

Additional Cumacea Notes:

Tony Phillips
Hyperion Treatment Plant

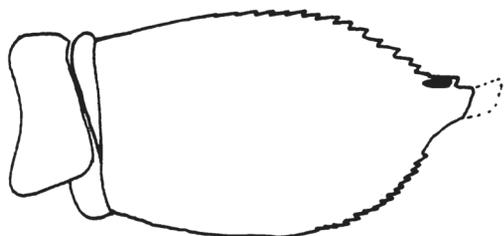
As a follow-up to the Cumacea meeting on the Family Bodotriidae I looked at the lots of Vaunthompsonia housed at the Los Angeles County Museum of Natural History (LCMNH). On the master list of Cumacea, supplied by Hans Kuck, Crustacea Collections Manager, were two lots listed as V. sp and one lot listed as V. serratifrons Gamo, 1964. I actually found five lots of V. sp. on the shelves of the LCMNH. Four lots were taken during the BLM baseline survey. The fifth lot was material identified by Dr. Robert Given as V. nr pacifica; this material was all in poor condition and should be left as V. sp.

One lot of the BLM material was from year one and the other three lots were from year two. The material from year one (all labelled as V. sp.) was a mix of V. pacifica and Glyphocuma sp. A (see voucher this newsletter). The three lots of V. sp. from year two contained two provisional species of V. sp. The specimens labelled as V. sp. A were all V. pacifica. The specimens labelled as V. sp. B were all Glyphocuma sp. A. The lot listed as V. serratifrons contained only specimens of Glyphocuma sp. A

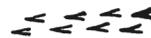
I made some drawings of V. sp. A. (the drawings are not camera lucida)(see figures). They compare well with the drawing of V. pacifica depicted in Lomakina, 1958. I feel the specimens of Vaunthompsonia found in our offshore waters are V. pacifica.

I was also able to look at 2 lots of the unidentified Cumacea from year 2 of the BLM survey. I found among the many species five specimens of Petalosarsia sp. A (Family Pseudocumidae). All five specimens were found at the Santa Rosa Ridge in fine-medium sand at a depth of 236-246 meters. They were all adult females, one being gravid. This species was described by Doug Diener (SCAMIT Vol. 6, No. 12) from a single specimen. Within the collection presently housed at the LCMNH are 174 lots of unidentified Cumacea. The unidentified lots from southern California hold the potential for revealing additional specimens of rare or new species. I plan on looking through these lots in the future.

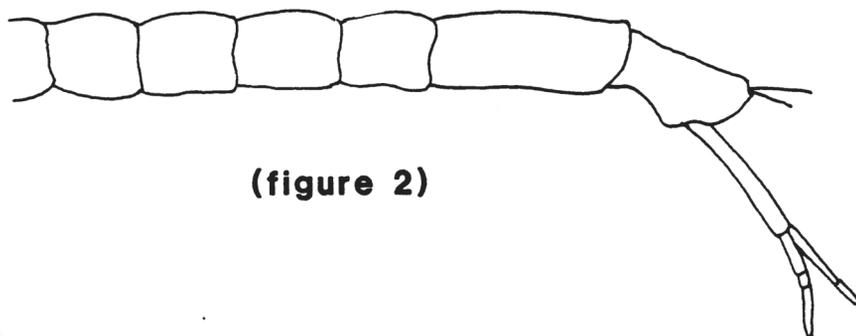
Los Angeles County Museum of Natural History
Station 23088 BLM Baseline Survey Year 1
Date Examined: December 20, 1988
Drawing by: Tony Phillips, HYP



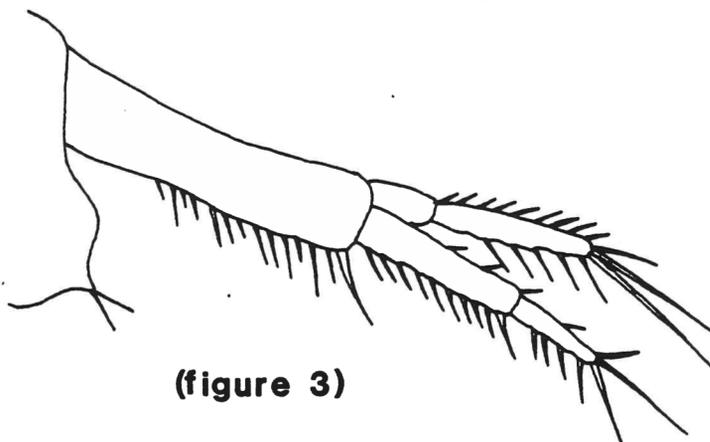
(figure 1)



(figure 4)



(figure 2)



(figure 3)

figure 1. carapace; figure 2. lateral view pleonal segments;
figure 3. peduncle and right uropod; figure 4. dorsal view of
double row of spines.

SCAMIT CODE: HYP

Date Examined: March 8 1989
Voucher By: Tony Phillips, HYP

Literature: Hale, H.M. 1944; Jones, N.S. 1969; Lomakina, N.B. 1958

Diagnostic Characters:

1. Dorsum of carapace with a median longitudinal carina coarsely toothed on anterior half of female and sub-adult male.
2. Pseudorostral lobe does not extend in front of ocular lobe.
3. Male with exopods on first four pereopods, female with exopods on first three pairs of pereopods.
4. Third maxilliped with basis prominently produced distally; ischium at least as long as wide (figure 2a).
5. Telsonic somite produced posteriorly between uropods (figure 3).

Related Species and Character Differences:

Cyclaspis sp. A (see Vol. 4, No. 12) appears similar in external morphology to Glyphocuma sp. A (figure 1), but can be differentiated by noting the number of pereopods with exopods. The Genus Cyclaspis has only the first pair of pereopods with exopods in either sex. The Genus Vaunthompsonia differs in maxilliped 3 with the basis slightly produced distally and the ischium being at least as long as wide (figure 2b). Vaunthompsonia pacifica has a double row of spines on the the mid-dorsal carapace. Female and sub-adult male Glyphocuma have a single row of spines. The Genus Leptocuma could be confused with the male of Glyphocuma. They can be separated by pereopod 2. Pereopod 2 of Leptocuma (figure 4a) has a distal brush of setae on the propodus and dactylus, but no spines. Pereopod 2 of Glyphocuma (figure 4b) has no brushes of setae on the distal segments, but with spines on at least the dactylus. The Genus Leucon also has a dorsal crest, but no eye is present.

Comments:

The Genus Glyphocuma was originally described by Hale in 1944. Four species were included within the genus. Their distribution was found between South Australia and New South Wales, extending out to Tasmania. Since this initial description of the genus and new species there have been no new published records in the literature.

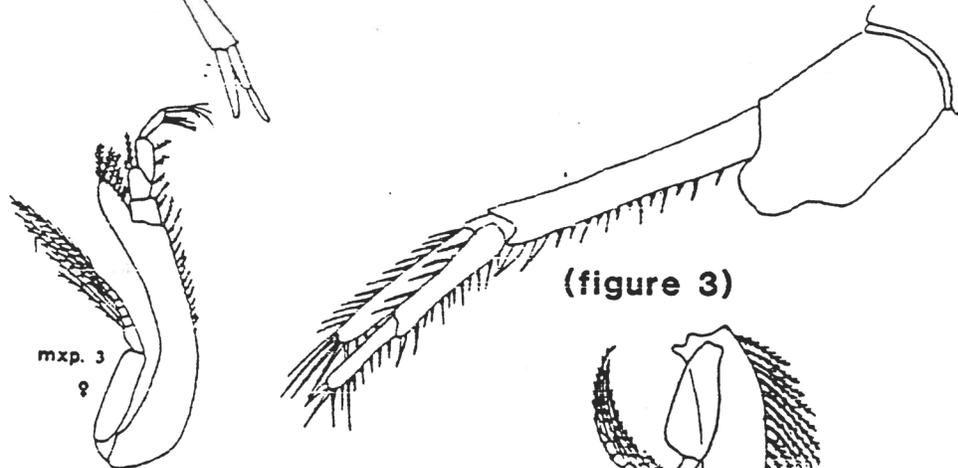
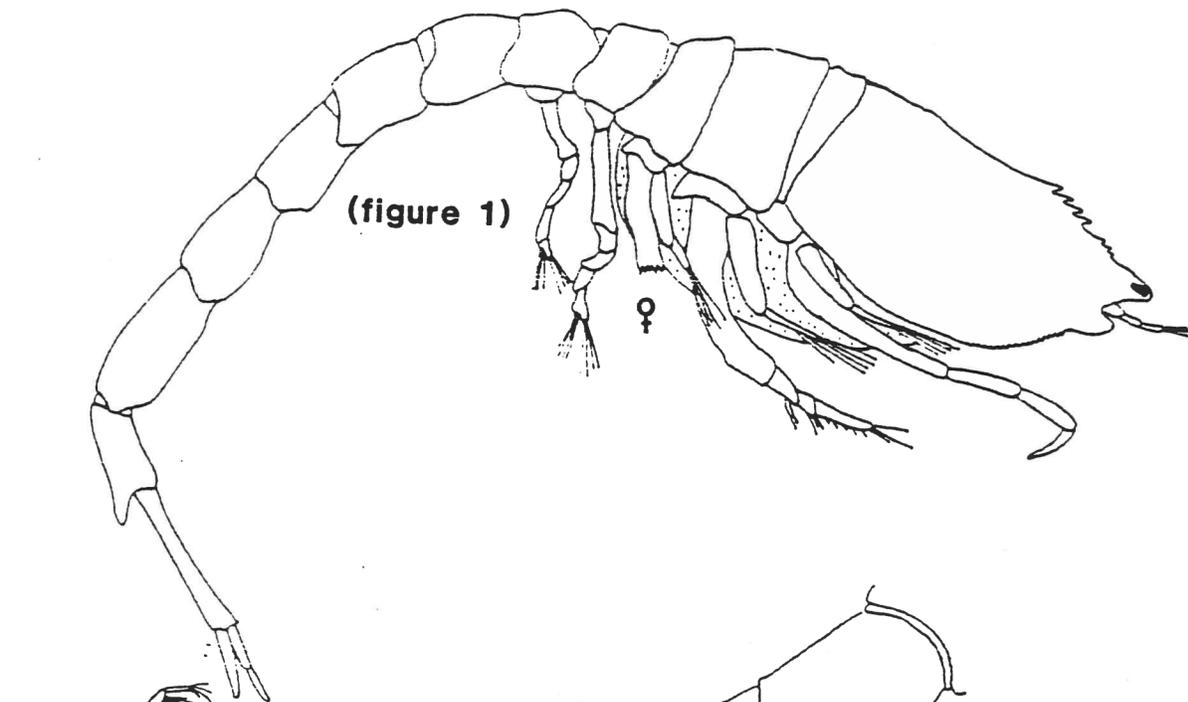
In his original description of the Genus Glyphocuma, Hale described the dorsal crest as being a sexual dimorphic character. The adult female and sub-adult male have the crest of the carapace coarsely serrate; the adult male not showing a coarsly serrated crest, being smooth. The material I have looked at includes 28 females and 2 sub-adult males. I have not seen any male specimens at this time.

The average size of the adult female and subadult specimens is 7 mm.

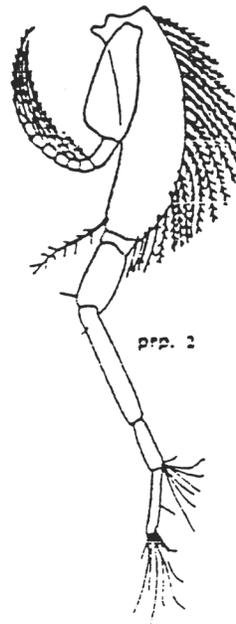
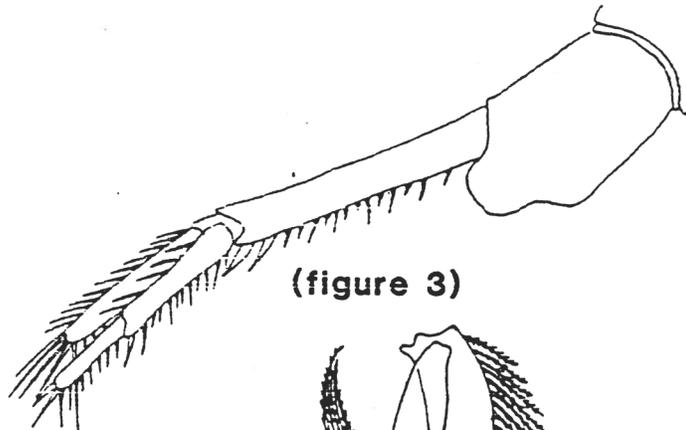
Distribution:

Hyperion material: Santa Monica Bay; 71-101 m; silty-sand, cobble bottom.

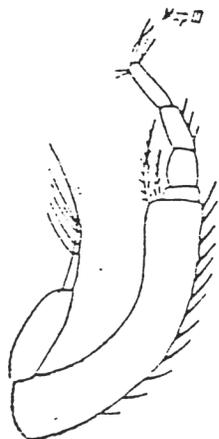
Los Angeles County Museum material: Santa Rosa Ridge, Santa Rosa Island, San Miguel Island; 90-108 m; silty-sand bottom.



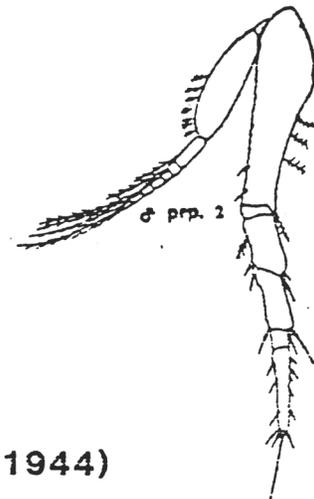
(figure 2a Hale, 1944)



(figure 4a Hale, 1944)



(figure 2b Lomakina, 1958)



(figure 4b Hale, 1944)

Figure 1, 2a, 3, 4b - Glyphocuma; Figure 2b - Vaunthompsonia;
Figure 4a - Leptocuma

