

## NASO UNICORNIS (FORSSKÅL, 1775): RECORD OF A NEW UNICORNFISH FROM PAKISTAN

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### ABSTRACT

Bluespine unicorn fish (*Naso unicornis*) was reported for the first time from Pakistan. Two specimens of this species were collected in April, 2017 and September, 2021. Addition of this species has increased number of species of *Naso* to 8 whereas total members of family Acanthuridae increased to 20 indicating diversified surgeonfish and unicornfish fauna of Pakistan.

**Key word:** *Naso unicornis*, Acanthuridae, Bluespine unicorn fish, Pakistan,

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### INTRODUCTION

A checklist of the members of family Acanthuridae which includes surgeonfish and unicornfish from Pakistan was published by Moazzam *et al.* (2017) which reported 7 species of genus *Naso* including *N. annulatus*, *N. brevirostris*, *N. brachycentron*, *N. elegans*, *N. hexacanthus*, *N. reticulatus* and *N. vlamingii*. Specimens of another species of genus *Naso* was photographed in April, 2017 and collected from commercial landings at Karachi Fish Harbour in September, 2021. This species was identified as *Naso unicornis* (Forsskal, 1775) commonly known as bluespined unicorn fish and reported for the first time from Pakistan. Present paper provides taxonomic details of this species.

### MATERIALS AND METHODS

Specimens of genus *Naso* were collected since 2017 from Karachi Fish Harbour. In addition, a specimen collected by an observer on board tuna fishing vessel was also included in the present study which was photographed before safely releasing in the sea. Samples collected from the Karachi Fish Harbour, were photographed and salient features and measurement were recorded, before, their preservation in 5 % neutralized formalin.

### RESULTS

*Naso unicornis* Forsskal (1775)  
(Fig. 1-2)

#### Material Examined

- # Acan-1,021/2017/MFD 76 cm. April 9, 2017- 67°15.071E; 23°21.800N Swatch Area 278 m (only Photograph)-(Fig. 1).
- # Acan-375/2020/MFD 54 cm. September 14, 2021, Karachi Fish Harbour -(Fig. 2)..

#### **Description**

Body deep and compressed, depth 2.3 in standard length; with a tapering, bony, horn on forehead of adults projecting anteriorly at level of eye but not extending in front of mouth a pointed, bony, dorsal profile from snout to horn straight, angle of about 45°; 2 peduncular plates with well-developed forward-curving knife-like spines. Mouth small. Caudal peduncle cylindrical with 2 peduncular fixed bony plates on mid-side which have forward-directed, knife-like keels. Caudal fin truncated.

Colour: body yellowish to olivaceous gray dorsally, paler ventrally, with blue peduncular plates and keel spines; lips whitish or blue;; dorsal and anal fins yellowish with narrow blue margins; caudal fin orangish basally, shading to gray, with a broad, pale greenish posterior border and caudal filaments are edged in blue.



Fig.1. *Naso unicornis* photographed at Swatch area, off Sindh coast on 9 April, 2017

It was originally described as *Chaetodon unicornis* by Forsskål (1775) from Jeddah, Saudi Arabia, Red Sea. Whereabouts of its types are unknown, however, lectotype selected later on by Fricke (1999). This species inhabit channels, moats, lagoon and seaward reefs with strong surge up to a depth of 180 m. It mainly feed on seaweeds especially coarse leafy brown algae like *Sargassum* (Froese and Pauly, 2021).

## DISCUSSION

*Naso unicornis* (commonly known as bluespine unicornfish) is reported for the first time from Pakistan coast. It has characteristically a tapering body horn projecting anteriorly at the level of eye but not extending in front of mouth

This species is known to be widely distributed in the Indo-Pacific area including Red Sea, East Africa, South Africa, Socotra, Seychelles, Comoros, Madagascar and Mascarenes east to Hawaiian Islands, Marquesas Islands and Tuamotu Archipelago, north to central Japan and Ogasawara Islands, south to Rottneest Island (Western Australia), Jervis Bay (A.C.T., Australia), Lord Howe Island, New Zealand and Rapa (Eschmeyer, 2021; Froese and Pauly, 2021). It is reported from India by Kapoor *et al.* (2002) and Oman (Arabian Sea coast) by Randall (1995). It is recently reported from Cox's Bazar coast of Bangladesh (Siddiqueki, *et al.*, 2021). The present paper extends its distribution to further north to Pakistan coast.



Fig.2. *Naso unicornis* collected from Karachi Fish Harbour on 14 September, 2021

Genus *Naso* was previously represented by 7 species from Pakistan. The present record is an addition to this important genus which is now represented by 8 species which is second most diversified genus *Acanthurus* represented by 11 species. Presence of 20 species from Pakistan by Moazzam *et al.* (2017) indicates diversity of family Acanthuridae in the Arabian Sea. The present paper is of great interest because members of this family are mainly found along coral reefs (Froese and Pauly, 2021) but there are only limited coral patches along Pakistan coast (Khan and Sharif, 2020).

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