

Ballarrinae, a New Subfamily of Harvestmen from the Southern Hemisphere (Arachnida, Opiliones, Neopilionidae)

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ABSTRACT. The family Neopilionidae (superfamily Phalangioidea) is redescribed along with a redescription of the monotypic type genus *Neopilio* and the type species *N. australis* Lawrence. The subfamily Neopilioninae is redefined and contains only *N. australis*. A new subfamily, Ballarrinae, is erected for *Vibone* Kauri (southern Africa) and four new genera: *Ballarra*, *Plesioballarra* and *Arrallaba* (southern Australia), and *Americovibone* (southern South America). Nine new species are described: *Ballarra drosera* (type species), *B. alpina*, *B. cantrelli*, *B. clancyi*, *B. molaris*, and *B. longipalpus*; *Plesioballarra crinis* (type species by monotypy); *Arrallaba spheniscus* (type species by monotypy); and *Americovibone lanfrancoae* (type species by monotypy). The Ballarrinae have highly distinctive pedipalps, characterised by a very long patella, a reflexed tibia and an arcuate tarsus with reduced claw. Australian Ballarrinae possess a distinctive penis carrying a left ventrolateral barbed process and an ovipositor with four spermathecae, rather than two which is the condition in other Ballarrinae and most Phalangioidea. Cladistic analysis is used to explore relationships among Southern Hemisphere non-entapophysate taxa, namely Neopilioninae, Ballarrinae, Megalopsalididae and Enantiobuninae, and their relationship with entapophysate Phalangioidea. Alternate hypotheses concerning relationships are discussed. The significance of characters including pedipalp morphology, distribution of plumose setae and abdominal spiracle structure is also discussed. The Neopilionidae *sensu* Silhavy (1970) is a paraphyletic group. The Neopilionidae, as defined in this paper, may also prove not to be a monophyletic taxon. Male specimens of *Vibone vetusta* should help to resolve this question.

HUNT, G.S. & J.C. COKENDOLPHER, 1991. Ballarrinae, a new subfamily of harvestmen from the Southern Hemisphere (Arachnida, Opiliones, Neopilionidae). Records of the Australian Museum 43(2): 131–169.