

The Amphipod Genus *Arcitalitrus* (Crustacea: Amphipoda: Talitridae) of New South Wales Forests, With Descriptions of Six New Species

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ABSTRACT. Until now, the genus *Arcitalitrus* has been restricted to three species, *Ar. bassianus* Friend, 1987, *Ar. dorrieni* (Hunt, 1925) and *Ar. sylvaticus* (Haswell, 1879). We redescribe the type species *Ar. sylvaticus* (Haswell, 1879) and describe six new species (*Ar. belbucca*, *Ar. bundeena*, *Ar. moonpar*, *Ar. nana*, *Ar. orara*, and *Ar. thora*) from New South Wales state forests and the Royal National Park, near Sydney.

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Including this paper, 32 species of terrestrial Talitridae (landhoppers) are described from Australia (Haswell, 1879; Bousfield, 1976; Friend, 1979, 1982, 1987). Most species are known from Tasmania (Friend, 1979, 1987). Apart from introduced terrestrial species, the New South Wales fauna appears to be restricted to species of *Arcitalitrus* and *Agilestia* and species of the former apparently dominate the amphipod component of the forest floor community. Including the new taxa described here, 12 species of talitrids are known from New South Wales: *Arcitalitrus belbucca* n.sp., *Ar. bundeena* n.sp., *Ar. dorrieni* (Hunt, 1925), *Ar. moonpar* n.sp., *Ar. nana* n.sp., *Ar. orara* n.sp., *Ar. sylvaticus* (Haswell, 1879), *Ar. thora* n.sp., *Agilestia hylaea* Friend, 1982, *Parorchestia gowerensis* Bousfield, 1976, from Lord Howe Island, and the introduced species *Talitroides alluaudi* (Chevreux, 1901) and *T. topitotum* (Burt, 1934).

Hurley (1975) established the subgenus *Talitrus* (*Arcitalitrus*) for *T. sylvaticus* Haswell, 1879, a terrestrial species originally known from Rooty Hill, just west of Sydney, New South Wales. Friend (1987) elevated the subgenus to generic status and included two additional

species, *Arcitalitrus dorrieni* (Hunt, 1925) from Blackheath, New South Wales and *Ar. bassianus* Friend, 1987, from Victoria and northwestern Tasmania. The type species, *Ar. sylvaticus* (Haswell, 1879) has never been precisely described. In this paper, we redescribe *Ar. sylvaticus* based on new collections from the type locality and establish a neotype to distinguish it from other closely related species.

Arcitalitrus appears to have two groups. The “Sylvaticus” species group is defined by gill 6 that has a convoluted anterior margin and a subapically incised posterior margin and the rami of pleopod 3 that are subequal in length to the peduncle. This group contains *Ar. bassianus*, *Ar. belbucca*, *Ar. nana*, *Ar. orara*, and *Ar. sylvaticus*. The “Dorrieni” species group contains *Ar. dorrieni* and *Ar. moonpar* and is defined by epimeron 2 that is longer than epimeron 3, a subquadrate posteroventral corner on epimeron 3 and an entire telson. The long epimeron 2 and the subquadrate corner of epimeron 3 are homoplastic characters that also occur in *Ar. bassianus*. *Arcitalitrus bundeena* and *Ar. thora* apparently belong in neither group. Neither species has the characters that define the “Sylvaticus” and “Dorrieni” species groups.

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