

Observation of intersexuality in land hermit crabs (Anomura: Coenobitidae)

Gusev O., Zabotin Y.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

We report here the first observation of intersexuality in a land hermit crab (Coenobitidae). Three species of land hermit crabs from Okinawa were investigated. In the population of the terrestrial hermit crab *Coenobita rugosus* two per cent of males were found to be intersex. Besides the true male gonopores on the coxae of the 5th pair of pereopods, they had additional openings on the coxae of the 3rd pair of pereopods. Both specimens examined had a normally developed male reproductive system. In the populations of two other species studied, *C. brevimanus* and *C. purpureus*, however, no intersex individuals have been found. Examples of intersexuality in decapod crustaceans are discussed and putative explanations of this phenomenon in land hermit crabs are proposed.

<http://dx.doi.org/10.1017/S0025315407054604>
