| SCAMIT CODE: | None | Date Examined: 19 August 1996 |
|--------------|---------------------------------------|--|
| | | Voucher By: Carol Paquette & Don Cadien |
| SYNONYMY: | Synchelidium sp A of MBC [see SCAM | IT NL 12(5)] |
| LITERATURE: | Bousfield & Chevrier 1996; Hirayama 1 | 987; Hirayama 1992; Imbach 1967; Jo 1990 |

DIAGNOSTIC CHARACTERS:

- 1. Head with a pronounced change in slope just beyond the eye; rostrum not exceeding article 1 of antenna 1 peduncle, strongly deflexed, ventrally keeled
- 2. Pereopods 3 and 4: dactyl long, subequal to the propodal length; carpus also subequal to propod length; hind margin of both carpus and propod proximally setose; basis expanded distally, especially on pereopod 3
- 3. Gnathopod 1: palm nearly transverse, defined by a spine and a sharp change in angle, equal in length to posterior margin
- 4. Gnathopod 2: propod elongate; dactyl relatively short, about 1/4 propod length
- 5. Coxa 3 with postero-ventral margin beveled; coxa 5 as long as wide
- 6. Pleonal epimeron 2 with posteroventral corner obtuse
- 7. Uropods 1 and 2: outer rami slightly shorter than inner; mesial margin of inner rami spined (two spines on U1, one on U2)
- 8. Telson truncate distally, bearing one pair of small curved setae
- 9. Strongly pigmented (retained in alcohol) with brown blotches in a pattern similar to that shown in Fig. 1

RELATED SPECIES AND CHARACTER DIFFERENCES:

- 1. Differs from *E. carinorostrum* in having a more deflexed, shorter rostrum which does not exceed article 1 of the antenna 1 peduncle; and in having a truncate not emarginate telson
- 2. Differs from *E. miraculum* in having articles 1 and 2 of the antenna 1 peduncle subequal, not article 2 50% longer; in having the posterior margin of coxa 3 beveled, not evenly rounded; in having the basis of pereopod 3 distally expanded; in bearing spines on the mesial margins of uropods 1 and 2; in having the telson truncate, not slightly emarginate; and in having a pair of curved setae dorsally on the telson

- 3. Differs from E. nonrostrum in lacking pleon ridging or carination dorsally
- 4. Differs from E. bulytschevae in having the carpus of pereopods 3 and 4 posteriorly setose
- 5. Differs from *E. nonmiraculum* in having the rami of uropods 1 and 2 unequal
- 6. Differs from E. lenorostralum in the hind corner of pleonal epimeron 2 being obtuse, not acute
- 7. Differs from *E. rostriospiculum* in having the propod of gnathopod 2 not slender, and in lacking spines posteriorly on the propod of percopods 3 and 4

DEPTH RANGE: 7-20 m

DISTRIBUTION: all specimens known to date have been taken in Long Beach Harbor, either in the inner portion of the Main Channel, in the Consolidated Slip, or in Queensway Bay in the outer harbor. It is assumed that the species is introduced from the Northwest Pacific, but no collections of it are known (to us) from that region.

REMARKS: As outlined by Bousfield and Chevrier (1996), both the genus *Eochelidium* and the closely related *Chitomandibulum* occur only in the Western Pacific. The current species is then almost certainly introduced from either Japanese or Korean waters, presumably in ships' ballast water. The species is most closely related to *E. carinorostrum* (Jo 1990 - to which it would key out in Bousfield and Chevrier's key) and *E. miraculum* from the South China Sea (Imbach 1967). It can be separated from all the local species of *Synchelidium* in being heavily pigmented rather than pure white, and in numerous fine details. The specimens taken by MBC were from 1993 and 1994 samples, and the species may not still be extant in the harbor. Although in nearly all respects it falls within the definition of the genus *Eochelidium*, it differs from other members of that genus in having the carpus and propod of pereopods 3 and 4 equally long.



Figure 1. Color pattern of *Eochelidium sp A* (based on preserved specimen from Long Beach Harbor)