

2. Lesson -2

Important trait of Grey mullet

2.1 Introduction

Grey mullets are important cultivable fishes in brackish water ponds. Their culture dates back to ancient times. Egyptians had devised their culture methods about 2500 years ago. In Rome, mullet culture was profitably practiced since the first century.

Grey mullets are suitable for farming because they are herbivores and detritivores, feeding low in the trophic level. They require less supplementary feed. They are tolerant to higher temperatures and salinities, hence can be grown in tropical and sub-tropical areas. They are generally polycultured with other fish and shrimps.

Distinctive characteristics

Grey mullets belong to the family Mugilidae. They have a broad and flattened head, a small and terminal mouth, two short dorsal fins and they are devoid of a lateral line. When alive they have blue, green or olive colorations on the back. The sides and belly are silvery and body has 3-9 longitudinal streaks. Among the 14 species only some are cultivable. *Mugil cephalus* is the fastest growing larger sized mullet which is very widely distributed in the tropics and the subtropics. Other important cultivable species are *Liza macrolepis* and *Liza tade*.

Mugil cephalus has a robust body and fatty tissue covering most of the eye.

The lips are thin, the lower one having a high knob on the symphysis. There are 6- 7 indistinct brown bands down the flanks and a dark purple blotch at the base of the pectoral fin. This fish grows to a maximum size of 90 cm, but the common sizes range from 35 – 45 cm.

Liza macrolepis has a moderately robust body and the fatty tissue is only in the form of a rim around the eye. The body does not have any bands or stripes. It grows to a maximum size of 60 cm, with common sizes ranging from 25-30 cm.

In *Liza tade* the body is slender and elongate. The head is depressed and elongated. In adults 5-7 indistinct longitudinal marks are present on the upper half of the body.

Biology

Majority of grey mullets are marine, inhabiting shallow areas of the sea. Since they are highly euryhaline and eurythermal, they ascend brackish waters, bays, creeks, swamps and estuaries.

The adults feed on algae, diatoms, crustaceans, decaying organic matter and detritus found at the bottom. The post larvae, fry and juveniles feed on plankton.

Most species spawn in the sea, but fry form shoals along the coasts and enter estuaries, lagoons and creeks from where they can be easily collected.