



Additions to the decapod crustacean fauna of the Hawaiian Islands, I. A review of the genus *Sakaila* Manning and Holthuis, 1981 (Decapoda, Brachyura, Aethridae), with the description of a new species from the Northwestern Hawaiian Islands

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Abstract

The brachyuran crab genus *Sakaila*, currently considered a member of the family Aethridae, is reviewed and revised. Illustrations are provided for all of the known species, and a new species, the fourth in the genus, is described based on one female from French Frigate Shoals, one male from Maro Reef, both in the Northwestern Hawaiian Islands, and a second male from Johnston Atoll. Previous species are known only from the eastern Atlantic off the west coast of Africa (*S. africana* Manning and Holthuis, 1981) and from the far western Pacific off Japan (*S. japonica* Sakai, 1963, and *S. imperialis* Sakai, 1963). The new species differs from its congeners mostly in the overall spination of the carapace and legs, which is more pronounced in the new species. A key to the known species is provided and the current status of each species is discussed.

Key words: *Sakaila*, Brachyura, Aethridae, Hawaii, French Frigate Shoals

Introduction

Brachyuran crabs of the superfamilies Calappoidea De Haan, 1833, and Aethroidea Dana, 1851, are controversial as to the makeup and relationships of their constituent genera and species (reviews by Bellwood, 1996; Boyce, 2001; Ng *et al.*, 2008). As treated in several recent classifications (i.e. Bellwood, 1996; Martin and Davis, 2001; McLaughlin *et al.*, 2005), the superfamily Calappoidea contains two families, the Calappidae De Haan, 1833, and the Hepatidae Stimpson, 1871. The Calappidae is by far the larger of the two, containing eight extant genera and approximately 60 species. In contrast, the family Hepatidae contains three genera, all of which have at times been treated as members of the Calappidae: *Hepatus* Latreille, 1802 (with 5 extant species), *Osachila* Stimpson, 1871 (with 11 extant species), and *Sakaila* Manning and Holthuis, 1981 (with 3 extant species). This division of the calappoids is not universally accepted, however. Some workers have treated *Osachila* and/or *Sakaila* as members of the Parthenopidae MacLeay, 1838 (e.g. Sakai, 1976: 288; Manning and Holthuis, 1981 [following Sakai, 1976]; Zimmerman and Martin, 1999) or Aethridae (e.g. Casadío *et al.*, 2005, Ng *et al.*, 2008). Guinot (1966, 1967) demonstrated earlier the relationships among the genera *Osachila*, *Actaeomorpha*, *Hepatus*, and *Aethra* (her "parthenoxystomian group") and proposed grouping them into the Aethrinae Dana, 1851 (= Hepatinae). The genus *Aethra* Latreille in Cuvier, 1816, the type genus for the family Aethridae, is very similar to the genus *Hepatus* on morphological grounds (Guinot 1966, 1967; Guinot and Bouchard, 1998), and consequently some workers have combined the three "hepatid" genera mentioned above with the Aethridae, a family name that would have seniority over Hepatidae if these