

Salient features

- **First Time** scientifically developed nutritionally balanced feed for **carp brood** in India
- Egg, sperm and larval quality is superior with the use of CIFABROOD
- Hastens early maturation of the gonad and improves breeding performances
- Facilitates early spawning and improves spawn recovery
- Suitable for multiple/repeat breeding in carp
- Suitable in 3-5 mm diameter sinking pellet
- Can also be given as mass feed
- Can be given in tray or plastic bags like any other feed
- Required to be fed @ 3-5 % body weight per day for two months prior to breeding
- To be fed twice a day in equal proportions
- The growth and survival of the spawn and fry is better by using CIFABROOD



Other Benefits observed from field trails

- Maintaining a large number of brood stocks may not be needed.
- Spent brood (twice bred earlier) matured again within 45 days in West Bengal.
- Fishes were matured by 6th April 2013 (48 days), without water exchange in Odisha.
- Indian Major Carps were bred in April - May 2013 by farmer in Odisha.
- Early bred (April) spawn has already grown up to fingerling size by June 15th 2013 which is fetching Rs.1 per piece to the nursery growers allowing an extra period of 3 months for growth purpose.
- Re-maturation and breeding of spent brood at Ramsagar, Bankura, West Bengal, in August-September 2012.
- According to the spawn buyers survival rate of fingerling is in between 50-70% as compared to 30% normally observed during spawning season in previous years.



Entrepreneurial opportunity

It has already been commercialized and Hatchery operators can benefit by feeding CIFABROOD

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**Aquapreneurs'
Flyer**

Grow Fish Grow with Fish

Business plan

Cost of CIFABROOD : Price varies from rupees 40 - 50 per Kg

Cost of feeding : Rs 90,000/- for one ton of Brood fish

Investment : Operational cost is rupees 6.0 Lakh in hatchery

Benefits : 1.6 Lakh rupees in spawn, 16 Lakh in Fry production

Net Profit : A hatchery operator using CIFABROOD- 10.5 lakhs per annum



Scientific background

In oviparous animal like fish the embryonic development is completely dependent on the stored energy provided in the eggs following fertilization. The nutrient necessary for embryonic development is transferred from female brood during egg formation. Since millions of eggs mature simultaneously and derive all the essential nutrients from the brood mother, there is always chance of deficiency in one or other component either due to lack in mother's diet or due to malnutrition. Therefore adequate nutrient source through exogenous diet containing indispensable amino acids (IAA), long-chain fatty acids (PUFAs), selected vitamins and trace elements must be provided to the brood prior to maturation in such a way that voluntary dietary intake becomes optimum.



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Agrisearch with a human touch



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