

### 3. Lesson 3

#### Important trait of milk fish

##### 3.1 Introduction

The milkfish, *Chanos chanos* is one of the most ideal fish for coastal aquaculture. This commercially very important fish has many traits essential for culture. They have fast growth rate, in the first year of its life; wide range of tolerance to temperature, salinity and dissolved oxygen; feeds on algal mats at the bottom and resistant to most diseases and parasites.

It is cultured on a large scale in Indonesia, the Philippines and Taiwan for centuries. It is much esteemed fish in the south east Asian countries.

#### Distinctive characters

Milkfish has a moderately compressed, spindle shaped elongated body covered with small scales. Mouth is small, without teeth, snout is longer than the lower jaw, which has a small tubercle at its tip.

The dorsal fin is located at about the middle point of the body; anal fin short and situated far behind the dorsal fin base. Lateral line is present and tail fin is large and forked. The dorsal, anal and caudal fins have dark margins.

#### Biology

It grows up to 180 cm in length and 20 kg in weight, but the fish caught in the sea normally range from 70-110 mm.

The fry and fingerlings feed on microscopic algae. The fish grows to about 50 cm in length weighing 500 – 800 g in brackish water ponds.

In ponds milkfish feed mainly on filamentous algae at the bottom along with associated microorganisms and detritus. The fish can be fed supplementary feed such as rice bran, oil cakes and other feed stuffs.

##### 3.2 Pearls spot

The pearlspot *Eetroplus suratensis* is an important cichlid fish distributed in India, Sri Lanka and Pakistan. It is found in estuaries, tidal creeks, lagoons, backwaters and swamps. It attains a length of more than 30 cm and weight of about 1.5 kg.

#### Distinctive characters

Body is oblong, compressed and elevated. There are small teeth on jaws, none on the palate. The dorsal fin is single, with spinous portion greater in extent than the soft portion. Lateral line present in the upper fourth of the body.

Colour light green, with eight oblique bands on the body. Most of the scales have central white pearly spots. The dorsal, caudal, ventral and anal fins are dark coloured, pectoral yellowish with a black base. Strong spines on dorsal and anal fins present.

### Biology

It matures within one year of its life and breeds in confined waters such as ponds, almost throughout the year. Natural breeding grounds have weeds with water depths ranging from 50-100 cm. A female releases up to 6,000 eggs at a time. The eggs are attached to submerged objects like stones, twigs, tiles, bamboo poles etc. by the female after cleaning them. The male fertilizes the eggs and the female guards over them during development and hatching.

The early fry feed on zooplankton, the advanced fry on aquatic insect larvae. Juveniles and adults feed on filamentous algae and other weeds. Since this fish is easy to breed and a herbivore, it is one of the ideal species for coastal aquaculture.