

A Sea Cucumber, *Holothuria (Selenkothuria) Parva* Krauss in Lampert, 1885 for the First Time in the Bandar-E Lengeh Coast (Persian Gulf, Iran)

Abdul-Reza Dabbagh

The Persian Gulf Aquatics World Center, Bandar-e Lengeh, Iran

Abstract: Some specimens of a sea cucumber were collected from the intertidal zone of Bandar-e Lengeh in Iranian waters of the Persian Gulf. The current study provides a morphological description, the habitat characteristics and a distribution map for the Persian Gulf specimen of *Holothuria (Selenkothuria) parva* Krauss in Lampert, 1885.

Key words: Sea Cucumber • *Holothuria parva* • Bandar-e Lengeh • Persian Gulf

INTRODUCTION

About 1400 species of holothurians from six orders (Aspidochirotida, Elasipodida, Molpadiida, Apodida, Dendrochirotida and Dactylochirotida) have been recorded [1]. Of these, only 20 species of Holothurians have been reported from Iranian waters [2]. However, *Holothuria parva* has previously recorded from two localities of Iranian waters [3], but in the present study it was collected from Bandar-e Lengeh in southern Iran. A morphological description, the habitat characteristics and a distribution map are presented for *H. parva*.

MATERIALS AND METHODS

The specimens were collected by hand from under rocks along the Bandar-e Lengeh coast. A voucher specimen was deposited at the Persian Gulf Molluscs Research Station (PGMRS), Hormozgan Province, Bandar-e Lengeh, Iran. All methods for the work have been previously reported by Samyn *et al.* [4]. For counting the tentacle numbers, the specimen was anesthetized with 5% magnesium chloride. Further identification was provided by examining ossicles of 3 positions including, dorsal and ventral body wall, tentacles and tube feet. The ossicles were removed from the tissues using household bleach. The treated ossicles were then examined with a microscope at 40 X magnification.

RESULTS

Taxonomy

Order Aspidochirotida Grube, 1840

Family Holothuriidae Ludwig, 1894

Genus *Holothuria* Linnaeus 1767

Subgenus *Holothuria (Selenkothuria)* Deichmann, 1958

Holothuria (Selenkothuria) parva Lampert, 1885

Cherbonnier, 1988: 64, Fig. 24A-H; Samyn, 2003: 69, tab, 15; Samyn *et al.*, 2006a: 94, Fig. 72.

Material Examined: Some specimens, Bandar-e Lengeh, Persian Gulf, South of Iran, not recorded, intertidal zone, coll. A.R. Dabbagh, 2010.

Morphology: The specimen measured 22 cm long. Colour in the living condition was brownish - the ventral side slightly lighter in colour - with yellowish tube feet (Fig. 1). Mouth was ventral, surrounded by 20 tentacles. The tentacles, when extended, showed 10 mm of brown tissue. One polian vesicle was observed (10 mm). The Cuvierian organ was absent.

Spicules of the dorsal body wall were rods, 70- 130 µm (Fig. 2A). Spicules of podia were perforated plates (330 µm) (Fig. 2B) and rods, 70- 150 µm (Fig. 2A). The tentacles contained rods, 150 µm long (Fig. 2C).

Habitat Characteristic: The habitat of *H. parva* is rocky shores, as the specimens were hidden under stones. The specimens were collected throughout the intertidal zone.



Fig. 1: *Holothuria (Selenkothuria) parva* Krauss in Lampert, 1885 from the Bandar-e Lengeh coast

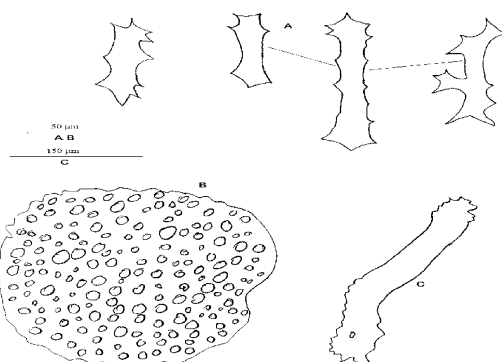


Fig. 2: *Holothuria (Selenkothuria) parva* Krauss in Lampert, 1885. A: Rods From Dorsal body wall; B: plate from podia; C: Rods from tentacles



Fig. 3: Distribution of *Holothuria (Selenkothuria) parva* Krauss in Lampert, 1885 in the Persian Gulf (Blue: Bushire; Red: Bandar-e Lengeh; Green: Qism)

DISCUSSION

The spinous rods of the dorsal body wall and yellowish tube feet are all characteristic of the species *Holothuria (Selenkothuria) parva* Krauss in Lampert, 1885 [5]. Some authors have previously described this species [5, 6]. Despite extensive investigation in Iranian waters by Heding [3], this species has not been previously recorded from Bandar-e Lengeh (South of Iran).

H. parva is usually found under the rock and stone in mangroves [5] and Coral reef [3], although it is found on rocky shorelines in Bandar-e Lengeh.

The presence of *H. parva* was already mentioned in the Persian Gulf (South of Bushir; Qism) (Fig. 3) [3, 7]. It is also distributed in the Red Sea [6, 8], Africa [5, 6], Gulf of Aden [9].

In this article, *H. parva* is described for the first time from the northern Persian Gulf and Iranian waters of the Persian Gulf.

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