



## A new terrestrial talitrid genus from the Philippine Islands (Crustacea, Amphipoda, Talitrida, Talitridae) and the designation of two informal subgroups

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### Abstract

*Curiotalitrus*, a new genus of terrestrial land-hoppers (Amphipoda, Talitridae) is described from rain-forests in the Philippines. *Curiotalitrus* includes one species: *C. curioi* (Javier & Coleman, 2010). Informal *Talitrus* and *Orchestia* groups are proposed based on the condition of the male second gnathopod.

**Key words:** Crustacea, Amphipoda, Talitridae, Philippines, taxonomy, new genus, *Curiotalitrus*

### Introduction

There are currently 59 recognised talitrid amphipod genera. In 44 of these genera the males develop massive second gnathopods that are used in agonistic and mating behaviour. They fight over burrows (Bowers 1964) and they hold and guard females prior to mating inside or outside their burrows (Williamson 1951, Iyengar & Starks 2008). Thirty of these genera are coastal beach dwellers and 14 are terrestrial. They are incorporated here in the informal *Orchestia* group.

In other talitrids males never develop massive second gnathopods, but retain the mitten-shaped second gnathopods of females. These males, at least in *Talitrus* Bosc, 1802 will fight using their heads and antennae (Williamson 1951) and hold reproductive females with the antennae and pereopods. Currently there are 15 genera in which the males retain mitten-shaped second gnathopods, 25% of all talitrid genera. All are terrestrial (including cave-dwellers) except *Talitrus*, the European sandhopper which is successful and widespread on beaches along the European coast from the Baltic Sea to the Mediterranean Sea and along the Atlantic coast of Morocco. These genera are incorporated here in the informal *Talitrus* group.

Whether these groups are monophyletic is not known. If they are monophyletic, then they are very old, at least Pangaean (Bousfield 1984), because they occur on both post-Laurasian and post-Gondwanan landmasses. The idea that members of the *Talitrus* group have evolved independently several times is also a distinct possibility, but needs a full generic-level morphological and/or molecular phylogeny to understand.

Seventy-three percent of all *Talitrus* group genera occur in the Indo-West Pacific, either endemic on islands such as New Zealand (*Kanikania* Duncan, 1994, *Makawe* Duncan, 1994), Hawaii (*Spelaeorchestia* Bousfield & Howarth, 1976), the Philippines (*Curiotalitrus* **gen. nov.**) and the Australian continent (*Arcitalitrus* Hurley, 1975, *Austrotroides* Friend, 1982, *Keratroides* Hurley, 1975, *Mysticotalitrus* Hurley, 1975) or widespread on Indo-West Pacific Islands (*Brevitalitrus* Bousfield, 1971) (Table 1). Eighty per cent of all Indo-West Pacific genera occur in Australia and New Zealand. Of the remainder the monotypic genus *Talitrus* Bosc, 1802 is widespread on European and Mediterranean coasts. The genus *Caribitroides* Bousfield, 1984 occurs in the Caribbean area and Central America. *Palmorchestia* Stock & Martin, 1988 has a restricted distribution on the Canary Islands, North Atlantic and *Talitriator* Methuen, 1913 is diverse in South Africa. The genus *Talitroides* Bonnier, 1898 has such a widespread anthropogenic distribution that its original distribution is not known.