Key to the Nephtyidae of Point Loma

(Adapted from Hilbig, 1994)

1A. Interramal cirri curved inward, free end curving toward the parapodial wall, first present on setigers 5-8; erect upper neuropodial lobe (length=~8X width) present in median setigers (see Fig. 1) .....***Aglaophamus verrilli*** (McIntosh, 1885) SF

1B. Interramal cirri curved inward, free end curving toward the parapodial wall, first present on setiger 8 or 9; erect upper neuropodial lobe (length=~3X width) present in median setigers (see Fig. 2) .....***Aglaophamus erectans*** Hartman, 1950

1C. Interramal cirri curved outward with the free end pointing away from the parapodial wall (recurved), or straight and pointing down or angled inward.....**2**

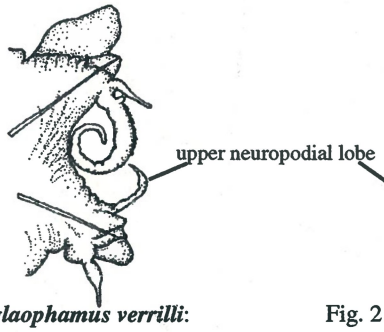

Fig. 1 ***Aglaophamus verrilli***: middle parapodium

Fig. 2 ***Aglaophamus erectans***: middle parapodium

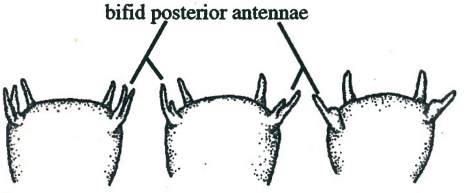

Fig. 3 ***Nephtys cornuta***: prostomium, ventral view, showing bifid posterior antennae

2A. Interramal cirri first present on setiger 3 or 4; all antennae simple.....**3**

2B. Interramal cirri first present on setiger 5 or 6; posterior pair of antennae bifid (see Fig. 3); small worm generally less than 10 mm in length.....***Nephtys cornuta*** Berkeley and Berkeley, 1945 SF

2C. Interramal cirri first present on setiger 5 to 11; all antennae simple.....**Key in Hilbig, 1994** (verify with a polychaete specialist)

3A. Interramal cirri first present from setiger 3 (may be small).....**4** ? = N. californiensis

3B. Interramal cirri first present from setiger 4.....**5**

3C. IRC 5-11 ... → 6 = N. assignis → 7 = N. punctata

4A. Dorsum of anterior end pigmented (may be faded especially if small); anterior postsetal notopodial lobes broader than tall; acicular lobes of anterior parapodia incised (see Fig. 4); subdistal, dorsomedian, unpaired papilla larger than the paired papillae .....***Nephtys ferruginea*** Hartman, 1940 SF

4B. Anterior end unpigmented; anterior postsetal notopodial lobes approximately as tall as broad; acicular lobes of anterior parapodia not incised (see Fig. 5); subdistal dorsomedian, unpaired papilla of approximately same length as the paired papillae .....***Nephtys simoni*** Perkins, 1980

[Recent San Diego area collections in less than 100 ft. depth off the mouth of theTijuana River (International Treatment Plant stations), and (Larry Lovell, personal communication) in subtidal sands of Mission Bay.]

4C. Check N. squamosa

Fig. 4 ***Nephtys ferruginea***: anterior dorsum and anterior parapodium (anterior view)

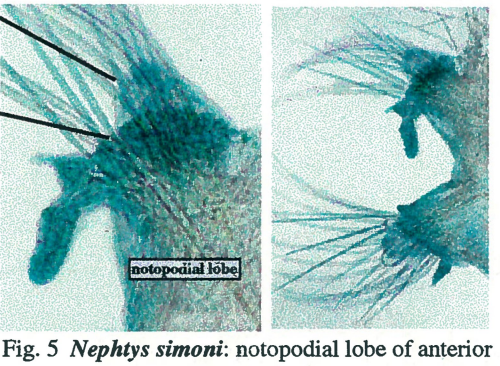

Fig. 5 ***Nephtys simoni***: notopodial lobe of anterior parapodium (anterior view) and entire anterior parapodium (anterior view)

5A. Anterior dorsum with a restricted pigment pattern (may be faded); acicular lobes of median parapodia incised (see fig. 6); subdistal, dorsomedian, unpaired papilla present on the proboscis, much larger than paired papillae.....***Nephtys caecoides*** Hartman, 1938 SF

5B. Anterior dorsum without pigment; acicular lobes of median parapodia not incised (see fig. 7); subdistal, dorsomedian papillae are paired and approximately the same length as the other subdistal papillae (see Provisional Species Worksheet, 2May1997).....***Nephtys* sp SD 2** *fide* Rowe, 1997

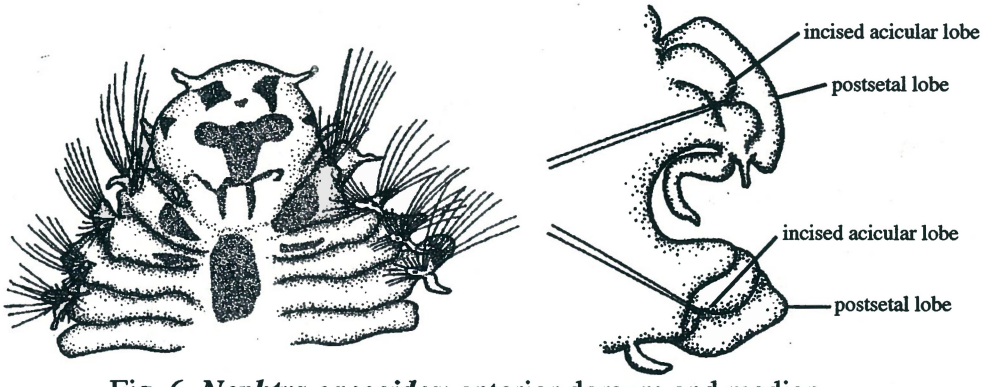

Fig. 6 ***Nephtys caecoides***: anterior dorsum and median parapodium (anterior view)

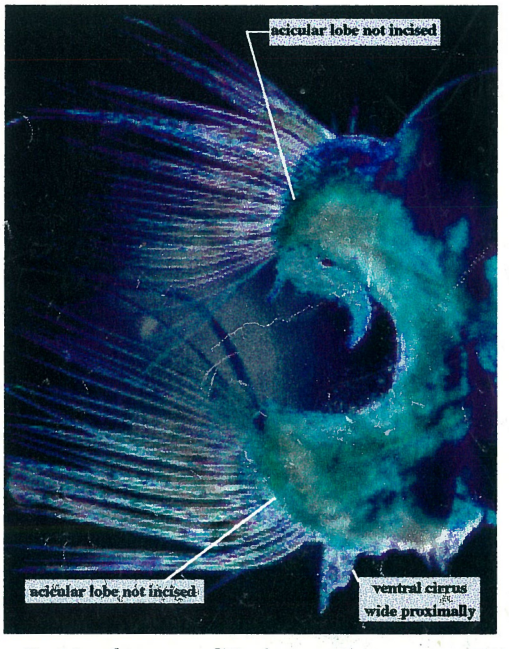

Fig. 7 ***Nephtys* sp SD 2**: median parapodium (anterior view, alcian blue stained, darkfield illumination)

Literature cited:

Hilbig, B. 1994. Chapter 13. Family Nephtyidae Grube, 1850. pp. ~~329~~ 317-362. In: Blake, J. A. and B. Hilbig (eds). Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Vol. 4, The Annelida Part 1. Oligochaeta and Polychaeta: Phyllodocida (Phyllodocidae to Pataleacydoniidae). 377 pp.

[Figures 1, 2, 3, 4 and 6 are modified from Hilbig, 1994. Figures 5 and 7 are original digital images.]

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