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Massive invasion of the alien biofouling mussel *Mytella strigata* (Hanley, 1843) in Muthalapozi estuary, along the coast of Kerala, India and destruction of clam fishery- a case study.

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Bioinvasion of different species to the native aquatic ecosystems is one of the serious threats faced by the world. The invasive tropical American brackish water mussel *Mytella strigata* has recently got introduced to India, mainly in the Vembanad estuary of Kerala, India. After one year of its introduction currently, this non-indigenous mussel species is spreading rapidly in the estuaries and backwaters of the Kerala coast. Muthalapozi estuary is located in the Trivandrum district of Kerala (latitude 83° 7'54" N and longitude 76°47'08" E), where the estuary meets the Arabian Sea. In addition to the good finfish fisheries, the estuary is also a commercial fishing and landing area for clams. Currently, hundreds of fishermen, including women, depend on the estuary for their livelihood. The present study investigated to disclose distribution and massive settlement of *M. strigata* in Muthalapozi estuary and the destruction of the native clam fishery. From the interview and discussion with the clam pickers, it has been revealed that native clam abundance in the estuary is severely affected by the alien mussel resulting reduction in the fishery. This low-value mussel can grow up to 8 to 10 cm in length and attaches to wooden structure, the hull of the boats, rocks, stationary fishing gears, fish cages, etc. The rapid growth and massive settlement of *Mytella strigata* also adversely affected the livelihood of the local fishermen. These mussels, which are able to survive the changing hydro-biological parameters.

Biography:

Mariyam Fazula A completed Bachelor degree in Zoology and post-graduation in Aquatic Biology and Fisheries from University of Kerala currently she is Junior Research Fellow at Molluscan Division of ICAR- Central Marine Fisheries and Research Institute, Vizhinjam Regional Centre, Thiruvananthapuram, Kerala, India and registered her PhD degree at University