



The Porcellanidae (Crustacea: Decapoda: Anomura) of the Red Sea with description of a new species of *Petrolisthes*

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Abstract

The porcellanid crabs from the Red Sea are revised based on museum collections. A complete compilation of all species known from the Red Sea is presented, including four new records of species for that region. *Petrolisthes aegyptiacus* n. sp. is described on the basis of an old collection of porcellanids from the Museum für Naturkunde, Stuttgart. The presence of *Petrolisthes lamarckii* in the Red Sea is confirmed and a single specimen, which corresponds in its general characters to *Petrolisthes donanensis* from Japan, is reported. *Porcellanella haigae* is reported based on photographs from a field guide. As a result, 18 species are now known to occur in the Red Sea. Figures of all known species are included and an identification key to the species is provided.

Key words: Crustacea, Anomura, Porcellanidae, *Petrolisthes aegyptiacus*, new species, Red Sea, taxonomy, geographic range

Introduction

When Lewinsohn (1969) revised the porcellanid crabs from the Red Sea, this fauna comprised 13 species. An additional species, cited by Lewinsohn (1969) with an incorrect name, was added later by the same author (Lewinsohn 1974) to the list of species from the Red Sea, making a total of 14 species, none of which is endemic to this region. Although Lewinsohn's contributions (1969, 1974) to the knowledge of the porcellanid fauna from this relatively well explored region is quite complete there is no recently collected material, for which information on the ecology, habitat diversity, and distribution of species has been recorded.

In this report, four species, including *Petrolisthes aegyptiacus* n. sp., found in an old museum collection compiled by Klunzinger between the years 1877 and 1884, and deposited in the State Museum of Natural History, Stuttgart (Germany) (SMNS), are reported for the first time for the Red Sea. One of these species, represented by a small single specimen, corresponds in most of its characters to *Petrolisthes donanensis* described by Osawa (1997) from the Ryukyu Islands, Japan. This specimen is also described and discussed here, and referred to as *Petrolisthes* cf. *donanensis*, since a reliable identification is not possible (see below). The presence of *Petrolisthes lamarckii* (Leach, 1820) in the Red Sea, whose occurrence in this region was discussed by various authors (see Lewinsohn 1969), is confirmed. Finally, *Porcellanella haigae* Sankarankutty, 1963 is reported for the first time from the Red Sea based on photographs from the Gulf of Aqaba.

Most of the material examined for the present study is deposited in the SMNS collection. Additional material from the Red sea, deposited in the Senckenberg Museum, Frankfurt (SMF), the Zoological Museum of the Humboldt-University, Berlin (ZMB), and the Zoologische Staatssammlung München (ZSM), was examined. Also, a collection from the Sanganeb Atoll, Sudan, collected by V. Neumann, between 1991 and 1992, and also deposited in the SMF, was examined. Adding new records of three species and a new species to the 14 species reported by Lewinsohn (1969, 1974) results in 18 porcellanid species so far known for the Red Sea.