

## Adaptive strategy in a hydrothermal-vent gastropod *Oenopota ogasawarana*

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Deep-sea hydrothermal vents are patchy distributed in ocean floor and have extremely higher biological productivity than non-vent deep-sea environments. Although most hydrothermal-vent species are endemic to such environments, it has still not been fully known how they disperse from vents to vents and colonize new habitats. A turrid snail *Oenopota ogasawarana* is a hydrothermal vent-endemic gastropod reported from the southernmost part of the Izu-Ogasawara (Bonin) Arc and the northern Mariana Arc. Individuals of the family Turridae, which contain over 150 described species, lives in silt or sand bottom around the world. Understanding of biological characteristics and adaptability of vent-endemic gastropods should provide a clue to revealing evolutionary processes of vent-endemic species.

In this study, we examined characteristics of the egg capsule and the larval development of *Oenopota ogasawarana* in attempt to determine how the reproductive strategy and larval biology, including substratum selection and duration of larval period, influence distributions of the juveniles and adult snails by means of comparative studies with related species living in non-vent area.