

**One New Species, *Codonellina parviavicularia*, n. sp.,  
an Ascophoran Bryozoa from the Yellow Sea in Korea**

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황해산 유낭류 1신종, *Codonellina parviavicularia*, n. sp.에 대하여

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적 요

1986년 7월 황해, 고군산군도의 말도 앞 수심 10m인 곳에서 SCUBA에 의해 채집된 유낭류를 동정한 결과 입이끼벌레과, 종이끼벌레속에 속하는 1신종이 밝혀져 *Codonellina parviavicularia* (작은조두체종이끼벌레)로 명명하고 기재 보고한다. 본 신종의 특징은 악이 둥근 삼각형인 작은 조두체와 혀모양인 조두체의 두 종류를 갖고 있는 점이다. 완 모식표본은 이대 생물학과에 보관되어 있다.

Key words: new species, Ascophoran Bryozoa, Korea

**INTRODUCTION**

The ascophoran genus *Codonellina* is one of the most dominant groups of the family Smittinidae in Korea, both in number of individuals and in number of species as yet. The four species of the genus *Codonellina*, *Codonellina acuta* (Ortmann, 1890), *Codonellina obtusata* (Ortmann, 1890), *Codonellina spatulata* Okada & Mawatari, 1936 and *Codonellina montferrandii* (Audouin, 1826) have been known from Korea as the results of the previous reports (Rho & Kim, 1981; Rho & Seo, 1984; Song, 1985; Rho & Seo, 1986). All of them were collected only in the South Sea, but *Codonellina parviavicularia* n. sp. was collected from Maldo in Yellow Sea. The new species is different from the other species

of *Codonellina* by the presence of either small avicularium with rounded triangular mandible or larger one with tongue-shaped mandible.

The close observation of the zooecium and most photography was made by using scanning electron microscope, Model JSM 35CF at 25 kilovolts accelerating voltage. A ion sputter, Model JFC-1000 was used for gold coating. The type specimen is deposited in the Department of Biology, College of Natural Sciences, Ewha Womans University.

## SYSTEMATIC ACCOUNT

Phylum Bryozoa Ehrenberg, 1831	태형동물 문
Class Gymnolaemata Allman, 1856	나후 강
Order Cheilostomata Busk, 1852	순구 목
Suborder Ascophora Levinsen, 1909	유낭 아목
Family Smittinidae Levinsen, 1909	입이끼벌레 과
Genus <i>Codonellina</i> Bassler, 1934	종이끼벌레 속

*Codonellina parviavicularia*, n. sp.      작은조두체 종이끼벌레

**Holotype:** DBEWU BRY 860710

**Type Locality:** Maldo Island (35° 51' N, 126° 19' E), Misŏng-up, Okku-gun, Chŏllabuk-do, Korea. The type specimen was encrusting the rock at a depth of water of 10 metres and collected by Suk Jun Yun (Scuba diver).

**Etymology:** Named for the small avicularium with rounded triangular mandible, from the Latin, "*parvi*" (small).

**Diagnosis:** Suboral avicularia of two types, small one with rounded triangular mandible and larger one with tongue-shaped mandible.

**Description:** Colony encrusting, bilaminar form found on the rock. Zooecia nearly rectangular, flat, arranged longitudinally. Frontal surface tremocyst with numerous small pores. Orifice elliptical, longer than wide, with wide and rounded sinus limited by a pair of condyles, relatively large. Peristome absent distally and laterally, but developed proximally, with suboral avicularian chamber. Suboral avicularia two types: one is very small, with rounded triangular mandible, the other larger, with tongue-shaped mandible. They are usually present in the midline proximal to the orifice, sometimes asymmetrically located. Ovicell large, wider than width of zooecium, globose and prominent with numerous large pores, closed by operculum.

**Remarks:** *Codonellina obtusata* (Ortmann, 1890; Okada, 1917; Okada & Mawatari, 1938; Mawatari, 1952; Rho & Seo, 1986) and *Codonellina spatulata* (Okada & Mawatari, 1936; Mawatari, 1952; Rho & Seo, 1984; Song, 1985; Rho & Seo, 1986) resemble this new species in appearance of avicularium with tongue-shaped mandible. But *Codonellina obtusata* has only one kind of avicularium with tongue-shaped mandible and *Codonellina spatulata* has two kinds of avicularia, one with tongue-shaped mandible, the other with large spatulate mandible. *Codonellina acuta* (Ortmann, 1890; Okada, 1917; Okada & Mawatari, 1936; Mawatari, 1952) and *Codonellina montferrandii* (Harmer, 1957; Cook, 1968) are different from the new species by having avicularium with acute mandible. The small avicularium with rounded triangular mandible is characteristic of the new species.

### ABSTRACT

A new ascophoran species, *Codonellina parviavicularia*, n. sp., collected from Maldo in the Yellow Sea on July 10, 1986, is characterized by small avicularium with rounded triangular mandible and larger one with tongue-shaped mandible.

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RECEIVED: 31 MARCH 1988

ACCEPTED: 28 JULY 1988

## EXPLANATION OF PLATES

### PLATE 1

**Fig. 1.** Colony.

**Fig. 2.** Arrangement of zooecia with circular orifice (or) and ovicell (ov).

**Fig. 3.** Small avicularium (\*) with rounded triangular mandible and larger one (☆) with tongue-shaped mandible below orifice with condyles (arrow).

### PLATE 2

**Fig. 1.** Enlargement of avicularium (\*) with rounded triangular mandible (m).

**Fig. 2.** Enlargement of avicularium (☆) with tongue-shaped mandible (m).

PLATE 1

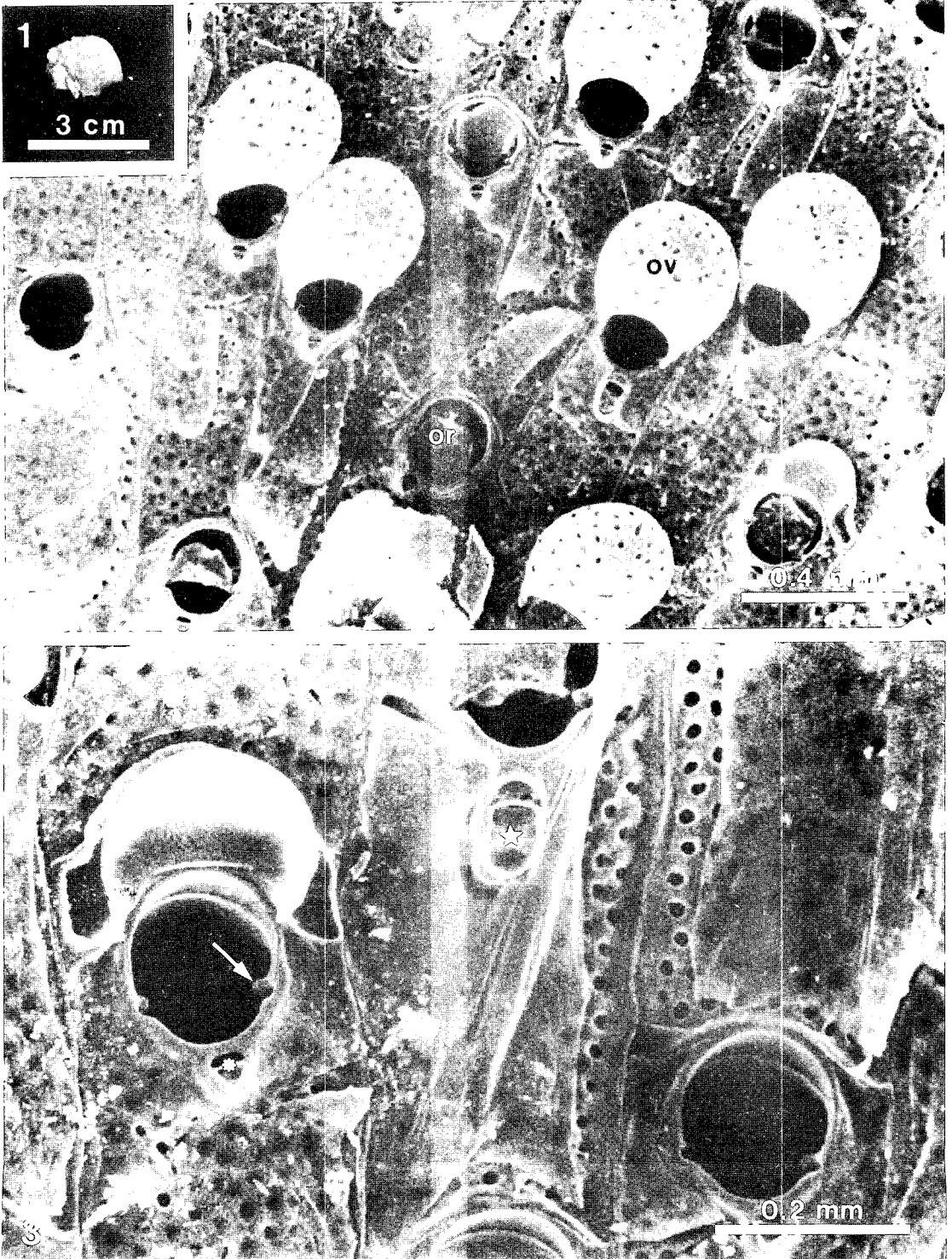


PLATE 2

