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Mimulus Stimpson, 1860, a junior synonym of Pugettia Dana, 1851 (Decapoda: Brachyura: Majoidea: Epialtidae)

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Abstract

William Stimpson (1860) established Mimulus (Brachyura: Majoidea: Epialtidae), with a single species, M. foliatus. Rathbun (1894) placed the genus in synonymy with *Pugettia* Dana, 18951, but subsequent authors have considered *Mimulus* to be a valid genus. Genetic evidence and re-examination of the morphology indicate that M. foliatus belongs to a clade of majoid crabs consisting of species of *Pugettia*. We therefore consider *Mimulus* to be a junior synonym of *Pugettia*. We provide a list of all species of *Pugettia*.

Key words: Mimulus, Pugettia, kelp crab

Introduction

William Stimpson (1860, 200, pl. 5, fig. 1) described and figured a new genus and species of brachyuran crab, Mimulus foliatus. A second species, M. acutifrons A. Milne-Edwards, 1867, was described without illustrations or a type locality. With the exception of Newcombe (1893) and Rathbun (1894), subsequent authors have used the name M. foliatus in reference to the species of Mimulus found in the northeastern Pacific. A recent genetic analysis co-authored by the second author (Hultgren & Stachowicz 2008b) indicates that M. foliatus is closely related to Pugettia gracilis Dana, 1851 and does not warrant designation as a species of a different genus. We examined specimens and studied descriptions and illustrations of M. foliatus and compared its morphology to that of species of Pugettia and other epialtid crabs. We herein synonymize Mimulus Stimpson, 1860 with Pugettia Dana, 1851, and provide a list of species.

Material and methods

Hultgren & Stachowicz (2008b: table 1) analyzed four specimens of M. foliatus from Bodega Bay, California (38°20'N 123°2.9'W) and compared them to 12 specimens of five other species of *Pugettia*. The first author examined specimens of a male (carapace width 38 mm) and a female (carapace width 22 mm) taken by scuba diving at 8 m on 7 August 1971 from Monastery Beach, Carmel, California (36°31.5'N 121°55.5'W) (Texas A&M University Teaching Collection). These specimens were compared with descriptions given by Stimpson (1860) and Garth (1958), and with a diagnosis given by Wicksten (2012). The gonopods of the male M. foliatus were compared with those of one specimen each of *Pugettia richii* Dana, 1851, and *P. producta* (Randall, 1840), from the Texas A&M Collection, and a male Talipeus nuttallii (Randall, 1840) from the Natural History Museum of Los Angeles County (LACM 41120), as well as with those illustrated by Garth (1958) for M. foliatus, six species of Pugettia and T. nuttallii. We follow the classification of Ng et al. (2008) for majoid crabs. The list of species of Pugettia is from Ng et al. (2008) with the addition of P. ogasawarensis Komatsu, 2011.