

# Monograph



# **ZOOTAXA**

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# A review of the *Dardanus sinistripes* (Stimpson, 1859) (Decapoda, Anomura, Diogenidae) species complex with the description of five new species from the Mexican Pacific

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#### **Abstract**

An exhaustive revision of material identified as *Dardanus sinistripes* (Stimpson, 1859) in collections in Mexico and the USA, and of new material of *Dardanus* collected in several localities in the Eastern Pacific revealed the existence of five undescribed species closely related to *D. sinistripes*. Detailed study of this material allows us to redescribe *D. sinistripes* based on a neotype selected from a locality in Panama, and to describe *D. nudus* **n. sp.**, *D. stimpsoni* **n. sp.**, *D. janethaigae* **n. sp.**, *D. pilosus* **n. sp.** and *D. magdalenensis* **n. sp.** The six species of the genus *Dardanus* in the Eastern Pacific are fully illustrated and compared.

Key words: Decapoda, Anomura, Diogenidae, Dardanus sinistripes, hermit crabs, species complex, Eastern Pacific

#### Introduction

Pagurus sinistripes Stimpson, 1859 was originally described from the Pacific coast of Panama based on one male specimen collected by the Rev. J. Rowell. It was transferred to *Dardanus* by Rathbun (1910). A relatively large species of hermit crab (type: total length female, ca 7.5 cm) (Stimpson 1859: 37), often collected in shallow trawls, it has been recorded subsequently from Ecuador (Nobili 1901b), Baja California, Mexico, and Sechura Bay, Peru (Rathbun 1910), San José Island (Schmitt 1924), Arena Bank, Santa Inés Bay, Gorda Bank, Baja California (Glassell 1937b), Magdalena Bay, on the west coast of Baja California, Tenacatita, Jalisco, Acapulco, Guerrero, the area of Salina Cruz, Oaxaca, México, Taboguilla Island, Panama, Basilito Bay, Costa Rica, Cotudo Point, Gorgona Island, Colombia, Galera Point, Ecuador, Sechura Bay and Paita, Peru (Haig *et al.* 1970; Ball & Haig 1974; Hendrickx & Harvey 1999), Golfo Dulce, Golfo de Nicoya (Castro & Vargas 1996; Vargas *et al.* 1996) Costa Rica.

The original description by Stimpson (1859) for *Pagurus sinistripes* was very superficial, based on general characters now known to be widespread within several genera of hermit crabs, and without illustrations. Unfortunately, the type has been lost. Because of the typical aspect of the last two segments of the left, third pereiopod (second walking leg) which are covered by scales, all succesive collectors following Stimpson's description identified their material of *Dardanus* with *D. sinistripes*.

Recent review of numerous specimens of *Dardanus* in the Regional Collection of Invertebrates, Benthic Invertebrate Laboratory, Instituto de Ciencias del Mar y Limnología, UNAM, at Mazatlán, Mexico, prompted us to reconsider the status of *Dardanus sinistripes* and to revise the identifications of specimens identified as this species in other collections.