Gammaridea: Corophioidea: Aoridae

SCAMIT CODE: None Date Examined: 16 February 1998
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SYNONOMY: Rudilemboides stenopropodus J.L. Barnard 1959 of CSDMWWD

LITERATURE: See Page 2.

# **DIAGNOSTIC CHARACTERS:**

Head lobe acutely produced; pereon without ventral cusps.

Antenna 1, article 3 approximately one-half length of article 1; article 2 approximately twice length of article 1.

Uropods 1, 2, and 3 well developed, rami sub-equal, strongly setose; uropod 3 peduncle shorter than rami.

Mandibular palp, article 3 rectolinear (the two sides nearly parallel).

Pigment patch present dorsally on pereonite 6 (in alcohol).

Male gnathopod 1 carpochelate, article 6 enlarged (one-half width of article 5); posterior margins of articles 5 and 6 each with large tooth (Figure 1) and several sets of strong setae; anterior margins nearly bare.

Gnathopod 2 (both sexes) scarcely sub-chelate, article 5 longer than 6; ventral margins of articles 5 and 6 inserted by several sets of strong setae, anterior margins mostly bare except for distal tufts of long setae; anterior margin of article 2 with 6-8 regularly spaced, short, stout spines (Figure 2).

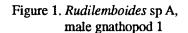
Female gnathopod 1 subchelate, well developed, larger than gnathopod 2; palm oblique, defined by strong mesial spine; ventral margins of articles 5 and 6 inserted by sets of strong setae; anterior margins mostly bare; article 5 longer than 6 (Figure 3).

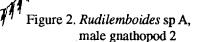
Female gnathopod 2 with short, transverse palm defined by large mesial spine; dactyl overlapping (Figure 4).

### **RELATED SPECIES:**

Rudilemboides stenopropodus J.L. Barnard 1959 differs in the more slender article 6 (one-third of article 5), and the absence of a process or tooth on articles 5 and 6 of male gnathopod 1; the excavate palm (i.e., not transverse) of female gnathopod 2; and the setose anterior margins of articles 2, 5 and 6 of gnathopod 2 (both sexes).

Acuminodeutopus heteruropus J.L. Barnard 1959, A. periculosus J.L. Barnard 1969, and Acuminodeutopus sp of Gillingham 1984 differ in the male gnathopod 1, article 6 which is both more slender and smooth (i.e., without a process or tooth on the posterior margin).





#### OTHER COMMENTS:

This species is very similar to *R. stenopropodus*, and female specimens were identified as such for many years by the CSDMWWD Marine Biology staff. Recent collections of several male specimens and the rexamination of many other "*R. stenopropodus*" specimens from the CSDMWWD collection revealed the differences discussed above.

Myers (1981) synonomized *Rudilemboides and Acuminodeutopus* (submerging *Rudilemboides* within *Acuminodeutopus* on page priority). However, Barnard and Thomas (1987) argue for the continued separation of the genera, and Barnard and Karaman (1991) retain *Rudilemboides* as separate from *Acuminodeutopus*. However, the robust nature of the male gnathopod 1, with its distinctive processes, is more similar to *Acuminodeutopus* than *Rudilemboides*, and contradicts the diagnosis of *Rudilemboides* given by Barnard and Karaman (1991). These authors describe the male gnathopod 1 of *Rudilemboides* as "simple, incipiently carpochelate, article 5 enlarged, long, unlobed or weakly so, article 6 small." *Rudilemboides* sp A further blurs the distinction between *Rudilemboides* and *Acuminodeutopus* and supports the arguement of Myers (1981). A more detailed analysis of the two genera is required before the status of the species, as well as the two genera, can be resolved.

Placement of this species within *Rudilemboides* is based on the presence of the short uropod 3 peduncle, the longer and sub-equal rami of uropod 3, and a mandibular palp that is best described as "rectolinear," as per the more recent and widely accepted systematic treatement of Barnard and Karaman (1991).

### DISTRIBUTION:

San Diego, CA., 60 - 100 m.

## LITERATURE:

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Barnard, J.L. and J.D. Thomas. 1987. New species of Neomegamphopus from Tropical America (Crustacea: Marine Amphipoda). Proc. Biol. Soc. Wash. 100 (1): 147-163.

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