

A New Host of *Eugymnanthea japonica* (Leptomedusae, Eirenidae) in Japan

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With Table 1

Abstract As the fifth host species of the commensal hydroid *Eugymnanthea japonica*, a mytilid bivalve, *Septifer virgatus*, was recorded at Tsushima Island, Nagasaki Prefecture, southern Japan. The attachment sites of the hydroids and their incidence of medusa bud production were observed in this new host.

Key words: commensal hydroid, *Eugymnanthea japonica*, *Septifer virgatus*, attachment site

The hydroid *Eugymnanthea japonica* Kubota, 1979 has been recorded from various localities from central to southern Japan, being commensal with four bivalve species, *Mytilus edulis galloprovincialis* Lamarck, *Crassostrea gigas* (Thunberg), *Barbatia virescens* (Reeve), and *Chlamys farreri* (Jones and Preston) (Kubota, 1992). Recently, I have found this hydroid species associated with the mytilid bivalve *Septifer virgatus* (Wiegmann) for the first time.

Host. The hydroid occurred in one specimen of *Septifer virgatus* that measured 46 mm along the anterior-posterior axis, and which was collected by the author intertidally at Takeshiki in Asou Bay, Tsushima Island, Nagasaki Prefecture on August 21, 1992. *S. virgatus* was rare at this locality, and only 22 other specimens were collected there on August 20-22, 1992. These specimens were smaller than the host specimen, i.e. at least 24 mm along the anterior-posterior axis, and had no bivalve-inhabiting hydroids of any species in their mantle cavities.

Attachment site of hydroid. A total of 84 hydroids were found in the mantle cavity, attached only to the posterior part of the mantle. Nearly the same number of zooids were found on each side of the host (Table 1).

Table 1. The number of hydroids of *Eugymnanthea japonica* in mantle cavity on each side of an infected *Septifer virgatus* from Takeshiki, Tsushima Island.

Mantle cavity	No. of hydroids with fully developed medusa buds	No. of hydroids with small medusa buds	No. of hydroids without medusa buds
Left	1	13	30
Right	1	8	31

Hydroid. Most of the hydroids within the host were small. The incidence of medusa bud production was 27.4%. The precise identification of the hydroids was possible in only two large specimens with fully developed medusa buds. Daughter hydroids were not found in any of these hydroid specimens.

Remarks. The small number of small hydroids attached to a restricted part of the body of the present new host suggests that infection by a *Eugymnanthea* colony in this host specimen is probably recent. *Septifer virgatus* is also used rarely as a host of another bivalve-inhabiting hydroid, *Eutima japonica* Uchida; this association has been recorded only at Oshoro, Hokkaido, and at Otsuchi, Iwate Prefecture, in northern Japan (see Kubota, 1992). Although *Eutima japonica* occurred associated with *Mytilus edulis galloprovincialis* and *Barbatia virescens* at the present collecting site (Kubota, 1992; present study), it was not found within *S. virgatus*, as described above.

Acknowledgements

This study was supported by a grant-in-aid for scientific research from the Showa Seitoku Kinen Zaidan.

References

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