

Bushy bryozoan

Phylum Ectoprocta
Class Gymnolaemata
Order Ctenostomata
Family Vesiculariidae

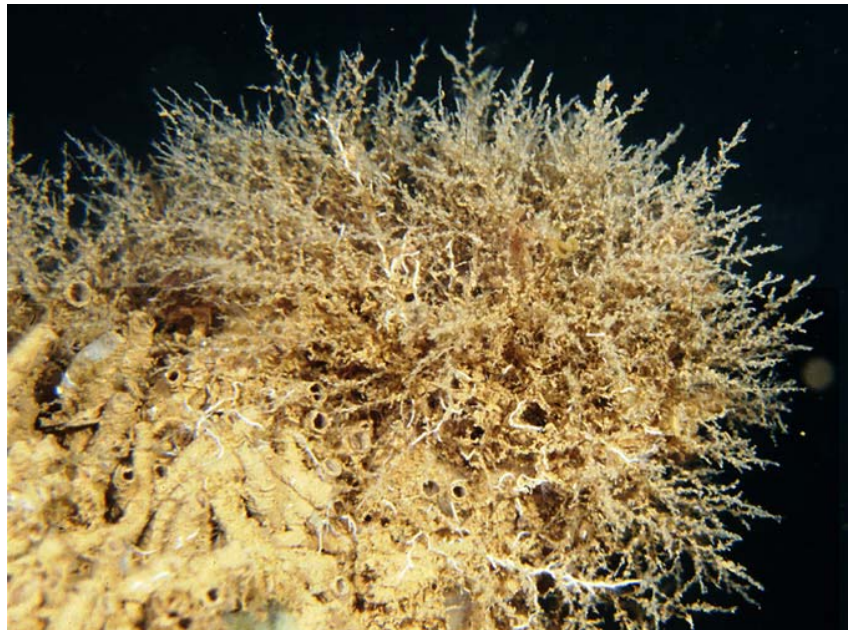


Photo by J. Hoover

DESCRIPTION

This bryozoan forms soft, bushy growths, 5-20 cm in diameter. The flexible stolons (branches) are usually coated with silt and diatoms which gives the colonies a muddy brown color. The colonies consist of short, erect zooids (individuals) arranged biserially in a spiral around each stolon segment.



Amathia distans, stolon with spiraling zooids
(from Grodon & Mawatari, 1992)

HABITAT

Primarily as fouling in shallow water on hard substrates (pilings, hulls, coral rubble, etc.) in harbors and embayments. Occasionally found on the reef in more protected areas.

DISTRIBUTION

HAWAIIAN ISLANDS

Throughout main Hawaiian Islands and also Midway Atoll.

NATIVE RANGE

Caribbean

PRESENT DISTRIBUTION

North Carolina to Brazil, Mediterranean and Red Sea, Puget Sound to the Gulf of California, Australia, New Zealand, Java, Japan, and Hawaiian Islands.

MECHANISM OF INTRODUCTION

Unintentional, as fouling on ships' hull or as larvae in ballast water.

IMPACT

Fouling organism. Ecological impact unstudied, but presumed minimal.

ECOLOGY

Feeding

The bryozoan is a suspension feeder. It has a retractable U-shaped crown of tentacles (lophophore) which bear cilia that create a current, bringing food particles toward the animal. Particles are then guided into the mouth by action of the tentacles and cilia.

Reproduction

Each bryozoan colony begins from a single, sexually produced, primary zooid. This zooid undergoes asexual budding to produce a group of daughter cells, which themselves form buds, and so on. Most bryozoans are hermaphroditic, each zooid capable of producing sperm and eggs. Sperm is released into the coelom and the fertilized eggs are retained and brooded for a time before being released.

REMARKS

First reported from Kaneohe Bay by Edmondson and Ingram (1939, based on 1935 collections), this bushy bryozoan is now a well established fouling species, reported throughout the main Islands. It was also one of the few alien marine invertebrates found at Midway Atoll when surveys were conducted there in 1998 (DeFelice et al. 1998).

REFERENCES

- Edmondson, C.H. and W.M. Ingram. 1939. Fouling organisms in Hawaii. Occ. Pap. B.P. Bishop Museum. 14(14): 251-300.
- DeFelice, R.C., S.L. Coles, D. Muir, and L.G. Eldredge. 1998. Investigation of the marine communities of Midway Harbor and adjacent lagoon, Midway Atoll, Northwestern Hawaiian Islands. Hawaii Biol. Survey, Bishop Museum (HBS Contrib. No. 1998-014).