

A New Sponge Species, *Stelletta kundukensis* (Demospongiae: Stellettidae), from Korea

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ABSTRACT

A new sponge, *Stelletta kundukensis*, is described from the East Sea coast of Korea.

Key words: *Stelletta kundukensis*, n. sp., sponge, Korea.

INTRODUCTION

Over 40 species of genus *Stelletta* were reported all over the world. Twelve species were described from Japan by Thiele (1898) and Hoshino (1981). Ten species were reported from New Zealand by Berquist (1968). Five species were known from Koeran coasts (Sim, 1981; Sim and Kim, 1995). *Stelletta*, with long shafted triaenes of various types accompanied by oxeas as megascleres, differs from other genera in that there are always two distinct categories of euaster as microscleres. This paper deals with the description of a new species collected from Kunduk, East Sea coast of Korea by fish-nets. The specimens are deposited in the Natural History Museum of Han Nam University (NHM).

RESULT

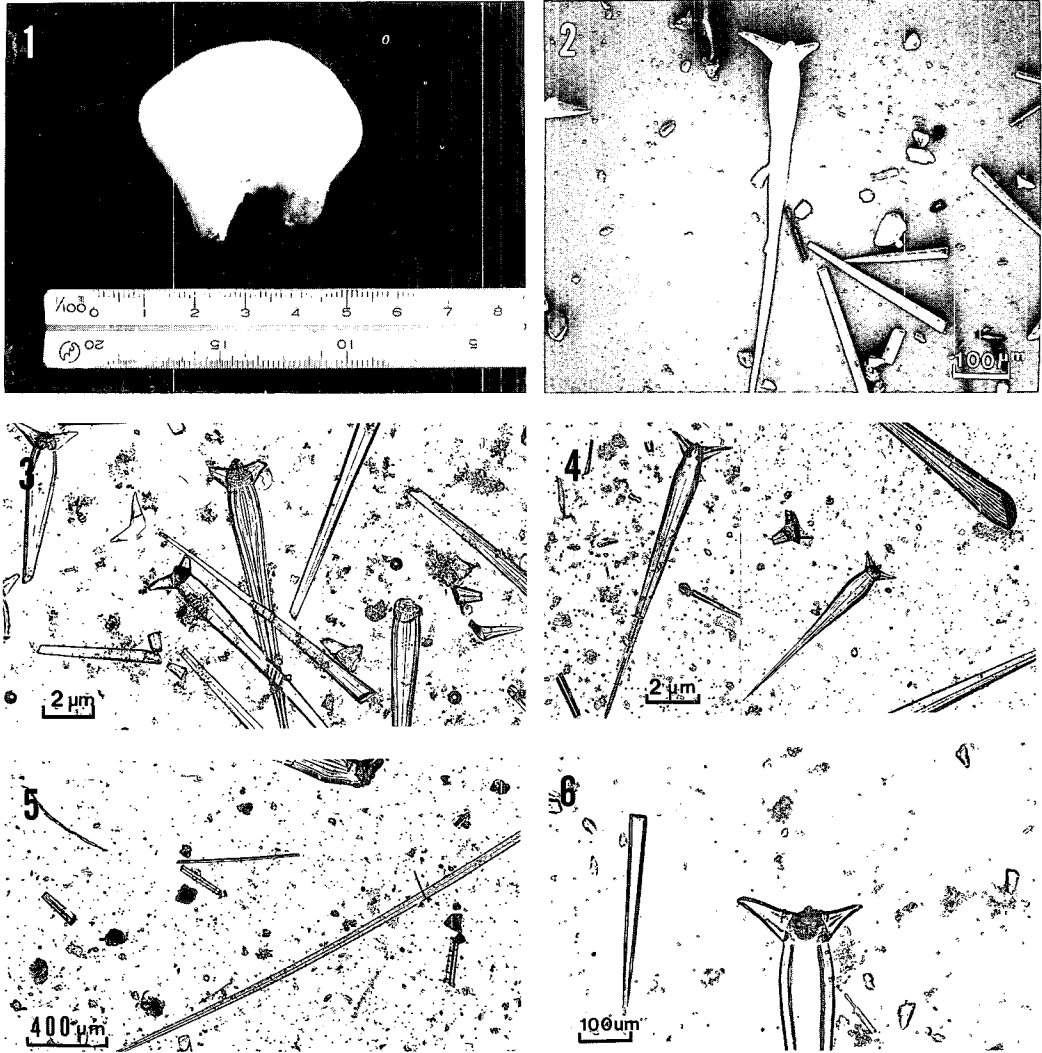
Order Astrophorida Levi, 1973 별해면목

Family Stellettidae Carter, 1875 별해면과

Genus *Stelletta* Schmidt, 1862 별해면속

***Stelletta kundukensis*, n. sp.** 근덕별해면 (신칭) (Figs. 1-8)

Material examined. Holotype Por. 20 (Han Nam Univ. NHM): Kunduk (fish-net) 6/VI/1993.



Figs. 1-6. *Stelletta kundukensis*, n. sp.: 1, entire animal; 2-4, megascleres. 2, plagiotriane (SEM); 3 and 4, plagiotriae; 5, oxea; 6, head of plagiotriane.

Description. Shape: flatten, stony, size up to 45 × 35 × 15 mm.

Surface: smooth, no oscules and pores were observed.

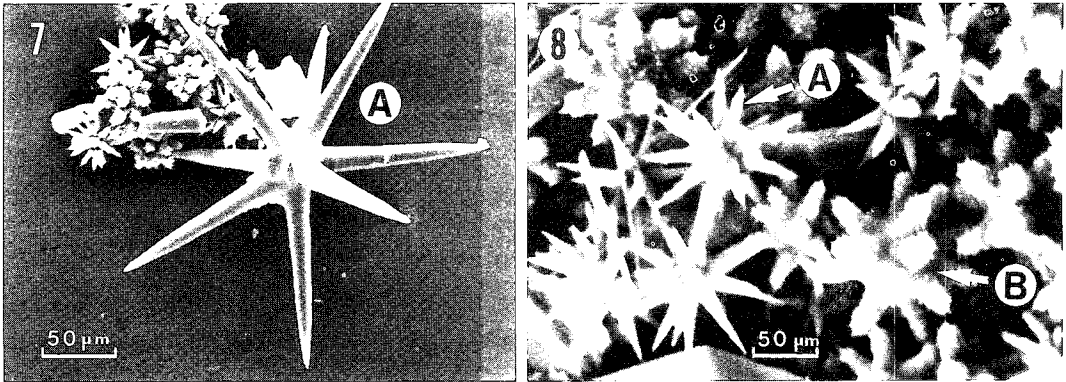
Texture: very hard like stone.

Colour: white.

Skeleton: Ectosome, outer layer hard, 1 mm thick with bundle of plagiotriane, and mixed with stronglyspheraster microscleres. Clads of the plagiotriane are directed toward the surface, arranged radial skeleton. Choanosome have only oxeas as megascleres, oxyaster and oxyspheraster as microscleres, distributed in an irregular fashion.

Spicules: I. Megascleres

- (1) Plagiotriane (long) Rhabdome 2400 × 120 μm
- Cladi (individual) 100 × 80 μm



Figs. 7-8. *Stelletta kundukensis*, n. sp., microscleres (SEM): 7, oxyaster (A); 8, oxyspheraster (A) and stronglylospheraster (B).

Plagiotriaene (Short)	Rhabdome	600 × 80 µm
	Cladi	50 × 25 µm
(2) Oxea		3500 × 25-50 µm
II. Microscleres		
Oxyaster(6-12rays)		30-70 µm (diameter)
Oxyspheraster		7.5-12.5 µm (diameter)
Strongylospheraster		6-7.5 µm (diameter)

Remarks. *Stelletta kundukensis* is similar to *Stelletta grubii* Schmidt, 1862 (Hoshino, 1981) in its spicules. *S. grubii* has long and thin cladi of plagiotriane. *S. kundukensis* has short and thick cladi of plagiotriane and also base rhabdome with club-shaped dilatation. Radial skeleton appears only at the cortical layer.

The plagiotriane and oxea of the new species are so fragile that it is very hard to find complete spicules. At first glance the type specimen looked like a genus *Geodia* in naked eye.

Etymology. The specific name *kundukensis* is named after the type locality, Kunduk.

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REFERENCES

Bergquist, P.R., 1968, Demospongiae of New Zealand, I. Tetractinomorpha and Lithistida. Mem. N. 2. Oceanogr. Inst., **37**: 1-105.
 Hoshino, T., 1981, Shallow-Water Demosponges of Western Japan, II. J. S. Hiro Univ. Ser.B, Div. I (Zoology), **29**(2): 207-289.
 Sim, C.J., 1981, A systematic study on the marine sponges in Korea. 1. Ceratinomorpha and

Tertractinomorpha. Soong Jun Univ., Essays & Papers, **11**: 83-105.

Sim, C.J. and Y.A. Kim., 1995, A systematic study on the marine sponges in Korea 12. Tetractinomorpha (Porifera: Demospongiae). Korean J. Syst. Zool., **11**(2): 147-158.

Tanita, S., 1961, Report on the sponges collected from the Kurushima Strait, Set. Inland Sea. Mem. Ehime Univ., Sect. 11, ser. B, **4**(2): 335-354.

Thiele, J., 1898. Studien über Pazifische Spongien I. Zoologica, **24**: 1-72.

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한국 근덕의 해면 1신종(보통해면강: 별해면과)

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요 약

1993년 6월 동해의 근덕에서 어망으로 채집된 해면동물을 동정한 결과 1신종이 밝혀져 *Stelletta kundukensis*로 명명하고 기재하였다.