

Southern California Association of  
Marine Invertebrate Taxonomists

3720 Stephen White Drive  
San Pedro, California 90731



August 1988

Vol. 7, No. 4 & 5

NEXT MEETING:                    AMPHIPOD WORKSHOP  
DATE:                                SEPTEMBER 13 - 15, 1988  
LOCATION:                            Los Angeles County Museum of Natural History  
    900 Exposition Blvd  
    Los Angeles, CA

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MINUTES FROM MEETING ON AUGUST 8, 1988:

John Ljubenkov from Marine Ecological Consultants presented some of his preliminary work on polyclad flatworms, including techniques used for working with the group. To work with flatworms, a drawing is made of the whole organism first in which any external features are noted. The specimen then is placed into 95% ethanol and then cleared in methyl salicylate (oil of wintergreen). Any additional structures observed after clearing are added to the drawing. The major character used to distinguish the different species are the various types of eyes and their distribution on the body.

Every body should begin using these techniques to find out what flatworms they are getting in their samples. Perhaps in a few months we can have a workshop to compare notes and determine whether we can identify these flatworms further. Thanks, John, for getting us started.

FUNDS FOR THIS PUBLICATION PROVIDED IN PART BY ARCO FOUNDATION,  
CHEVRON USA, AND TEXACO INC.

The SCAMIT newsletter is not deemed to be a valid publication  
for formal taxonomic purposes.

The best reference for flatworms is:

Hyman, L.H. 1953. The polyclad flatworms of the Pacific coast of North America. Bull. Amer. Mus. Nat. Hist. 100(2):265-392. Figs. 1-161.

A New Scamiteer has just arrived! Born to Karen Green and her husband, David; this Scamiteer weighed in at 2,828 grams and measured slightly over 48 centimeters in length. His name, by the way, in either English or metric units is Steven David. Congratulations to all!

Don Cadien, from MBC Applied Environmental, reports that Neaeromya rugifer (Carpenter, 1864) may be found in the spaces between the elytra and the body wall of the aphroditid polychaete, Aphrodita refulgida Moore, 1910.

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#### SIXTH ANNUAL SCAMIT PICNIC

WHEN: Saturday, September 10, 1988

WHERE: Doheny State Beach (see map)

TIME: 10:00 am until the kids get cranky.

PROVIDED: Entree, soft drinks, plates etc.

BRING: One pot-luck dish per family. Call Larry Lovell (619) 436-5494 for suggestions. Alcoholic beverages are permitted in the park so you may BYO if you are so inclined.

ACTIVITIES: Traditional SCAMIT jungle volley ball, beach sports, lots of grass and sand for child's play (there's room for the kids to play also).

RSVP: Larry Lovell (619) 436-5494 as soon as possible so we can determine food needs.

CAMPING: An overnight camping area is located adjacent to the park. Camping costs and reservations are available through Mistix at (800) 446-7275. Info about the campground is available from park headquarters (714) 496-6171.

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Ostracoda of the Suborder Myodocopina of Southern California  
Brad Myers

## Cypridinidae

<u>Gigantocypris agassizi</u>	Muller, 1895
<u>Macrocypridina castanea</u>	
var <u>rotunda</u>	(Poulsen, 1962)
<u>Vargula tsujii</u>	Kornicker and Baker, 1977

## Philomedidae

## Pseudophilomedinae

<u>Harbansus bradmyersi</u>	Kornicker, 1978
<u>Harbansus mayeri</u>	Kornicker, 1978
<u>Harbansus</u> sp. A	Kornicker, 1978
<u>Harbansus</u> sp. B	Kornicker, 1978
<u>Harbansus</u> sp. indeterminate	Kornicker, 1978

## Philomedinae

<u>Euphilomedes carcharodonta</u>	(Smith, 1952)
<u>Euphilomedes longiseta</u>	(Juday, 1907)
<u>Euphilomedes producta</u>	Poulsen, 1962
<u>Philomedes dentata</u>	Poulsen, 1962
<u>Philomedes</u> sp. A	SCAMIT, 1988
<u>Scleroconcha trituberculata</u>	(Lucas, 1931)
<u>Zeugophilomedes fonsecensis</u>	(Hartman, 1959)
<u>Zeugophilomedes oblonga</u>	(Juday, 1907)

## Rutidermatidae

<u>Rutiderma chessi</u>	Kornicker and Myers, 1981
<u>Rutiderma judayi</u>	McKenzie, 1965
<u>Rutiderma lomae</u>	(Juday, 1907)
<u>Rutiderma rostratum</u>	Juday, 1907
<u>Rutiderma rotundum</u>	Poulsen, 1965
= <u>R. californica</u>	McKenzie, 1965
= <u>R. californica</u>	Baker, 1975

## Sarsiellidae

<u>Eusarsiella pseudospinosa</u>	(Baker, 1977)
<u>Eusarsiella thominx</u>	Kornicker, 1987
= <u>Sarsiella tubipora</u>	Baker, 1975
(not Darby, 1965)	
= <u>Sarsiella</u> sp. A	(of Myers)
<u>Eusarsiella zostericola</u>	(Cushman, 1906)
= <u>Sarsiella americana</u>	Cushman, 1906
= <u>Sarsiella tricostata</u>	Jones, 1958
<u>Eusarsiella</u> sp. A	SCAMIT, 1988
= <u>Sarsiella</u> sp. H	(of Myers)
= <u>Sarsiella</u> sp. B	(of Point Loma)
<u>Sarsiella</u> sp. B	(of Myers)
<u>Sarsiella</u> sp. E	(of Myers)

## Cylindroleberididae

<u>Asteropella</u> <u>slatteryi</u>	Kornicker, 1981
<u>Bathyleberis</u> <u>californica</u>	Baker, 1979
<u>Bathyleberis</u> <u>garthi</u>	Baker, 1979
<u>Bathyleberis</u> <u>hancocki</u>	Baker, 1979
<u>Diasterope</u> <u>pilosa</u>	Poulsen, 1965
<u>Leuroleberis</u> <u>sharpei</u>	Kornicker, 1981
<u>Parasterope</u> <u>barnesi</u>	Baker, 1978
<u>Parasterope</u> <u>hulingsi</u>	Baker, 1978
<u>Parasterope</u> sp. K	(of Myers)

SCAMIT Code: MBC 67

Date examined: June 13, 1988 and  
August 8, 1988

Voucher by: Don Cadien (MBC)

Figure by: Kathy Langan  
(Pt. Loma Lab)

Synonymy: Turbonilla sp. F of Shrake  
Turbonilla sp. A of Hyperion  
Turbonilla "red" of CSDOC  
Turbonilla sp. J of MBC  
Turbonilla sp. C of Pt. Loma

Literature:

Strong, A. M. 1946. The family Pyramidellidae. Minutes  
of the Conchological Club of Southern California, 61:2-46.

Dall, W. H. and P. Bartsch. 1909. A monograph of west  
American pyramidellid mollusks. US Nat. Mus Bull., 68:258p.

Abbott, R. T. 1974. American Seashells. 2nd ed. Van Nostrand  
Reinhold Co. 663p.

Diagnostic Characters:

1. Number of ribs in body whorl is 19-25.
2. Number of striae is 8, with very fine secondary striae.
3. Post nuclear whorls number 10 in most specimens (range 9-14), 14 in largest specimen.
4. Ribs slightly retractive.
5. Consistent spire angle.
6. Aperture auricular (ear shaped).
7. Sutures compressed.
8. Interstices wider than ribs.
9. Faint spiral striations; equal and weak.
10. Nearly straight columella.
11. Varices in adult; white to waxy yellow in color.
12. Shell is thin and light for its size, without periostracum; base color is chestnut with both light and dark bands and is up to 2.5 cm in length.

Comments: Subgeneric distinctions are confused and in a state of flux, are interpreted differently by different authorities and do not permit reliable use. Turbonilla sp. A is one of the most commonly encountered species of Turbonilla in benthic samples from southern California.

Distribution: Range from San Diego to at least Goleta. Depth from 5 to 170 m.

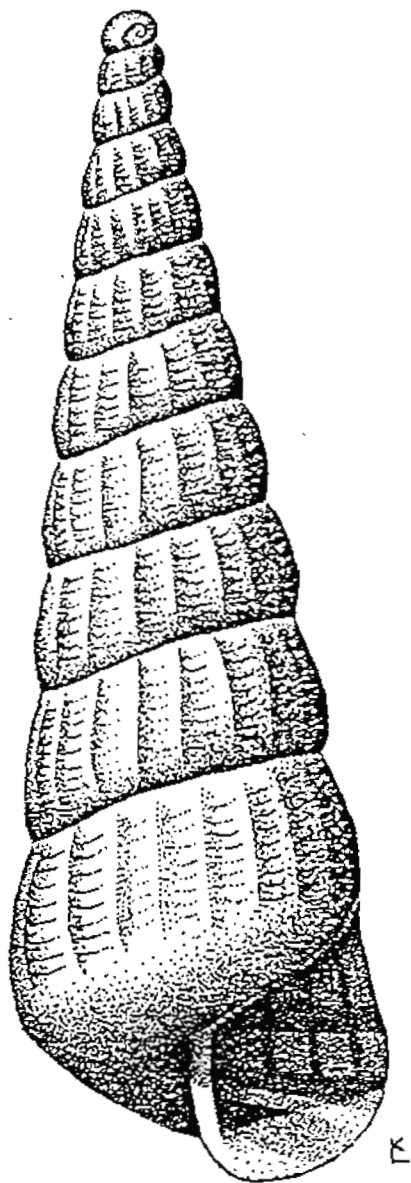


Figure 1. Turbonilla sp. A

SCAMIT CODE : MBC 66

Date Examined: 13 October 1987  
Voucher By : Don Cadien

SYNONYMY: *Philine* sp. A of MBC.

LITERATURE: Abbott, 1974; Dall, 1919; Mattox, 1958; Pruvot-Fol, 1954; Willett, 1944 .

DIAGNOSTIC CHARACTERISTICS:

Animal - (Figure 1)

1. Relaxed animal length 3-4 times width.
2. Cephalic shield 50-65% of body length.
3. Parapodia reaching but not overlaying sides of cephalic shield.
4. Metapodium asymmetrical, not bilobed but longer on right side where posterior corner may extend considerably beyond left or even cover most of the pallial aperture.
5. Pallial lobes equal and rounded (without flagellum), meeting dorsally in a medial sinus as deep as wide.
6. Shell 1/3-1/4 length of relaxed animal (1/2-2/3 length of contracted specimen).
7. Spines of shell lip and columellar flange usually visible through body.
8. No pigment in preserved specimens - all parts of body translucent white.
9. Three subequal fusiform gizzard plates strengthened by a longitudinal rib on their outer faces (similar to *P. scabra* as illustrated in Pruvot-Fol 1954).

Shell - (Figure 2)

1. Shell consisting of about 1 and 1/2 rapidly enlarging whorls.
2. Aperture as long as body whorl, outer lip extends beyond whorl apex.
3. Shell flattened and broad: shell depth (aperture to dorsum) about 0.4 times apertural width; length/width ratio 1.2-1.4/1.
4. Columella usually bearing a flattened flange extending into the aperture. This varies in prominence and is sometimes lacking in juveniles or resorbed in adults. When present it is diagnostic. Columellar callus thin and transparent.
5. Outer lip usually bearing 1-4 sharp spines which project from the ends of the most posterior spiral ribs. Aspinous variants uncommon. Smaller specimens generally with fewer spines.

6. Shell sculptured with 33-43 obliquely spiral rows of punctations (mode 35). The spacing and size of these varies over the shell. Higher numbers of rows result from intercalation of secondary smaller rows in some individuals. Punctations on the most posterior rows frequently obscure.
7. Punctations generally round and either chained or nearly touch those adjacent in the radial row. Separated from those in adjacent radial rows by less than the punctae diameter. Occasional gaps separate the radial rows into groups of 3-20.

#### RELATED SPECIES AND CHARACTER DIFFERENCES:

1. *P. californica* has raised reticulate sculpture with spines at each intersection. The animal is completely retractile within the shell (except for the mantle covering of the shell itself) and probably should be removed from the genus (see Willett, 1944).

RANGE: Redondo Beach to off Pt. Loma; Depth 130-300 m

2. *P. alba* is a massive lens shaped animal about as wide as long. The shell is broadly oval, with a very produced outer lip. Both these characters are true at all stages of growth. No spiral striations or punctations adorn the shell. This is the only *Philine* you are likely to take in a trawl (see Mattox, 1958).

RANGE: San Miguel Island to San Benito Island (Baja California); Depth 100 m

3. *P. bakeri* has a shell with a blunt apex and a narrow, almost cylindrical body whorl separated posteriorly by a sulcus from the outer lip. Animal only about 30% longer than shell, less if strongly contracted. Shell sculpture of small radial rows of punctae separated by more than their diameter from the adjacent radial row. These punctations are sunken below the shell surface. Outer lip crenulate throughout (see Dall, 1919 - DISREGARD Abbott's [1974] description of this species).

RANGE: Goleta to off So. Coronado Island; Long Beach Harbor, Mission Bay

4. *P. cf. quadrata* lacks spines on the lip and has much finer punctae. Body proportions also differ markedly, with pallial lobes larger than the cephalic shield or foot.

RANGE: Oceano to off Pt. Sal, San Luis Obispo

5. *P. sinuata* and *P. polaris* (reported from the Arctic or boreal North East Pacific) both lack outer lip spines and shell sculpture.

*Philine* can be separated from the externally similar *Aglaja*, *Melanochlamys*, *Chelidonura*, and *Navanax* by the relationship between the shell and the pallial lobes. In *Philine* the shell is either flattened-quadrate or barrel-shaped and fills most of the pallial lobes. In *Aglaja* and *Melanochlamys* the shell is reduced and occupies half or less of the pallial lobes, with its anterior margin cutting diagonally across them. In *Chelidonura* and *Navanax* the shell is further reduced to a narrow claw-like calcified curve restricted to the most posterior portion of the pallial lobes.



DEPTH RANGE: 8 m - 222 m

DISTRIBUTION: Oceano (San Luis Obispo Co.) to off Pt. Loma (San Diego Co.).

REMARKS: *Philine* sp. A animals range up to 10.5mm in length when relaxed. At this size the maximum width is 2.6 mm and the shell length (excluding spines) is 3.1 mm. They are most common in clayey bay sediments, especially within the Los Angeles - Long Beach Harbors complex, although occurring offshore as well. This species became much more abundant following the 1982-83 winter storm season. It flourished on the "Clay pudding" sediments which were deposited in quiet water areas such as the harbors.

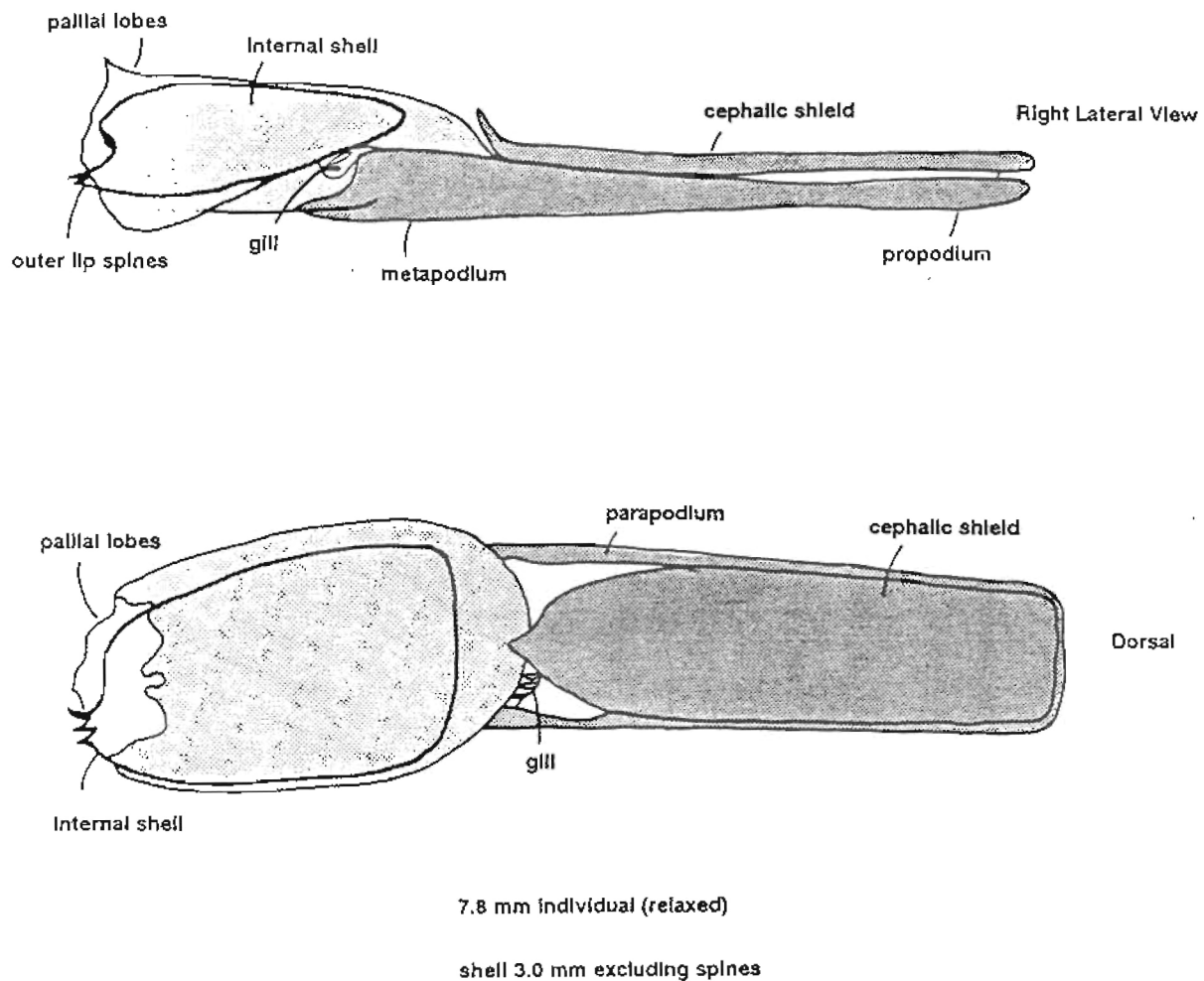


Figure 1. a) Animal lateral view, b) animal dorsal view.

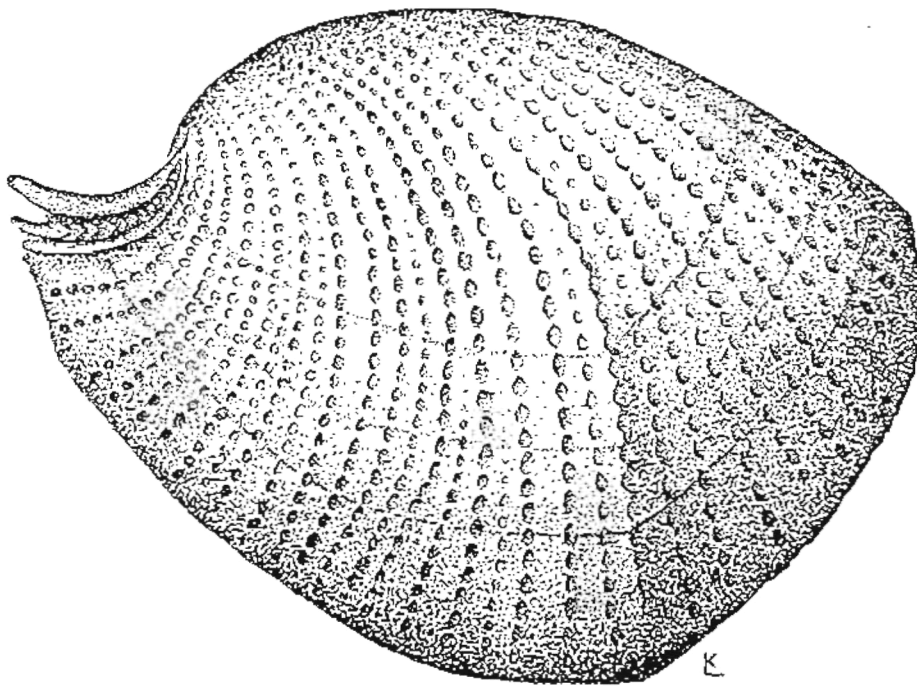


Figure 2. Shell, dorsal view.

(Illustration by Kathy Langan,  
Pt. Loma Biology Lab)