

SCAMIT CODE: PL76

Date Examined: 14 March 88
Voucher by: Carol Paquette

SYNONYMY: Eusiridae Genus B sp. A of MBC
Eusiridae sp. A of SCAMIT (Vol. 6, No. 12)

LITERATURE: Tzvetkova, N.L. 1975. A new species of Pleustidae (Amphipoda), a commensal of sea urchins, from the Commander Islands. *Zoologicheskii Zhurnal* 54:121-124.

Vader, Wim. 1978. Associations between amphipods and echinoderms. *Astarte* 11:123-134.

Karaman, G.S., and J. L. Barnard. 1979. Classificatory revisions in gammaridean Amphipoda (Crustacea). Part 1, *Proc. Biol. Soc. Wash.* 92(1):106-165.

DIAGNOSTIC CHARACTERS:

1. Dactyls of pereopods 3-7 serrate on distal 2/3 of posterior margin, with a distal cusp.
2. Gnathopods 1 and 2 slender, subchelate, article 5 about as long as article 6, article 5 of G2 slightly lobed on distal end of posterior margin.
3. Rostrum reaching about halfway along article 1 of antenna 1.
4. Antennae short, 1/4 length of body, flagella with 4-6 articles each.
5. Pleonal epimera slightly produced posteriorly, margins entire.
6. Outer rami of uropods 1-3 slightly shorter than inner rami. Peduncle of uropod 3 with 2 stout setae on posterior dorsal margin. Outer ramus of U3 with 3 stout setae on outer margin and 2 on inner margin. Inner ramus of U3 with 4 stout setae on outer margin, and 5 on inner margin.

RELATED SPECIES AND CHARACTER DIFFERENCES:

1. No other pleustid genus has the cuspid (prehensile) pereopod dactyls. (Only one species has been described for the genus *Dactylopleustes*.)
2. This species appears to differ from *Dactylopleustes echinoicus* (Tzvetkova 1975) only by a few minor characters:
 - Presence of stout setae on the peduncle of U3, and number of stout setae on the margins of the rami.
 - One more tooth each on the postero-ventral corner of coxae 1 and 3.
 - Presence of 2 pairs of small setae on the telson.
 - Distal end of article 5 of G2 slightly more expanded posteriorly, forming a small lobe.
 - Anterior margin of P5-7 produced distally forming a pointed projection with a terminal stout seta.

DEPTH RANGE: 30 - 298 m

DISTRIBUTION: Pt. Conception to San Diego

NOTES: This species was also examined at the first SCAMIT Barnard Amphipod Workshop in 1985. Based on the single specimen available at that time, it was thought to be a eusirid. More specimens have been found recently, and because of the species pleustid-like appearance, it was re-examined during the 1988 SCAMIT Barnard Amphipod Workshop. The lower lip was found to be typically pleustid with highly tilted outer lobes astride 2 fused inner lobes. Eusirids have larger, unfused inner lobes, or outer lobes not widely flared, but pointed down. Also, the mandibular molar is non-tritulative.

This species has been found on the surface of the regular sea urchins *Lytechinus pictus* and *Allocentrotus fragilis* from both trawl and bottom grab collections. The closely related *Dactylopleustes echinoicus* was collected in the littoral zone of Bering Island (Commander Islands) in the southwest Bering Sea, on the sea urchin *Strongylocentrotus polyacantha*.

