Parastichopus sp. A Group: Stichopodidae

Synonymy: Same as *Parastichopus sp. A* in SCAMIT list from 1998 Date Examined: 25 September 2003 Vouchered By: Lisa Haney LACSD

DIAGNOSTIC CHARACTERS OF THE GENUS PARASTICHOPUS:

1. Peltate tentacles.

- 2. Tube feet located only on the ventral side.
- 3. Body of animal elongate and tapering at both ends.
- 4. Gonads present in two tufts.
- 5. Dorsal side usually, but not always, with papillae.
- 6. Ossicles are predominately present as tables, C-shaped rods, and buttons

IDENTIFYING CHARACTERS OF SPECIES A:

- 1. Body elongate, almost cylindrical, several times longer than broad.
- 2. Tentacles nearly equal in size, average twenty in number, large circular discoidal ends.
- 3. Ossicles are similar to all species within the genus *Parastichopus* and are represented by tables, C-shaped rods, and buttons. (Number of holes in tables varies, as is the case in all *Parastichopus* species).
- 4. Color in alcohol and in live material is bright white, with small dots of pink or black on the surface, terminal parts of the tentacles and pedicels yellowish.
- 5. Terminal part of the tentacles covered with minute papilla-like projections
- 6. Calcareous ring rudimentary and fragile.
- 7. Body wall flaccid with no large extending papillae or warts.

RELATED SPECIES AND CHARACTER DIFFERENCES

Parastichopus sp. A differs from P. parvimensis, P. californicus, P. johnsoni, and P. leukothele in overall body size, shape and color, ossicle morphometrics, absence of large or noticeable tubercles dorsally and lacking musculature of the body wall.

Species Name	Diameter of disk (μm)	No. of holes in disk	No. of spines on spire	Height of spire (µm)	
P. californicus	82.5 ± 10.8	9.7 ± 3.8	15.1 ± 4.1	82.0 ± 9.7	
P. johnsoni	138.3 ± 17	18.3 ± 3.3	16.3 ± 4.4	107.5 ± 11.9	
P. leukothele	113.4 ± 14.5	16.6 ± 6.3	8.1 ± 2.3	96.6 ± 13.4	
P. parvimensis	54.8 ± 4.5	5.9 ± 1.4	4.7 ± 1.7	47.7 ± 5.2	
Taken from Lambert, 1986					

P. sp. A ≈ 55 22 ± 6 ≈ 12 ≈ 65

DEPTH RANGE: 80 - 454 m

<u>HABITAT AND DISTRIBUTION:</u> Taken from the Palos Verdes Peninsula in Los Angeles, California within the slope environment and one specimen is know from the east end of Catalina Island. Muddy substrate.

LITERATURE:

Lambert, Philip. 1985. Northeast Pacific holothurians of the genus *Parastichopus* with a description of a new species, *Parastichopus leukothele* (Echinodermata). Canadian Journal of Zoology; Vol 64: 2266-2272.

Subclass Aspidochirotacea

Diagnosis. 10-30 leaf like or shield like 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 Stichopodidae Haeckel, 1896

Diagnosis. Peltate tentacles, tube feet ventral, tapered ends, gonads in 2 tuffs, dorsal side usually with papillae or warts. Ossicles as tables and sometimes C-shaped rods and buttons.

Parastichopus sp. A (SCAMIT, 2004)

General Body Design:



General Ossicle Morphology:









Parastichopus sp. A (SCAMIT, 2004)



Fig. 1: Calcareous plate (Enlarged)



Fig. 2: Calcareous plate (Enlarged)



Fig. 3: Plates



Fig. 4: Supporting tables

Parastichopus sp. A (SCAMIT, 2004)



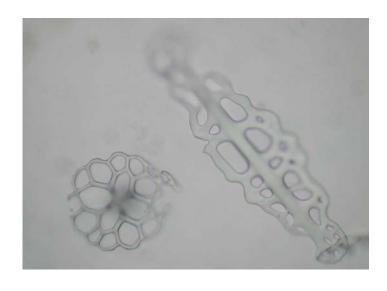


Fig. 1: Plates and Button

Fig. 2: Plates and Button (Enlarged)



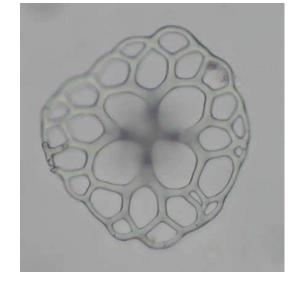


Fig. 3: Side view of plate spires

Fig. 4: Calcareous plate (Enlarged)

Parastichopus sp A.



Fig. 5: Side view of spire



Fig. 6: Side view of spire



Fig. 7: Side view of spire

Fresh Specimens

(in good condition)



