



Haliclystus californiensis, a “new” species of stauromedusa (Cnidaria: Staurozoa) from the northeast Pacific, with a key to the species of *Haliclystus*

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Abstract

We describe *Haliclystus californiensis*, a new species of stauromedusa from the northeast Pacific. *Haliclystus californiensis* differs from other species within the genus primarily by its horseshoe-shaped anchors, but also by the presence of prominent glandular pads at the base of its outermost secondary tentacles and by geographic range. It has been found from southern to northern California in coastal waters, 10 to 30 m depth. A single specimen of the species was originally described in an unpublished dissertation; nine additional specimens have been found since that time. We provide an annotated key to the known species of *Haliclystus*.

Key words: *Haliclystus*, Staurozoa, stauromedusa, Cnidaria, *H. auricula*, *H. octoradiatus*, *H. californiensis*, *H. tenuis*, *H. stejnegeri*, *H. borealis*

Introduction

Stauromedusae are stalked, benthic medusozoan cnidarians distributed mostly in shallow, temperate and polar waters. They may be locally common but are often highly cryptic. Only about 50 species have been described worldwide (Mills 1999; Daly *et al.* 2007). Until recently, Stauromedusae was considered part of class Scyphozoa, but phylogenetic analyses based on genetic and morphological data suggest that the group represents the earliest diverging clade of extant medusozoan cnidarians (Collins & Daly 2005; Collins *et al.* 2006; Van Iten *et al.* 2006). The establishment of Staurozoa as a new class highlights the importance of the systematics of stauromedusae. Its basal position within Medusozoa offers insights into the early evolution of Cnidaria (Collins 2002; Collins & Daly 2005; Collins *et al.* 2006).

Within class Staurozoa, the genus *Haliclystus* Clark, 1863 has the greatest number of species—10 described—with the most recent addition in 1961 (*H. monstrosus* (Naumov, 1961)). An additional species widely known under the *nomen nudum* *H. sanjuanensis* exists within the genus as well. A survey of stauromedusa species in the eastern north Pacific revealed an additional species of *Haliclystus*. This species was described in detail in a Ph.D. thesis (Gwilliam 1956) as *H. californiensis*, but the account was never published. In spite of the lack of a formal description, references to this species have been made in the literature as *H. californiensis* (Hirano 1997; Mills & Larson 2007; Miranda *et al.* 2009). Another species described by Gwilliam, *Stenoscyphopsis vermiformis*, has not been found during any later surveys.