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Interspecific interaction between the burrowing mud shrimp, *Upogebia major*, and its commensal bivalve, *Peregrinamor oshimai*

The commensal brooding bivalve *Peregrinamor oshimai* Shoji 1938 has been recorded from a number of Japanese localities. The bivalve, which is always solitary, attaches to the groove between the bases of the pereopods of its host, *Upogebia major*, using its fan-shaped byssus. *P. oshimai* is believed to be hermaphroditic, since it has both an ovary and a 'testis'. Although it is difficult to postulate that self-fertilization continues perpetually, considering the host density and the scale of its burrow, it also seems inefficient to release sperm in water. Therefore, we carried out a detailed histological study to determine its mating system, and found that the organ believed to be a testis was not a true testis, but a seminal receptacle. Therefore, the formerly described bivalve was female. Each female is normally accompanied by several 360- μ m-long dwarf males that attach to the bases of the host's pereopods. This dwarf male system is similar to those of some parasitic invertebrates, such as the parasitic barnacle, in the order Rhizocephala.