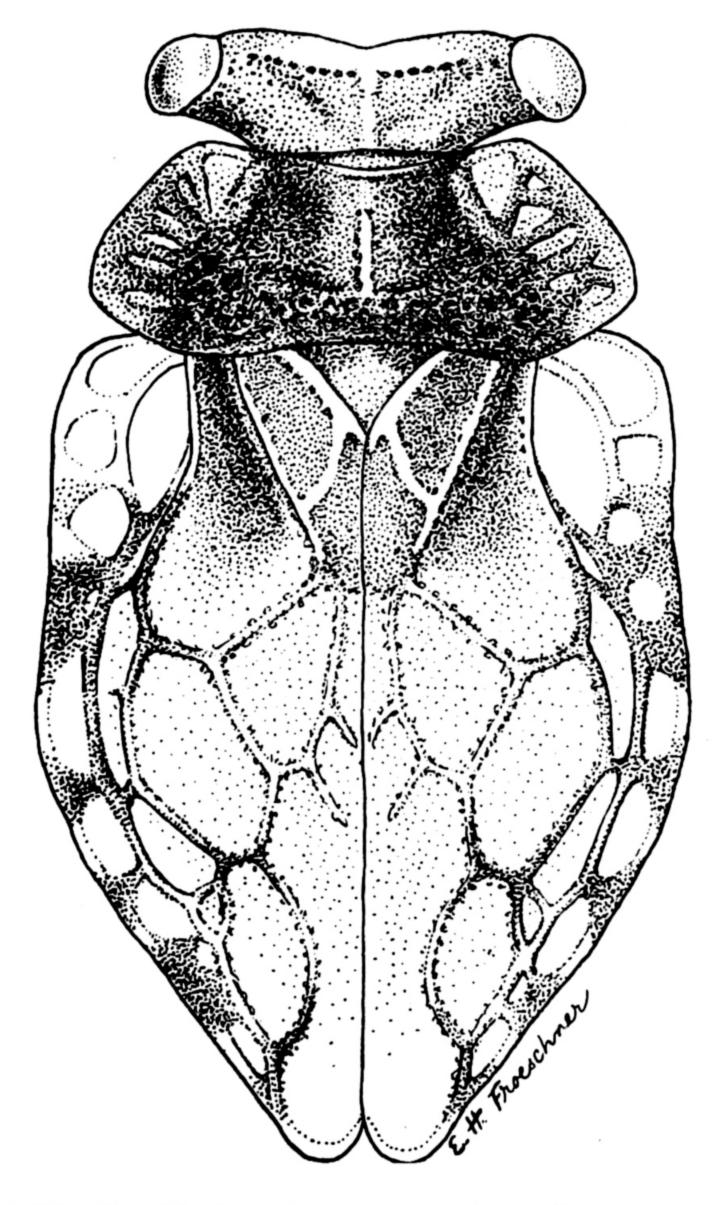


Fig. 2.—Oiophysa fuscata n.sp. drawn from type.