Pertanika 5(1), 117–118 (1982)

COMMUNICATION (II)

Induced Breeding of Ikan Sebarau

RINGKASAN

Ikan sebarau, Hampala macrolepidota *(Van Hasselt) dibuat pembiakan aruhan dengan cara menyuntik ikan betina dengan HCG dan pituitari ikan Lee Koh* (Cypinus carpio). *Pembuahan buatan dijalankan dengan cara melirit perut ikan dan membancuh telur serta mani ikan-ikan itu. Kadar penetasan telur adalah lebih kurang 60% dan kadar kematian anak-anak ikan sebanyak 0.2%.*

One of the prerequisites of fish culture is the availability of fish fry and to ensure constant supply, induced breeding is normally carried out. The methods of induced breeding of fishes have been described by several authors (Hickling, 1966; Chaudhuri, 1969). In Malaysia, induced breeding has been established for Chinese carps by the Fisheries Department and Freshwater Fisheries Research Station, MARDI, Malacca (Chen, *et al.,* 1969, Ahmad Tajuddin, 1980a, 1980b). Published information on induced breeding of local carps are scanty.

Ikan sebarau, *Hampala macrolepidota* (Van Hasselt) is the most popular sport fish in Malaysia and is also a good food fish. As a part of a Ph.D program on recreational fishery management, induced breeding of ikan sebarau was initiated so as to restock this fish in the study area.

The fishes (80-20 mm long) for this study was collected from Zoo Negara Lake, Selangor; Sungai Keratong and Paya Bungor, Pahang. Six males and six females were selected and kept in a holding tank (2.5 m x 1.7 m x 1.7 m) and fed with *Macrobachium lanchesteri* (De Man) twice a day. When they were fully acclimatised, the males and females were separated, individually weighed and placed in separate tanks (1.5 m x 0.5 m x 0.5 m). The females were recognised by their smooth opercles and rounded bellies while the male by their rough opercles and less rounded bellies. After 3 days, four females (240-300 g) were chosen and injected with 250 I.U. Human Chorionic Gonadotropin (HCG). This was carried out at 9.00 am., 4th December, 1981. At 3.00 pm. on the same day, each of the six males (250-280 g) and the four females were injected with 1 mg common carp pituitary ground in 1 ml saline solution and placed in a circular spawning tank, 1.5 m in diameter. At 8.00 pm. the fishes started to pair off, with the male following closely behind the female and nudging the abdomen of the female with its head. Half an hour later, the fishes were stripped and milt and ova were mixed in a bowl. Fertilization took place almost immediately. The fertilised eggs were washed with Thiourea solution to remove the stickiness. The solution was prepared by dissolving 1.5 g Thiourea and 1 g sodium chloride in 1 litre of distilled water. After washing, all the eggs were placed in a hatching jar.

The eggs started to hatch at 9.00 am., 6th December 1981 and by December 7th morning, about 3,000 larvae were found swimming. About 40% of the eggs failed to hatch, probably because they had not been fertilized. These larvae were transferred into a glass aquarium (Tank 1) except for 20 larvae which were left unnoticed in the hatching jar. These were later transferred into a small glass aquarium (Tank 2). The next day, artemia larvae were given as feed but the larvae only started feeding in the late afternoon. Up to December 24th, the larvae in Tank 1 suffered a 0.2% mortality rate whereas there was a 100% survival rate in Tank 2. On December 19th most of the larvae became juveniles and those in Tank 1 were transferred to two separate tanks. Signs of white spot disease were noticed on the juveniles, formerly from Tank 1, on 24th December. All except eight of these juveniles died two days later.

All the juveniles in Tank 2 have survived until the time of writing (8 March 1982).

Mohd Azmi Ambak,
Aizam Zainal Abidin
and
A.K. Mohammad Mohsin

Faculty of Fisheries and Marine Science,
Universiti Pertanian Malaysia,
Serdang, Selangor, Malaysia.

REFERENCES

AHMAD TAJUDDIN B. ZAINUDDIN (1980a): Pembiakan Ikan (Bahagian Satu). *Teknologi Pertanian MARDI,* **1:** 75-87.

---------- (1980b): Pembiakan Ikan (Bahagian Dua). *Teknologi Pertanian MARDI,* **1(2):** 96-107.

CHAUDHURI, H. (1969): Methods adopted for inducing breeding of Fishes. FAO/UNDP Regional Seminar on induced breeding of cultivated fishes. Bombay, FRI/IBCR/8.

CHEN, F.Y., CHOW, M. and SIM, B.K. (1969): Induced spawning of the three major Chinese carps in Malacca, Malaysia. *Malay. Agric. J.* **47(2):** 211-238.

HICKLING, C.F. (1966): The artificial inducement of spawning in the grass carp, *Ctenopharyngodon idella* Val. A review. *Proc. Indo-Pacific Fish Counc.,* **12(II):** 236-243.

(Received 9 March 1982)