A NEW SPECIES OF UDEOCORINI (LYGAEIDAE: RHYPAROCHROMINAE) FROM NEW ZEALAND

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(Received for publication, 18 February 1971)

Summary

A new species of *Udeocoris* from New Zealand is described and figured. This is the first record of this Australian genus outside Australia, and the first record of the tribe Udeocorini in New Zealand.

INTRODUCTION

Five tribes of the lygaeid subfamily Rhyparochrominae are previously recorded from New Zealand (see Eyles, 1970): Targaremini, Stygnocorini, Drymini, Myodochini* and Rhyparochromini. Collecting in the Taupo-Rotorua area in November 1970 revealed the presence of an additional tribe, the Udeocorini, as an endemic member of the Australian genus *Udeocoris* Bergroth.

The tribe Udeocorini was erected by Sweet (1967) to contain the Australian brachypterous Myodochini studied and figured by Gross (1962) and six other genera previously in the Myodochini. Both tribes have abdominal spiracles II, III and IV dorsal, and V, VI and VII ventral, the Udeocorini being distinguished from the Myodochini by the presence of inner laterotergites between the connexivum and tergites of the abdomen. The tribe contains 13 genera, nine occurring in Australia, and one in each of Fiji, Chile, Brazil and Guatemala, and United States of America and Hawaii (Slater, 1964; Sweet, 1967). The Udeocorini may be distinguished from other tribes in the subfamily with the key provided by Sweet (1967).

Udeocoris Bergroth 1918 (Figs 1-7)

Bergroth, Annals hist.-nat. Mus. natn. hung. 1918 16: 310 (Original description).

Gross, Rec. S. Aust. Mus. 1962 14 (2): 376, 389–393 (Key; Redescription; Figs dorsal view).

^{*} The New Zealand species, *Remaudiereana inornata* (Walker, 1872), has been revalidated by Scudder (1970).

The points given below are to be regarded as additional to the redescription given by Gross (1962).

Small to medium sized insects with head and much of pronotum black and shining.

Head a little wider than long, pentagonal, broad and convex across paraclypeal lobes which extend well forwards between first antennal segments (Fig. 1); head trichobothria prominent, in particular two in front of ocelli and two mid-way along tylus; there are also about six at tip of tylus and one in front of each eye; sides between anterior margin of eye and base of antenna converging; eyes touching posterior margin of pronotum; bucculae small and triangular, about as long as width of first rostral segment, but immediately shortening and continuing as low carinae joining and ending in a V at level of middle of eyes.

Pronotum with extremely narrow lateral carinae, turned upwards; anterior margin with narrow bevelled border.

Fore femur antero-ventrally with full or half row of spines; fore tibia in male curved throughout, greatly expanded at apex, with ventrally at apex stout double-toothed spine and three bristle-like spines; ventrally fore tibia with double row of serrations and postero-ventrally row of bristle-like spines; fore tibia in female curved over total length (not greatly expanded at apex), with bristle-like spines.

Aedeagus (Fig. 6) with sclerotized phallotheca, conjunctiva of medium length, two main wing-like lobes on vesica, a cupped helicoid process of 2·5 to 3·0 turns, several free turns of the duct beyond helicoid process, flared at secondary gonopore. Paramere (Fig. 7) with narrow, slightly curved blade. Dorsal surface of genital capsule with, above articulation of each paramere, a narrow finger-like projection covered with long hairs on inner edge.

Spermatheca (Fig. 4) of *Rhyparochromus*-type with bulb, spiral, wider portion with sclerotized annulations and thin wall, and a basal narrow portion with thick wall; ring sclerites present on floor of genital capsule.

The main characters of *Udeocoris* are: the absence of a transverse impression; the fore tibia which is curved throughout and in the male expanded apically with a stout tooth from the ventral apical corner; the head shape, which is pentagonal with broad but only gradually tapering across the forward extending paraclypeal lobes; and the prominent head trichobothria.

Udeocoris is similar to Euander Stål but is distinguished by the absence of a transverse impression, the non-triangular head, and the apical position of the male fore-tibial stout spine (preapical, one-sixth from apex, in Euander). Porander Gross has the head, pronotum and scutellum coarsely and densely punctate, lacks the fore tibial-spine and has a

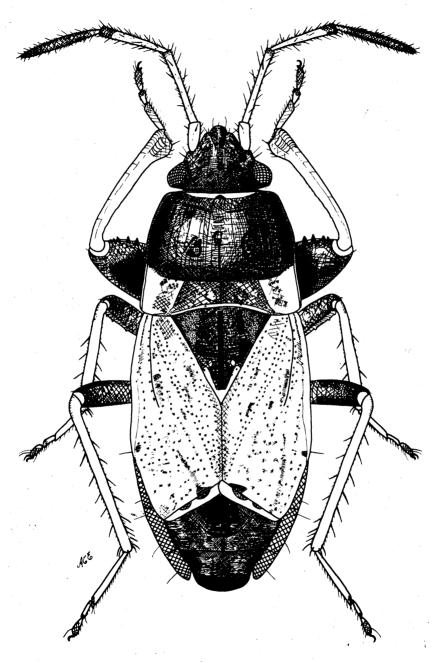
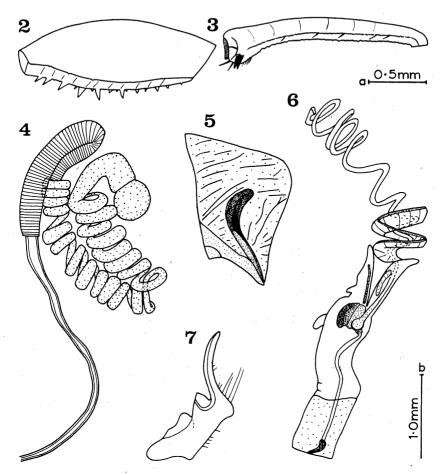


Fig. 1—Udeocoris levis n.sp. dorsal view drawn from holotype male.



Figs 2-7—Udeocoris levis n.sp. Fig. 2, left fore femur of holotype male, posterior and slightly ventral view; Fig. 3, left fore tibia of holotype male, posterior face; Fig. 4, spermatheca of paratype female; Fig. 5, ostiolar peritreme and evaporatorium of holotype male; Fig. 6, aedeagus of paratype male (near Taupo); Fig. 7, left paramere of paratype male.

transverse impression. Fontejus Stål has the fore-tibial spine near the middle, and has the head wider than the anterior of the pronotum which is long and narrow. In Cryptocoris Gross the fore femora are not incrassate, whilst in Telocoris Gross they are unarmed.

The genitalia of Udeocorini have not previously been figured, but the aedeagus of *Udeocoris* is of the same general form as that of *Myodocha serripes* Olivier (Myodochini) figured by Ashlock (1957).

Udeocoris levis n.sp. (Figs 1-7)

COLOUR: Black, with light brown hemelytra (Fig. 1). Head black, shining; first antennal segment pale; second and third segments pale with narrow dark apical annulation; fourth segment dark, usually orange at base; rostrum dark; bucculae brown at longest part, remainder black.

Pronotum black, and shining in anterior lobe with yellow submarginal transverse streak at anterior between level of inner margin of eyes; posterior lobe with lateral yellow stripe, sublateral dark stripe, another yellow stripe and large remaining central portion dark (in one female pale with five longitudinal dark stripes). Scutellum black with pale apex and often two lateral, subapical orange spots.

Hemelytra pale stramineous with brown punctures and some dark blobs or streaks at middle and base of clavus and middle and apex of vein R+M. Membrane pale with two brown spots.

Connexivum and abdominal tergites black; abdomen ventrally black; ventral surface of thorax black; posterior upper corner of propleuron yellow; posterior margins of pleurae light brown; coxal covers pale; coxae brown; femora black with extreme apices pale; mid and hind femora brownish-orange basally; tibiae and first tarsomere pale; second and third tarsomeres dark (sometimes second partly pale).

STRUCTURE: Brachypterous form (Fig. 1). All measurements in mm; those for female in brackets.

Head a little wider than long, $1\cdot10:0\cdot96$ ($1\cdot17:1\cdot00$); width of vertex $3\cdot5x$ eye width, $0\cdot7:0\cdot2$ (female $3\cdot9x$, $0\cdot77:0\cdot20$); anteocular length greater than eye length, $0\cdot50:0\cdot35$ ($0\cdot50:0\cdot35$); sides between anterior margin of eye and base of antenna markedly converging; dorsal surface finely wrinkled; ventral surface shallowly rugulose; antennal segments $0\cdot4:0\cdot9:0\cdot8:0\cdot9$ ($0\cdot4:0\cdot9:0\cdot8:1\cdot0$), first segment with only one-fourth of its length extending beyond tip of tylus; first antennal segment with long bristles and short pubescence; remaining segments with long erect hairs (not as long on fourth segment) in addition to short pubescence; rostrum reaching mid coxae, first segment reaching and slightly surpassing base of head; rostral segments $0\cdot8:0\cdot8:0\cdot5:0\cdot4$ ($0\cdot8:0\cdot8:0\cdot5:0\cdot4$).

Pronotum wider than long, 1.7:1.4 (1.74:1.24); anterior portion considerably longer than posterior portion, 1.05:0.35 (0.9:0.34); sides sub-parallel, scarcely diverging, faintly convex on anterior lobe, with weak sinuation between anterior and posterior portions; anterior margin straight (faintly concave in some females); posterior margin concave; anterior lobe portion shining, smooth and impunctate except for narrow band of punctures behind anterior pale streak, two shallow depressions near middle and one towards each anterior corner; posterior lobe portion punctate except on lateral yellow area.

Scutellum about as wide as long, $1 \cdot 1 : 1 \cdot 1 (1 \cdot 4 : 1 \cdot 2)$; sparsely punctate, with broad granular area in basal angles. Claval region with two outer rows of punctures, one to two inner rows with irregular punctures in between; claval suture lacking; length of claval commissure 0.80 to 0.95. Corium extending onto tergite VI. Membrane greatly reduced, length measured at right angles from corial apical margin, 0.15; extending onto tergite VI, but where both membranes meet in middle, the border between tergites IV and V is just visible. Posterior abdominal scent gland and most of tergite VI are visible.

Prosternum coarsely punctate in anterior one-third (one-half in female) and with swelling in middle before fore coxae in both sexes; ostiolar peritreme (Fig. 5) crescent-shaped, near vertical, curving slightly forwards then backwards, but not sharply curved back; ventral surface of abdomen lightly punctate.

Fore femur in male (Fig. 2) antero-ventrally with full row of 14 to 16 spines (usually with one small spine between two larger spines, but in basal half with two small spines between); postero-ventrally with two or three tubercles apically; mid and hind femora in male antero-ventrally with full row of small tooth-like spines; fore tibia in male (Fig. 3) curved throughout, greatly expanded at apex, with ventrally at apex stout double-toothed spine and three bristle-like spines. Fore femur in female antero-ventrally with row of spines, postero-ventrally unarmed; mid and hind femora in female with one or two bristle-like spines near apex; fore tibia in female curved over total length, with bristle-like spines.

Aedeagus (Fig. 6) with two small pointed lobes ventrally on distal part of conjunctiva; ejaculatory reservoir with large body and large, broad wings, but the neck is spherical with duct immediately reducing to usual width and not gradually tapering; wing-like lobes with sclerotized rod on one side; ventral portion of vesica before helicoid process with sclerotized region; terminally seven free turns. Paramere as in (Fig. 7).

Spermatheca (Fig. 4) with approximately 18 turns in the spiral which doubles back on itself; portion with sclerotized annulations also bent back on itself in specimen examined.

Size: male: length 4.95 to 5.70; width 1.85 to 2.15; female length: 5.25 to 5.75; width 2.0 to 2.2.

Holotype male, size 5.70 x 2.15; and allotype female (both brachypterous) collected 14 miles north of Taupo on roadside in front of forested area near Kaimanawa Road, 17.XI.1970, A. C. Eyles, under *Pimelea prostrata* (J. R. et G. Forst.) Willd. Six paratypes (all brachypterous); two males and three females same data as holotype; one male on sand and gravel shore of Lake Rerewhakaaitu, 17.XI.1970, A. C. Eyles, amongst thin patch of mixed weeds.

DEPOSITION OF TYPES: Holotype, allotype and most paratypes in Entomology Division, D.S.I.R., New Zealand; one paratype male in South Australian Museum.

D. levis is distinguished from the Australian U. rolandi (Distant) by the smooth, impunctate anterior-lobe portion of the pronotum, black connexivum, pale first antennal segment, sub-parallel sides of pronotum, and usually by the non-striped but dark mid region of posterior part of pronotum.

ACKNOWLEDGMENTS

Grateful acknowledgment is made to Mr G. F. Gross of the South Australian Museum for confirming that the New Zealand species is distinct from *U. rolandi* and for information on the fore tibial characters of *Euander*, and to T. W. Rawson, of Botany Division for identifying the *Pimelea* species.

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