

## On the occurrence of the Egyptian seahorse *Hippocampus suezensis* Duncker, 1940 in Muscat, Sultanate of Oman

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*The Egyptian seahorse Hippocampus suezensis is recorded for the second time in the Oman Sea. It differs from H. kelloggi and H. jayakari in a set of characters, e.g. in shape and direction of the anterior spines, shape and length of abdominal spines, ratio of head length to standard length, dorsal fin ray count and number of body rings opposite brood pouch.*

**Key words:** *Hippocampus suezensis*, Oman Sea, Sultanate of Oman

### INTRODUCTION

The members of the genus *Hippocampus* are widely distributed in the Indo-Pacific and East Africa, from the Red Sea to Japan and Lord Howe Island, Australia (KUITER & DEBELIUS, 2007). *H. suezensis* is restricted to the Red and Arabian Seas (KUITER, 2002). About 285 nominal species belonging to 48 genera are included in the family Syngnathidae, of which the genus *Hippocampus* is among the largest genera and comprises of approximately 50 species (FROESE & PAULY, 2008).

So far, only two specimens of the Egyptian seahorse, *H. suezensis* have been collected from waters of the Oman Sea (KUITER, 2002). The description of those two specimens was not published. Thus, in the present study we report on the record of a second specimen of *H. suezensis* from the Oman Sea together with its morphological description compared with the other two *Hippocampus* species found in the study area.

### MATERIAL AND METHODS

On 10<sup>th</sup> February 2008, one male Egyptian seahorse specimen *Hippocampus suezensis* (total length TL 275 mm) was caught in waters in the vicinity of Muscat City. The specimen was collected in the area 23° 34' 44N, 58° 36' 51E and found attached to a fishing trap at a depth of 9-10m. The specimen has been deposited in the fish collection of the Marine Science and Fisheries Centre, Ministry of Agriculture and Fisheries Wealth, Muscat, Sultanate of Oman under catalogue number OMMSTC 0165 (Figure 1). For morphological comparison between *H. suezensis* and *H. kelloggi*, an additional ten specimens of unidentified *Hippocampus* under catalogue number OMMSFC 0347-0356, later identified as *H. suezensis*, and 20 specimens of *H. kelloggi* under catalogue an additional ten specimens of unidentified *Hippocampus* under catalogue number OMMSFC 0347-0356, later identified as *H. suezensis*, and 20 specimens of *H. kelloggi*



Fig. 1. *Hippocampus suezensis*, total length 275 mm, from the Gulf of Oman (OMMSTC 0165)

under catalogue number OMMSFC0357-0376 available at the collection of Marine Science Centre, Ministry of Fisheries Agriculture and Wealth were used.

## RESULTS AND DISCUSSION

The Muscat specimen had the following features: dorsal rays (D) 20, anal rays (A) 4; trunk rings 11; tail rings 40; brood pouch extends over 7-8 rings; head length/snout length = 1.7 times the head length; snout 0.56, least snout depth 0.18. Anterior pair of cheek spines broad, blunt, directed to the anterior, running parallel to the lower jaw. Two pairs of eye spines, anterior pair longer than posterior, both prominent. Coronet straight with wedge-like ridges. Body with three lines of spines on each side, dorsal, lateral, ventral extending to the posterior end of the head. The lateral line is short. Colour (in ethanol) brown with tiny pale spots.

There are only two species of *Hippocampus* present in Gulf of Oman so far - these are *H. kelloggi* (FOUDA & HERMOSA, 1993; MMINISTRY OF REGIONAL MUNICIPALITIES AND ENVIRONMENT, 1997) and *H. jayakari* (R. KUITER, personal

communication). Laboratory observations show significant differences between *H. suezensis* and the other two species of the genus *Hippocampus* (*H. jayakari* and *H. kelloggi*) (Table 1).

The species in question is closely related to the great seahorse *H. kelloggi*. It differs from the latter species in a set of characters (Table 1). KUITER (2002) recognized *H. suezensis* as a valid species but, according to LOURIE *et al.* (1999), it may be a synonym of *H. kelloggi* Jordan & Snyder (GOLANI & FINE, 2002). The additional diagnostic characters obtained in the present study that are able to separate *H. suezensis* from *H. kelloggi* are a new set of characters that were not recognized and used by LOURIE *et al.* (1999). They used criteria that did not allow them to separate the two species. Thus, it is possible to conclude that the present work supports Kuiters's assumption (2002) on the validity of *H. suezensis* and adds a new set of diagnostic characters to separate it from *H. kelloggi*.

Two other female specimens (Total length 220 mm) of *H. suezensis* were collected from the vicinity of Muscat by P. Woodhead and images appeared in KUITER (2002). Therefore, the present report constitutes only the second record from the Gulf of Oman and provides evidence that Woodhead's specimens were not just a stray event.

Since only a few specimens of this species were collected from the Gulf of Oman, *H. suezensis* may be considered a very rare species in the Gulf of Oman area until further specimens are recorded. Conservation plans to cover this species and studies on its biology should be put forward in order to protect its stock in the Gulf of Oman area.

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## **O pojavi egipatskog morskog konjića, *Hippocampus suezensis* Duncker, 1940 u Muškatu, Sultanat Oman**

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### SAŽETAK

Egipatski morski konjić, *Hippocampus suezensis* je zabilježen po drugi put u Omanskom moru.

Razlikuje se od *H. kelloggi* i *H. jayakari* nizom značajki, kao npr. u obliku i smjeru prednjih šipčica, obliku i duljini trbušne šipčice u omjeru duljine glave s obzirom na standardnu duljinu tijela, u leđnoj peraji te broju prstenova nasuprot reproduktivnoj trbušnoj vrećici.

**Ključne riječi:** *Hippocampus suezensis*, Omansko more, Sultanat Oman