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## An updated checklist of decapod crustaceans (infraorders Astacidea, Thalassinidea, Polychelida, Palinura, and Anomura) from the northern and northeastern Brazilian coast

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## Abstract

A checklist of the decapod crustacean species from the infraorders Astacidea, Thalassinidea, Polychelida, Palinura, and Anomura from the northern and northeastern (N/NE) Brazilian coast based on literature and material deposited in the carcinological collection of the Universidade Federal de Pernambuco, Recife, Brazil, is provided. The list includes marine and estuarine species reported at least once to each of the studied area, including the oceanic islands and banks along the N/NE Brazil. A total of 146 species is reported, corresponding to an increase of 32.7% when compared to the data published in Paulo Young's Catalogue (1998). The most representative infraorder concerning number of species is Anomura, represented in N/NE Brazil by 90 species and 10 families, followed by Thalassinidea, with 36 species and 6 families, Palinura, with 14 species and 4 families and, finally, Astacidea, which comprises 6 species and 2 families. Families with highest species richness were Porcellanidae (20), Diogenidae (19), Paguridae (18) and Galatheidae (15), all of them included in the infraorder Anomura. Zoogeographic affinities regarding the species are briefly discussed.

Key words: species richness; geographic distribution; crustaceans; northern and northeastern Brazil

## Introduction

Reliable lists of species occurring in distinct geographic regions of the world are of multiple uses. In addition to providing comparative figures for biodiversity studies, they serve as an important tool in defining the extension of protected areas, inferring potential impact of anthropogenic activity and complexity of communities, and estimating availability of life resources (Hendrickx 1995).

The studies regarding the marine and estuarine decapod crustaceans from the northern and northeastern (N/NE) Brazilian coast started during the 19th century with the contributions of White (1847) and Smith (1869), among others. In the late 19th century, the Brazilian coast was visited by oceanographic expeditions of high historical importance such as the *Challenger* (Miers 1886; Bate 1888; Henderson 1888) and *Branner-Agassiz* (Rathbun 1900). In the 20th century, the R/V *Calypso* carried out samplings between 1961 and 1962 (Haig 1966; Forest & de Saint-Laurent 1967; Rodrigues da Costa 1968; Christoffersen 1979). Collections by the ships *Canopus* and *Akaroa*, between 1967 and 1969, and the *Almirante Saldanha*, between 1967 and 1987 were the basis for studies of Coelho & Koening (1972), Coelho & Ramos (1972), Coelho *et al.* (1980). Additional information about the Brazilian oceanographic expeditions can be found in Coelho *et al.* (2004).