

PAGE PROOF / PRUEBA DE IMPRENTA

First record of *Coronida glasselli* (Stomatopoda: Coronididae) for Costa Rica (Isla del Coco National Park, Eastern Tropical Pacific)

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Abstract: Stomatopods are a small group of marine and estuarine crustaceans that inhabit several marine ecosystems including deep, shallow waters, and intertidal zones. Six species from five families have been reported from the Park. We add *Coronida glasselli* Manning, 1976 from rocky reef environments at Isla del Coco. In the Eastern Tropical Pacific the species was reported only from Isla Gorgona, Colombia. There are species from Isla Uva, Panamá in the National Museum of Natural History, Washington DC. Rev. Biol. Trop. 64 (Suppl. 1): S000-S000. Epub 2016 February 01.

Key words: Reef, benthic invertebrates, stomatopods, diversity, Isla del Coco.

Stomatopods, also known as mantis shrimps, are an important group of benthic invertebrates with active predatory habits in temperate, subtropical and tropical waters. They are found from the intertidal zone to the deep waters of marine and estuarine ecosystems (Salgado-Barragán, & Hendrickx, 2010).

A total of 35 species in 10 families of stomatopods have been reported for Costa Rica, twenty nine species are found in the Pacific Ocean and six species along the Caribbean coast (Vargas, & Cortés, 1997; Vargas,

& Wehrtmann, 2008; Vargas, 2009). In Isla del Coco National Park there are six species registered in five families (Table 1). The family Coronididae represents 5.7 % of the diversity of the order in the country and is the most diverse family of stomatopods on the island, with two species previously reported, *Coronida schmitti* and *Neocoronida cocosiana*, the last one as an endemic species from Isla del Coco (Vargas-Castillo, & Wehrtmann, 2008).

An individual *Coronida glasselli* was collected by scuba diving in 10 November 2014

TABLE 1
Stomatopod species reported for Isla del Coco by Vargas-Castillo & Wehrtmann (2008)

| Family | Specie |
|------------------|---|
| Coronididae | <i>Coronida schmitti</i> Manning, 1976, <i>Coronida glasselli</i> * Manning, 1976, <i>Neocoronida cocosiana</i> (Manning, 1972) |
| Gonodactylidae | <i>Neogonodactylus zaca</i> (Manning, 1972) |
| Pseudosquillidae | <i>Pseudosquillisma adialta</i> (Manning, 1964) |
| Squillidae | <i>Crenatosquilla oculinova</i> (Glassell, 1942) |
| Tetrasquillidae | <i>Tetrasquilla mccullochae</i> (Schmitt, 1940) |

* New report



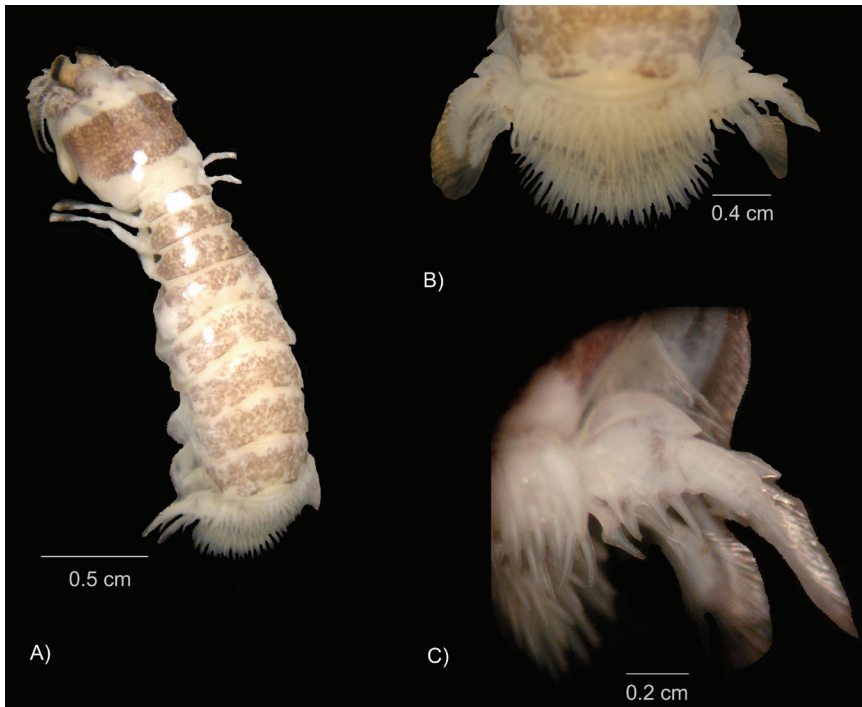


Fig. 1. *Coronida glasselli* Manning, 1976. (A) Specimen collected in Punta Ulloa, Isla del Coco National Park; (UCR 3378-01), (B) Telson detail, (C) Uropodal exopod thorns.

in shallow waters of Punta Ulloa, Isla del Coco (5°33'23.13" N - 87°02'51.84" W), at 6 to 12m deep. This species was associated with coarse sand substrate in a coral reef environment. The organism was deposited in the carcinological collection of the Museo de Zoología (UCR 3378-01), Universidad de Costa Rica.

The present report of *C. glasselli* Manning, 1976 is the first record of this species on Isla del Coco. *Coronida glasselli* is a small species that has a total length of 3.60cm, with the sixth abdominal somite and the telson being covered by grouped thorns and less than 10 thorns in the basal segment of the uropodal exopod (Fig. 1) (Manning, 1976; Salgado-Barragán, & Hendrickx, 2010). *Coronida glasselli* has been reported previously from Isla Gorgona, Colombia, between 10 and 13m depth (Manning, 1976; Salgado-Barragán, & Hendrickx, 2010). In addition, specimens from Isla Uva, Panama, found in sandy-bottoms, and coral substrates at 25m, are deposited in the National

Museum of Natural History, Washington, DC, but is unpublished (NMHH 2015).

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RESUMEN

Presencia del crustáceo *Coronida glasselli* (Stomatopoda: Coronidae) en el Parque Nacional Isla del

Coco, Pacífico Tropical Oriental, Costa Rica. El orden Stomatopoda es un pequeño grupo de crustáceos marinos y estuarinos que habitan en una amplia diversidad de sustratos. En el Parque Nacional Isla del Coco se han hallado seis especies pertenecientes a cinco familias. El presente trabajo reporta a *Coronida glasselli*, el cual anteriormente solo se había reportado para Isla Gorgona, Colombia y en el Museo Nacional de Historia Natural, Washington, DC, se encuentran depositados individuos de Isla Uva, Panamá.

Palabras clave: Arrecife, invertebrados bentónicos, estomatópodos, diversidad, Isla del Coco.

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