

SCAMIT CODE: None

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SYNONYMY: *Chaetoderma scabra* Heath, 1911

LITERATURE: Heath, 1911; Schwabl, 1963; Scheltema, 1998

DIAGNOSTIC CHARACTERS:

1. Body regionated, BLI 6-8; body generally widest in posterior trunk, although other regions only slightly narrower (Figure A); anterium may be somewhat inflated relative to neck and anterior trunk; a strong constriction between the anterium and the neck
2. Oral shield entire, about half the width of the anterium (Figure C)
3. Posterium nearly linear, not flaired; in some specimens preceded by a slight waist between the posterior trunk and the posterium; spicular fringe short, but extending beyond the flattened peribranchial plate (Figure B); spicular fringe frequently bearing ferric deposits (Figure D)
4. Radula bearing very reduced denticles; radular cone broadening basally in frontal view, curved in lateral view, with the anterior edge concave and the posterior edge convex (Figure E)
5. Mid-anterior trunk spicules relatively short and triangular, with a strong median keel weakening towards the base of the spicule (Figure F)

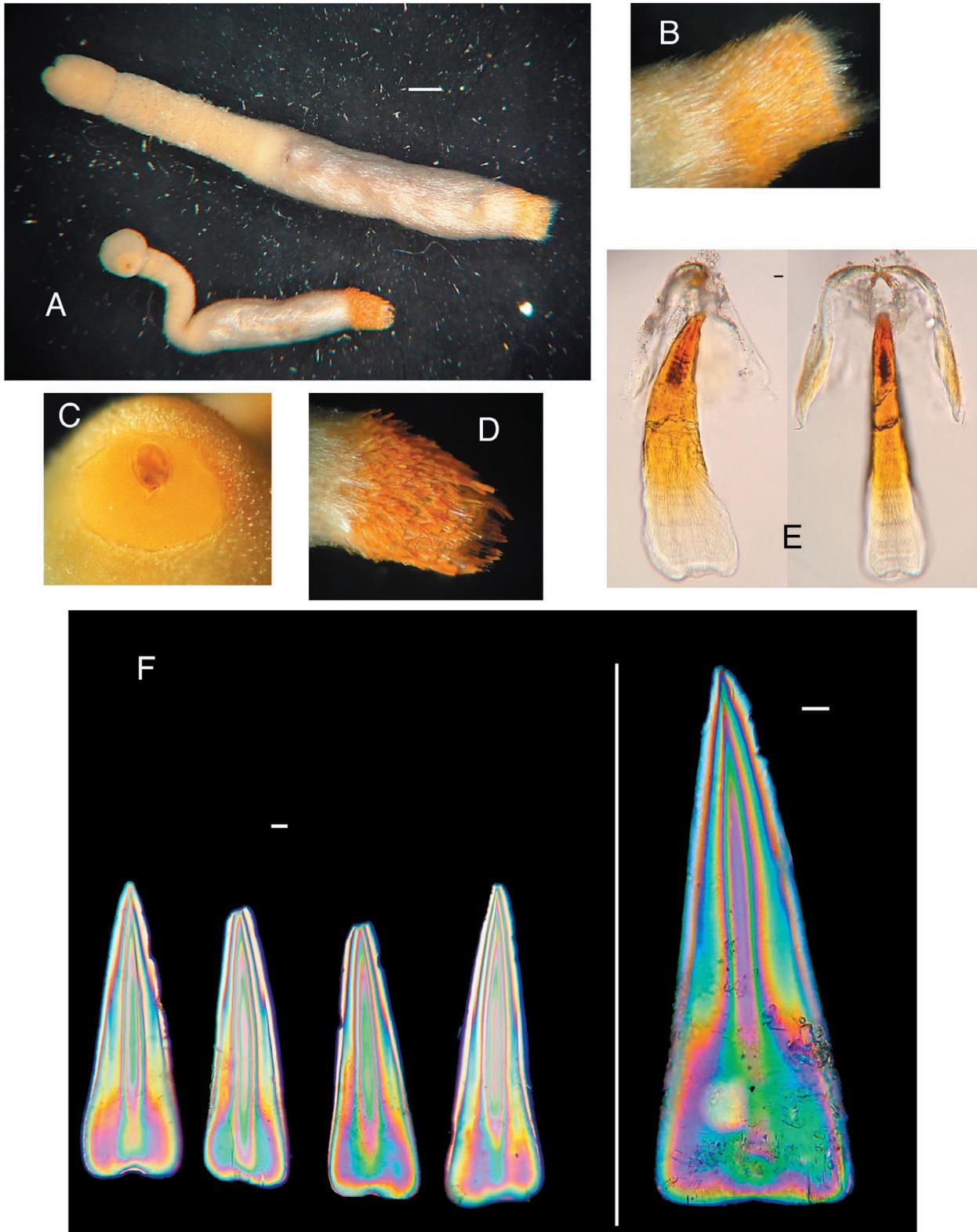
RELATED SPECIES AND CHARACTER DIFFERENCES:

1. Three other species have an entire oral shield; *Chaetoderma recisum*, *C. sp A*, and *Falcidens hartmanae*. *C. scabrum* can be separated from *C. recisum* based on the basically linear body with all regions similar in diameter. In *C. recisum* the anterium, neck, and posterior trunk are all much greater in diameter than the anterior trunk, but not as much as in *Furcillidens incrassatus*. *C. sp A* can be separated based on the presence of an annular expansion of the front part of the posterium, the short spicular fringe (not reaching to peribranchial plate), more elongate and less triangular spicules, and larger denticles on the radula. *Falcidens hartmanae* can be separated from *C. scabrum* based on the inflation of its anterium, neck and anterior trunk relative to its posterior trunk, by its large sickle-shaped denticles, and by the presence of a triangular plate in all but the largest specimens. The radular cone of *F. hartmanae* is also nearly straight-sided in lateral view rather than concave anteriorly and convex posteriorly as in *C. scabrum*.
2. Only *Chaetoderma nanulum* and *Falcidens macracanthos* have roughly the same BLI as *C. scabrum*. Separation of these short species can be based on the presence of an entire oral shield in *C. scabrum*. If the oral shield is not evident or is damaged, *C. scabrum* can be separated from *C. nanulum* by the orientation of the anterior trunk spicules; nearly perpendicular in *C. nanulum* (because they are basally bent) and nearly parallel to the body axis in *C. scabrum*. The spicules of the two species also differ, with those of *C. nanulum* bearing lateral ridges flanking the central keel.
3. The same anterior trunk spicule orientation is seen in *F. macracanthos*, but the spicules are truly perpendicular to the body axis and are very long, making the apparent diameter greater than either the neck or the posterior trunk. The spicular fringe of the posterium is longer in *F. macracanthos* than in *C. scabrum*, and the radula has much stronger denticles and a triangular plate.

DEPTH RANGE: 504 - 1568m

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

DISCUSSION: No specimens of *Chaetoderma scabrum* were taken in the Bight '03 survey, and none have been reported by participating agencies during their regular monitoring over past years. This is appropriate given the bathymetric distribution of the species. The specimens photographed were from off Oregon at 1372m. The species has also been recorded from deeper than 1150m in the Tanner Basin offshore in the Southern California Bight. The holotype is from Monterey Bay, and from the deepest part of the species bathymetric distribution. Scheltema (1998) indicates that upon reexamination of material identified as *C. scabrum* by Schwabl, she found all extant specimens to be *C. nanulum*. The above comparisons between *C. resisum* and *F. macracanthos* are based on literature only. No specimens of these species were available for examination during this effort.



*Chaetoderma scabrum* Heath 1911 A. Whole animal, lateral views (scale bars 1mm) B. Posterior lateral view C. Anterior view D. Posterior lateral view E. Radula lateral and frontal views F. Spicules from mid-anterior trunk (scale bars 0.01mm) (Sta. ESB-067, 1372m)