

A New Species of Genus *Jaspis* (Demospongiae: Astrophorida: Ancorinidae) from Korea

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ABSTRACT

A new species of the genus *Jaspis* (Demospongiae: Astrophorida: Ancorinidae), *Jaspis coreana* n. sp., is described on the specimen collected from Geomundo Island, Korea during September 1995 to March 2002 by SCUBA diving. This new species is characterized by two sponges association which is completely covered with *Poecilastra wondoensis* except for oscules. This new species is similar to *J. wondoensis* in its spicules type, but different in their spicules size, form of oscules and sponge colour. *J. coreana* has a large oxyasters and longer megascleres than *J. wondoensis*, oscule cluster and golden yellow colour in life.

Key words: Ancorinidae, *Jaspis*, new species, Korea

INTRODUCTION

The genus *Jaspis* belonging to the family Ancorinidae is a very small group of astrophorid sponges and less than ten species have been recorded from all around the world (Topsent, 1900; Kennedy, 2000). This genus is characterized by oxea and euasters without a marked centrum and triaenes (Hooper and Soest, 2002). Only one species of *Jaspis*, *J. wondoensis*, has been reported from Korean waters (Sim and Kim, 1995).

A new species of the *Jaspis* was collected from Geomundo Island, Korea during October 1994

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Table 1. The comparison of characters between *Jaspis wondoensis* and *J. coreana* n. sp.

Species	Color in life	Oscules	Megascleres (μm)		Microscleres (μm)		
			Oxeas	Styles	Oxyasters		Spherasters
					Large	Small	
<i>J. wondoensis</i>	beige	invisible	1,100-1,530 \times 45-90	1,000-1,150 \times 100	-	17.5-45	5-25
<i>J. coreana</i>	golden yellow	cluster	1,150-2,200 \times 20-50	1,300-1,600 \times 40	100	10-20	10-30

to March 2002 by SCUBA diving. Histological techniques for light microscopy and scanning electron microscopy (SEM) follow Hooper (1996). The Holotype is deposited in the Natural History Museum, Hannam University (HUNHM), Daejeon, Korea.

SYSTEMATIC ACCOUNTS

Phylum Porifera Grant, 1836

Class Demospongiae Sollas, 1885

Order Astrophorida Sollas, 1888

Family Ancorinidae Schmidt, 1870

**Jaspis coreana* n. sp. (Fig. 1)

Type specimen. Holotype (Por. 50), Baekdo (Geomundo Island), 28 Mar. 2002, 20 m deep (SCUBA diving), Lee K. J. and Kim H. S., deposited in the HUNHM. One Paratype (Por 50-1), Baekdo (Geomundo. Island), 26 Sep. 1995, 20 m deep (SCUBA diving), Kim H. S., deposited in the Department of Biological Sciences, Hannam University.

Description. Holotype, massive and completely covered with *Poecilastra wondoensis* Sim and Kim, 1995, 0.6-2.1 cm thick, except for oscules. Size up to 8 \times 6 cm wide and 10 cm high. Colour, golden yellow in life. Texture, slightly hard and compressible. Oscules, clustered with 3-5 openings, 1-3 mm in diameter. Megascleres, oxeas in one wide size-range, typically curved over their entire length and slightly curved styles rare. Microscleres, large oxyaster with 9 thin rays and small oxyaster with 9-15 thin rays has small centrum less than one-third diameter of whole spicule. Spheraster with 9-18 short rays and thick centrum have weak spine at end of each rays.

Spicules.

Megascleres

oxeas 1,150-2,200 \times 20-50 μm
 styles 1,300-1,600 \times 40 μm

Microscleres

large oxyaster 100 μm
 small oxyasters 10-20 μm

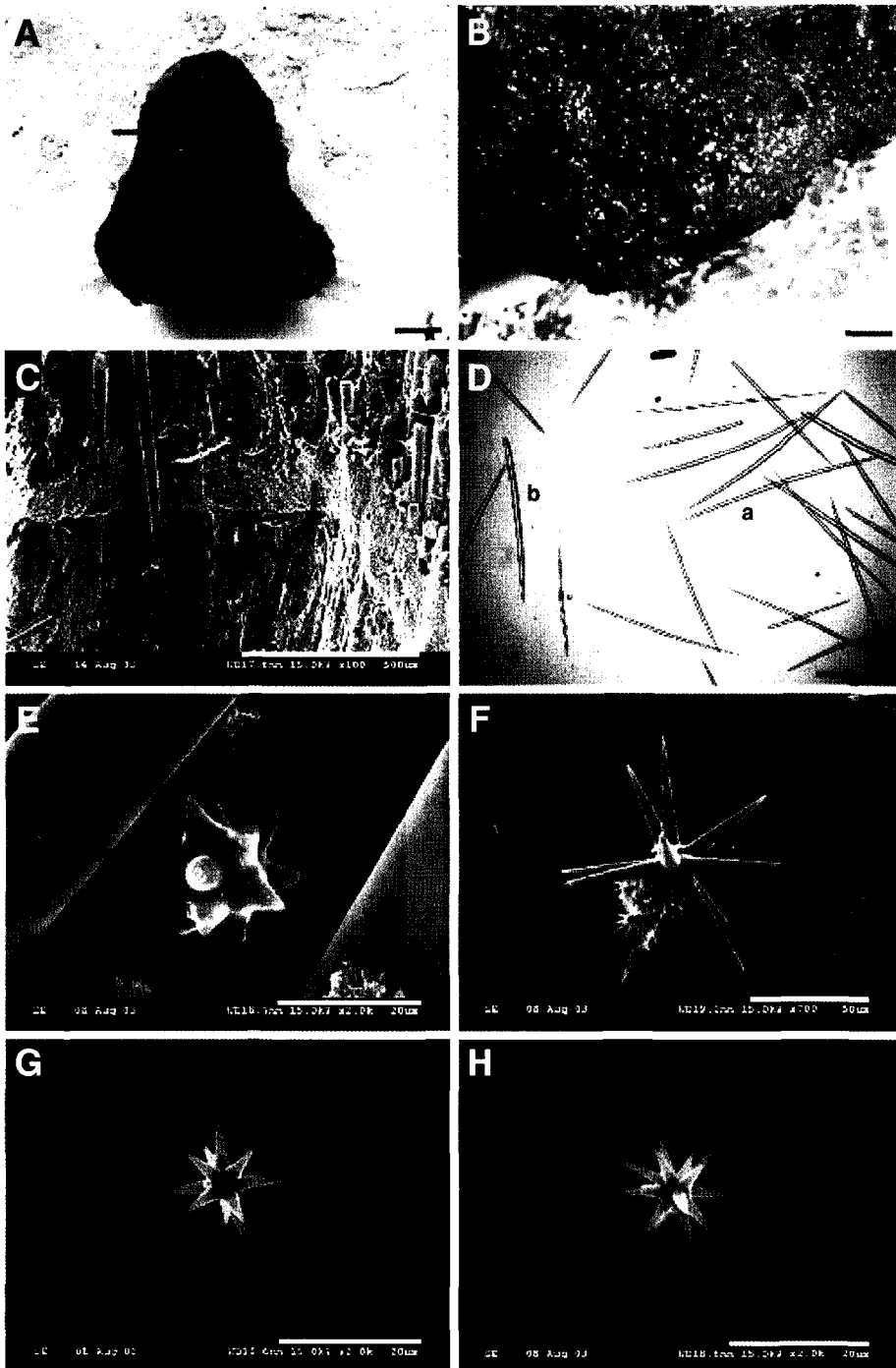


Fig. 1. *Jaspis coreana* n. sp. A, entire animal (arrow); B, oscules; C, skeletal structure of connected part with *Poecilastra wondoensis* (arrow indicates *J. coreana* n. sp.); D, megascleres (a, oxea, b, style); E-H, microscleres; E, spheraster; F, large oxyaster; G-H, small oxyaster; Scale bars = 20 μm (E, G, H), 50 μm (F), 500 μm (C, D), 5 mm (B), 1 cm (A).

spherasters10-30 μm

Etymology. The specific name *coreana* is named for the Republic of Korea.

Remarks. This new species is similar to *J. wondoensis* Sim and Kim, 1995 in its spicules type, but different in their spicules size, form of oscules and sponge colour. *J. coreana* has a large oxyasters and longer megascleres than those of *J. wondoensis*, oscule cluster and golden yellow colour in life. In microscleres, this new species has a large oxgaster (Table 1).

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한국 벽옥해면속 (보통해면강: 별해면목: 안코리니과)의 1신종

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요 약

1994년부터 2002년까지 거문도로부터 SCUBA로 채집된 해면동물을 동정·분류한 결과 벽옥해면속 (*Jaspis*)의 1종이 신종으로 밝혀졌다. 본 신종은 원도다성해면 (*Poecilastra wondoensis*)으로 대공을 제외하고 표면 전체를 완전히 덮혀 있어 2종의 해면동물이 마치 한 종처럼 보이는 것이 특징이다. 본 신종은 곱편의 형태에 있어서는 원도벽옥해면 (*J. wondoensis*)과 유사하지만 주대곶편의 길이가 더 길고 4-5개의 대공이 한 곳에 집중되어 있으며, 살아있을 때에 황금색을 띠는 점에서 차이가 있다. 큰성상체의 미소곶편이 있다.