SCAMIT CODE: None Date Examined: 05 April 2005 Voucher By: K. Barwick/D. Cadien

SYNONYMY: Crystallophrisson hartmani Schwabl, 1961

LITERATURE: Schwabl, 1961; Schwabl, 1963; Scheltema, 1998

DIAGNOSTIC CHARACTERS:

1. Body regionated; anterium and neck about equal in diameter to anterior trunk; posterior trunk much narrower than anterior trunk, and narrower than posterium (Figure A)

- 2. Oral shield entire, uncleft dorsally; surrounding mouth (Figure B)
- 3. Peribranchial plate flattened to dome shaped, spicular fringe protruding (if plate flat) or not protruding (if plate convex and dome shaped)(Figure C).
- 4. Mid-anterior trunk spicules with single or double central keel, otherwise lacking ridges (Figure E), slightly bent toward body axis (Figure F)
- 5. Radula with triangular plate well developed, bearing a pair of apophyses. Denticles strong, sickle-shaped, with long robust bases (Figure D)
- 6. Radular cone narrow and straight in frontal view, broad and somewhat asymmetrically extended anteriorly in lateral view (Figure D)

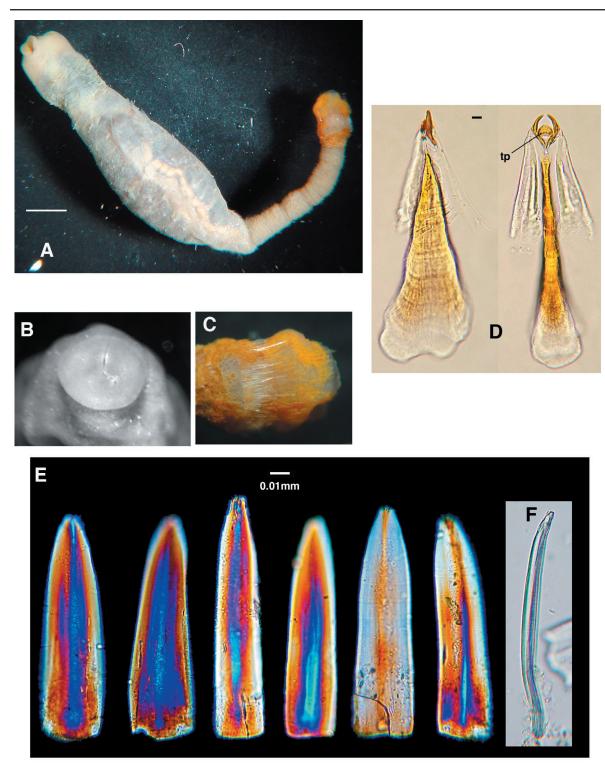
RELATED SPECIES AND CHARACTER DIFFERENCES:

- 1. Differs from all other NEP chetodermomorphs in the strongly inflated anterior trunk which is much wider than the posterior trunk (forming a shank-like tail)
- 2. Similar to *Chaetoderma* sp A, *C. scabrum* and *C. recisum* in having an entire oral shield. Can easily be differentiated from all three on the basis of body regionation and posession of a triangular plate in the radula

DEPTH RANGE: 200 - 1843m

DISTRIBUTION: Upper and mid Continental Slope; Southern California Bight to Oregon

DISCUSSION: Falcidens hartmanae is quite distinctive in its body form among Southern California Bight chaetodermomorphs, although this particular pattern of regionation is reasonably common among members of the genus. The type species of Falcidens, F. crassotus from northern Europe, has this pattern. Species off West Africa and Australia also have a very broad anterior trunk followed by a narrow posterior trunk. An entire cephalic shield is infrequent among NEP chaetodermomorphs, but occurs in three species of Chaetoderma, and in an undescribed Scutopus from off California and Oregon. To the north there are several similar appearing undescribed species of Falcidens from the Gulf of the Farallones and the Oregon Slope. Scheltema (1998) indicates these differ in size of radula and spicules from F. hartmanae. Fine structure of apophyses associated with the triangular plate may also help distinguish a similar form from Oregon. In the B'03 collections F. hartmanae was the fourth most abundant and wide-spread aplacophore species, occurring at 20 sites (29 total individuals). In the survey it was taken at sites ranging from 310m to 960m in depth. Mean depth of occurrence was 573m, modal depth was 579m, and median depth was 590m. Other collections found this species both shallower and deeper.



Falcidens hartmanae (Schwabl 1961) A. Whole animal, lateral view (scale bar 1 mm) B. Anterior view C. Posterior lateral view D. Radula lateral and frontal views (tp, triangular plate) E. Spicules from midanterior trunk F. Spicule edge view (scale bars 0.01mm) (location unknown)