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A New Species of Marine Sponge (Demospongiae: Poecilosclerida: Esperiopsidae) from Chindo, Korea

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ABSTRACT

A new species of *Esperiopsis* (Esperiopsidae), collected from Chindo, is described under the name of *Esperiopsis chindoensis*.

Key words: *Esperiopsis chindoensis* n. sp., marine sponge, Chindo, Korea.

INTRODUCTION

The genus *Esperiopsis* Cater, 1882, contains about 50 species, which were found mainly in 5-300 m depth of seawater. Lambe (1895) reported four species from North America. Koltun (1959) described five species from the USSR. Bakus (1966) reported one species from southern California.

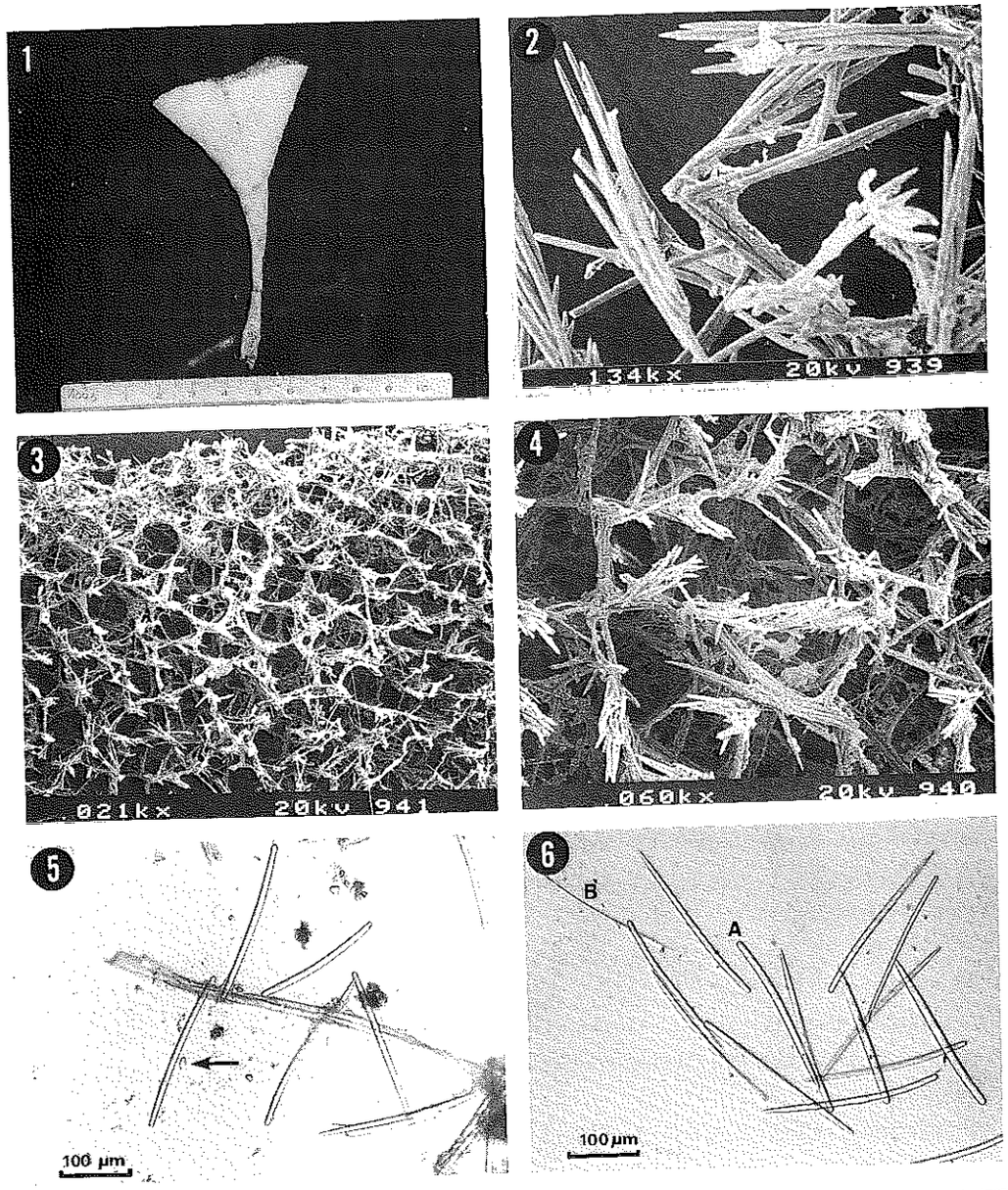
In Korea, two species, *Esperiopsis uncigera* and *E. pulmosa*, were recorded by Rho and Sim (1979) and Sim (1982, 1985).

The genus *Esperiopsis* was first allocated to the family Desmacidonidae (De Laubenfels, 1932, p. 70) but next transferred to the Ophlitaspongiidae by De Laubenfels (1936), and now belongs to the Esperiopsidae.

The materials examined were collected from Chindo Island by dredges.

DESCRIPTION

Order Poecilosclerida Topsent, 1928 다골해면목
Family Esperiopsidae 발톱해면과
Genus Esperiopsis Cater, 1882 발톱해면속
***Esperiopsis chindoensis*, n. sp.** 진도발톱해면(신청)

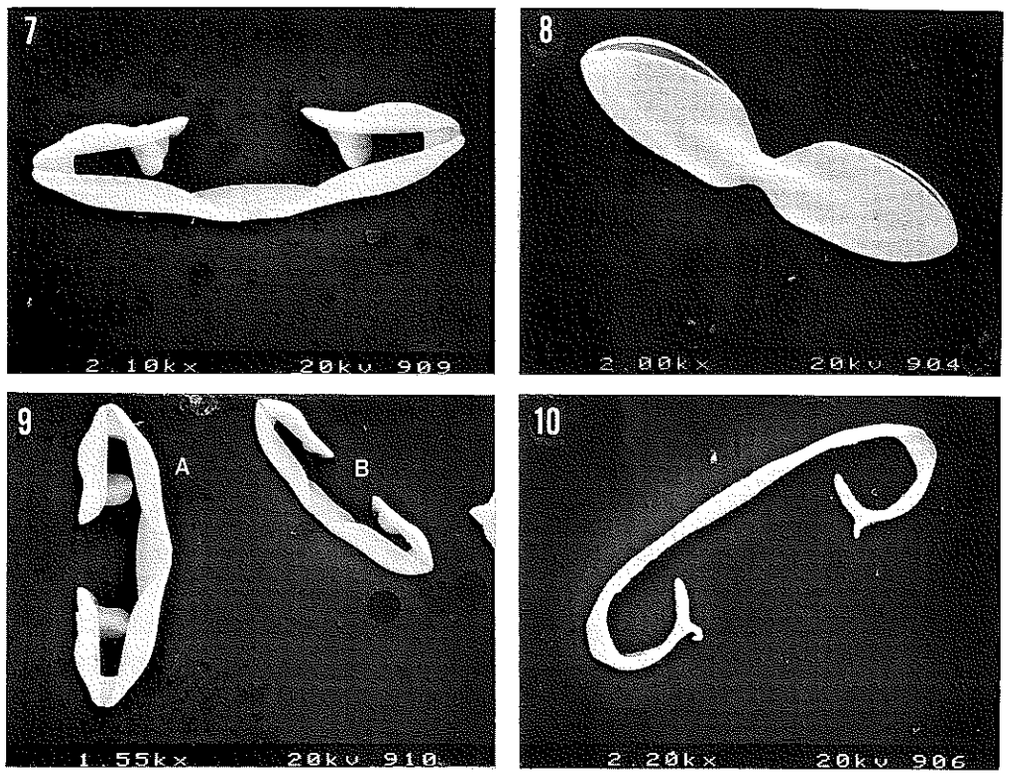


Figs. 1-6. *Esperiopsis chindoensis*, n. sp.: 1, Entire animal (holotype); 2-4, Surface of skeletal framework (SEM, × 134, × 21, × 60); 5, Skeletal structure (light microscope) (←: Isochela); 6, Megascleres (A, Style B; Slender Style).

Material Examined. Holotype. Por. 17 (Han Nam Univ. NHM): Chindo, 126°10′ 20″E, 34°29′ 39″N, sandy mud, dredged by Jong-Geel Je, 23 July 1994.

Description. Shape: Funnel or cup shaped, with a short stem, varying in size, up to 99 mm high, 53 mm in cup diameter, 1 mm in thickness, 48 mm in stem length.

Color: Yellowish grey when alive.



Figs. 7-10. *Esperiopsis chindoensis*, n. sp. Microscleres: 7, Isochela (SEM, × 2,100); 8, Side view of Isochela (SEM, × 2,000); 9, (A, Large Islchela; B, Small Islchela) (SEM, × 1,550); 10, Slender Isochela (SEM, × 2,200).

Texture: Soft and easily brittle.

Surface: Smooth, even, somewhat wrinkled or warty, with numerous ostia.

Ectosome: No dermal skeleton.

Choanosome: Consisting of multispicular fibers forming a meshwork in which primary fibers and secondary ones are visible.

Spicule: Megascleres

Styles ····· 200-300 × 7-10 μm

Slender styles ····· 162-200 × 2 μm

Microscleres

Islchelas ····· 25-50 μm

Slender isochelas ····· 27.5-30 μm

Remarks. Lambe (1892) reported four species, *Esperiopsis rigida, E. vancorverensis, E. quatsinoensis* and *E. laxa*. Hentschel (1929) and Buton (1935) classified all the four species to *E. rigida*. Koltun reported that *E. rigida* was identical with *Veluspa polymorpha* var. *digitata* Miklukho-Maklai, 1870, and, in accordance with the existing rule of priority, the species should be named *E. digitata* (Miklacho-Maclary 1870). He divided this species into two subspecies, namely, *Esperiopsis digitata digitata* and *E. digitata infundibula*.

E. chindoensis is similar to *E. digitata infundibula* Koltun, 1956. The former can be distinguished from the latter because it has two microscleres and a smoother surface; all specimens (154) are funnel shaped. Koltun (1959, pp. 64-65) described his specimen as very uneven, variable in form, and having small curved costa forming an irregular reticulate pattern.

Etymology. Named after the type locality.

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해산해면류(보통해면강, 다골해면목, 발톱해면과)의 1신종

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요 약

진도의 인근 해역에서 채집된 *Esperiopsis* 속에 속하는 해면동물 1신종을 *E. chindoensis*라고 명명하여 기재한다.