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# A New Species of *Notuchus* (Homoptera, Fulgoroidea, Delphacidae) from Lord Howe Island

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Figures 1-9

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Through the kindness of Dr J. W. Evans, I have been able to examine a male Delphacid taken in moss at the summit of Mt Gower, Lord Howe Island. This has proved to represent a new species of the Asiracine genus *Notuchus*, and is described below. It has become evident during this study that some of the features originally used to define the genus are of no more than specific value, and the opportunity is taken to provide a revised definition.

## **Notuchus** Fennah

Fennah, 1969: 32; type species, *Notuchus risioides* Fennah, 1969.

Form ovate, depressed, nearly twice as long as broad. Bodily length about 4.5 mm. Vertex broader than long, anterior margin distinctly convex, posterior margin transverse, disc medially carinate in basal half. Frons slightly longer than broad, widest in distal third, a pair of sublateral carinae closely approximated to lateral margins, and sometimes uniting with them and a pair of well-defined arcuate submedian carinae; median carina absent; clypeus tricarinate; rostrum long, much surpassing post-trochanters; ocelli absent, genae narrow; antennae attaining level of middle of clypeus with segments subequal, basal segment sub-cylindrical, slightly flattened dorsally. Pronotum with anterior margin between eyes transverse or shallowly convex, posterior margin shallowly concave, lateral lobes extending laterad almost horizontally, disc tricarinate, lateral carinae concave, almost attaining posterior margin, a small impression in each compartment of median disc, and a more prominent impression near mesal edge of each lateral lobe; mesonotum about twice as broad as long, tricarinate; tegmina brachypterous, about as broad as long, shallowly convex, coriaceous, costal margin in basal half inflected mesad, apical margin transverse or nearly so, venation coarse, more or less densely reticulate; wings absent; femora and tibiae of fore and middle legs a little compressed, post tibiae each laterally trispinose and with four or five spines apically, spur subulate, moderately long; basal metatarsal segment half as long as post-tibia, with four teeth at apical margin and a further tooth basad of the remainder; second metatarsal segment with three teeth apically; abdomen depressed, terga medially carinate and with two or four supernumerary carinae, ninth tergum of male roofed over by eighth tergum. Anal segment of male short, collar-like. Pygofer rather short.

The most distinctive features of the genus are the double lateral margins of the frons, the subhorizontal carriage of the lateral lobes of the pronotum and the presence of an impression on each lobe. The dentition of the hind legs indicates that *Notuchus* belongs to the group of Asiracine genera headed by *Ugyops*, and it is fortunate, for

purposes of comparison, that truly brachypterous species of *Ugyops* exist. These include *U. pelorus* Fennah from New Zealand and *U. raouli* from the Kermadec Is. and serve to show what morphological changes occur in *Ugyops* as an accompaniment to brachyptery and that they do not significantly narrow the gap between the two genera.

***Notuchus monticola* sp. n.**

Figs 1-9

*Description.*—Male. Vertex broader at widest part (just before eyes) than long in middle line (1 : 1.25), strongly produced before eyes, anterior margin deeply subacutely convex, confluent with lateral margins and slightly elevated, posterior margin transverse, disc shallowly impressed medially in distal half, a broad median carina weakly present in basal half; frons slightly longer in middle line than broad (1.1 : 1), widest at about four-fifths from base, submedian carinae replacing lateral margins in basal fifth, lateral margins each formed of two narrowly separated fine ridges (representing the sublateral carinae and the true lateral margins) on each side from level of lower margin of eyes to widest part of frons, median carina absent, median disc of frons finely rugulose, submedian carinae each nearer to lateral margin than to middle line of frons; antennae with basal segment longer than broad at apex (about 2.4 : 1), subcylindrical, very slightly flattened on upper surface, second segment as long as first, slightly expanding distad; tegmina about as long as broad, subquadrate, not covering fourth abdominal tergum, apical and anal angles broadly rounded, venation irregular, densely reticulate, no longitudinal veins or claval suture discernible.

Antennae, vertex, pronotum, mesonotum and abdominal terga, except for six small piceous spots on each tergum, orange brown; frons, except for five round pale spots near each lateral margin, clypeus, except for a tawny spot on each side distally, genae below antennae, pleura, coxae at base and apex, femora distally, and abdomen ventrally except for lateral margins and an ovate spot near each lateral margin, and pygofer except in posterior half of ventral surface, dark reddish brown; tegmina dull yellowish-brown.

Anal segment of male about as broad as long, deep, collar-like. Pygofer rather short, lateral margins a little produced in an acute angle, ventral margin produced caudad at middle in a broad, shallow subquadrate lobe. Genital styles in ventral view of genitalia narrow, slightly widening distad, strongly curved mesad in basal third, weakly incurved in distal two-thirds and meeting in middle line apically.

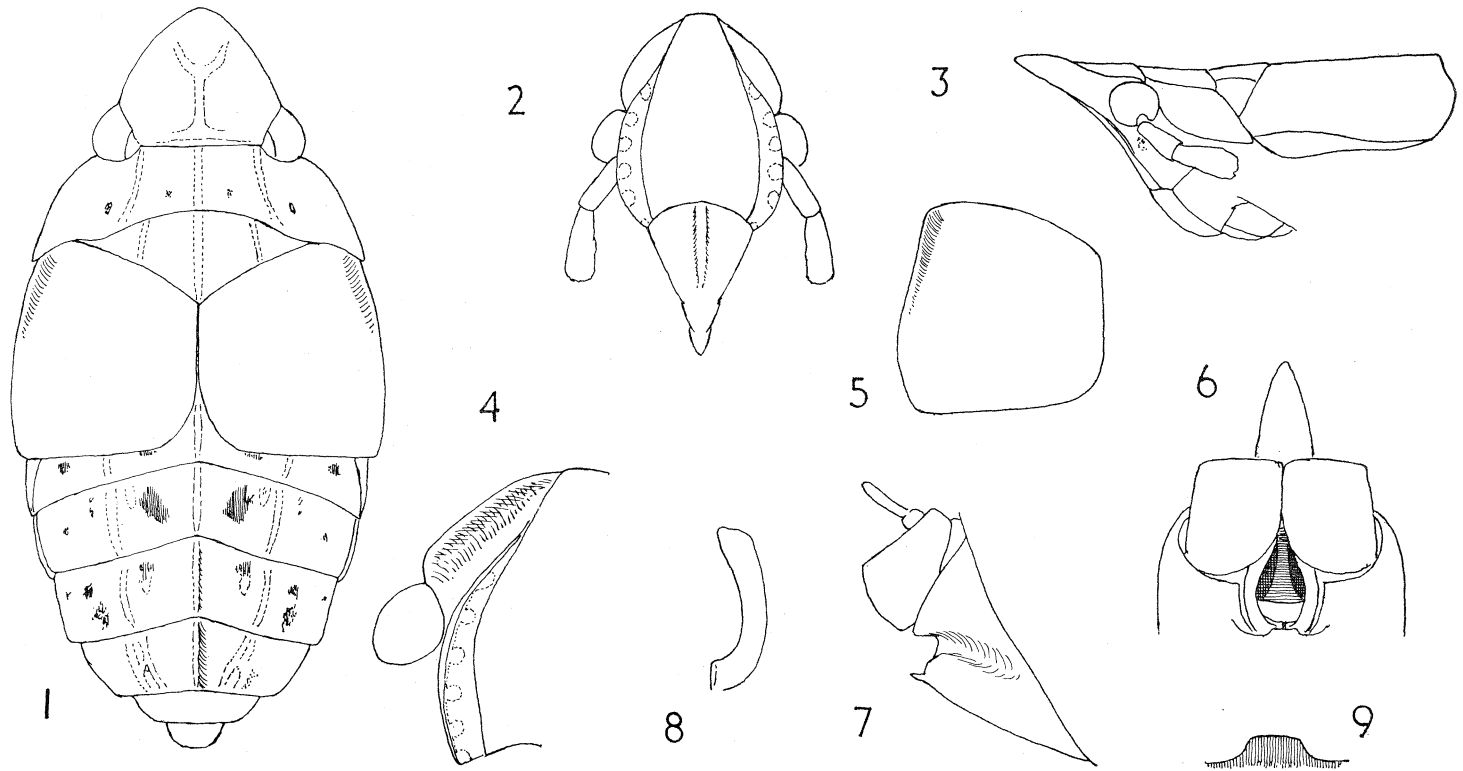
*Type material.*—Holotype male, length 4.5 mm; tegmen, 1.3 mm. Summit of Mt Gower, Lord Howe Island, in moss, July 1971, coll. J. Disney, in Australian Museum.

*Remarks.*—This species differs from *N. risioides* in the shape and carination of the vertex and frons, the shape and venational pattern of the tegmina, the presence of a medioventral process on the pygofer, and the shape of the genital styles.

The discovery of this species establishes a link, hitherto unsuspected, between the fulgoroid faunas of Lord Howe Island and New Caledonia. It will clearly be of interest to ascertain whether a native species of *Notuchus* or one of *Ugyops* occurs on Norfolk Island.

**REFERENCE**

- Fennah, R. G., 1969. Fulgoroidea (Homoptera) from New Caledonia and The Loyalty Islands. *Pacif. Ins. Monogr.*, 21: 1-116.



Figs 1-9. *Notuchus monticola* n. sp.—1, dorsal view of body; 2, frons and clypeus; 3, head, pronotum, mesonotum and tegmen, left side; 4, margin of frons, right side, anterolateral view, showing the two narrowly-separate carinae at margin not quite uniting at their dorsal extremity with right submedian carina; 5, tegmen; 6, male genitalia, posteroventral view; 7, the same, right side; 8, right genital style, posteroventral view; 9, medioventral process of pygofer, ventral view, with portions of narrowly infuscate posterior margin.