



Short Communication

Report of *Antennarius hispidus* (Bloch & Schneider, 1801) (Lophiiformes: Antennariidae) from the northern Arabian Sea

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The present study reports *Antennarius hispidus* (Bloch & Schneider, 1801) from the northern Arabian Sea. Earlier reports mainly came from the east coast of India, however, the present specimens report the occurrence from northernmost part of the Arabian Sea, in the Indian EEZ (off Okha, Gujarat). The description and the previous distributional records of *Antennarius hispidus* from India are provided herewith.

[**Keywords:** Antennariidae, *Antennarius hispidus*, Arabian Sea, Lophiiformes]

Introduction

The lophiiformes (suborder Antennarioidei) constitutes a morphologically diverse assemblage of taxa, nearly all of which are laterally compressed, inhabiting shallow to moderately deep water, benthic forms which are commonly known as frogfishes. They are found nearly in all the tropical and subtropical oceans and Seas across the world, with some taxa occurring also in temperate waters¹. They are noticeably characterized by the structure of the first dorsal-fin spine (illicium), which is placed near the anterior tip of the snout assisting as a luring apparatus for attracting prey. Pectoral fins of frogfishes are modified for “walking” on the bottom, and gill openings are narrowly constricted as a tube-like structures that open posteriorly behind the base of the pectoral fin playing an important role in the locomotion called jet propulsion. Approximately 20 genera with 63 extant species are distributed with in the four families of lophiiformes¹⁻³.

Family antennariidae is distinguished from other antennarioid families by the presence of large third dorsal-fin spine as well as by shortened body and

sigmoid vertebral column^{4,5}. Antennariids are well known for their brilliant colors and textures and hence are widely used in the aquarium trade.

Materials and Methods

Three specimens were collected by the exploratory deep-sea fishery survey of FORV *Sagar Sampada*, (Cruise 372) conducted by the Centre for Marine Living Resources and Ecology (CMLRE), Ministry of Earth Sciences, India. The specimens were collected using High-Speed Demersal Trawl Crustacean Version (HSDT-CV), operated off Okha (Gujarat), northern Arabian Sea at a speed of 2.5 knots at depths ranging from 72 to 100 m. The specimens were identified following Pietsch² and Pietsch & Grobecker⁵.

Results

Order: Lophiiformes Rafinesque, 1810

Family: Antennariidae Gill, 1863

Genus: *Antennarius* Daudin, 1816

Antennarius hispidus (Bloch and Schneider, 1801)
(Fig. 1)

Common names: Hispid or Shaggy Frogfish

Material Examined: IO/SS/FIS/00615a, b and c; 61, 46 and 45 mm SL, respectively; 22.52° N, 68.26° E, northern Arabian Sea; depth 72-100 m, February 2018.

Description

Body laterally compressed, head and eyes small, skin covered with close-set dermal spinules; first dorsal-fin spine (illicium) striped and of nearly equal length to the second spine; illicium and second dorsal spine closely placed and posteriorly directed; second and third dorsal-fin spines stout with spinules; illicium



Fig. 1 — *Antennarius hispidus*, IO/SS/FIS/00615a, 61 mm SL

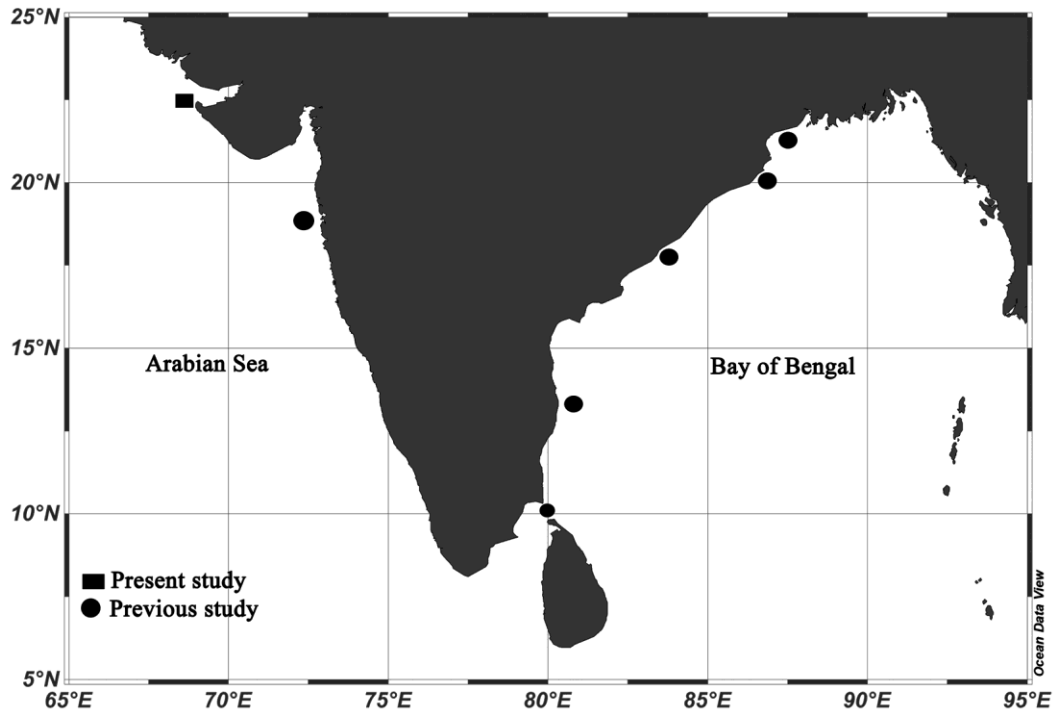


Fig. 2 — Map showing the distribution of *Antennarius hispidus* along the Indian EEZ

naked, without dermal spinules except the pterygiophore (bony support for the illicium); esca large, oval shaped with tuft of filaments; a small naked groove is situated just behind the second dorsal-fin spine for accommodating esca; pterygiophore prominent and extending anteriorly, considerably beyond symphysis of upper jaw; second and third dorsal-fin spines well connected to head by a membrane; lower jaw extends over upper jaw; mouth vertical, small pointed teeth present on both upper and lower jaws; pectoral lobe attached to the side of body; gill opening tubular, placed just below the pectoral lobe; whole body bear light brown colour; head, body and all fins completely covered with parallel, darkly pigmented streaks; belly devoid of streaks; at least 5 to 6 streaks radiating from the eyes; small streaks and blotches present on all the fins; DIII, 12; C 9; A 7; P 10; V 6.

Discussion

Antennarius hispidus commonly known as hispid or shaggy frogfish belongs to the *Antennarius striatus* group⁵ and sometimes mistaken for hairy frogfish, *Antennarius striatus*. The holotype was collected from Coromandel coast, Bay of Bengal, India (ZMB 2221) by Bloch & Schneider in 1801. *Antennarius hispidus* can be easily distinguished from *A. striatus* by having large oval shaped bushy esca but *A. striatus* possess

esca with 2 to 7 thick worm like appendages. The members of antennariidae family are mostly shallow-water benthic forms, having ubiquitous geographic distribution, for all genera throughout the tropics and subtropics¹. Occurrence report also came from Indo-west Pacific, South Africa, East Africa, Pakistan, Madagascar and western Mascarenes east to Indonesia, Samoa and Tonga, north to Taiwan, south to Western Australia and Loyalty Islands⁶. From India, the species has been reported previously from the coast of Chennai⁷, Andhra Pradesh⁸, Odisha⁹, West Bengal¹⁰, Kakkinada¹¹, Mandapam and Dhanushkodi (Gulf of Mannar)¹². From the Arabian Sea *A. hispidus* is only known from a single report off Mumbai coast¹³ in 1992; but detailed systematics account of the specimen was not provided. Present study from the northern Arabian Sea indicates that the species is possibly present throughout the shallow depth of Indian EEZ (Fig. 2).

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Conflict of Interest

On behalf of all authors, the corresponding author states that there is no conflict of interest.

Author Contributions

RK: Conceptualization; formal analysis, original draft and writing; AK: Conceptualization, review & editing; MH & NS: Investigation, supervision, review & editing; NS: Funding acquisition; and MS: Supervision and funding acquisition.

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