



Recent and fossil Isopoda Bopyridae parasitic on squat lobsters and porcelain crabs (Crustacea: Anomura: Chirostyloidea and Galattheoidea), with notes on nomenclature and biogeography

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Abstract

The parasitic isopod family Bopyridae contains approximately 600 species that parasitize calanoid copepods as larvae and decapod crustaceans as adults. In total, 105 species of these parasites (~18% of all bopyrids) are documented from Recent squat lobsters and porcelain crabs in the superfamilies Chirostyloidea and Galattheoidea. Aside from one endoparasite, all the bopyrids reported herein belong to the branchially infesting subfamily Pseudioninae. Approximately 29% (67 of 233 species) of pseudionine species parasitize squat lobsters and 16% (38 of 233 species) parasitize porcelain crabs. Bopyrids are found in five of six squat lobster families (lacking only in Kiwaidae) and the sole porcelain crab family Porcellanidae. Six pseudionine genera are shared between squat lobsters and porcelain crabs. The deepest bathymetric records of bopyrids on squat lobster hosts (5210 m), and records of swellings interpreted as indications of bopyrid presence in fossil host taxa are noted. Four nomenclatural issues are resolved and the proper form of citation for the French zoologist C. E. Hesse is provided. Biogeographic distributions for squat lobsters and porcelain crabs are discussed and compared to those of hermit crabs.

Key words: Bopyridae, Chirostyloidea, hermit crab, Galattheoidea, Isopoda, parasite, Porcellanidae, squat lobster, taxonomy