

## SUCCESS STORY

### Breakthrough in breeding and seed production of Indian major carps using CIFABROOD™ during December 2019-January 2020 in Tamil Nadu

A landmark success was achieved with successful breeding of Indian Major Carps (IMC) for the first time in the country during December-January in a private and a government hatchery at Tamil Nadu. CIFABROOD™ was provided during North East monsoon and the spent fishes of July-August 2019 attained maturity after feeding CIFABROOD™ for 45-49 days in the two farms, and the fishes were bred successfully in December 2019-January 2020. Pugazh Aqua farm, Cuddalore bred both rohu and catla(Fig.1); while government fish farm at Manimuthar, Tirunelveli started breeding of rohu in December 2019 and continued till January 2020 (breeding data in table). No maturation could be observed in the control ponds at both the places stocked with same broods and fed commercial diet. The breeding parameters and spawn recovery was almost comparable with the June-July monsoon. The spawn produced during December-January has grown very fast to fry (Fig.2) as well as advanced fingerlings (Fig.3) and juvenile (Fig.4) and was ready for stocking by March-2020, which is much earlier than June. Demand of such stockable fingerling from the neighboring aquaculture states like Andhra Pradesh and Telangana are expected to rise in the coming years. Thus, the culture period may be extended by 3 more months starting from March to October. This success has a long term implication as Tamil Nadu can be developed into a major seed producing state especially during non-breeding/winter season, which will contribute substantially for the aquaculture production in the country.

**Table. breeding data of two farms from Tamil Nadu during NE monsoon.**

Name of Farm	Pugazh Aqua Farm	Govt. Fish Farm, Manimuthar			
Species name	Rohu and Catla	Rohu			
Date of spawning	03/12/2019	05/12/2019	09/12/2019	12/12/2019	09/01/2020
Inducing agent	WOVA-FH	WOVA-FH			
Number of Male	11	7	12	15	11
Number of Female	7	5	8	9	6
Spawn harvested (In Lakhs)	25.0	11.0	6.45	13.5	9.0
Date of spawn lift / stocking	05/12/19	09/12/19	13/12/19	16/12/19	13/01/20



**Fig. 1a: Breeding activities at Pugazh Aqua Farm, Cuddalore**



**Fig. 1b: Breeding activities at Govt. Fish Farm, Manimuthar**



**Fig. 2: Fry produced at Govt. Fish Farm, Manimuthar observed on 14/01/20**



**Fig.3: Advanced Fingerlings observed on 02/03/20**

Length (cm): 5.5 to 8.5  
weight (gm) : 20(avg)



**Fig.4: Juveniles observed on 02/03/20**

Length (cm): 10.5 to 13.0  
weight (gm) : 70(avg)

**Sampling results of nursery rearing of IMC spawn produced during December 2019-  
Januanry 2020 at Govt. Fish Farm, Manimuthar, Tamil Nadu on 02/03/20**