

Kuhli Loaches

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By Al Castro

Q. I have just set up a 10-gallon tank with an undergravel filter powered by a powerhead. The pH is 7.2 and the temperature in the tank is an average of 76 degrees Fahrenheit. The primary aquascaping is a bunch of Anacharis.

I was thinking of putting some coolie loaches (*Acanthopthalmus kuhlii*) into my tank, but I can't seem to get enough information on the fish to feel comfortable about buying them. Could you please give me some information on this species?

A. The kuhli loach ("coolie" is an often seen mistake) is a fascinating and hardy species that fits well into a small fish community aquarium. They like clean, clear water, and do best with aquarium gravel, such as fine sand, that does not have sharp edges. This approximately duplicates their natural habitat, which is the sandy beds of mountain streams or slow flowing rivers. They actually seem to do better in an aquarium that has a slight buildup of organic mulm or peat moss on the surface of the substrate.

They accept a wide range of water chemistries — pH of 5.5 to 7.5 and hardness up to 200 parts per million (ppm) — although optimum values seem to be more like a pH of 6.3 to 6.8 and a hardness below 80 ppm. Cool temperatures are preferred (70 to 75 degrees Fahrenheit), but they will accept temperatures into the low 80s for short periods of time.

The kuhli loach will live for several years in an aquarium in which it is the only fish of its kind, but it seldom comes out in the open and cannot be enjoyed for its comical actions. If it is kept in small groups (I like to keep at least a half dozen together), the kuhli loach will be seen swimming in and around piles of rocks, under and over pieces of driftwood or around the stems of plants. It will be out looking for food, playing tag with its friends or simply "sunning" itself on a raised object — in short, it will act more like it would in the wild.

I don't want you to get the impression that they are schooling fish, because they aren't. They are simply gregarious and feel much more comfortable in the company of their own kind.

Feeding the kuhli loach poses no problems. They are very adept at locating bits of food in an aquarium, and are often included in an aquarium to ensure that there is no buildup of uneaten foods under rocks or wood. They eat prepared flakes, freeze-dried foods and any small live foods that settle to the bottom, but have a real fondness for small worms, such as grindal worms, white worms or Tubifex. It is important to limit the amount of worms in their diets because worms are a rich, fat-filled food, and a balanced diet is much better for the fish.

I know very little about the breeding of this fish. I have only had five spawns of these loaches that produced babies, and have learned very little from these spawnings. On three occasions, pairs have scattered adhesive eggs over and in the aquatic plants (generally water sprite).

On one of these occasions, I siphoned out all the eggs I could find to a separate container for careful handling of the eggs and fry. I fed the fry on "green water," sifted Cyclops nauplii, newly hatched Artemia (brine shrimp) nauplii and microworms, and in this manner was able to raise seven fry to the age of one month in this container.

Then I noticed that there were some babies in the original kuhli aquarium. I added all the fry (the newly found fish and my "carefully" reared fish) back to the community tank. At age six months, there were still 22 of the young fish in the aquarium.

On one other occasion I did not know a spawning had occurred because I didn't see any babies in the aquarium until I did my periodic cleaning under the subgravel plates. I inserted a siphon down the uplift tube, started to drain the water and accumulated mulm from under the plates and found 14 fry, about 1 inch long. This final spawning apparently took place in a large cave, although I'm only basing this on the fact that the adults always lived in the cave and that's where the fry were found. It has been reported elsewhere that the kuhli loach builds a bubble-nest, but I've never actually seen this.

The most disturbing aspect of my breeding adventures is that I have absolutely no idea what triggers the spawning

activity. I know that it is possible to stimulate spawning with pituitary hormones, but I don't use them.

The last item worth mentioning is that all "kuhli" loaches aren't necessarily real kuhli loaches. There are a number of very similar species in the genus *Acanthopthalmus*. The real kuhli loach, *Acanthopthalmus kuhlii*, is a 3½-inch fish from Indonesia, Sumatra, Java, Malaya and Thailand. It has 15 to 20 dark bars on its flanks that almost circle the body, but stop at the belly. There are two subspecies (maybe three) that have variations in the length of the bars and narrow bands within the bars.

The first impostor is the Indian thorneyes, *Acanthopthalmus cuneovirgatus* (*Acanthopthalmus* means "thorn eye" and refers to the sharp, two-pronged spine at the base of each eye), from the Johore province of India. This fish grows to about 2½ inches and has 10 to 14 short, dark bars that look like triangles over its back and part way down its sides.

Myer's loach (also known as Myer's slimy loach or giant kuhli loach), *Acanthopthalmus myersi*, is a 4-inch species from southeast Thailand. This species is considerably heavier bodied than the normal kuhli loach, and the body has a more slippery or "slimy" texture. It has 10 to 14 long, broad, dark bars that nearly encircle the body.

The dwarf kuhli, *Acanthopthalmus robiginosus*, is a seldom-seen species from western Java that has about 20 broad dark bars separated by very narrow yellow to yellow-orange bands. The dark bars reach down to just past the mid line of the body. This very attractive species reaches barely 2 inches in length.

Acanthopthalmus semicinctus, the half-banded loach, is a 3-inch species with 12 to 16 dark bars on the flank. There are two or three bars at the head and one or two bars at the tail that circle the body, but the rest of the bars come only to the mid line of the body. This Indonesian species shows more reddish-copper color on the body and seems to prefer warmer waters — from 78 to 85 degrees Fahrenheit.

Another species with a similar color pattern is Shelford's thorneye, *Acanthopthalmus shelfordii*. Instead of distinct bars, the dark areas are ragged blotches in two horizontal bands. This 3½-inch species comes from Borneo, Sarawak and the Malay Peninsula.

There are several other "thorneyes" that warrant keeping in the aquarium, but their color patterns are not similar to the kuhli loach, so they cannot be confused with this species. Care is much the same for all species of *Acanthopthalmus*, with temperature being the only real variable that matters. If you're not sure which species you have, I suggest keeping the water at about 75 degrees Fahrenheit until you can identify the proper temperature. And be sure to purchase these fish in a group to ensure that they are better able to adapt to your aquarium conditions.