Colurostylis castlepointensis, a new shallow-water diastyrid (Crustacea: Cumacea) from New Zealand

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Abstract

Colurostylis castlepointensis sp. nov. is described from Castle Point, New Zealand. Colurostylis castlepointensis can be differentiated from all known species of Colurostylis by the combination of a smooth anterolateral angle on the carapace, carapace without ridges, uropod peduncles longer than pleonites 5 and 6 together, and uropod exopod longer than endopod. A key to all species of Colurostylis is included.

Key words: New Zealand; southwestern Pacific; Cumacea; Colurostylis

Introduction

The cumacean fauna of New Zealand has been studied by a few individuals, most notably William T. Calman in the early twentieth century and Norman S. Jones in the mid-twentieth century. Approximately 40 species of cumaceans are currently recorded from New Zealand, with about 35 of those being endemic. The cumacean fauna of New Zealand appears depauperate in comparison with that of Australia, due in large part to limited collection efforts and minimal work on the New Zealand cumacean fauna. Six of the eight recognized cumacean families are represented, the families Pseudocumatidae and Ceratocumatidae are not recorded from New Zealand. The Lampropidae and Nannastacidae are represented by one and two species, respectively, although there are at least four undescribed species of lampropid in the collections of the National Institute of Water and Atmospheric Research (SG, personal observation).

Colurostylis Calman 1911 is notable within the Diastylidae for being remarkably similar to the family Pseudocumatidae, as first noted by Calman (1911). The Pseudocumatidae are defined as possessing a small, unarmed telson, the antenna reduced to one or two articles in the female, a reduced accessory flagellum on the antennule, a uniarticulate uropod endopod, and two pairs of pleopods in the male. Colurostylis differs from the pseudocumatids primarily in having a biarticulate uropod endopod and three articles in the female antenna. Within the Diastylidae, uropod endopods can be of one, two or three articles, and it is not clear that uropod endopod article number is a useful character at the family level.

The genus Colurostylis is only known from shallow waters around New Zealand, at depths from 0-125 meters, with 4 of the 5 species collected from depths less than 25 meters. The genus is found on both the North Island (Spirits Bay, Hawke Bay, Castle Point) and the South Island (Lyttleton Harbour).