

Fish attractant: An indigenous device to prevent escapement of fishes

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Studies on fish attractant especially in fresh water fish are very scanty. Tribal people, who practice fish attractant against the escapement of fish during inundation of ponds during flood, mainly inhabit the Karbi-Anglong district of Assam. This fish attractant is made from locally available ingredients such as rice bran, oil cake, Jubulee, etc. The practice is quite popular among the fishers in Karbi-Anglong. On verification of the efficacy of this indigenous method, it was observed that as many as 70% of fishes remain in the pond after flood.

Key words: Fish attractant, Fish escapement, Rice bran, Oil cake, Jubulee, Rice Beer, Assam

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Karbi-Anglong district is an autonomous hill district of Assam, which is centrally located in the southern part of Assam covering an area of 10, 434 sq km, providing habitat to the tribal communities. Generally, this tribal community (Fig.1) possess and practice traditional knowledge in the daily activities. They use lots of indigenous technical knowledge in aquaculture. Most of the fishers of Karbi-Anglong district prefer to construct embankment ponds, because of its low investment. Generally, fishermen make their embankment up to the height of local flood level. Every year due to increase in flood level, new places are inundated, resulting in huge loss in terms of money and resources. Since flood being the main problem among the fishermen, they have developed indigenous fish attractants made from the naturally available materials which helps retaining the fish in their cultured pond during flood period. This indigenous technical knowledge is generously passed on to newer generation. A few researchers have reported some indigenous method on fish harvesting in rivers and beels¹⁻⁴.

Methodology

The main ingredients for preparation of indigenous fish attractant are rice bran (@7.5kg/ha/day), mustard oil cake (@7.5 kg/ha/day) and *Jubulee* (a local rice beer). The required amounts of rice bran is fried in an

iron utensil for 20 minutes and cooled. The mustard oil cake is soaked in 7.5 litres of water and kept it for 2 hrs. When softened, it is mixed thoroughly with fried rice bran and 3 kg of *Jubulee* and made into dough (Fig. 2).

When water level goes up during rainy season and may overflow then fishermen use the dough. The fishermen apply it as artificial fish feed as well as fish attractant. They divide said dough in equal two parts, one part is applied in morning and other part in the evening at the same place of their cultured ponds (Fig. 3). During this period, they keep their cultured ponds without disturbing the water surface. Fishermen completely stop their fishing activity until the water level goes down below the height of the embankment. Due to taste of the dough, most of the fishes remain in the ponds.

A trial was made in three different ponds of size 0.25 ha to 0.3 ha located at Barpeta district of Assam to test the efficacy of the attractant. The formulated fish attractant was applied in these ponds during flood (Fig. 4-6) After the flood, it was observed that almost 60%-75% of fishes remained in the pond. The most effective result is obtained in case of stagnant water.

Discussion

It has been observed that fishermen community of Karbi-Anglong district with their long experience use different techniques suitable in different seasons. The indigenous techniques on fish attractant are cost effective, user friendly and easily communicated

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Fig. 1. Tribals ready for community fishing



Fig. 2. Fisherman preparing Rice Beer (*Jubalee*) extraction



Fig. 3. Fisherman applying indigenous fish attractant in the cultured fish pond



Fig.4. Fisherman applying indigenous fish attractant



Fig. 5. Fisherman applying indigenous fish attractant



Fig. 6. Fisherman applying indigenous fish attractant

Hence, it is found to have tremendous scope in rural flood affected areas. It is hoped that documentation of this indigenous technical knowledge, will facilitate researchers to familiarize themselves with it and to improve or remodel the techniques to suit the local needs.

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