Sponges from the Trondheimsfjord and Adjacent Waters I.

By

Harald Alander

(Fremlagt i Fellesmøtet 10de mai 1937 av herr Dons).

In the collections brought home by Professor L. A. Jægerskiöld from his investigations of the coral-fauna of the Swedish and Norwegian coasts I have found some sponges worth recording. The sponges dealt with in this part I-II have been dredged up in the Trondheimsfjord and its surroundings on board the M/Y «Gunnerus» under the direction of mr. Carl Dons, director of the Biological Station of Trondheim.

The sponges mentioned here and in subsequent communications have not hitherto been recorded from the Norwegian coast, and four of them seem to be new to science.

Order Triaxonida


Order Cornacuspongida, Sub-order Poikilorhabdina


Diagnosis: Sponge thin, encrusting; surface slightly
uneven, made shaggy by protruding spicules: Colour in spirit grayish white. The main skeleton consists of upright acanthostyls of two sizes, echinating the substratum. The dermal skeleton consists of bundles of tornota, running more or less obliquely to the surface. Microsclera chelae arcuatae. The large acanthostyls are slightly curved and have a more or less distinct head. The basal half-part of the shaft is spined with small, reclinor spines. The spines of the head are rather strong and straight, with the outermost tip abruptly bent. Size: 170-210 μ by 8-9 μ. The small acanthostyls are straight and club-like and have no distinct head. The shaft is set with rather strong, reclinor spines in all its length. The head is spined in the same manner as that of the large ones. Size: 75-85 μ by 4-6 μ. The tornota are straight and very slightly fusiform and poltyloete. The ends, which are somewhat unequal, are rather sharply pointed and have mucros, which may be very small or lacking. Size: 180-210 μ by 3-4 μ. The isochelae arcuatae have a thin, evenly curved shaft and small end parts. Size: 20-24 μ chord.

Remarks: This species seems to be easily distinguished from other Hy med e siae with spicula of such small sizes, by the fact that the large acanthostyls are spined only in the basal half-part.


Diagnosis: Sponge thin, encrusting; surface even; dermal membrane a thin, easily separable film. Colour in spirit grayish white. The main skeleton consists of upright acanthostyls of two sizes, echinating the substratum. The dermal skeleton consists of bundles of tornota, running more or less obliquely to the surface. The microsclera are isochelae of three sizes and sigmoid of two sizes. The large acanthostyls are slightly, sometimes irregularly curved and have no distinct head. They are spined in all their length with small, reclinor spines, but the spines are very few in number. Size: 350-425 μ by 14-16 μ. The small acanthostyls are straight and somewhat club-like and have
no distinct head. They are spined in all their length with comparatively strong spines. Size: 125-145 µ by 9-10 µ. The corneta are straight or slightly curved and have unequal ends; one end is abruptly pointed, and is provided with a mucro, the other one tapers more evenly, but has also a mucro. Size: 220-250 µ by 4-5 µ. The large chelae are of the ordinary arcuata-type with evenly curved shaft with distinctly recurved ends. The tooth is elliptical and the same length as the alae. Size: 55-75 µ chord. The chelae of the medium size are of a similar shape, but the ends are not or only very little recurved and the alae manubria a little broader. Size: 20-30 µ chord. The small chelae have the rather short free part of the shaft nearly straight and the curvatures rather abrupt. The tooth is narrow and elliptical, but the alae manubria are broad and palmate. Size: 9-15 µ chord. The sigmata are of the ordinary contorted type; the large ones measure 55-75 µ chord, the small ones 20-30 µ.

Remarks: This species is very easily distinguished from all its relatives by the presence of microsclera of five sorts. As the reduction of spinula is a rather common feature in the genus Hymedesmium, this species can be considered to have a central position among its relatives.