



**Indian Fisheries and
AquaCulture Forum**

11TH INDIAN FISHERIES AND AQUACULTURE FORUM
**Fostering Innovations
in Fisheries and Aquaculture**
Focus on Sustainability and Safety

BOOK OF
ABSTRACTS



 **KOCHI**
KERALA, INDIA

 **21 to 24**
NOVEMBER **2017**

Organised by



Asian Fisheries Society
Indian Branch (AFSIB)

Hosted by



ICAR - Central Institute of Fisheries Technology
Kochi, India

FR OR 47

Exploitation of juvenile clam, *Villorita cyprinoides* from Vembanad lake

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The black clam, *Villorita cyprinoides* (Family Corbiculidae) is the most important clam species landed in India which contributes about two-thirds of the total clam landings of Kerala. Major proportion of this species is harvested from Vembanad Lake, followed by the Malabar Coast. The black clam fishery was recorded from Vembanad Lake, the largest estuary, 96 km long, on the west coast of India. More than 4,000 fishermen are involved in the fishery which includes 2,000-2,500 of active fishers. Being a rich and cheap protein source, clams are regularly fished from Vembanad Lake and the meat is sold in local as well as export markets for consumption. The black clam catch from Vembanad during 2016 was estimated as 37,129 tonnes with 6.8% decrease from the previous year and the estimated annual catch rate of shell-on clam was 210 kg/unit. Over the years the production of black clams declined from a peak of 75,592 t in 2006 to 37,129 t in 2016. Using size at first maturity (SFM) as a biological reference point, the minimum legal size (MLS) for the black clam, *Villorita cyprinoides* was fixed at 20 mm. Corresponding minimum legal weight was calculated as 3.4 g. Heavy exploitation of juvenile black clams (below MLS of 20 mm APM) which is locally known as "mallikakka" is practiced in many parts of Vembanad lake.

Vaikom area of Vembanad lake was selected as a case study to assess the juvenile black clam exploitation. Cooked juvenile clams were sent to the prawn filtration field as shrimp feed @ Rs.25/ kg whereas the cooked adult clam is sold @Rs.100/kg. About 450 kg of juvenile clam meat are sold as shrimp feed from the Vaikom area per day. The practice of exploiting juvenile clams is continued in this area for 4-5 months. The loss due to juvenile clam fishery was estimated as 4 times in terms of weight and 15 times in terms of price. An economic loss of 1.75 crores was estimated due to the juvenile exploitation from Vaikom area