

It does not show any form of parental care. During spawning, it just lays eggs and leaves the scene. Group spawning and sympathetic spawning are obvious. Sometimes it is found that fish will turn to their own spawns and hatchling for feeding. For the maturation of captive broodstock, all specimens should be adapted till the maturity level in a large aquarium for 3-4 months, artificially fed (5% of body weight) 3-4 times a day. The fish show obvious sexual dimorphism. Male and female should be separately conditioned for three weeks, and then kept in the spawning tank at a ratio of 1:1. Broodstock should be regularly provided with small live feed, such as bloodworms, daphnia, artemia, and high-quality dry flake feed.

Spawning tank set up:

A glass aquarium (200 litres capacity), filled with soft water, pH (6.5-7.5), temperature (24-27.5 °C), DO (3.5-4.6 ppm) and stone/marble, with a lot of fine-leaf plants at the bottom. Place a square shaped nylon net on the stone/marbles. This should be very dim, and the bottom covered with some kind of net large enough so that the eggs can fall off, but so small that the adults cannot reach them. The temperature should be set at 26-27°C and filtered through a gentle air-driven sponge filter (using mature sponge). Fish in good conditions should be carefully adapted to the environment, with the lid closed tightly, because spawning can be a very active event.



Spawning tank set-up

Spawning:

When the adults are in good physical condition and the females are gravid, one or two pairs should be introduced and the eggs will be laid the next morning. Another method is to divide the fish into groups to spawn. Six specimens of each sex is a good number, although a larger aquarium may be required. The first rays of sunlight in the morning usually trigger fish to lay eggs, which will be scattered on plants and marble. On average, it can produce nearly 200-500 transparent to pale yellow eggs for each female. The parent fish will be hungry and should be removed once spawning terminates. Eggs hatch out within 24-48 hours, and the fry will swim freely after about 24 hours. For the first few days, they should be fed with infusoria grade food until they are large enough to receive microworms, Artemia nauplii or similar live



Young ones

feeds. Once the fish reaches 25 mm, it can be adapted to prepared feed of 0.3 mm size. The fish reaches marketable size (50-60 mm) in 45 days.

Interesting facts about Melon barb:

- Males develop beautiful red-pink colouration with maturity.
- Peaceful disposition with fish and peaceful invertebrates too large to be considered prey.
- Very active and noticeable fish in any aquarium.
- Ideal for planted aquariums.
- Will school with many other species of fish, especially other barbs.

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**Promoting indigenous
ornamental fish of Goa:
Breeding and Seed
production of *Haludaria
pradhani* for conservation
and management**



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**Under Scheduled Caste Sub Plan
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Introduction:

The barbs are cyprinids, with one or two pairs of small barbels around the mouth. Among the 400 species listed, only 150 barbs showed ornamental value. *Puntigrus tetrazona* (Tiger barb), *Pethia conchonius* (Rosy barb), *Puntius titteye* (Cherry barb), *Barbodes everetti* (Clown barb), *Balantiocheilos melanopterus* (Silver Shark), *Desmopuntius johorensis* (Stripped barb) and *Haludaria sp.* (Stripped barb) are the most traded in India.

Melon barb (*Haludaria pradhani*) is a tropical freshwater barb, a well-known species in the international ornamental fish trade. The attractive colour patterns and striking behaviour make this fish an ideal choice for aquarium tanks. The water quality requirement for the species are the following: pH: 6.0-6.5, water temperature: 22-26°C, dissolved oxygen: 5-7 mg L⁻¹, water hardness: 36-179 mg L⁻¹, TDS: 36-179 mg L⁻¹. The species prefers clear water in the slow-flowing streams. It is an open water substrate egg-scatterer/spawner. The maximum recorded length of this species is 10 cm (total length). It inhabits soft, acidic, medium-flow waters in various regions. The number of thick black bars on their surface (varies from 1 to 5) again depends on the habitat. Melon barb is one of the underestimated ornamental barbs. It is relatively calm, hardy, colorful, and has interesting feeding (browsing) behaviour. This species is listed as Least Concern (LC) in the IUCN Red List. Together with other local barbs, melon barb can contribute to the country's ornamental fish industry in a big way especially in community aquariums.

Classification:

Kingdom: Animalia

Phylum: Chordata

Class: Actinopterygii

Order: Cypriniformes

Family: Cyprinidae

Genus: Haludaria

Species: *H. pradhani*

Common name: Melon barb

Maximum length (measured as Standard length): 60-70 mm

Reproduction: Eggs scatterer on the external open substratum showing no parental care

Temperament to its own species: Peaceful

Temperament toward other fish species: Peaceful

Usual place in the tank: Bottom-Middle

Expected life span: 6 years

Distribution and habitat:

Melon barb is endemic to Goa, Karnataka, Kerala, Tamil Nadu in southern India and Western Ghat mountains. It is more common on the western slopes of the mountain ranges and has been recorded in many river drainage systems from mouths to near sources. Many geographically isolated types differ in colour and pattern, depending on the location and habitat. Populations from high-altitude environments (headwaters, mountain streams, etc.) usually have an orange base colour, while in low-altitude areas they are usually purple or light red. The position and number of black bars on the body are also different. For example, the populations from Goa, Karnataka/Northern Kerala, and Central/Southern Kerala show five, four, and three bands respectively. This fish inhabits various biotopes from mountain streams to major rivers, irrigation canals, ponds, lakes and ditches. It prefers shallow and calm areas covered by submerged vegetation/leaf litter.



Natural habitat of *H. Pradhani*

Although gregarious, it usually forms large schools with members of same/similar species.

Diet:

Wild ones are generally omnivores, feeding on diatoms, algae, organic debris, small insects, worms, crustaceans and other zooplankton. It can be easily raised in the aquarium, but the best state and colour can be obtained by regularly feeding small live feeds such as bloodworms, daphnia, artemia, and high-quality pellets and dry flakes.

Behaviour and compatibility:

Melon barb is very quiet, which makes it an ideal occupant for community aquariums, but since it is a somewhat active feeder, it may outperform slow-moving or timid fish. Since it has no special requirements for water chemistry, it can be combined with many of the common aquarium fishes such as small cyprinids and tetras, livebearers, rainbow fish, anabantids, catfishes and loaches. It is usually found with other small cyprinids, such as *Pethia ticto*, *P. setnai*, *P. punctata*, *Puntius sahyadriensis*, *Dawkinsia filamentosus*, *D. assimilis*, *D. Arulius* and *D. exclamatio*.



Female



Male



Male Dorsal fin



Female Dorsal fin

Sexual dimorphism:

Females are larger and plumper, especially under breeding conditions. Males are more vivid in colour, and dorsal fins are usually red and/or black.

Broodstock development:

Fish show a preference for shallow and quiet areas covered by submerged vegetation. In Goa, Keri Sattari (15.6105° N, 74.0658° E) and Valpoi (15.5300° N, 74.1301° E) are natural habitats for melon barbs.



Male and Female pair

Reproduction:

The melon barb is an open-water egg scatterer. The maximum size of this species is 10 cm (TL). The males show bright colours, which indicates variability related to the condition of the gonads. According to reports, during the courtship and spawning period, the body colour deepens to the greatest extent for males. Females maintain a stable colour throughout their life.