

Scleroderma latispiculata, a new genus and species of Prochaetodermatidae (Caudofoveata, Aplacophora)

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Scleroderma latispiculata, новый род и вид Prochaetodermatidae (Caudofoveata, Aplacophora)

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In the course of studying the Prochaetodermatidae from the Pacific waters collected by research vessels of the Institute of Oceanology of Russian Academy of Sciences (Moscow) (IORAN) a single specimen was found, which strongly differed from all known members of the family. After a detailed investigation this specimen appeared to be a representative of a new genus and species. The description of the new taxa are presented below.

Scleroderma Ivanov, gen. nov.

TYPE SPECIES: *Scleroderma latispiculata* Ivanov, sp. nov.

DIAGNOSIS: With characters of the family, except visible differentiation of the posterium, absence of tendency to curve ventrally in fixed condition, and body shape similar to that of *Limifossor*. Trunk and posterium spicules are slightly asymmetrical, flat, wide at the base, the lower edge is almost straight, the blade (typical of other Prochaetodermatidae [Scheltema, 1985]) is not expressed due to the smoothed waist. Besides the central keel (which usually does not reach the base of spicula),

there are some longitudinal riblets on its each side.

The differences in spicular morphology between the new genus and related genera are given in Fig. 1.

DISTRIBUTION: presently the genus is known from only the waters of the Bismarck Archipelago (Pacific).

[Диагноз: Имеет все характеристики семейства, за исключением заметной дифференциации заднего отдела, отсутствием тенденции к свертыванию на брюшную сторону при фиксации и формой тела, напоминающей представителей рода *Limifossor*. Спиккулы средней и задней частей тела обычно слегка асимметричные, плоские, широкие в базальной части с уплощенным основанием, лезвие (характерное для других прохетодерматид) не выражено вследствие сглаживания пережима. Помимо центрального киля, который обычно не доходит до основания спиккулы, имеется несколько продольных ребрышек с каждой его стороны.]

Scleroderma latispiculata Ivanov, sp. nov.

Fig. 2, A-D

MATERIAL. Holotype: R/V "Vityaz", cruise 27, station 3979, depth 1059-1064 m, 2°31'S, 145°22'E, grab "Ocean-0.25", 1958. The holotype is stored in the Zoological Museum of Moscow State University (ZMMU), No. Le1-52 (the studied specimen in alcohol, a slide of jaw and head shield, five sets of spicules on three slides, the radula lost during the preparation).

DIAGNOSIS. Prochaetodermatidae less than 3 mm long. Maximum diameter is near the mid-body region. Divisions of body are poorly differentiated, except the anterium. Spicules are situated along the main axis of the body. The mantle division is ornamented by long, slightly curved, needle-shaped spicules which are placed in a single row along a circle and form an irregular goblet-like structure. Orange secretion on mantle spicules absent. Head shield spicules with slightly asymmetrical drop-shaped outlines, flat, without keels or ridges, up to 36×18 μm in size. The anterium cover contains flat, oval, scale-shaped spicules without keels or ridges, up to 20×30 μm in size. Trunk spicules are asymmetrical, irregularly drop-shaped, up to 120×90 μm in size. The apex occupies no more than 1/3 of the whole spicule length. Midline

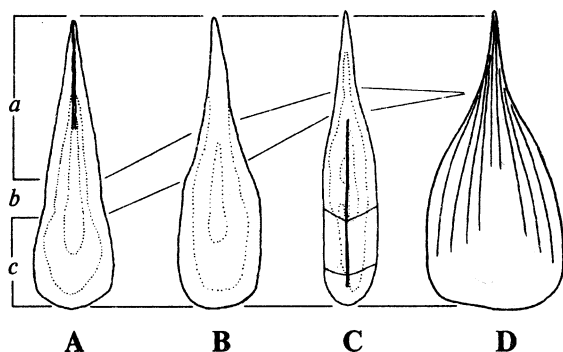


FIG. 1. Comparative morphology of spicules in Prochaetodermatidae.

A — *Prochaetoderma raduliferum* (Kowalevsky, 1901); B — *Spathoderma clenchi* Scheltema, 1985; C — *Shevroderna turnerea* Scheltema, 1985; D — *Scleroderma latispiculata* Ivanov, gen. et sp. nov. (a — blade; b — waist; c — base). (A-C — after Scheltema, 1985; D — original).

РИС. 1. Сравнительная морфология спиккул у Prochaetodermatidae.