



Short Communication

First report of a fish of the family Aploactinidae from West Bengal coast

Dipanjana Ray¹ and Anil Mohapatra^{2*}

¹Bajkul Milani Mahavidyalaya, Kismat Bajkul, Purba Medinipur – 721655, West Bengal, India

²Estuarine Biology Regional Centre, Zoological Survey of India, Gopalpur-on-Sea, Ganjam – 761002, Odisha, India;
anil2k7@gmail.com

Abstract

The species i.e., *Cocotropus roseus* Day, 1875 have been reported for the first time from West Bengal coast on the basis of eight specimens collected from Shankarpur fishing harbour. The specimens were collected during winter along with some specimens of genus *Minous*.

Keywords: *Cocotropus roseus*, East Coast of India, New Record

Introduction

The fishes of the family Aploactinidae are bottom dwellers and inhabit mostly shallow waters of rocky reefs and soft bottom trawling grounds in tropical to temperate Indo-Pacific waters (Poss and Eschmeyer, 1978; Imamura and Shinohara, 2008). The family Aploactinidae contains 17 genera and 48 species worldwide, 4 genera and 6 species from Indian waters (Gopi and Mishra, 2015). The genus *Cocotropus* Kaup, 1858 is having the maximum numbers of species (16-species) among all other genus reported in the family (Prokofive, 2010; Froese and Pauly, 2015). During the survey around Digha and adjacent areas of West Bengal coast on the ornamental fauna, eight specimens of velvet fish or Aploactinid fish were collected and subsequently identified as *Cocotropus roseus* Day, 1875. This present study reports first occurrence of family Aploactinidae along the West Bengal coast as well as reports the species *Cocotropus roseus* Day, 1875 from West Bengal coastal waters.

Material and Methods

Eight examples (33.9-51.4 mm) of *Cocotropus roseus* Day, 1875 were collected from Shankarpur fishing harbor where generally fishermen used to operate trawl net. Photograph was taken in fresh condition for observing

proper coloration. Method for measurement and count followed Imamura and Shinohara (2003). The specimens were deposited in Museum of MARC, ZSI, Digha with Regn no. F3482 and F3495. The abbreviation SL and HL represents standard length and head length respectively.

Results

Characters: D: XIV, 9; A: II, 7; P: 13; V: I, 3. Small sized fishes with body moderately and head strongly compressed (Figure 1); head length 34.85%-36.07% of SL. Scales absent and lateral line tube: 10-11. Dorsal fin origin vertical to middle of the eye, mouth oblique, lower jaw slightly longer than upper jaw; villiform teeth present on jaws and vomer but absent in palatines. Snout short, eye placed high up and its diameter 16.82%-17.03% of HL. Interorbital ridge converge posterior. Preorbital with two blunt spines, longer spine backwardly directed and reaches to the eyes, small spine also backwardly directed. Preopercular spine 4; opercular spine 3; a rough ridge passes across the suborbital region. Papilla present on lower jaw. Gill rakers 1+7, gill membrane free from isthmus. Dorsal fin single, continuous and dorsal fin origin vertical to middle of the eye. Anus just before origin of anal fin. Pectoral fin as long as head and reach upto the anus opening; ventral fin short reaching halfway to anus; caudal fin rounded.

* Author for correspondence

Colour: Body pinkish in colour with numerous grey spots; ventral part whitish. Edges of dorsal and anal fin whitish; pectoral and anal fin reddish; ventral fin whitish.

Distribution: Western Indian Ocean: India (Imamura and Shinohara, 2003) and Maldives (Randall and Anderson, 1993). In Indian coast this species was reported from Andhra Pradesh (Barman *et al.*, 2004) and Coromandel coast (Type locality).



Figure 1. *Cocotropus roseus* Day, 1875 (42.4 mm SL).

Discussions

Cocotropus roseus Day, 1875 was originally described by Day (1875) from Coromandel coast. This Least Concerned (LC) species mainly found in winter in the West Bengal coast along with species of genus *Minous*. Several studies (Manna and Goswami, 1985; Goswami, 1992; Talwar *et al.*, 1992; Chatterjee *et al.*, 2000; Das *et al.*, 2007, Yennawar *et al.*, 2015, Yennawar *et al.*, 2017) have been carried out on Marine ichthyofauna diversity of West Bengal coast but the species of the family Aploactinidae has not yet been reported by any of the reports. This study first time reports family Aploactinidae along with species *Cocotropus roseus* Day, 1875 from west Bengal coast.

Acknowledgements

Authors are thankful to Dr. Kailash Chandra, Director, Zoological Survey of India, Kolkata for providing necessary facilities for the work. DR is thankful to Zoological Survey of India for the Senior Research fellowship.

References

- Barman, R.P., Kar, S. and Mukherjee, P. (2004). Marine and estuaries fishes, State fauna Series No.8-Fauna of Andhra Pradesh, Part- 2(Mammals and Marine and Estuaries fishes). 188-189 pp. (Published by the Director, Zoological Survey of India, Kolkata).
- Chatterjee, T.K., Ramakrishna, Talukdar S. and Mukerjee, A.K. (2000). Fish and fisheries of Digha Coast of West Bengal. *Rec. Zool Surv. India*, Occ. paper No. 188:i-iv, pp. 1-87.
- Das, P., De, S.P., Bhowmik, R.M., Pandit, P.K., Sengupta, R., Nandi, A.C., Thakurta, S.C. and Saha, S. (2007). Piscine diversity of West Bengal. *Fishing Chimes*, 27(5): 15-28.
- Day, F. (1875). The fishes of India; being a natural history of the fishes known to inhabit the seas and fresh waters of India, Burma, and Ceylon. London. Part 1: 1-168, Pls. 1-40.
- Froese, R. and Pauly, D. (2015). Fishbase 2015. World Wide Web electronic publication. Available from: www.fishbase.org
- Gopi, K.C. and Mishra, S.S. (2015). Diversity of marine fish of India. *Marine Faunal Diversity in India, Taxonomy, Ecology and Conservation*. Chapter 12, pp. 171-194. DOI: 10.1016/B978-0-12-801948-1.00015-X. ISBN: 978-0-12-801948-1. <https://doi.org/10.1016/B978-0-12-801948-1.00015-X>
- Goswami, B.C.B. (1992). Marine fauna of Digha coast of West Bengal, India. *J. Mer. Biol. Ass. India*, 34(1-2): 115-137.
- Imamura, H and Shinohara, G. (2008). A new species of *Cocotropus* (Teleostei: Aploactinidae) from the Ryukyu Island, Southern Japan. *Bull. Natl. Mus. Nat. Sci., Ser. A, Suppl.*, 2: 21-24.
- Imamura, H. and Shinohara, G. (2003). *Cocotropus keramaensis*, a new species of the family Aploactinidae (Teleostei) from the Kerama Islands, southern Japan. *Ichthyol. Res.*, 50(3): 233-238. <https://doi.org/10.1007/s10228-003-0162-x>
- Manna, B. and Goswami, B.C.B. (1985). A checklist of marine and estuarine fishes of Digha, West Bengal, India. *Mahasagar*, 18(4): 489-499.
- Poss, S.G. and Eschmeyer, W.N. (1978). Two new Australian velvetfishes, genus *Paraploactis* (Scorpaeniformes: Aploactinidae), with a revision of the genus and comments on the genera and species of the Aploactinidae. *Proc. Calif. Acad. Sci.*, 41(18): 401-426.
- Prokofive, A.M. (2010). Occurrence of Velvet_Fishes of the Genus *Cocotropus* (Teleostei: Scorpaeniformes: Aploactinidae) in Vietnam Waters with Descriptions of Two New Species. *Journal of Ichthyology*, 50(9): 718-727. <https://doi.org/10.1134/S0032945210090031>
- Randall, J.E. and Anderson, C. (1993). Annotated checklist of the epipelagic and shore fishes of the Maldives Islands. *Ichthyol. Bull. of the J.L.B. Smith Inst. of Ichthyol.* (59):1-47.

- Talwar, P.K., Mukherjee, P., Saha, D., Paul S. N. and Kar, S. (1992). Marine and estuarine fishes, In, State Fauna Series: Fauna of West Bengal, Part-2 : 243-342.
- Yennawar, P., Mohapatra, A., Ray, D. and Tudu, P. (2015). Diversity of marine fish of India. Marine Faunal Diversity in India, Taxonomy, Ecology and Conservation. Chapter 15; pp. 235-148. DOI: 10.1016/B978-0-12-801948-1.00015-X. ISBN: 978-0-12-801948-1. <https://doi.org/10.1016/B978-0-12-801948-1.00015-X>
- Yennawar, P., Mohapatra A. and Tudu, P.C. (2015). An account of Ichthyofauna of Digha coast, West Bengal. *Rec. zool. Surv. India*, **117**(1): 4-21. <https://doi.org/10.26515/rzsi/v117/i1/2017/117289>