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**Southern California Association of  
Marine Invertebrate Taxonomists**

3720 Stephen White Drive  
San Pedro, California 90731



December, 1986

Vol. 5, No. 9

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NEXT MEETING: January 12, 1987  
SPECIMEN EXCHANGE GROUP: Porifera  
TAXONOMIC TOPIC: Asellota Isopoda

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MINUTES FROM MEETING ON DECEMBER 8, 1986

Gretchen Lambert from Cal State University, Fullerton led us on a review of local ascidians. Her discussions provided both the beginner and advanced ascidian worker with a thorough overview of the major group's distinguishing characters. Unique to most of the groups SCAMIT examines, the diversity of the local ascidians is well represented by the existing literature. Please turn to the Helpful Hints section for a brief account of a few interesting Ascidiacea tidbits.

New publication of interest - Identification Manual to the Mysidacea and Euphausiacea of the Northeast Pacific. R.D. Kathman, W.C. Austin, J.C. Saltman, J.D. Fulton. Canadian Special Publication of Fisheries and Aquatic Sciences 93. 1986. Publication Center. SSC, Ottawa, Canada, K1A 0S9. \$24.95 Canadian.

ERRATUM

Volume 5, No. 8. Specimen PL 74 Tenonia prios (Hartman, 1961)

Helpful hints for ascidians - Dissection of compound ascidians (typical of aplousobranchia) will rarely yield a single, whole zooid, but rather several zooids need to be examined to produce a complete view of the taxonomic features. The order Phlebobranchia contains both solitary and compound animals that commonly have thin, transparent tunics. This region's fauna is frequently represented by members of the Agnesidae, Ascidiidae, and Cionidae. Corella (a Rhodosomatidae)

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Helpful hints for ascidians (continued)

has spiral stigmata and may sometimes resemble an Agnesia with its tunic removed.

The order Stolidobranchia contains a solitary species with the general appearance of thick, leathery lumps. Dissection in this group must be carefully done to allow orientation to the left (ventral) and right (dorsal) side of each specimen. Orientation can be achieved by locating the languets which are always on the dorsal or excurrent side. The ventral side can be distinguished by locating the long ribbon shaped endostyle.

LIST OF SPECIMENS EXAMINED ON DECEMBER 8, 1986

HYP 69	<u>Agnesia septentrionalis</u>	Huntsman, 1912
CSUF 1	<u>Microcosmus exasperatus</u>	Heller, 1878

Literature:

Van Name, W.G. 1945.

Diagnostic Characters:

1. Tunic colorless, covered totally or nearly so with sand grains.
2. Size small, usually no more than 12-15 mm.
3. Branchial tentacles simple (not branched), 30-50 in number. Fifteen or more longitudinal rows of stigmata, singly spiralled.
4. Gut, intestine and reproductive organs on left side of body. Intestine curves anteriorly and dorsally beyond the stomach, before extending anteriorly to atrial siphon.

Remarks:

This species can be distinguished from Corella willmeriana by the covering of sand grains, the small size, fewer branchial tentacles, and position of the gut and gonads. In Corella the alimentary and reproductive organs are located ventrally and on the right side of the body, and the intestine bends ventrally beyond the stomach before curving anteriorly to the atrial siphon.

This species can be distinguished from Eugyra by the simple unbranched tentacles (Eugyra has only about 16 large branched tentacles two or three times compound), and by the stigmata (Eugyra has only 8 longitudinal rows, arranged in double spirals).

Depth range: 27-80 m.

Distribution: Bering Sea to Newport Harbor in southern California.

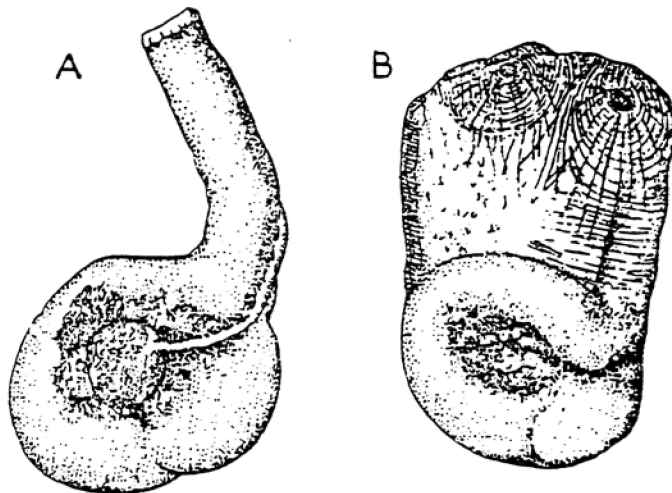


FIG. 112. Agnesia septentrionalis Huntsman. Left side of body. A. Intestinal tract and gonad,  $\times 2.5$ . B. Left side of body removed from the test,  $\times 2$ . After Ritter.

Microcosmus exasperatus Heller, 1878  
Pyuridae

Vol. 5, No. 9

SCAMIT Code: CSUF 1A

Date examined: Dec. 8, 1986  
Voucher by: Gretchen Lambert

Literature:

- Kott, P. 1985.  
Van Name, W.G. 1945.

Diagnostic Characters:

1. Tunic thick and tough, usually some shade of red, reddish purple, or pink externally and pearly grey internally.
2. Branchial sac with 8 or 9 branchial folds on each side of the body. Ninth fold might be rudimentary. Branchial siphon lined with tiny, fleshy, flattened spines bluntly pointed. At the base of the branchial siphon lining are 4 pockets which form a cuspid valve. Eight to ten branchial tentacles pinnately branched with secondary and sometimes tertiary branching.
3. One gonad on each side of the body, consisting of 3-4 segments on the left side and 4-5 on the right. Gonad on left side crosses the descending loop of the gut.
4. Dorsal tubercle C shaped with the horns inrolled and spiralled at least one turn.
5. Dorsal lamina a continuous membrane, not cleft into languets.

Remarks:

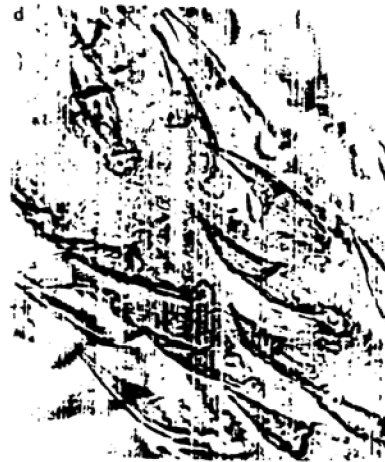
This species can be distinguished from common California Pyura species by a constellation of characters: the 8 branchial folds instead of 6, the spines lining the branchial siphon, the 4 pockets at the base of the branchial siphon, the gonad crossing the descending gut loop (it does not cross in Pyura), the spiralling of the horns of the dorsal tubercle, and the absence of languets on the dorsal lamina.

Depth range: intertidal to 42 m., perhaps deeper.

Distribution: This is the first record that I am aware of for southern California. It is a very sidespread warm water species, occurring from the Red Sea to Malaysia, Australia, and Hawaii, as well as Bermuda, the West Indies, Florida and Brazil. It does occur in some Australian temperate waters. We have collected it from San Diego, San Pedro, and Alamitos Harbors on floats since Feb. 1986.



Tokioka 1967, p. 209



Branchial spines  
Kott 1985, p. 337

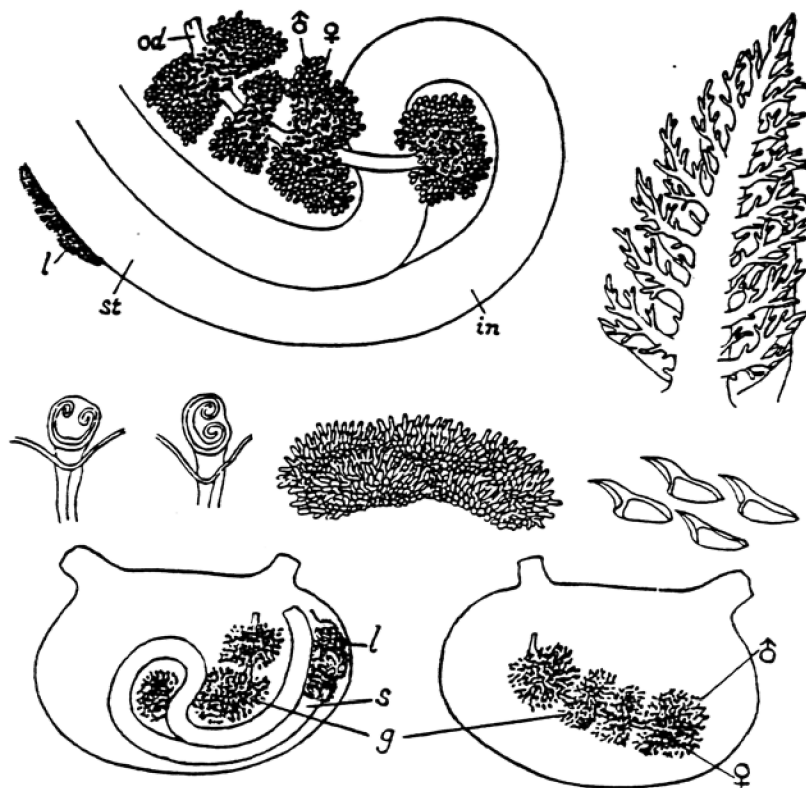


FIG. 230. *Microcosmus exasperatus* Heller. Details: alimentary tract, tentacle, dorsal tubercle, liver, and minute spines ( $\times 250$ ), from lining of the distal part of branchial siphon; also, left and right sides of body, somewhat enlarged.

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