

FARMING SNAKESKIN GOURAMI, *Trichogaster pectoralis*, FOR POVERTY ERADICATION

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Abstract

The focus of the study is to elucidate the potential of Snakeskin gourami farming for poverty eradication. Snakeskin gourami is a native freshwater fish to most of the Asia countries. It can be found in the paddy field, river, stream and many other water bodies. However, the population of the freshwater fish was declined rapidly due to the sudden demand from the market and pollution of agriculture wastes to their natural habitat. No many farming activity was reported of this fish in the Asia region and the demand of the fish is still increasing. In the present study trial on breeding of Snakeskin gourami as well as growing the fish were carried out. Based on the present study results showed that the cost production of the fish is low while the price and demand of the fish are high. Hence, we proposed that farming Snakeskin Gourami, *Trichogaster pectoralis*, can be used as a poverty eradication tool.

Keywords: *Snakeskin Gourami; poverty eradication tool; aquaculture*

Introduction

From the market survey recently, it is evident that Snakeskin gourami is highly source out for pickling. Commonly, snakeskin gourami was collected and harvest from natural water bodies such as paddy field, ditch, lake, river and etc. However, there is a limited supply of this species which is associated mainly to pollution of agricultural wastes in their habitat. Based on the literature survey, there is a lot of studies and information of the propagation, nutrition and feeding of the other aquaculture fish (Reigh and Ellis, 1992, Amornsakun 1999, Amornsakun et al., 2002, Patricia et al., 2006). For comparison purposes, the market price of Snakeskin Gourami is RM 18/kg and the demand

for this fish is expected to increase in the near future. This present study will provide valuable information on the farming of Snakeskin gourami to cater the needs in domestic and international markets and as poverty eradication tool.

Farming Method

Pond Design and water parameter requirement of farming snakeskin gourami

Snakeskin gourami can be farmed in a earthen pond with the size 10 m (wide) X 10 m (length) and 1 m (depth). The density of snakeskin gourami can be applied in the earthen pond is around 10 to 12 pieces/m³. Snake gourami can survive in tough environmental with low dissolved oxygen up to 3 ppm; high ammonia level and acidic environment. The production cycle of the fish is 6 to 8 months and depend feeding regime. Snakeskin gourami can survive without food supply from farmer. This fish can find its own food by eating alga and aquatic plant. The main diet of the snakeskin gourami is aquatic plant and seldom reported became predator of other fish.

Breeding snakeskin gourami

Traditionally, fish farmer will collect snakeskin gourami fish fry from natural water bodies such as paddy field, ditch, lake and etc. Therefore the production of the snakeskin gourami is very low due to the lacking of fish fry. Recently, the breeding technique of snakeskin gourami was developed by natural and artificial breeding program. Natural breeding program of snakeskin gourami was conducted by manipulating the environment factors such such pH, water level and adding substrate in the broodstock pond. At the mean time, artificial breeding of snakeskin gourami was carried out by using synthetic hormone. Both natural and artificial breeding program were found suitable in producing snakeskin fish fry.

Feeding snakeskin gourami

At the larvae stage, snakeskin gourami prefer fed with green water whereas at juvenile and adult stage, the fish will find aquatic plants as their main diet. In order to boast the growth of snakeskin gourami fish farmer will use commercial pellet with the 30 % crude protein for juvenile and 20% crude protein as finisher feed.

Cost of Production

The cost production of snakeskin gourami is around RM 4 to 5 /kg. However, if the fish is fully depend on the natural food that available in the culture system the cost production will be reduced with the longer production cycle compared to the farmed snakeskin gourami that fed with commercial pellet.

Conclusion

Snakeskin gourami has good value in the market and the cost production is low compared to the other freshwater fish. Hence, farming of snakeskin gourami can be used as poverty eradication tool.

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