

New Distributional Records of *Hyotissa hyotis* (Linnaeus, 1758) Family: Gryphaeidae from Mandapam Area-South East Coast of India

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Abstract: The new occurrence of bivalve species of *Hyotissa hyotis* (Linnaeus, 1758) was recorded at the Mandapam area, based on a few shells collected from the fish landing centers. The common name of the species is Giant honey comb Oysters. In Gryphaeidae family, only one species of *Hyotissa hyotis* was recorded. The present paper described the taxonomic status of the new record of *Hyotissa hyotis* under the family of Gryphaeidae.

Key words: *Hyotissa hyotis* % Mandapam area % India

INTRODUCTION

In Gulf of Mannar, the only one species of Giant honey comb Oysters -*Hyotissa hyotis* was recorded. The Giant Honey Comb Oyster (*Hyotissa hyotis*) is a very large saltwater oyster, a bivalve mollusc that is found in deeper water in the Indo-pacific ocean. It has also recently been found as an accidentally introduced species in the Florida Keys. Species in this family are known as honey comb oysters or “foam oysters” because under magnification, their shell structure is foam-like. The comb oyster is a filter feeder. The family Gryphaeidae, common name the foam oysters or honey comb oysters, is a family of marine bivalves mollusks, related to the true oysters.



Mandapam study area map

During a regular survey at Mandapam fish landing centers, (Map. 1) the shells of Giant honey comb Oysters - *Hyotissa hyotis* were collected, 2 right valves and 3 left valves of different individuals, which have not been recorded by earlier workers from this area. One specimen of each valves of this species has been deposited in the Zoological survey of India - Chennai (Reg. no 181, dated-14.7.2009).

Systematic Position:

Phylum : Mollusca

Class : Bivalvia

Order : Ostreoida

Family : Gryphaeidae (Vyalov, 1936)

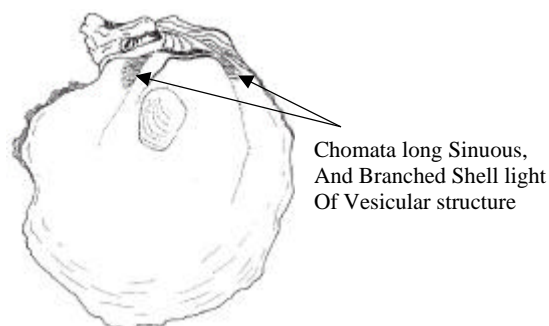
Genus : *Hyotissa*

Species : *Hyotissa Hyotis* (Linnaeus, 1758)

Family : Gryphacidae

Genus : *Hyotissa* (Stenzel, 1971)

Gryphacidae: Shell more or less inequivalve, cemented to substrate by the left valve, with a microscopic vesicular structure. Ligamental area with a shallow median groove. Hinge without teeth, A single adductor muscle scar, closer to the hinge. Along peripheral area of the interior, adductor muscle scar nearer to the hinge than to the ventral margin, Chomata long, sinuous and branched.



Hyotissa Hyotis (Linnaeus, 1758):

Size : 10.2 cm
Locality : Coral area, Intertidal area
Common name : Giant Honey Comb Oysters
Status : Uncommon
Distribution : Gulf of Mannar: Elsewhere: Kyung Won, Jun Nam and Korea (83 mm)

Description: Shell up to 10.2 cm in length, obvious difference in shape, which becomes distorted by cementation to other objects. Central adductor muscle with the characteristic central shell scar. The central adductor muscle is much larger and not bounded by ridges. Each valves of this shell solid and thick. Shell is sharply ridged forming a series of arches at the edges. The arches of both valves interlock. Inside the shell surface white with brownish purple shell surface. Ligament strait and elongated (Figure 1).



Fig. 1: *Hyotissa hyotis*

Remarks: The shells were found on the fish landing centers at Mandapam area during the discarding of trawl catches from the Gulf of Mannar. This is the first record of this genus in Gulf of Mannar at Mandapam area. Previously this species has been recorded in Kyung Won, Jun Nam and Korea (83 mm).

REFERENCES

1. Retrieved from “<http://en.wikipedia.org/wiki/Gryphacidae>”.
2. Paula, M. Mikkelsen and Rudiger Bieler, 2008. Sea shells of southern Florida: Living Marine mollusks of the Florida Keys and adjacent regions, Princeton University Press, Princeton and Oxford, ISBN-10: 0-691 11606-7.