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SHORT NOTE

FIRST RECORDS OF TWO HOLOTHURIANS (ECHINODERMATA : HOLOTHURIOIDEA) FROM TAIWAN¹

SHYH-MIN CHAO and KUN-HSIUNG CHANG²

Graduate Institute of Biology, Tunghai University, Taichung, Taiwan 40704, Republic of China and Institute of Zoology, Academia Sinica,

Nankang, Taipei, Taiwan 11529, Republic of China

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Shyh-Min Chao and Kun-Hsiung Chang (1990) First records of two holothurians (Echinodermata : Holothurioidea) from Taiwan. Bull. Inst. Zool., Academia Sinica 29(1): 65-69. Two species of holothurians, Bohadschia graeffei (Semper) and Bohadschia argus Jaegar (Holothuriidae), described here are newly recorded holothurians from reef area of southern Taiwan. The genus, Bohadschia, also is new to Taiwan. This report presents a brief description of the two species with colored illustrations.

Key words: Holothurians, Echinoderms, Systematic account, Taiwan.

Several papers (Applegate, 1984; Chao, 1986; Chao and Chang, 1989; Chao et al., 1989) on the systematics of holothurians from Taiwan had been published in recent years. A total number of 25 species belonging to 5 families have been described from Taiwan before this study. Two species, Bohadschia graeffei (Semper) and Bohadschia argus Jaegar (Holothuriidae), collected from the coral reef area of Kenting National Park in southern were newly recorded from Taiwan Taiwan. According to Clark and Rowe (1971), 13 species of the genus Bohadschia were recorded from the Indo-West Pacific area, but it is the first time that *Bohadschia* been discovered in Taiwan.

The purpose of this short communication is to re-describe the species with ecological photos and spicules from body wall for the first time in Taiwan. Up to this moment, 27 species are reported from the shallow waters off shore of Taiwan. Methods for preservation and identification follow Rowe and Doty (1977) and Sheals (1978). The specimens are deposited in the Laboratory of Marine Invertebrates, Institute of Zoology, Academia Sinica (ASIZ), Taipei, Taiwan.

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^{2.} To whom reprint request should be sent.

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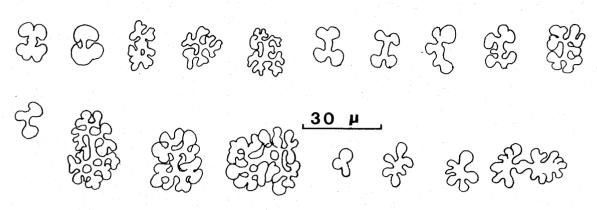


Fig. 1. Bohadschia argus, various branched rods.

Bohadschia argus Jaegar

(Figs. 1, 3)

Bohadschia argus Jaegar, 1833: 19 (type locality, E. Indies) (not seen).

Holothuria argus, Domantay, 1960: 84; Chang and Liao, 1964: 34; Rowe, 1969: 130; Clark and Rowe, 1971: 177 (distribution); Liao, 1975: 206; Rowe and Doty, 1977: 229; Tan Tiu, 1981: 68.

Material: ASIZ-50025, 1 specimen; 1 meter depth, Nan-wang, southern Taiwan; Apr. 23, 1989.

Diagnosis: A specimen with the length of 45 cm and width of 15 cm; with

20 peltate tentacles. Pedicels present ventrally. Color in live is dull gray and purplish of some shades, with conspicuous yellowish encircled spots on body wall. Spicules are various branched rods (Fig. 1).

Remarks: A specimen was found in a tidal pool covered by coral sand and dead coral fragments. *Bohadschia argus* is a common tropical species that had been reported from Ceylon area and Bengal Bay through South Pacific Is., but not yet recorded from Hawaii, eastern Pacific. This species is rare in Taiwan.

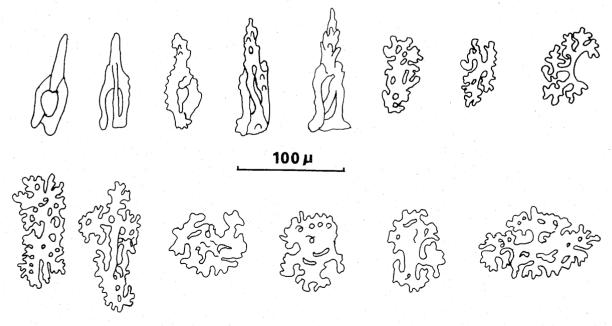


Fig. 2. Bohadschia graeffei, trident-shaped and rosette-like spicules.

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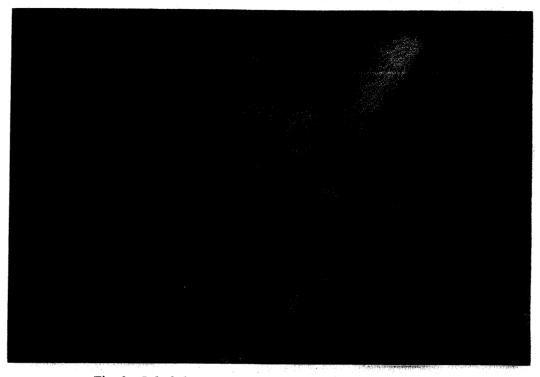


Fig. 3. Bohadschia argus Jaegar. Nan-wang, southern Taiwan.



Fig. 4. Bohadschia graeffei (Semper). Nan-wang, southern Taiwan.

Bohadschia graeffei (Semper) (Figs. 2, 4)

- Holothuria graeffei Semper, 1868: 78 (type locality, Philippine) (not seen).
- Bohadschia graeffei, Domantay, 1960: 92; Rowe, 1969: 130; Clark and Rowe, 1971: 177 (distribution); Rowe and Doty, 1977: 229; Cherbonnier and Feral, 1984: 669.

Material: ASIZ-50026, 1 specimen; 8 meters depth, Nan-wang, southern Taiwan; Dec. 20, 1988.

Diagnosis: Animal with a length of 20 cm and width of 6 cm; with 20 black peltate tentacles. Pedicels present ventrally; the tip of pedicels are white. Mouth is surrounded by a rim of papillae. Spicules include rosette-like fenestrates and trident-shaped tower-like forms (Fig. 2). Color is generally light tan or yellowish with brown patches and spots. *Remarks*: Single specimen was dis-

covered on the exposed surface of reef flat at a depth of 8 meters of Kenting National Park. *Bohadschia graeffei* had been reported from Red Sea, Maldive area, East Indies, Philippine Is. and South Pacific Is.. It is rare in the waters off shore of Taiwan.

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TWO HOLOTHURIANS FROM TAIWAN

兩種臺灣新記錄之海參

趙世民 張崑雄

本文描述產於臺灣南部珊瑚礁區的二種新記錄海參:蛇目白尼參 Bohadschia argus Jaegar 及葛 瑞白尼參 Bohadschia graeffei (Semper)。白尼參屬 Bohadschia 海參亦是臺灣首次發現。 生態照 片及骨針圖形均報告於本文中。