NOTES

ON *STERECHINUS ANTARCTICUS* KOEHLER (CAMERODONTA: ECHINOIDEA: ECHINODERMATA) COLLECTED FROM THE COASTAL WATERS OF ANTARCTICA OFF QUEEN MAUD LAND

ABSTRACT

Sterechinus antarcticus Koehler 1901, an echinoderm of the family Echinoidea and order Camerodonta collected from the coastal waters of Antarctica off Queen Maud Land is reported giving some of its morphological features and remarks on its affinity to two closely related species namely *S. diadema* and *S. agassizii.*

STERECHINUS ANTARCTICUS Koehler 1901 is a species of sea urchin found distributed around the Antarctic continent with its northernmost geographical limit going as far north as south Georgia (Mortensen 1943). A specimen of this species (Plate I) was collected during the Third Indian Scientific Expedition to Antarctica in 1983-'84 period by the second author. The specimen was collected using a snapper from a depth of 150 m at 70°02'S and 12°36'E about 1 km away from the Antarctic ice edge at Queen Maud Land. As the snapper brought no sedimentary material it is assumed that the substratum at the Station is hard. Since the material would form one more record to the geographical distribution of the species, a brief description of the specimen is presented with remarks on its close relationship with two other species namely *S. diadema* and *S. agassizii.*

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Material : A single specimen of h.d. 24 mm and v.d. 14 mm (Plate I).

Description : The test is globular. The apical system is 25% of the diameter of the test. The occular plates are all insert. The anus is excentric in position. Sections of the spines show that the spokes are round and broad.

Peristome is large and forms 40% of the diameter of the disc. The peristomial membrane is thin.

The Aristotle's lantern (Plate I) has well developed epiphysis. The rotule are also well developed. The pyramids are well formed. The teeth are somewhat weak.

Primary spines are short, pointed and grooved. Secondary spines are long and needle-like. The primary tubercles are arranged in distinct rows, those at the ambitus being the largest. The tubercles are noncrenulate.

Globiferous and triphyllous pedicellariae are distinctly seen. In globiferous pedicellariae the basal part of the valves are not produced. The valves of the triphyllous pedicellariae are broad and rounded.

Remarks: Whereas Koehler (1901) while establishing the species thought it to be quite unique differing sharply from all other species of the order Camerodonta by the characters of its apical system and the smaller number of its conical plates. Mortensen (1903) came to the conclusion that it could not be distinguished from *S. diadema* and *S. agassizii*. In 1909, Mortensen (1909) while placing *S. antarcticus* as a separate species opined that if more intermediate forms are collected, this species could not be kept separate from *S. diadema*. Finally in his Discovery Report, Mortensen (1936) considered *S. antarcticus* as separate species though very close to *S. diadema* and *S. agassizii*. In the comparative account made for these three related species Mortensen (1943) examined the various characters critically to conclude that they represented three distinct species eventhough there could be intermediate hybrid forms between *S. antarcticus* and *S. agassizii*, their area of distribution overlapping in the South Georgia region.

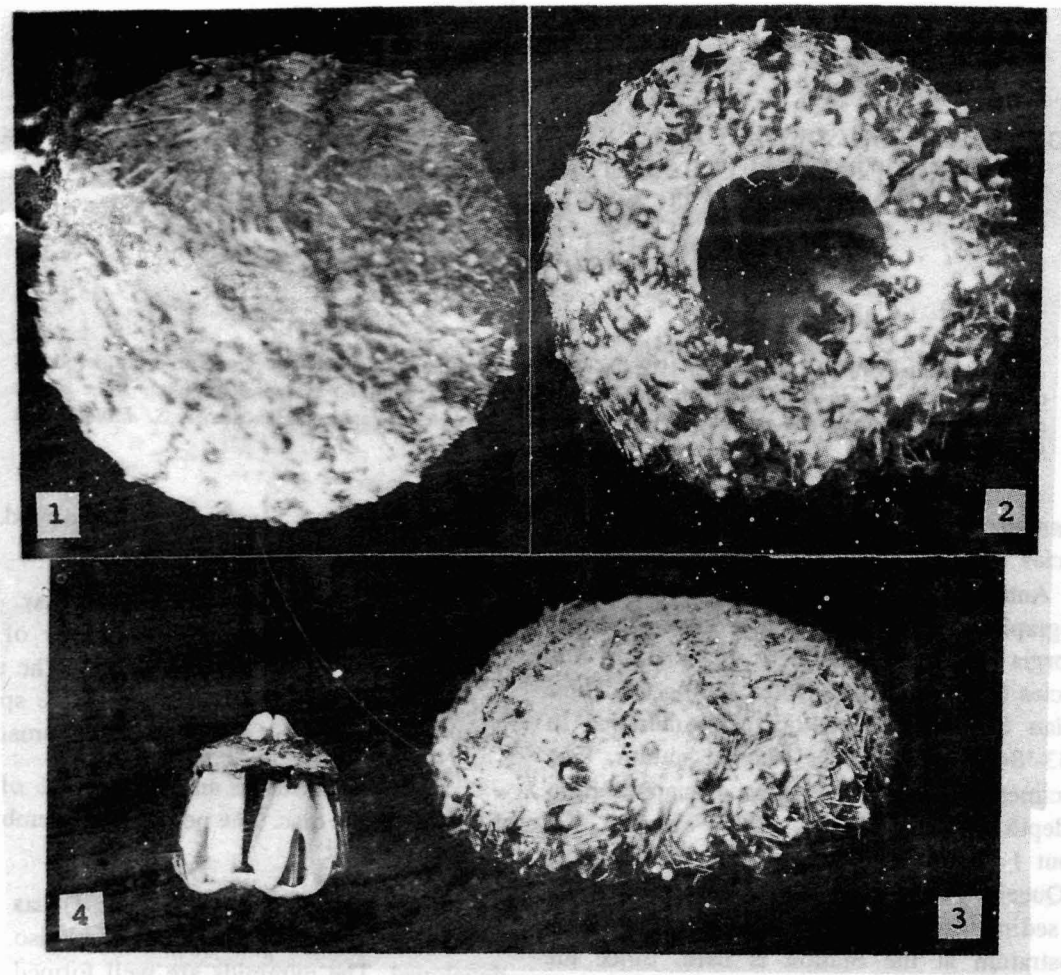

PLATE I *Sterechinus antarcticus* Koehler 1. Dorsal view, 2. Ventral view, 3. Lateral view, 4. Aristotle's Lantern (Lateral view)

Distribution: Distributed all around the Antarctic continent. In the South American region it goes as far north as S. Georgia. Bathymetrically the species is distributed between 100 and 1080 m.

Central Marine Fisheries Research Institute,
Kochi-682 014

D. B. JAMES
K. J. MATHEW

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RECORD OF *COPIDOGNATHUS TAMAEUS* BARTSCH (HALACARIDAE : ACARI) FROM THE INDIAN OCEAN

ABSTRACT

Copidognathus tamaeus (copidognathinae : Halacaridae : Acari) collected among *Jania rubens* from Andaman Islands recorded here for the first time from the Indian Ocean.

BIOSYSTEMATIC studies of Halacaridae from Andaman and Nicobar Islands yielded many new species and new records. Present author has already documented 11 halacarid species (Chatterjee 1991, 1992, 1995a, b, Sarma and Chatterjee 1991, 1993a, b) As a sequal to the above in present communication *Copidognathus tamaeus* Bartsch 1992 is recorded here for the first time from the Indian Ocean besides its first record away from the type locality.

The species earlier was recorded by Bartsch (1992) based on a single female specimen from coast of Moorea Island (Society Islands Pacific Ocean) 2 m depth — coral reef.

Four females were collected by the present author among Jania rubens from Chatam Island (Andaman). Though the specimen was collected in 1986 but due to delay for reporting, it is becoming second record from World Ocean.

The specimen at hand closely resembles with the description given from type locality.

Female : Idiosomal length of four females ranges from 300 μm to 340 μm. The various other morphometric measurements obtained from one of the specimen are as follows.

Idiosoma (dorsal) 302 μm long, 211 μm wide; Anterodorsal plate (AD) 89 μm long, 71 μm wide; ocular plate (OC) 70 μm long, 46 μm wide; Posterodorsal plate (PD) 172 μm long, 120 μm wide; Anterior Epimeral plate (AE) 95 μm long, 164 μm wide; Genitoanal plate (GA) 140 μm long 87 μm wide; Genital opening (GO) 71 μm long, 38 μm wide; Gnathosoma 105 μm long, 67 μm wide.

All dorsal plates separated by wide cuticular membranous area (Fig. 1a) AD with three areolae *viz.* one anterior and two posterior. The feebly developed pores of the areolae arranged longitudinally. Dorsal seta 1 (ds1) on