



Rec. zool. Surv. India : 105 (Part 1–2) : 1-4, 2005

MOLLUSCAN EGG CAPSULES FROM DIGHA BEACH

RAMAKRISHNA, A. DEY* AND JAYDIP SARKAR**

Zoological Survey of India, New Alipore, M-Block, Kolkata-700 053

INTRODUCTION

During the course of investigation on marine invertebrates of Digha coast of West Bengal and adjoining areas, the authors came across a good number of molluscan egg capsules of different varieties, majorities of which are identified as gastropod egg capsules and few egg capsules of cephalopods.

Bharati Goswami (1992) first described the marine invertebrates from Digha coast of West Bengal. But there is no mention on occurrence of egg capsules from this beach, however few of the molluscan egg capsules described by Subba Rao *et al.*, (1995) from Hugli-Matla estuary of West Bengal.

Gravelly (1942) described a number of gastropod egg capsules from Madras beach, few of those were unidentified. Chhapgar (1991) also mentioned few molluscan egg cases from Indian coast.

The present paper based on the observation, collection and captive study (1996–2003) on 14 types of molluscan egg capsules.

STUDY AREAS

The geographical position of Digha is between 21° 36' 30" N lat. and 87° 32' E long. The egg capsules are collected chiefly from lower range of intertidal zone of Digha beach including mudflat area near Digha mohana and New Digha upto West Bengal-Orissa border and also from extended part of the beach upto Jaldha khoti, accrossing Shankarpur beach on east.

MATERIALS AND METHODS

The collection, observation and study of the specimen during this work were made by multidisciplinary way *viz.*,

*Sunderban Field Research Station, Zoological Survey of India, Canning

**Champsara Satish Chandra Vidyaniketan, Baidyabati, Hooghly

1. Collection of specimens from drag net during offshore netting.
2. From discarded bycatch materials of dragnet and trawl net.
3. Collections from "Bagda net" (triangular bag net exclusively made for fishing post larva of tiger prawn).
4. Collection from actual site of egg laying during across and vertical survey of shore in different tidal times from intertidal zone and mudflat areas.
5. Freshly layed eggs are also collected during captive study of respective species in laboratory.

Collected egg capsules are fixed and preserved in 4% formalin solution after removing sand particles by washing with sea water.

RESULT AND DISCUSSION

A total of 18 varieties of molluscan egg capsules are collected (Figs. 1-18) of which 14 are identified.

List of the species of molluscan egg-capsules, their habitat and seasonal occurrence (on the basis of the observation during study period) are shown in Table-1.

From recent survey on occurrence of varieties of egg-capsules from this areas, it is revealed that majorities are obtained during December to March and occasionally found in between October-April. But no examples are obtained during May-September.

From this observation it is assumed that majorities of the species congregate to spawn at this estuarine zone during December to March.

Table 1.

Fig.	Species of Egg capsules	Locality	Habitat	Seasonal occurrence
1.	<i>Natica</i> sp.	Entire Digha Coast	Intertidal	October–April
2.	<i>Polinices</i> sp.	Digha Mohona	Mudflat areas	October–April
3.	<i>Murex</i> sp.	Aquarium (Hospital) Ghat	Found attached on the surface of dry coconut	January–March
4.	<i>Conus</i> sp.	New Digha Ghat	On a wooden piece	January–March
5.	<i>Pugilinus</i> sp.	Digha Mohona	Mudflat areas	November–March
6.	<i>Cymbium melo.</i>	Old Digha beach	Collected from bycatch material of fishing net	December–February

Table 1. (Cont'd.).

Fig.	Species of Egg capsules	Locality	Habitat	Seasonal occurrence
7.	<i>Acrilla</i> sp.	Digha Mohona	Intertidal zone	November–March
8.	<i>Onchidium</i> sp.	New Digha Ghat	Collected from fishing net	February–March
9.	<i>Nassarius</i> sp.	–do–	–do–	November–March
10.	<i>Melanochlamys</i> sp.*	Aquarium/Hospital Ghat	Intertidal zone	December–March
11.	<i>Cymia</i> sp.	–do–	Intertidal zone	December–March
12.	<i>Loliolus investigatoris</i>	–do–	Found to attached in cluster (5-7 capsules) with sand particles by thread like extention from each capsule	December–March
13.	<i>Sepiella inermis</i>	–do–	From fishing net	December–March
14.	<i>Sepia</i> sp.	–do–	From fishing net	December–March
15-18.	Unidentified	–do–	From fishing net	December–March

*Collected during captive study at Marine Aquarium & Research Centre, ZSI, Digha.

ACKNOWLEDGEMENT

Authors are grateful to Dr. J.R.B. Alfred, Director, Zoological Survey of India, Dr. T.K. Chatterjee, Officer-in-Charge, Zoological Survey of India, Digha, for providing facilities for the work and Sri Shankar Talukdar, Zoological Survey of India for his help for specimen collection and captive study.

Thanks are also due to (Prof.) R.L. Brahamachary, Indian Statistical Institute, Baranagar, Kolkata; Sri Dilip Das, Secretary; Sri Mrityunjoy Adhikari, Headmaster & colleagues, Champsara Satish chandra Vidyaniketan, Baidyabati, Hooghly for encourageing in this research work.

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