



A new genus, *Zeoliarus*, for the endemic New Zealand species *Oliarus atkinsoni* Myers and *O. oppositus* (Walker) (Hemiptera: Fulgoromorpha: Cixiidae: Cixiinae: Pentastirini)

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The New Zealand cixiid planthoppers were revised by Larivière (1999) who noted that further systematics work was required on a world basis or at least in an Australasian context before the position of New Zealand genera could be determined. As a consequence, most existing generic concepts were accepted by Larivière (1999), including the placement of two species in *Oliarus* Stål, 1862, a well-known catch-all pentastirine genus with species from all over the world.

Several attempts have been made in recent years by various authors to divide *Oliarus* (*sensu lato*) into more natural Palearctic, Ethiopian or Nearctic genera.

In 2001, Emeljanov provided a new definition for *Oliarus* (*sensu stricto*). This was followed by a re-examination of the type material of *O. walkeri* (Stål, 1859), the type species of *Oliarus*, and the provision of a supplementary description of the male genitalic morphology by Hoch (2005).

The morphological attributes of *Oliarus* (*sensu* Emeljanov 2001) and of *O. walkeri* type specimens studied by Hoch (2005) have been reported by Löcker *et al.* (2006: 21) and applied to their recent revision of the Australian Pentastirini fauna.

Löcker *et al.* (2006) applied Emeljanov's strict concept of *Oliarus* to all Australian pentastirine species characterised by the 2nd hind tarsomere bearing 5 (rarely 6) apical teeth and no platellae, and the hind tibiae possessing 2 lateral spines. These authors noted that "this last feature [2 lateral spines on hind tibiae] separates them [species retained in *Oliarus*] from all other Australian Pentastirini which have 3–4 lateral spines." Characters of the male genitalia were found to vary enormously among Australian taxa and to deviate somewhat from the configuration seen in the type species of *Oliarus*. Löcker *et al.* (2006) used this argument to support the creation of species groups to accommodate Australian *Oliarus* (*sensu* Emeljanov 2001).

The New Zealand species *Oliarus atkinsoni* and *O. oppositus* are characterised by the 2nd hind tarsomere bearing 13 apical teeth in addition to 8–10 platellae, and the hind tibiae possessing 2–3 lateral spines, thus differing markedly in chaetotaxic combination from true *Oliarus* species. The configuration of the male genitalia of the two New Zealand species differs also from the condition seen in Australian *Oliarus* as characterised by Löcker *et al.* (2006).

The revision of the Australian Pentastirini by Löcker *et al.* (2006) revealed only one species, *Pentastiridius felis* (Kirkaldy, 1906), with platellae on the 2nd hind tarsomere, which does not match the New Zealand taxa in other characters. A survey of the world literature suggested several Pentastirine genera with platellae on the 2nd tarsomere, but no correlation could otherwise be found with the characteristic morphology of the New Zealand taxa.

The two New Zealand endemics previously assigned to the pentastirine genus "*Oliarus*" clearly do not belong in this genus. Furthermore, they cannot be assigned to any other described pentastirine genus. Consequently, a new genus, *Zeoliarus*, is described to accommodate these species hereby listed as two new combinations: *Zeoliarus atkinsoni* (Myers, 1924) and *Zeoliarus oppositus* (Walker, 1851).

The generic description included below is written using the morphological terminology of Löcker *et al.* (2006) and a similar format allowing easy comparison with taxonomic descriptions provided in the Australian Pentastirini revision.