

Source:

Philippine Council for Aquatic and Marine Research and Development. Mudfish breeding and culture. PCAMRD Currents, 3(3): 8p. December 1998.

PCAARRD Information Bulletin No. 12/2012

For more information, please contact:

Freshwater Aquaculture Center Central Luzon State University Muñoz, Nueva Ecija

Inland Fisheries Division **Bureau of Fisheries and Aquatic Resources** Quezon City

PCAARRD

Los Baños, Laguna

Tel. Nos.: (049) 536-0015 to 20; 536-5907 Fax Nos. (049) 536-0016/536-7922 pcarrd@pcarrd.dost.gov.ph Website: http://www.pcarrd.dost.gov.ph



DEPARTMENT OF TRADE & INDUSTRY BUREAU OF MICRO, SMALL AND MEDIUM **ENTERPRISE DEVELOPMENT (BMSMED)**

5/F, Trade and Industry Building 361 Sen. Gil J. Puyat Ave. Makati City Trunkline No.: 751.0384

Tel. Nos.: (02) 897.1693 / 897.7596 / 890.4968 Fax No.: (02) 896.7916 • Email: bmsmed@dti.gov.ph

www.dti.gov.ph



Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) Department of Science and Technology (DOST)

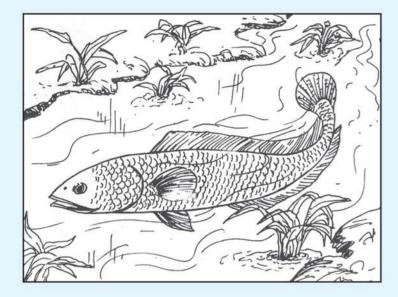


Muditsh Breeding and Culture

Overview

The mudfish (*Channa striata*) is an indigenous fish found in lakes, rivers, swamps, mangroves, and rice paddies.

Also called snakehead murrel and locally known as "dalag," the fish is sexually mature at a total length of 22 centimeters (cm) and spawns throughout the year.

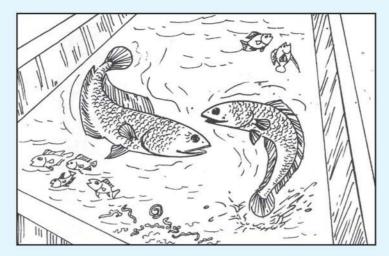


Mudfish Characteristics

The mudfish is a native freshwater fish that is highly-valued as a foodfish in many regions of the country. It is capable of air-breathing through its supra-pharyngeal organs. It matures in about six months and can grow to a size of 36.5 cm.

Breeding

The mudfish can be bred in tanks naturally. Adult fish with a length of 30 cm and weighing 250–500 grams (g) are used. The female is usually bigger than the male and can be distinguished by its wide girth when ready to spawn. Two pairs of broodfish are stocked in a 4 x 2 x 1 meter (m) tank. The fish are fed



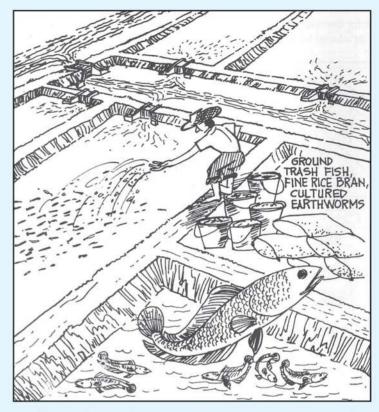
ad libitum or at 20% of their body weight per day with live fish or earthworms for two weeks prior to spawning at a depth of 0.2–0.3 m. When spawning is desired, the water level in the tanks is raised to 0.5–0.7 m.

The mudfish spawns early in the morning near the water surface. The spawners slowly swim around each other. Then the male coils around the female for the release of eggs which are then fertilized. Around 400–5,000 eggs can be produced by a female depending on its size.

The mudfish eggs contain oil globules and float to the surface. They hatch within three days and develop into swim up fry within five days. Mudfish fry feed on zooplankton like rotifers and copepods. Fingerlings can be fed with earthworms, maggots, and other live feeds.

The Growout

Mudfish fingerlings can be grown to market sizes of 150–250 g in ponds and cages. They can be stocked at high densities (e.g., 100,000/ha) in ponds because of their ability to breathe atmospheric air. Feeding can be done with a moist diet consisting of 90% ground trash fish and 10% fine rice bran or cultured earthworms. The culture period can last for 4–6 months.



There is one important characteristic of mudfish that the grower should know about. The mudfish is highly predaceous and cannibalistic. It will readily feed on other fishes including its own kind. To minimize cannibalism, sorting of the fish should be done regularly to reduce size variation.

Mudfish are susceptive to a disease known as ulcerative disease syndrome (UDS) or "kurikong" which is caused by a fungus. The disease can be avoided by maintaining good water quality in the ponds and removing diseased fish.

Marketing

Mudfish are sold live in the fresh market. They can survive out of water for one day as long as they are kept moist. Mudfish are cooked in soup or roasted as a delicacy. They can also be dried, salted, or fermented.