

## Brown bryozoan

**Phylum** Ectoprocta  
**Class** Gymnolaemata  
**Order** Cheilostomata  
**Family** Bugulidae



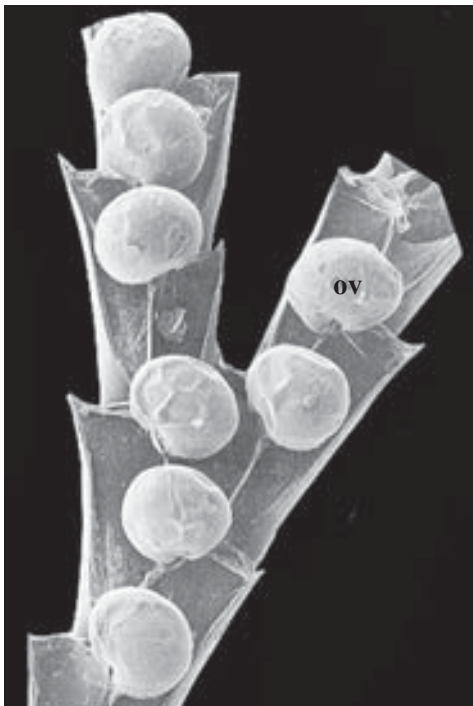
Photo by S. Davidson

### DESCRIPTION

Flexible bushy colonies, branching biserial, to about 10 cm high. Color is purplish-brown. Zooids alternating, with the outer corner pointed, but not spined. No avicularia, ovicell large, white, and globular (from Gordon & Mawatari, 1992).

### HABITAT

Typically found in harbors and embayments, especially Pearl Harbor, intertidal to 5 m, attached to any available hard substrate.



SEM of *Bugula neritina*, (ov) globular ovicell (from Gordon & Mawatari, 1992).



Individual colony of *Bugula neritina*  
(photo S. Davidson)

### DISTRIBUTION

#### HAWAIIAN ISLANDS

Throughout the main islands, in harbors, embayments, and shallow reef areas.

## NATIVE RANGE

Unknown, perhaps the Mediterranean

## PRESENT DISTRIBUTION

Worldwide in tropical and temperate seas

## MECHANISM OF INTRODUCTION

Unintentional, most likely as fouling on ships' hulls.

## IMPACT

Fouling organism. Ecological impact unstudied, likely some competition for space with native species.

## ECOLOGY

(see Feeding and Reproduction for previous bryozoan species)

## REMARKS

A common fouling organism worldwide, reported from all seas except subarctic and subantarctic regions, this species is most likely a suite of very similar species. It's presence in Hawaii was first reported by Edmondson (1933). He noted that it was one of the most common fouling species in harbors and bays around Oahu. It has since been widely reported throughout the main Islands by a number of authors.

Recently, *B. neritina* has been a subject of a great deal of biochemical research. It is the source of a novel chemical, bryostatin, which has been shown to be effective against leukemia.

There are three additional alien species of *Bugula* reported in Hawaii; *B. dentata*, *B. robusta*, and *B. stolonifera* (Zabin, 1999).

## REFERENCES

- Edmondson, C.H. 1933. Reef and Shore Fauna of Hawaii. B.P. Bishop Museum Spec. Pub. 22.
- Gordon, D.P. and S.F. Mawatari. 1992. Atlas of marine-fouling Bryozoa of New Zealand ports and harbours. New Zealand Oceanographic Institute, Pub. 107: 1- 52.
- Zabin, C.J. 1999. New records of introduced fouling Bryozoa from Oahu, Hawaii. Occ. Pap. Bishop Mus. 59: 46-47.