



A new genus of the family Plagusiidae Dana, 1851, close to *Plagusia* Latreille, 1804 (Crustacea, Decapoda, Brachyura)

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Abstract

The new genus *Davusia* n.gen. is established for *Plagusia glabra* Dana, 1852, from Australia, a species clearly different from the other known species of *Plagusia*. The new genus is related to *Plagusia* Dana, 1851 but is readily distinguished from its described species by differences in the morphology of the front, external maxillipeds, thoracic sternum, and the male abdomen. *D. glabra* (Dana, 1852) n.comb. is characterized by smooth and practically naked body and pereopods

Key words: Crustacea, Decapoda, Brachyura, Plagusiidae, *Plagusia*, *Davusia*, new genus, new combination, Australia

Introduction

The family Plagusiidae Dana, 1851, has been traditionally treated as a subfamily of the Grapsidae MacLeay, 1838. It comprises only two genera, *Plagusia* Dana, 1851 and *Percnon* Gistel, 1848. It was raised to full family status by von Sternberg & Cumberlidge (1998) following an extensive cladistic study of grapsoid crabs. Davie (2002) transferred *Euchirograpsus* and *Miersiograpsus* to the Plagusiidae from the Varuninae and Grapsinae respectively. Evidence for *Euchirograpsus* being a plagusiid first came from both larval morphology (Cuesta & Schubart 1997) and DNA evidence (Schubart *et al.* 2000). Davie (2002) noted that both *Euchirograpsus* and *Miersiograpsus* have male abdominal segments 3–6 fused, a character state found only in Plagusiidae, as well as shallow grooves on the frontal margin that appear to mark incipient antennular clefts. Guinot & Bouchard (1998: 664) also recognised *Euchirograpsus* as unusual because of its press-button abdominal locking mechanism (“a specially acute button and a socket posteriorly defined by a strongly calcified border, which suggests that the genus is misplaced in the Varuninae”).

In sharp contrast to the known *Plagusia* species revised by Dawson (1987), *P. glabra* Dana, 1851 is characterized by its smooth and naked carapace and pereopods. This, in addition to other important features diagnostic of the species, warrants the establishment of a new genus, *Davusia* n.gen. *D. glabra* (Dana, 1852) n.comb. is so far confined to the intertidal rocky shores of eastern Australia, from southern Queensland south to New South Wales and Victoria.

Methods

Measurements, provided in millimeters (mm), are of the carapace length (measured across the middle of the carapace from the middle portion of the front to the middle portion of the posterior border of the carapace) and