

## Short communications

### *Chevroderma hadalis*, a new species of Prochaetodermatidae (Caudofoveata, Aplacophora) from the North-west Pacific

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### *Chevroderma hadalis*, новый вид Prochaetodermatidae (Caudofoveata, Aplacophora) из северо-западной части Тихого океана

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In the course of studying Pacific species of *Chevroderma* collected by research vessels of the Institute of Oceanology of Russian Academy of Sciences, Moscow (IOAN), in Aleutian and Kurile-Kamchatka Trenches, two samples were found to contain specimens differing from all known members of the genus. After a detailed investigation these specimens appeared to be a new species.

#### *Chevroderma* Scheltema, 1985

TYPE SPECIES: *Chevroderma turnerae* Scheltema, 1985 (original designation)

DIAGNOSIS: Scheltema, 1985: 512

DISTRIBUTION: continental slopes, abyssal plains and hadal trenches of the Atlantic, Pacific and Indian oceans [Scheltema, 1985; Ivanov, unpubl.].

#### *Chevroderma hadalis* Ivanov, sp. nov.

(Fig. 1)

MATERIAL. Holotype: R/V "Vityaz", cruise 39, station 5629, depth 8390 m, 45°55'N, 149°47'E, grab "Ocean-0.25", 31.08.1966. The holotype is stored in the Zoological Museum of Moscow State University (ZMMU), No. Le1-53 (studied specimen in alcohol, a slide of jaw and radula, a slide of head shield, five sets of spicules on three slides).

8 paratypes from the type locality. ZMMU No Le1-54. 5 paratypes: R/V "Vityaz", cruise 45, station 6145, depth 7250 m, 51°09,7'N, 174°35,5'E, Sigsbee trawl, 20.06.1969. ZMMU No. Le1-55.

DIAGNOSIS. Animal rather large for the family, average length about 3 mm, up to 4.75 mm, with a rather short posterium from 1/4 to 1/3 of the total length; translucent; head shield spicules absent; spicules converge at angle along dorsal midline; spicules slightly asymmetrical; trunk spicules with long base, weak waist, and distinctly sharpened, pointed blade, up to 185 µm long; initial radular tooth with long, narrow, irregularly serrate wing, up to 130 µm long; central plate of radula long, narrow, slightly curved, up to 39.5×5.5 µm; jaws very thick, up to 590 µm long, the brush membrane almost symmetrical.

Holotype: length 4.0 mm, maximum diameter 0.85 mm; maximum diameter is approximately in the center of trunk. The posterium is almost cylindrical, diameter 0.25 mm.

DESCRIPTION. Rather large animal, average length about 3 mm, up to 4.75 mm, with a rather short posterium from 1/4 to 1/3 of the total length; translucent. The anterium is slightly inflated, with distinct folds indicating the possibility of substantial enlargement. The anterium is covered with small spicules and has mat lustre. Pale yellow jaws are poorly seen through the cuticle and spicules. The trunk inflated, 0.5 to 0.85 mm in maximum diameter. Spicules of trunk flat-lying and arranged obliquely, diverging on each side of ventral midline, spiralling up dorsally and posteriorly, and meeting at slight angle along dorsal midline. The posterium is almost cylindrical, 0.18 to 0.25 mm in diameter. Spicules of posterium flat-lying along the main axis of the body. The mantle division is externally decorated by needle-shaped spicules circularly arranged in one row and forming a collar-like structure; spicules on the ventral and dorsal sides are almost equal in size. Inside the "collar" the "mantle cone" is clearly seen and covered with needle-shaped, slightly curved spicules. Orange secretion on mantle spicules is absent.

Laterally from the mouth lies not large bifid head shield. Each half of it is bean-shaped (215×110 µm). Specialized spicules on the external sides of head shield are absent.

All the spicules, except for the mantle ones, have a longitudinal groove and regularly obliquely striated (chevron-shaped).

Spicules on the anterium are small, scale-shaped, slightly squeezed in the middle part, with a poorly expressed blade (25×12 to 30×12 µm).

Trunk spicules are slightly asymmetrical, uniform, and do not vary in size from ventral to dorsal side of the body, with long base, weak waist, distinctly sharpened, pointed blade occupying about 1/4 of the total spicule length, without a medial ridge or distinct keel, up to 30 µm wide and 185 µm long. The longitudinal groove seldom extends beyond the base and may be very faint. Basal edge of spicules is somewhat trapezoid.

There are three types of spicules on the posterium: spicules similar to those on the trunk but shorter (up to 125×18 µm); long, needle-shaped, symmetrically thickened in the basal part (up to 225×10 µm); and hair-like, slightly curved spicules covering the "mantle cone" (up to 250×3 µm).