CLASS HOLOTHOROIDEA

Prepared by Lisa Haney/LACSD

Subclass Aspidochirotacea

Diagnosis. 10-30 leaflike or shieldlike oral tentacles, lacks retractor muscles, tube feet present. (e.g., *Enypniastes, Holothuria, Isostichopus, Parastichopus, Pelagothuria, Scotoplanes, Stichopus*)

Order Aspidochirotida Grube, 1840

Diagnosis. Tentacles peltate, 15-30 in number. Respiratory trees present. Gonads in 1 or 2 tuffs. Ossicles usually include tables.

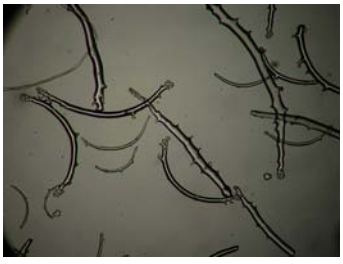
Family Synallactidae

Diagnosis. Body with tube feet in rows ventrally, papillae dorsally. Body wall soft and pliable. Twenty equal, peltate tentacles. Tentacle ampullae absent. Retractor muscles absent. Rete mirable absent. Posterior mesentery attached to right ventral body wall. Gonad single tuft, of double tuft. Cuvierian organs absent. Calcareous ring simple; not a mosaic of smaller pieces. Typical skin ossicles: Tables or C-shaped bodies.

Synallactes alexandri

General Body Design:	General Tentacle Morphology:

Larvae Morphology:	General Ossicle Morphology:



General Ring Canal Morphology:

Synallactes alexandri SCAMIT Vol. XX, No.xx
Group: Synallactidae

Synonymy: none

Date Examined: 25 September 2003
Vouchered By: Lisa Haney LACSD

IDENTIFYING CHARACTERS:

1. Body elongate, almost cylindrical, and similar in form to Pannychia.
2. Peltate tentacles nearly equal in size, average twenty in number, large circular discoidal ends.
3. Ossicles are in the form of tables with long thin spires and a needle like opening towards the top. Also present are C-shaped supporting rods in the tentacles and small club-shaped ossicles in the tube feet.
4. Color in alcohol and in live material is brown/grey.
5. Terminal part of the tentacles covered with minute papilla-like projections
6. Smooth dorsal body wall with small projections/bumps.
7. Body wall rigid and well formed with large tube feet located ventrally only.
8. Calcareous ring very poorly calcified with neither long anterior or posterior extensions.

RELATED SPECIES AND CHARACTER DIFFERENCES:

The only reported Synallactid from southern California is *Synallactes challengeri* of which there is no way this specimen could be confused. *Synallactes challengeri* has long pointed papillae dorsally and the ossicle tables are different in form, though the spires of both of these animals are similar.

DEPTH RANGE: Taken from 500 m

HABITAT AND DISTRIBUTION: Taken from the Palos Verdes Peninsula in Los Angeles, California within the slope environment. Muddy substrate.

LITERATURE:

Lambert, Philip. 1997. Sea Cucumbers of British Columbia, southeast Alaska and Puget Sound. UBC Press.

Ludwig, 1893. Ludwig, H. 1893. Vorläufiger Bericht über die auf den Tiefsee-Fahrten des "Albatross" (Frühling, 1891) im ostlichen Stillen Ocean erbeuteten Holothurien. Zoologischer Anzeiger 16;177-186 (May, 1893). Abstract, J.R. Micr. Soc. 1893, pp.484-486.

Solis-Marin, 2004. Revision of the Synallactidae. In press.

Synallactes alexandri

Fig. 1: Tube feet ossicles

Fig. 2: Body wall ossicles

Fig. 3: Tentacle mass

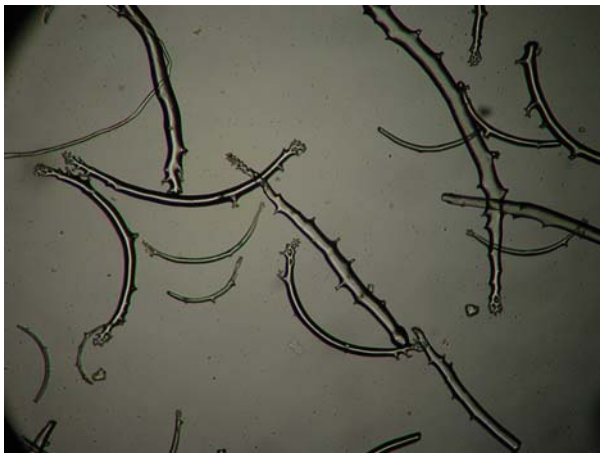


Fig. 4: Tentacle ossicles

Digital Images taken by Lisa Haney, Los Angeles County Sanitation Districts, Carson, CA

Synallactes alexandri

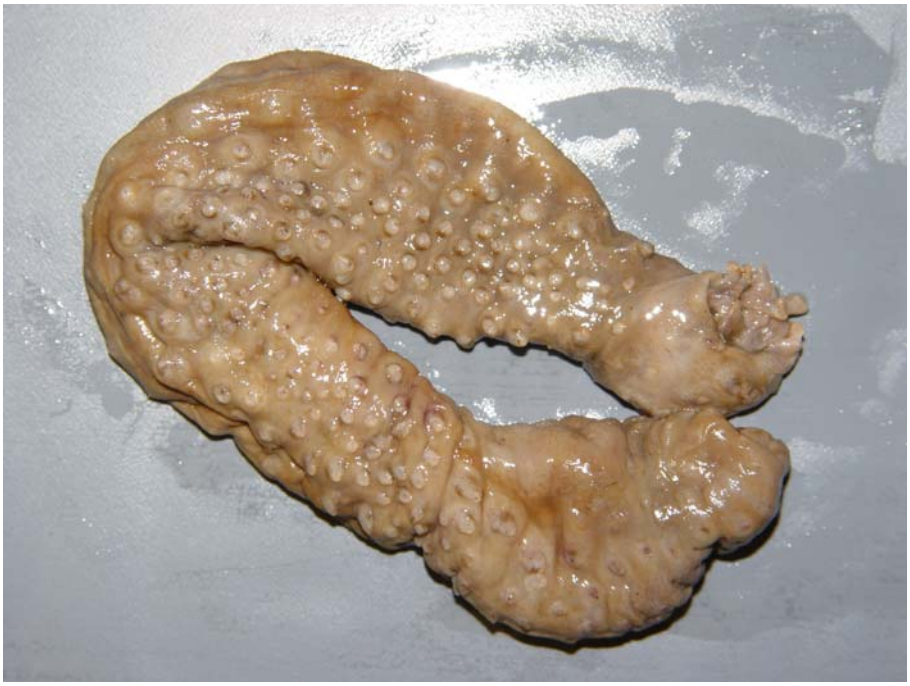


Fig. 1: Ventral view

Fig. 2: Dorsal view

Digital images taken by Lisa Haney, Los Angeles County Sanitation Districts, Carson, CA