Rhepoxynius sp. A of SCAMIT
Phoxocephalidae

SCAMIT CODE : MBC 60

Date Examined: 13 April 1987
Voucher By : Don Cadien

SYNONYMY: *Paraphoxus bicuspidatus* Barnard 1960 (in part)
Rhepoxynius sp. A of MEC
Rhepoxynius sp. A of MBC

LITERATURE: Barnard 1960; 1963; 1964a,b; 1966a,b; 1971

DIAGNOSTIC CHARACTERISTICS:

1. Pereiopod 7 article 2 bearing 2 large spikes on it's posterior margin, one along the proximal margin of the segment and one at about 50-65% of the segment length.

2. Epistome acute, produced, but of moderate length rather than long.

3. Lacking apico-medial spine on peduncle of uropod 2.

4. Peduncle of uropod 2 bearing row of three dorsal spines.

5. Articles 6 and 7 of pereiopod 7 subequal.

RELATED SPECIES AND CHARACTER DIFFERENCES:

1. Initially this species was treated as a mutant form of *bicuspidatus* (Barnard 1960) and later as an intergrade or hybrid of *bicuspidatus* and *variatus* (Barnard 1963). Consistant differences in habitat from *bicuspidatus* were noted by Sue Garner (MEC) off San Onofre ca. 1981. These differences have been confirmed by observations in other areas since then, but existance of a Los Angeles Harbor population with *sp. A* morphology and *bicuspidatus* habitat preference (fide Jim Roney, Hyperion) has blurred habitat distinctiveness.

erroneous

2. *Sp. A* can be distinguished from *R. bicuspidatus* by characters 1,2,3,4, and 5. Article 2 of pereiopod 7 in *bicuspidatus* also has two spikes, but the ventral spike is further down the segment (about 90% of the length) and usually points more ventrad than that in *sp. A*. The epistome in *bicuspidatus* is reduced to a rounded, unproduced point; that in *sp. A* is produced (medium length) and sharply pointed (character 2). The peduncle of uropod 2 in *bicuspidatus* bears a large apicomedial spine which is lacking in *sp. A* (character 3). Dorsally on the peduncle of uropod 2, *bicuspidatus* has a row of 4-5 spines while *sp. A* bears a row of 3 (character 4). The sixth article of periopod 7 is distinctly longer than the dactyl in *bicuspidatus*. The two articles are subequal (and article 6 shorter) in *sp. A* (character 5).

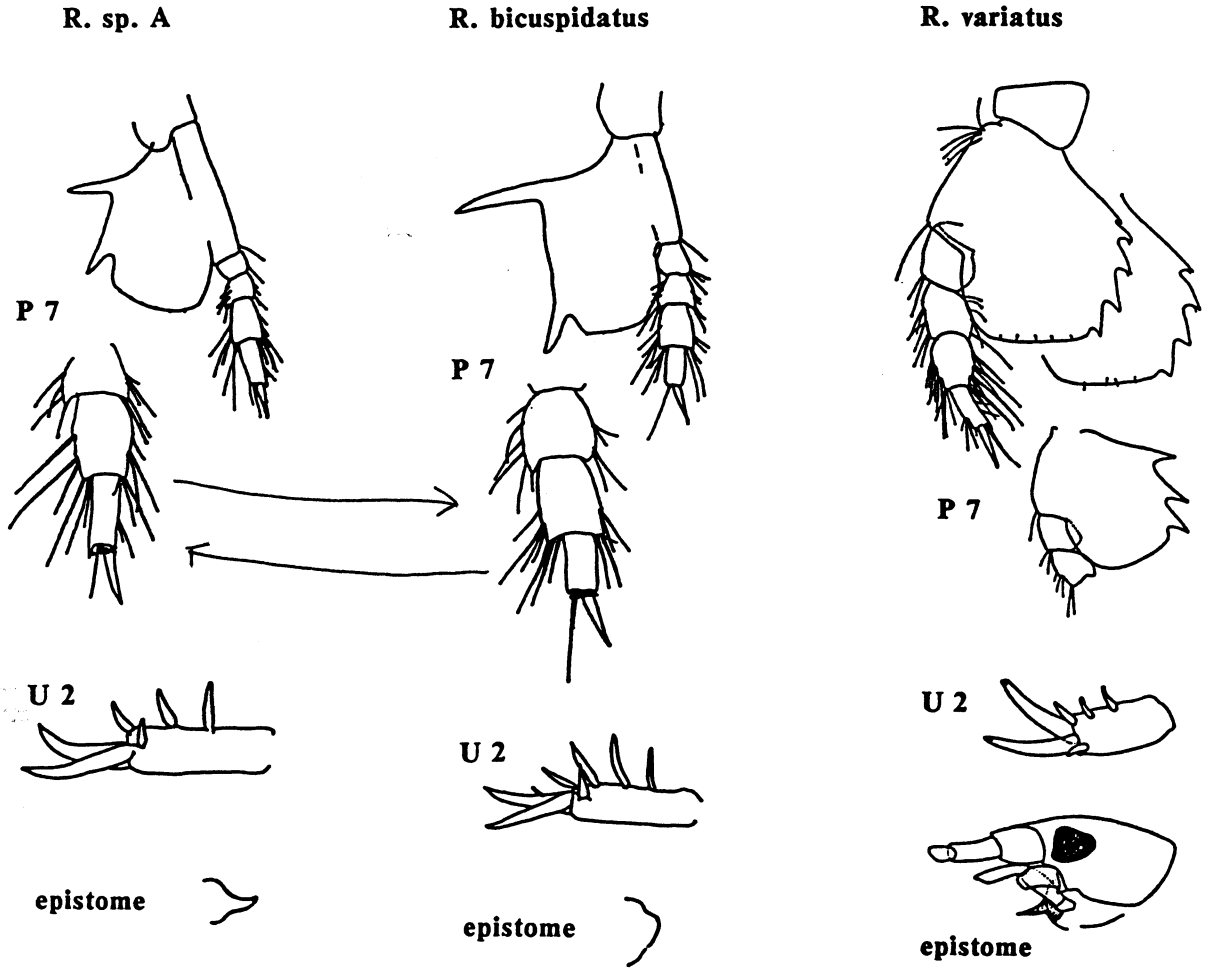
3. *Rhepoxynius variatus* is similar to both *sp. A* and *bicuspidatus*. Differences from *sp. A* are: more teeth (rather than spikes) on article 2 of pereipod 7 (character 1); and presence of an apicomedial spine on peduncle of uropod 2 (character 3). Otherwise quite similar to *sp. A*, although further examination of details of setation and spination of the appendages, and the mouthparts would probably provide further points of difference.

Rhepoxynius variatus is typically more abundant in inshore sands than offshore in finer sediments (Barnard 1963). The opposite is true of *R. bicuspidatus*, which (once misidentifications of *R. sp. A* are allowed for) is found primarily between 30 and 200 meters. Habitat preference of *sp. A* is generally 20m or shallower in fairly clean sand, much like that of *R. variatus*. Jim Roney (Hyperion) has recently reported *sp. A* from organically rich silty sands in Los Angeles Harbor, a very atypical habitat judging by prior records.

DEPTH RANGE: 2 m - 20 m

DISTRIBUTION: Morro Bay to at least Rosarita Beach (Baja California).

NOTES: Both depth range and distribution could change drastically once existing records of *R. bicuspidatus* are reexamined for *sp. A*. Barnard recorded *R. bicuspidatus* from as far south as Bahia San Quentin (1964a) and Bahia Santa Maria (1964b), and from as far north as Monterey (1966) and Oregon (1971). The Oregon records are particularly provocative as they refer to specimens with produced epistomes from 150-200 m depths.



Original Drawings - Sue Garner (1987)

from Barnard (1960)