

# Report on Mussel Farming

The department has initiated mussel farming as pilot project at Akhada St. Estevam Island Old Goa in the year 2022-2023. The species selected for Mussel Culture is ( *Perna Verdis*) Green Mussels . Average size of Mussel Seeds at the time of stocking was recorded 1-1.5 cm and about 4-6 weeks old. 35 Nos. of Mussel Seeded ropes was installed in 3x3 m rack at Akhada St. Estevam Island Old Goa. Salinity, PH reading were found optimum, water temperature was recorded as 30<sup>0</sup> C.

Important criteria need to be consider during Mussel Farming.

- Site selection.
- Preparation of floating rack.
- Procurement of Mussel Seeds.
- Installation of Mussel Seeded ropes.
- Harvesting.

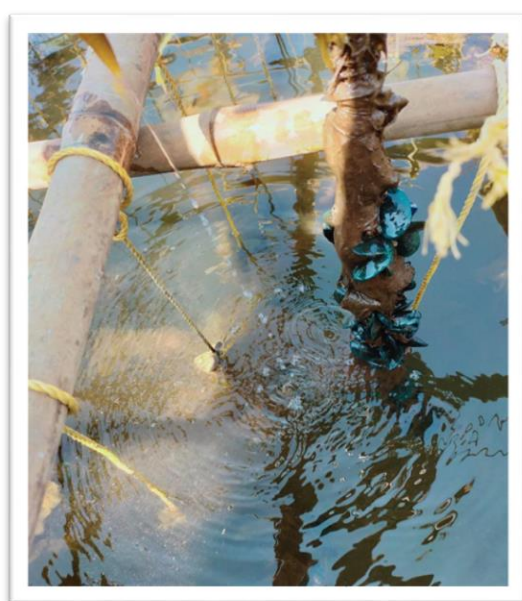
Regular monthly 15 days sampling shows good growth rate during last 5 months of culture. Size of Green Mussel recorded is as follows:

Sr. No.	Date	Size of Green Mussels
1.	31/01/2023	1.5 cm
2.	15/02/2023	2.5 cm
3.	01/03/2023	3.5cm
4.	31/03/2023	4.4cm
5.	18/04/2023	6.0cm
6.	10/05/2023	6.5cm
7.	26/05/2023	7.5 cm

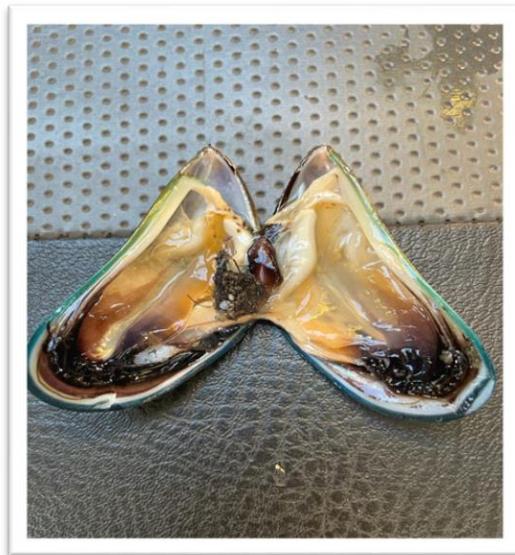


Green Mussel mainly feed on microscopic phytoplankton, zooplankton and suspended organic detritus in the water. The Mussel uses gills and ciliary- mucus mechanisms to feed on suspended food in water. Securely attached to a hard substrate, the Mussel uses its inhalant siphon to actively draw in water. *Perna Verdis*, Green Mussel is a large and fast growing warm water bivalve.

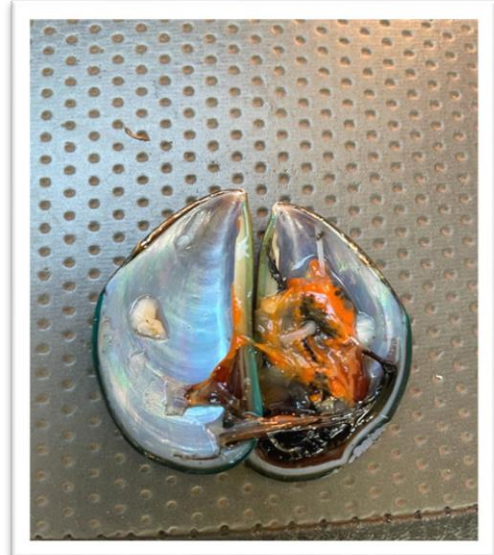
Mussel seeded ropes need to be installed at distance of 0.5 meter apart. After couple of days later seeds get attached to the ropes disposing off the muslin cloth.



*Perna Verdis*, gender cannot be identified in its shell; it can be classified by identifying the colour of its gonad. The male Green Mussel has creamy white colour while female Green Mussel has reddish gonad.



**Male Green Mussel**



**Female Green Mussel**

Every 15 days seeded ropes shall be cleaned so that all mud, plastic or other Sea Organisms are brushed off from the seeds.



Harvesting is done after 5 months or once Mussel reaches marketable size of 5 cm to 7 cm. the rate of Green Mussel in market is Rs.400/- to 500/-per kgs depending upon size.

