



New Zealand exports: *Pseudosphaeroma* Chilton, 1909 (Isopoda: Sphaeromatidae), a Southern Hemisphere genus introduced to the Pacific coast of North America

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Abstract

Collections made along the coast of California have revealed the presence of a species of *Pseudosphaeroma* Chilton, 1909, a genus common in New Zealand coastal waters. The genus is entirely Southern Hemisphere in distribution, and this record reports the introduction of a species of *Pseudosphaeroma* into the San Francisco and Central Coast region of California, the first reported occurrence of the genus as an invasive taxon, and the first record of the genus from the Northern Hemisphere. The genus is also recorded for the first time from the Galapagos and Argentina.

Key words: California, Isopoda, Sphaeromatidae, *Pseudosphaeroma*, New Zealand

Introduction

Pseudosphaeroma Chilton, 1909 is a small genus of Southern Hemisphere sphaeromatid isopods, most recently reviewed by Harrison (1984). A diagnostic and unique character of this genus is the upturned apex to the posterior margin of the pleotelson in males, and the uropodal exopod is distinctly shorter than the endopod. Harrison (1984) placed three species into the genus, and excluded a further three species, these lacking the diagnostic upturned pleotelson. The species are the type species *Pseudosphaeroma campbellense* Chilton, 1909, a species purportedly commonly encountered around New Zealand; *Pseudosphaeroma lundae* Menzies, 1962, which occurs on the Chilean coast between Coquimbo and Archipiélago de los Chanos (*c.* 30–45°S); and *Pseudosphaeroma tuberculatum* (Sivertsen & Holthuis, 1980), described from Tristan da Cunha.

This discovery of a species of *Pseudosphaeroma* in Californian harbours has, again (e.g. see Poore 1996 in response to Chapman & Carlton 1991, 1994), highlighted the need for sound and rigorous taxonomy in order to be able to identify marine organisms that may or may not have been introduced by trans-oceanic shipping. The common New Zealand ‘species’ that has been recorded under the name *Pseudosphaeroma campbellense* appears to be at least three species, and all other records of that species have to be considered as doubtful. The species from San Francisco Bay does appear to be one of the common New Zealand species, but is not a named species. Given the known Southern Hemisphere distribution of the genus, the abundance of *Pseudosphaeroma* species in New Zealand, its occurrence only in San Francisco harbour and Morro Bay in the United States, we are confident that the species has been introduced to California.

Only one isopod species is believed to have been translocated from New Zealand — *Euryllana arcuata* (Hale, 1925), which has been introduced to Australia and San Francisco (Bruce, 1986, Bowman *et al.*, 1981).

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