Date Examined: 5 February 2011 Voucher By: Tony Phillips

SYNONYMY: None

LITERATURE:

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Crandall, F.B. et al. 2002, Checklist of the Nemertean Fauna of Japan and Northeastern Asia. Nemertes (<u>http://nemertes.si.edu</u>). Smithsonian Institution, Washington, D.D. pp. 1-44.

Gibson, R. & F.B Crandall. 1989. The genus Amphiporus Ehrenberg (Nemertea, Enopla, Monostyliferoidea). Zoological Scripta, 18: 453-470.

Iwata, F. 2008. On Three Monostiliferous Hoplonemerteans from the San Juan Archipelago, Washington State, USA. Publ. Seto Mar. Biol. Lab., 40(5/6):9-45.

Kajihara, H. 2007. A Tzxonomic Catalogue of Japanese Nemerteans (Phylum Nemertea). Zoological Science, 24: 287-326.

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DIAGNOSTIC CHARACTERS:

- 1. Body yellowish-white to crème white. Coe (2005) noted that in alcoholic specimens the whole dorsal surface of the body was dark mottled brown. Iwata (2008) observed live material to be pale brown to light yellowish-white, with numerous darker spots dorsally and whitish ventrally. The head was white with a pair of dark brown blotches, separated from the rest of the body by the cephalic groove which appeared as a white transverse band.
- 2. Proboscis sheath extends almost full length of body, proboscis papillated
- 3. Basis approximately one-half to two-thirds in length compared to stylet (s/b ratio 1.55 2.25); basis is round to olive-shaped, 1-2 accessory sacs with 1-4 accessory stylets.



4. Eyes not visible unless cleared; cleared specimens with two groups of 4-6 marginal eyes along the anterior edge of head, followed by an irregular row/cluster of 4-6 eyes posterior and just inside of anterior row, but above the cephalic groove. Just posterior of the cephalic groove is a small cluster of 3-5 eyes that are above the brain lobes. When reading Coe's original description of eye patterns for Amphiporus punctatulus it must be considered that he was looking at specimens 35 – 50 mm in size, while SCB material was 4 -13 mm.

RELATED SPECIES AND CHARACTER DIFFERENCES:

Unless cleared there are many species of Amphiporus, Tetrastemma and provisional species of Hoplonemertea that have a similar appearance. I have only seen specimens that have been stored in 70% ethanol for years that may have caused the normal brownish pigmentation observed by Coe (1905) and Iwata (2008) to fade. If material is live or freshly preserved than this character should be distinctive for Nipponnemertes punctatula. The shape of the basis is distinctive and at this time only found in two other provisional species of Hoplonemertea, H. sp. C and H. sp. SD3. If eye pattern is evident, this will separate N. punctatula from the two provisionsal species of Hoplonemertea.

Members of the Genus Amphiporus with a wickerwork system of rhynchocoel musculature, rather than the normal bilayered rhynchocoel musculature, were transferred to the Genus Nipponnemertes (Gibson, 1988). There are several other internal characters (cerebral sense organs, eye structure complexity, rhyncholcoel diverticula, to name a few, that made it fit into the Family Cratenemertidae (Gibson, 1988; Iwata, 2001). Needless to say I did not have the expertise or equipment available to make this determination, but used the qualitative characters of eye pattern and probosicideal armature for my determination.

DEPTH RANGE: 4-60 meters

DISTRIBUTION: San Diego to Santa Monica Bay; San Juan Islands; Kurile Islands to Japan