

PROBOSCIS REGENERATION OF *CHICOREUS VIRGINEUS* AND *RAPANA RAPIFORMIS* (PROSOBRANCHIA: NEOGASTROPODA)

C. Raghunathan & K. Ayyakkannu

Centre of Advanced Study in Marine Biology, Annamalai University, Parangipettai 608  
502 India

ABSTRACT

The pleuroembolic proboscis measures 16-23 mm in *Chicoreus virgineus* and 30-35 mm in *Rapana rapiformis*. After amputation of 10 mm length of the proboscis, *C. virgineus* regenerated faster (107 days) than *R. rapiformis* (132 days). After feeding resumed, it took *C. virgineus* 17 h, and *R. rapiformis* 21 h to drill a complete borehole in the bivalve prey *Meretrix meretrix*. The time to drill a hole prior to amputation was 12 h and 14 h respectively. Regeneration of proboscis in relation to the variation of biochemical constituents was studied in the two muricid species till they resumed normal feeding activity under laboratory conditions. During regeneration, the concentrations of protein, carbohydrate, lipid and glycogen decreased markedly in the foot, mantle and adductor muscle of both species.