

## Research Article

## NEW DISTRIBUTIONAL RECORD OF *OMPOK MALABARICUS* (VALENCIENNES, 1840) IN WEST BENGAL, INDIA

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### ABSTRACT

*Ompok malabaricus* (Valenciennes 1840) was originally described from the Malabar, India. Earlier, this species was only found in the Indian peninsula, specifically in Maharashtra, Goa, Karnataka, Kerala along the Western Ghats Mountain range and Rajasthan. However, in this study, *O. malabaricus* is reported for the first time from West Bengal, and its distribution is extended further eastern region to the Kangsabati River of West Bengal in India. Till now three species of *Ompok*: *O. pabda* (Hamilton 1822), *O. pabo* (Hamilton 1822) and *O. bimaculatus* (Bloch 1794) reported from West Bengal. The present species is the fourth species of *Ompok* added to the state.

**Keywords:** Distributional record, Siluriformes, *Ompok malabaricus*, West Bengal.

### INTRODUCTION

A total of 25 valid species of *Ompok* are distributed worldwide. Out of which 6 are in India. The present collected species studied was found to be *Ompok malabaricus*. It belongs to the Siluridae family and order Siluriformes. It is currently reported from the Indian peninsula, with its distribution ranging in Maharashtra, Goa, Karnataka, Kerala and Andhra Pradesh (now Telangana) (Jayaram, 2006; Abraham, 2013). Arunachalam (2003), is reported from Tamil Nadu. Recently, Singh et al., (2024) reported the species first time from Rajasthan This species is reported here for the first time from West Bengal.

### MATERIAL AND METHODS

During the study of ichthyofaunal collections of Dry deciduous forest, one specimen of *Ompok* collected from the Kangsabati River, Basudha, Bardwan Division (Lat 23.61499541 & Long 87.53237464) of West Bengal was studied in detail by comparing with original description of *Silurus malabaricus* Valenciennes, 1840, from Malabar, India, which was synonymized with *Ompok malabaricus*. Ichthyofaunal resources of tributaries of the Kangsabati River of the Dry Deciduous Forest of West Bengal were

collected on 29<sup>th</sup> September 2023, from the fishermen doing fishing using cast net. The specimens were fixed in 10 % formalin at the field for fixing of tissue and then brought back to the laboratory where after repeated wash in water preserved in 70 % ethanol. Measurements were made point to point with digital callipers on the left side of the specimens. Counts (Meristic) and measurements (Morphometry) follow Jayaram (2010). Identification of the species was made following Jayaram (2006). The specimen is deposited to the Zoological Survey of India, Kolkata and the collection procedure followed the mandate of the Institute and collected under an approved program of ZSI, MoEF &CC.

### MATERIAL EXAMINED

ZSI FF 10488, India: West Bengal: Bardwan district: Kangsabati River, 23.61499541 N; 87.53237464 E, Collected on 29 September 2023 by Shibananda Rath & Party.

### RESULTS AND DISCUSSION

*Ompok malabaricus* (Valenciennes 1840) (Figure1)

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*Silurus malabaricus* Valenciennes, 1840, *Hist. nat. Poiss.*, 14: 353, (type-locality, Malabar).

*Callichrous malabaricus*: Day, 1877, *Fishes of India*: 478, pl. 111 (Canara); Day, 1889, *Fauna Br. India, Fishes*, 1: 133 (Malabar coast of India as high as Canara); Hora, *Rec. Indian Mus.*, 38 (3): 358, 1936 (review).

*Silurus goae* Haig, 1951, *Rec. Indian Mus.*, 48: 77, fig. 1, (type locality, Goa).

*Ompok malabaricus*: Misra, 1976, *Fauna of India, Pisces* (2<sup>nd</sup> ed.), 3: 193.

**Common Name:** Butter Catfish, Goan Catfish.

**Table 1.** Morphometric data for *Ompok malabaricus* (Valenciennes 1840) (ZSI FF 10488).

Standard length (in mm)	127.7
In % of SL	
Head length	25.4
Head width	12.7
Body depth at dorsal-fin origin	26.4
Body depth at anus	25.7
Snout length	9
Predorsal length	39.5
Prepectoral length	23
Prepelvic length	37.6
Preanal length	45
Dorsal-fin height	25.7
Pectoral-fin length	7.8
Pelvic-fin length	74.7
Anal-fin length	22.2
Caudal-fin length	25.7
In % HL	
Head width (maximum)	13
Orbital diameter	4.8
Snout length	9
Interorbital width	10.1
Maxillary barbel length	61.8
Mandibular barbel length	10.8



**Figure 1.** *Ompok malabaricus* (Valenciennes, 1840).



**Figure 2.** Map showing collection site of *Ompok malabaricus* in the Kangsabati River, West Bengal.

### Diagnosis

*Ompok malabaricus* can be distinguished from all congeners in having long maxillary barbels extending to slightly beyond pelvic fin origin, pelvic fin with 7 branched rays, and anal fin with 64 branched rays.

### Description

Morphometric data in Table 1. Body strongly compressed and elongate; Mouth oblique; teeth in broad villiform bands on jaws, medially interrupted; teeth on vomer in two large crescent-shaped patches. Head somewhat depressed covered with thick skin. Median longitudinal groove and occipital process not conspicuous. Two pairs of barbels; maxillary pair long extending to slightly beyond pelvic fin origin; mandibular pair short extending slightly beyond posterior border of eyes. Gill rakers 11 – 12. Rayed dorsal fin short and without any spine, with 4 rays, inserted above half of pectoral fin. Pectoral fin with one unbranched 12 branched reaching pelvic or anal fin origin, spine moderately strong, inner edge serrated. Pelvic fin with one simple and 7 branched rays and its tip reaching anal fin origin. Anal fin long, with 3 simple and 64 branched rays, not united with caudal but separated by a narrow notch. Caudal fin deeply forked, lobes rounded, upper lob longer than lower.

**Colour:** Deep grayish brown round with purple becoming pale below; a black spot behind gill-opening. Fins dusky.

**Distribution:** India; Western Ghats in Kerala to Goa, Maharashtra, Karnataka, Telangana, Rajasthan and West Bengal.: *Silurus malabaricus* was described from Malabar, India by Valenciennes in 1840. Mishra (1976) kept it under the genus *Ompok* Lacepede. *Silurus goae* was described from Goa and Trvandum by Haig in 1951. Kobayakawa (1989) examined two specimens of *Silurus goae*, including the holotype, and concluded that it does not belong to the genus *Silurus* but to *Ompok*. Arnachalam *et al.* 2003, describe *O. malabaricus* from eastern and western regions

of Western Ghats of Tamil Nadu. Talwar & Jhingran (1991) considered *Silurus goae* as a junior synonym of *Ompok malabaricus*. After seeing the original description of *Silurus malabaricus* Valenciennes 1840, and the description of *Callichrous malabaricus* Day 1877, we came to the conclusion that the specimen studied is *Ompok malabaricus* (Valenciennes, 1840). This species was considered endemic to the Indian peninsula, but its occurrence from the West Bengal shows its range of extension from the Western Ghat to the Eastern region. Due to its wide distribution the species is categorized as Least Concern by the IUCN.

This species inhabits rivers, tanks and ponds, and is caught in fairly good quantities in India. It is considered a very tasty fish and is highly priced. It spawns during the monsoons and thrives well in confined waters. However, the main threat of severe loss in aquaculture production is due to solid waste disposal pesticides, sand mining, fishing by using dynamite etc.. These impacts reduce the biodiversity of aquatic environments. Due to its high food value and delicacy, it is highly demanded in the local market and is commonly known as Malabar butter catfish. Talwar & Jhingran (1991) noted that this catfish can grow up to 51 cm. in Standard Length.

### CONCLUSION

In the present study, *O. malabaricus* is reported from West Bengal for the first time, and its distribution is extended further east to the Kangsabati River in West Bengal, India.

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**CONFLICT OF INTERESTS**

The authors declare no conflict of interest

**ETHICS APPROVAL**

Not applicable

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