

Success Story

Early breeding of Indian Major Carps achieved in Tamil Nadu using broodstock feed CIFABROOD™

Shri S. Pugalendhi, aged 45 is the owner of Chola Fish Seed Farm, located in the Cauvery Delta Region of Vaduvloor in Thiruvavoor district of Tamil Nadu and is basically a carp seed producer. He is well established with annual production of 600-750 lakhs of spawn. This progressive farmer has established close linkage with the Fisheries College and Research Institute, Tuticorin as well as Tamil Nadu Fisheries University, (TNFU) Nagapatinam. Shri Pugalendhi's farm of about 10 acres has all required facilities and infrastructure for fish breeding and seed production.

He came to know about the broodstock feed CIFABROOD™ during the Farmer-Scientist interaction meeting conducted at Thanjavur on 'Carp Broodstock Management and Quality Seed Production' on 22nd September 2015 jointly organized by TNFU and ICAR-CIFA in collaboration with NABARD and NFDB, Hyderabad. He received 600kg of CIFABROOD™ in December 2015 during unprecedented flood in Chennai and other parts of Tamil Nadu. Hence he started feedings trials of brood fish in February 2016.

Every year Shri Pugalendhi used to breed the fish starting from mid-June onwards and continue up to September except this year 2016 in which he wish to start early in April. The broods were stocked in 1st week of February 2016 and CIFABROOD™ was fed only in one pond. The remaining ponds were provided with his own preparation containing mixture of rice bran, soybean meal and ground nut oil cake along with some vitamin –mineral mixture available in the market and the cost of which may be Rs50/-per kg. Fishes were fed @2% of body weight. According to him, initially he started feeding CIFABROOD™ in a pond where mud silt was quite high and the pond water became turbid with ammonia gas formation. There was no sign of maturation even after one month of feeding. After seeing the deterioration of water quality he immediately



shifted the same broods into another recently renovated pond and to his pleasant surprise observed that the same fishes became mature within next 20 days. He bred both rohu and catla in April-May 2016 with rohu bred first on 21st April and again on 25th April 2016 while catla was bred on 20th and 25th May 2016 using inducing agent (WoVA FH). Totally he could produce 75 lakhs of spawn from these early breeding. Again on 1st June he has produced 59 lakhs of spawn by breeding catla. Successful breeding of IMC during April-May in Tamil Nadu is unprecedented. Shri Pugalendhi produced 200 lakhs of spawn/fry from CIFABROOD™ fed broods.

Collaborating scientists from ICAR-CIFA and TNFU have reported that while normal incubation time for spawning response was 9 h following the injection of inducing agent (WoVA FH), it reduced to 6 h in case of CIFABROOD™ fed broods. Minimum disturbance of broodfish, tray feeding and availability of good eco-hatchery added success to his venture. This progressive farmer has since expanded his business by including the farm ponds of his brother in law in nearby village where his April bred spawn has grown in to fingerling



size already on 7th June 2016. Though this broodstock feed cost is relatively high (Rs. 81/-) now, Shri Pugalendhi is hardly bothered about that and commented that with the benefits of this broodstock feed profit is assured. Initially he got Rs. 2/- per fingerling, and the cost is likely to increase to Rs. 5/- per fingerling during November-December. His customers are happy and satisfied, and the seed from his farm is selling like hot cake. Tamil Nadu is carp seed-deficient state, and the recent success of Shri Pugalendhi would catalyze increased seed production in the state. Seed production is possible even during peak summer, if water is available; Tamil Nadu has the advantage of having two monsoon seasons. The main advantage of early breeding of Indian Major Carps is in the early stocking of seeds for grow out culture with the onset of monsoon which will result in further increase in the period of culture thereby increasing fish production.

(Source: ICAR-Central Institute of Freshwater Aquaculture, Bhubaneswar)