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Lissothuria caboblanquensis n. sp., a new species of sea cucumber (Holothuroidea: Dendrochirotida: Psolidae) from Costa Rica

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Abstract

A new species of sea cucumber of the genus *Lissothuria* Verrill, 1867 is described. *Lissothuria caboblanquensis* **n. sp.** was found in the Costa Rican Pacific, at 17 m depth. The presence of towers with spiny apex and the elaborated shape of the hourglasses in the dorsal body wall, make this species unique among the species of this genus. This species is distinctive within the genus. The shape of the ossicles shows some similarities with *L. nutriens* H. L. Clark, 1901 and *L. hancocki* (Deichmann, 1941).

Key words: *Lissothuria caboblanquensis*, new species, Costa Rica

Resumen

Se describe una nueva especie del género *Lissothuria* Verrill, 1867. *Lissothuria caboblanquensis* **n. sp.** se describe para el Pacífico de Costa Rica, a una profundidad de 17 m. La presencia de espículas dorsales en forma de torres con ápice espinoso y la forma tan elaborada de los relojes de arena, hace a esta especie única entre las que conforman este género. Sus espículas se asemejan a las de *L. nutriens* H. L. Clark, 1901 y a las de *L. hancocki* (Deichmann, 1941).

Palabras clave: *Lissothuria caboblanquensis*, nueva especie, Costa Rica

Introduction

The members of the family Psolidae (Order Dendrochirotida) are sea cucumbers characterized by the presence of an armor-like arrangement of dorsal scales and a clearly demarcated ventral sole, this sole being thin and soft in most species. Psolidae species are generally sedentary and are found attached to a solid substrate, such as rock, coral rubble, mollusk shells and even sea urchin spines (i. e. Cidariidae). The family Psolidae Burmeister, 1837 comprises six genera: *Ceto* Gistel, 1848; *Echinopsolus* Gutt, 1990; *Ekkentropelma* Pawson, 1971; *Psolus* Oken, 1815; *Psolidium* Ludwig, 1886 and *Lissothuria* Verrill, 1867. Only two occur in Costa Rican waters: *Psolus* and *Lissothuria* (Alvarado *et al*., 2013).

The genus *Lissothuria* (Dendrochirotida: Psolidae) was erected by Verrill in 1867 to include psolids with tube feet on dorsal surface of the body and in the midventral interradius, with dorsal ossicles including hourglass shaped bodies, baskets, cups and towers; and sole ossicles as knobbed or smooth plates and cups. There are eight nominal

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