

A REPORT OF *ARMINA BABAI* (TCHANG, 1934) (NUDIBRANCHIA: ARMINOIDEA: ARMINIDAE) ALONG NORTHERN EAST COAST OF INDIA

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ABSTRACT

Armina babai (Tchang, 1934) of family Arminidae is reported with seven specimens from the Northern part of the east coast of India, collected from the fish bycatch of Bichitrapur and intertidal area Talsari of Balasore District of Odisha along with its morphometric measurements.

INTRODUCTION

Nudibranchs are the bottom-dwelling, jelly-bodied shell-less molluscs with most fascinating shapes and variety of colours forms camouflage the surroundings. There are more than 3,000 known species of nudibranch (National Geographic Animals). The Arminidae is one of the poorly known group of nudibranchs having six nominal genera; approximately 75 species (Ramya *et al.* 2014) and *Armina* is the largest taxon with more than 50 species under Arminidae (Kolb and Wägele, 1998). In Indian water; two species of *Armina* i.e. *A. cygnea* (Bergh, 1876) & *A. semperi* (Bergh, 1861) are reported from Andaman and Nicobar Islands (Ramakrishna *et al.* 2010) and *A. babai* (Tchang, 1934) is reported only from Tamil Nadu (Ramya *et al.*, 2014). Recently during the collection of mollusca samples at Odisha coast seven specimens of Nudibranchs were collected and identified as *A. babai* which was not yet reported from the region. The present report extends the distributional range of *A. babai* to northern east coast (Odisha).

MATERIALS AND METHODS

Four live specimens (Registration no MARC/ZSI/M4170) are collected by P.C. Tudu on 08.01.2014 from the fish bycatch of shore seine net operated near Bichitrapur mangrove ($21^{\circ}35'8.99''N$ and $87^{\circ}25'16.65''E$) and three (one live and two dead) specimens (MARC/ZSI/M4171) collected by P.C. Tudu on 01.03.2015 from intertidal area of Talsari mudflat ($21^{\circ}36'4.64''N$ and $87^{\circ}27'15.50''E$) of Odisha state (Fig. 1).

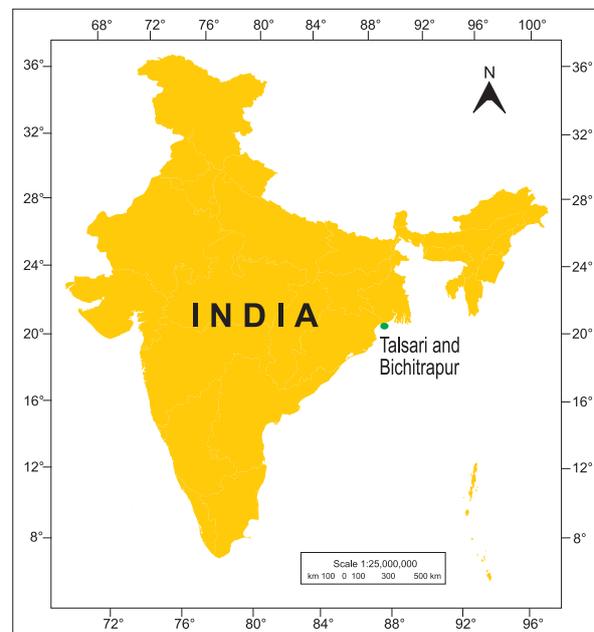


Fig. 1. The Collection localities, Talsari mud flat and Bichitrapur mangrove of Balasore district of Odisha.

Identification and classification follows Kolb and Wägele (1998), Ramya *et. al.* (2014) and Bouchet (2015). Length 12.2-52mm and width 9.5-30mm in preserved condition and the entire specimen are preserved in 70% ethyl alcohol.

RESULTS

Class GASTROPODA

Order NUDIBRANCHIA

Superfamily ARMINOIDEA Iredale & Ó
Donoghue, 1923 (1841)

Family ARMINIDAE Iredale & Ó
Donoghue, 1923 (1841)

Genus *Armina* Rafinesque, 1814

Armina babai (Tchang, 1934) (Fig. 2)

Diagnosis: Length 12.2-52mm long and 9.5-30mm wide. The body elongated, flattened, narrow



Fig. 2. A-B. *Armina babai* (Tchang, 1934) in the intertidal area during low tide, A-live specimen and B-dead specimen at Talsari

posteriorly and body surface smooth. The notum plain without any longitudinal ridges. The oral veil was distinct. Two club-shaped rhinophores with longitudinal lamellae. Eyes visible through the epidermis at the outer base of each rhinophore. The caruncle was not distinguishable in front of the rhinophores. The genital opening was located on the right side, anterior to the bronchial lamellae. Approximately 19 branchial lamellae were counted on the right side of the body and 16 branchial lamellae were counted on the left side. A total of 15 hyponotal lamellae on each side of the body. The pedal gland was white and located at the posterior end of the foot sole. External body colour of live specimens ash-creamy with dark at head portion, anterior margin of the oral veil and the apical portion of the rhinophores white, with two large purplish spots on the notum; head covering ashy with dark brown papillae, some papillae below rhinophores, and the anterior gills yellowish white; posterior gills dark

Distribution: In India; Tamil Nadu (Ramya *et. al.*, 2014) and present reports extends to northern east coast (Odisha). *Elsewhere:* China, Japan, Pakistan (Kolb and Wägele 1998; Sachidhanandam *et. al.*, 2000, Ramya *et. al.*, 2014).

SUMMARY

Seven specimens were examined from collections Odisha state and according to above diagnostic character the species was identified as *A. babai* (Tchang, 1934). The species was reported previously from Tamil Nadu coast only, hence present reports extends the distribution of *A. babai* (Tchang, 1934) to Northern east coast (Odisha coast).

ACKNOWLEDGEMENT

Our sincere thanks to Director, Zoological Survey of India for providing necessary facilities for this work.

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