



Paper ID 16057

## Enhancing Production and Sustaining the Black Clam (*Villorita cyprinoides*) Fishery of Vembanad Lake Through Scientific Stocking/ Re-laying in Suitable Sites

Vidya R<sup>\*1</sup>, Laxmilatha P<sup>2</sup>, Venkatesan V<sup>3</sup>, Geetha Sasikumar<sup>4</sup>, Alloydious P S<sup>1</sup>, Sajikumar K K<sup>1</sup>, Jenni B<sup>1</sup>,  
Jestin Joy K M<sup>1</sup>

<sup>1</sup>Molluscan Fisheries Division, ICAR-CMFRI, Kochi, Kochi, India

<sup>2</sup>Molluscan Fisheries Division, ICAR-Central Marine Fisheries Research Institute, Cochin, India

<sup>3</sup>Molluscan Fisheries Division, ICAR-CMFRI, Kochi, Kochi, India

<sup>4</sup>Molluscan Fisheries Division, Mangalore Regional Centre of ICAR-Central Marine Fisheries Research  
Institute, Mangalore, India  
vidya.panicker@gmail.com

Kerala is the leading producer of black clam, *Villorita cyprinoides* (Gray, 1825). The Vembanad Lake, the largest estuary on the west coast of India contributes more than 90% to the total black clam landings with a mean annual production of 40,000 tonnes (2011-2020). This fishery provides livelihood to over 5000 clam fishers. Aimed at enhancing production and sustaining the clam fishery, baby clams were re-laid after identifying suitable areas on the northern side of the Thanneermukkom barrage of Vembanad Lake. Suitable sites for relaying were selected based on the water quality parameters and sediment characteristics. Approximately 140 tonnes of baby black clams with a mean length and weight of 15.1mm and 1.7 g were re-laid by the clam fishers in Keecheri area (lat-long 9° 49' 765" N, 76° 23' 675" E to 9° 50' 951" N, 76° 23' 406" E) of about 15.38 hectares at a rate of 9.52 tonnes/ha under the technical guidance of CMFRI. Approximately 60 tonnes of baby black clams with mean length and weight of 14.7mm and 1.7 g were also re-laid in Chakkathukadu area (lat-long 9° 52' 208" N, 76° 22' 096" E to 9° 52' 289" N, 76° 21' 948" E) of about 4.8 hectares at a rate of 12.5 tonnes/ha. The growth of the re-laid clams was monitored periodically. The fishermen started harvesting around 10 tonnes of clams per day from two areas of the Lake from December 2021 onwards. Fishermen under the Keecheri Ulnadan Matsya Thozhilali Sahakarana Sangham collect the clams using canoes from different locations and sold meat @150 per kg in the nearest market. Each fisher collected 450 kg of clams per day. An estimated production of nearly 1500 tonnes is expected from Keecheri area of Vembanad Lake, which is a 10-fold increase in the production of black clam from this part of the Lake. This relaying efforts helped to enhance new stock of *V. cyprinoides* in virgin areas of Vembanad Lake and facilitated the rejuvenation of black clam fishery.

**Keywords :** Re-laying, Black Clam, *Villorita cyprinoides* and Vembanad Lake