



Flustrellidra armata (Bryozoa: Ctenostomatida)—a new species from the southern shoreline of Korea

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Abstract

Flustrellidra armata sp. nov. is described from ten intertidal and four subtidal sites along the southern coast of Korea. The new species possess a series of small lateral and occasionally proximal kenozooids with simple spines; large scattered vicarious kenozooids with long, tubular, sharp or weakly ramified spines; and a marginal fringe of spiny kenozooids. Colonies of *F. armata* provide a habitat for a large number of associated benthic organisms. This species is an abundant and prominent component of rocky intertidal to upper subtidal communities and is the third species of *Flustrellidra* with low-Boreal to Subtropical distribution.

Key words: Bryozoa, Ctenostomatida, Flustrellidridae, *Flustrellidra armata*, new species, biogeography, Korea Strait

Introduction

The ctenostome bryozoan genus *Flustrellidra* Bassler, 1953 includes Recent species with encrusting or, more often, flexibly erect colonies and zooids with a bilabiate orifice interspersed with kenozooids in a strict spatial arrangement. Kenozooids develop simple or branching spines that differ among species in degree of morphology and frequency. The morphology of *Flustrellidra* species was examined by Cook (1964) and d'Hondt (1983).

To date, 10 species and one subspecies have been described (Fabricius 1780; Smitt 1872; Robetson 1900; O'Donoghue & O'Donoghue 1923; Silén 1947; Okada 1921; Mawatari 1953, 1971) from the margins of seas in the Northern Hemisphere. They are typically well represented in intertidal communities on rocky shores. *Flustrellidra* larvae are bivalved forms that disperse a short distance before settlement (Hayward 1985), leading to relatively high population densities. Much of the diversity of this genus occurs on North Pacific shores (Okada 1921; O'Donoghue & O'Donoghue 1923; Mawatari 1953, 1971; Kluge 1961, 1962, 1975; Androsova *et al.* 1974; Gontar 1978; Izyumova & Kubanin 1978; Kubanin 1997; Grischenko 2004), especially in the Asian Far East.

Inventory of the bryozoan fauna of the coastal waters of Korea began in the third decade of the 20th century and over 30 papers have been published, culminating in a recent monograph by Seo (2005). Most of these studies dealt with cheilostomes, though some indicated the appreciable role of ctenostome bryozoans in benthic and fouling communities in the region (Kim & Rho 1969; Chung & Rho 1975; Kim *et al.* 1978; Rho & Lee 1981; Rho & Kim 1981; Rho & Seo 1986; Seo 1998a, 1998b; Gong & Seo 2003, 2004; Seo 2005). Seo (2005) listed five ctenostome species for the coastal waters of Korea: *Amathia convoluta* Lamouroux, 1816; *A. distans* Busk, 1886; *Bowerbankia gracilis* Leidy, 1855; *Vesicularia harmeri* Silén, 1942; and *Mimosella*