

A NEW RECORD OF OCCURRENCE OF SCLERACTINIAN CORAL *CYATHELIA AXILLARIS* (ELLIS & SOLANDER, 1786) FROM PAKISTAN COAST

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ABSTRACT

A scleractinian coral *Cyathelia axillaris* (Ellis & Solander, 1786) is reported for the first time from Pakistan. This specimen was collected from the trawling grounds in the offshore waters of Sindh, Pakistan from a depth of 45 m.

Keywords: Scleractinian coral, *Cyathelia axillaris*, trawling grounds, Sindh, Pakistan.

INTRODUCTION

Information about corals species of Pakistan is mainly based on the studies carried out by Ali *et al.* (2014) who reported a number of species of corals from eight SCUBA dive sites along Pakistan coast. Kazmi and Kazmi (1997) have described the status of research on marine corals in Pakistan whereas Siddiqui *et al.* (2011) have also reported some fossilized coral species from Gunz, along Balochistan coast. Farooq and Reza (2014), Reza and Parveen (2014) and Reza *et al.* (2014a-c; 2015) reported corals in the collection of Zoological Museum of University of Karachi, however, origin of these corals could not be determined with certainty. Gul *et al.*, (2015) has published a checklist of cnidarians from Pakistan which include coral species reported from Pakistan. Moazzam and Moazzam (2016) have added three new records of coral species from offshore waters of Pakistan. During the present study, another coral species is reported for the first time from Pakistan coast.

MATERIALS AND METHODS

The sample of coral was collected from the trawling grounds off the Sindh Coast (Fig. 1). This coral was harvested using a high opening bottom trawl net from a depth of 45 m from a location about 75 km south of Karachi (24°18.900'N'; 66°39.100'E'). The specimen was dried and photographed. This specimen was deposited in the Museum of Marine Fisheries Department.

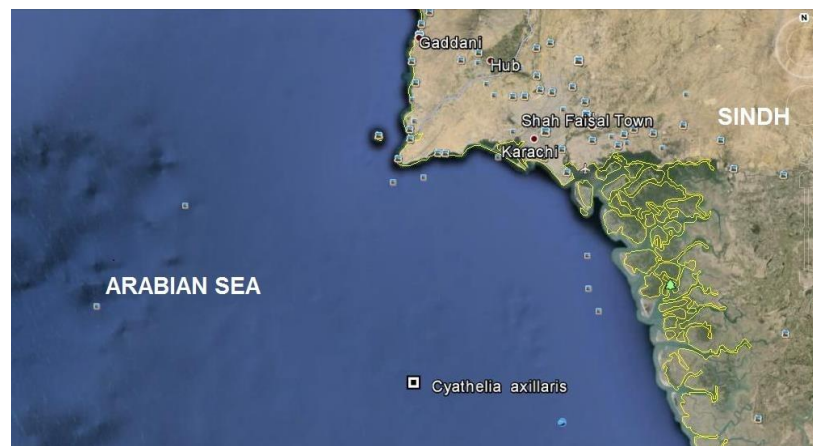


Fig. 1. Location from where coral *Cyathelia axillaris* was collected.

RESULTS

The collected coral was identified as a scleractinian coral *Cyathelia axillaris* which is not previously reported Pakistan.

Taxonomic Description:

Cyathelia axillaris (Ellis & Solander, 1786)

Fig. 2-4



Fig. 2. *Cyathelia axillaris*: Specimen collected from offshore waters of Sindh.

Specimen Examined:

1 specimen collected from 75 lm south Karachi, Sindh Coast (24°18.900'N'; 66°39.100E'), Depth 45 m; date 22 February 2016 (Specimen deposited in Marine Fisheries Department Museum at Karachi, Pakistan).

Description

The description of the species is based primarily on Cairns (1994). Coralla sparsely branched, resulting in small, robust, bushy colonies, the largest known about 11.6 cm in height, supporting approximately 75 corallites (Fig.2). Branching is essentially sympodial, but two buds often originate on opposite sides of a terminal corallite, the parent corallite ultimately becoming immersed in thick coenosteum within the branch axil. Corallites circular when small, often becoming elliptical to rhomboid (Fig. 3) or even medially constricted if located at a branch axil. Corallites relatively large, up to 13 mm in GCD and smallest being 4 mm in GCD. Branch coenosteum dense, granular, light brown to tan in color, and usually faintly costate. Corallites often pigmented a darker shade of brown. Septa usually hexamerally arranged in 4 cycles. Thick pali, wide, form a palmar crown encircling columella. Pali and septal faces highly granular. Columella papillose.



Fig. 3. *Cyathelia axillaris*: Oval corallites.



Fig.4. *Cyathelia axillaris*: Rhomboid corallites.

Distribution: Type Locality: Eastern Indian Ocean (Ellis and Solander, 1786). Now known from Japan and Moluccas (Cairns, 1994), Indonesia and the Philippines (Cairns and Zibrowius, 1997), Arabian Sea and Bay of Bengal (Alcock, 1898; Pillai, 1972), Australia (Cairns, 2004).

DISCUSSION

Information about corals inhabiting depth which is not easily accessible through SCUBA diving is highly limited from Pakistan and only a few species are known (Moazzam and Moazzam, 2016). Addition of *C. axillaris* in coral fauna is interesting, as this species is widely distributed in the Indo-Pacific area but is now reported for the first time from Pakistan coast.

Cyathelia is a monotypic genus distinguished from other oculinid genera by having two crowns of pali before its first three septal cycles (Carins, 1994). It has a distinctive colony shape, easily recognized by its sparse branching and large corallites in relation to its branch diameter. Sentoku and Ezaki (2012) described the branching pattern and formation of bushy morphology in *C. Axillaris* obtained through repeated dichotomy. This results in apparent complex, three dimensional colonies with numerous offsets are formed irrespective of the generation of individual corallites

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