

SCAMIT CODE: None

Date Examined: 05 April 2005

Voucher By: K. Barwick/D. Cadien

SYNONYMY: Neomeniomorpha sp SD1 Barwick 2003§

LITERATURE: Salvini-Plawen, 1978; Scheltema, 1998

DIAGNOSTIC CHARACTERS:

1. Animal small, just over 2mm in length; body not regionated, twig or very shallow C shape; tall oval with a ventral pedal groove (Figure A, arrows indicate groove); mouth not connected to pedal groove, which ends in a pedal pit; pedal groove continuous with cloacal chamber posteriorly.
2. Spicule coat dull; spicules adpressed in a single layer of slightly imbricated scoop-like spicules (less than 2 micro meters thick) (Figure B).
3. Radula, if present, unknown.
4. Copulatory spicules, if present, unknown

RELATED SPECIES AND CHARACTER DIFFERENCES:

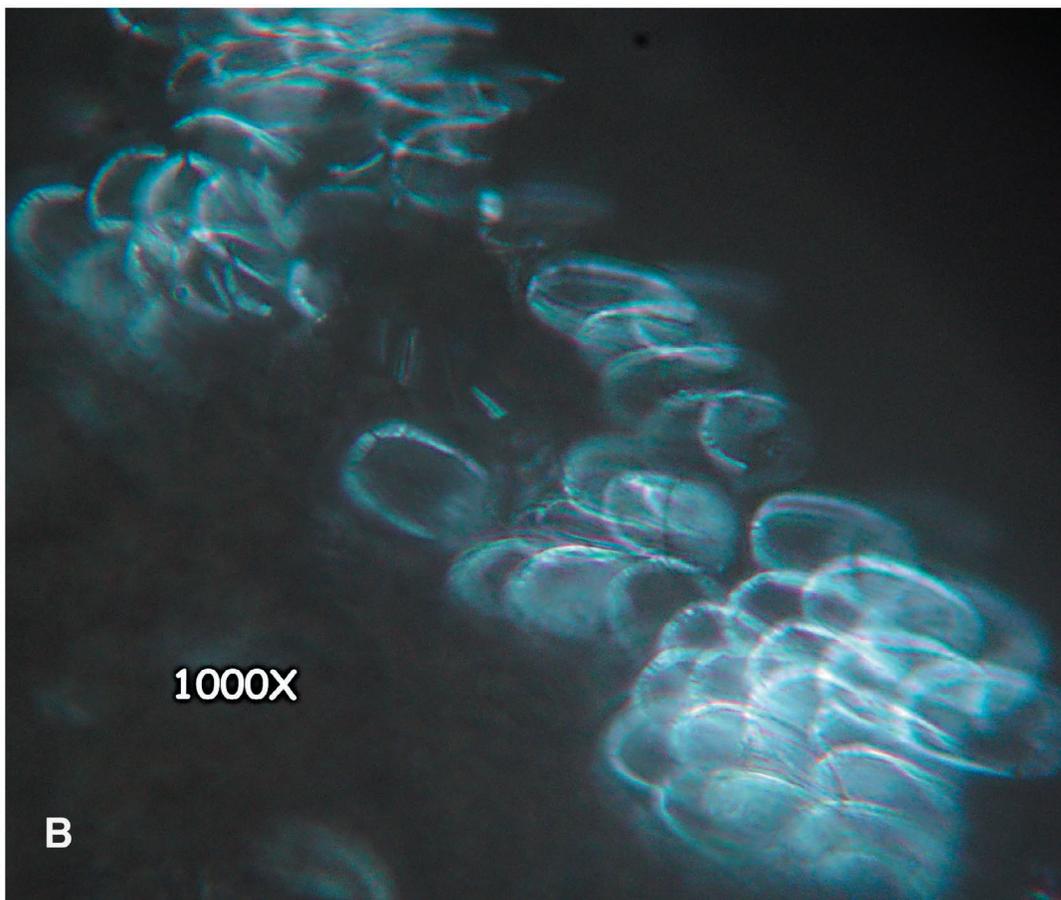
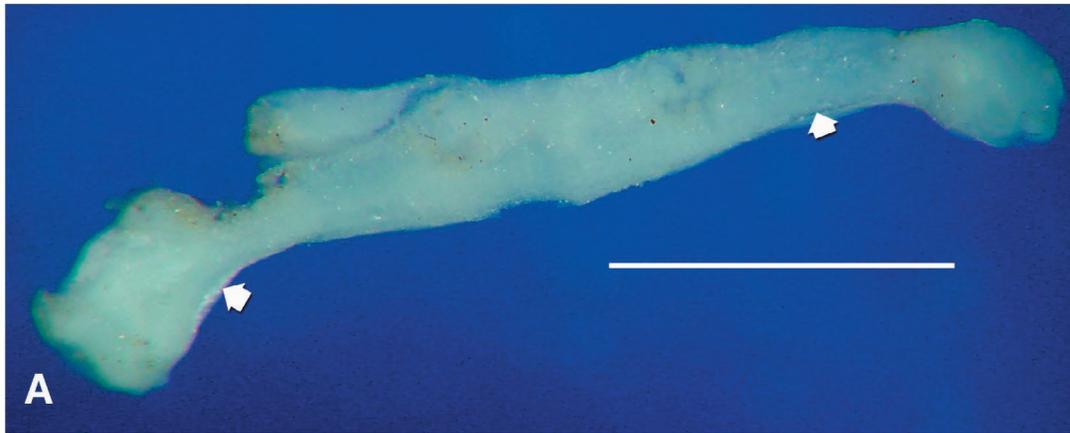
1. Neomeniomorpha sp A can be separated from *Heathia porosa* by having spicules not tapering at one end; by being an order of magnitude smaller; by lacking an attenuated posterior end.
2. It can be differentiated from *Dondersia californica* by being much smaller; in not having a crenulate carina dorsally; and in having scoop-shaped spicules.
3. It can be separated from *Dorymenia acuta* in being much smaller; in lacking multiple layers of tangential spicules in the dermis; and in not being attenuate posteriorly.
4. It differs from *Platymenia branchiosa* by having a much greater BLI; by having adpressed rather than upright spicules; by having solid scale-like spicules rather than short needle-like spicules; and by being taller than wide rather than wider than tall.
5. Neomeniomorpha sp A can be separated from Neomeniomorpha sp B by: being larger; having a greater BLI; by having adpressed rather than upright spicules; by having solid scale-like spicules rather than long hollow needle-shaped spicules; and by lacking a spiculose fringe around the cloacal chamber.
6. Neomeniomorpha sp A can be separated from Neomeniomorpha sp C by being larger; by having a dull rather than shiny spicule coat; by having spicules drawn into a long or short point over a rounded base; by having the spicules attached in a radial rather than an adpressed fashion.

DEPTH RANGE: known from a single specimen from 508m

DISTRIBUTION: Upper Continental Slope, off San Diego

DISCUSSION: It is likely that this species is the same as the *Gymnomenia minuta* described by Scheltema (1998) and noted as occurring within the Southern California Bight. The main similarities are in the overall body shape and in the shape and size of the spicules. If a radula and copulatory spicules can be recovered from this or another future specimen, the identity with *Gymnomenia minuta* may be established. For the moment we merely suspect that the two may

be either the same or closely related. Between our single undissected specimen, and the brief description provided by Scheltema, sufficient differences remain to retain this as a separate provisional species



Neomeniomorpha sp A SCAMIT 2005 A. Whole animal, lateral view (scale bar 1mm) B. Spicules from ventral furrow (arrows Fig. A) (CSD Sta. DS1, 25APR03, 500m, 0.5mm screen size)