

Cypris Settlement, Kentrogon Formation and Host Invasion in the Parasitic Barnacle *Lernaeodiscus porcellanae* (Müller) (Crustacea: Cirripedia: Rhizocephala)

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Abstract

The anatomy of the female cypris is very similar to that of cyprids of the Thoracica. There is no development of a preformed kentrogon within the unsettled cypris. Kentrogon formation is completed within 10–20 min after settlement. Elimination of the spent cypris is necessary for successful development. The kentrogon includes a variety of tissues, such as muscles and part of the cement glands. The injection stylet develops in connection with a moult, and it penetrates into the crab gill through the ventral body wall of the kentrogon c. 50 h after settlement. Only a single cell, also recognizable in the unsettled cypris, is injected into the host, while the rest of the kentrogon degenerates after invasion. The speed of kentrogen development and much of the kentrogon anatomy can be interpreted as a defense against host crab grooming. The single invasion cell may either be considered as a stem cell or an egg.

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