

Breeding the Jelly Bean Tetra

Breeding the Jelly Bean Tetra from far West Africa

By Mike Hellweg

One and one-fourth inch is the full-grown size of the jelly bean tetra (*Ladigesia roloffi*). Photo Credit: Steve Edie

Coming to the hobby infrequently in shipments from far West Africa, the beautiful little jelly bean tetras (*Ladigesia roloffi*) are rare beauties. With a delicate translucent body looking like a piece of amber come alive, their beauty is enhanced with two thin lateral stripes, one of metallic golden yellow, and the other below it black. Yet the most striking color pattern is the one that gives them their name: There are three jelly bean-shaped bright orange marks, one on the dorsal fin and one on each lobe of the forked caudal fin. Sometimes a fourth pale jelly bean can be seen on the anal fin, but not in all individuals.

Sexing these tiny beauties isn't easy, either. Both males and females top out at about 1 1/4 inches or so. Coloration is similar in both sexes. Adult females may be slightly stouter at breeding time, but the rest of the time, they aren't much larger than males.

Adult males have slightly longer rays at the front of the anal fin, giving them a slightly concave appearance, while the anal fin of females is straight. The problem is that they often carry the anal fin slightly folded, making it difficult to get a good look at the shape. Another method that often works with fish that have translucent bodies is looking for the ovaries in the females. The internal organs are in a silvery sac inside the body. The ovaries are a triangular extension of this sac that is lacking in males. It's more easily seen with light from behind the fish; this can be done by viewing the fish in a catch cup or bowl.

Water conditions are unimportant for maintenance of the adults, as long as extremes are avoided. They are found in several river systems from Sierra Leone in the west to the Ivory Coast in the east. They can take water from fairly soft to fairly hard, with a corresponding tolerance for a wide range of pH, as well. Water should be kept in the low to mid-70s Fahrenheit, as they are found in jungle streams that rarely are exposed to direct sunlight. A dim aquarium with a dark substrate, and some fine-leaved plants brings out their best color.

While I've had fry appear in well-planted maintenance aquariums with adults, there are never very many. For a good-sized spawn, these fish should be conditioned for a week or so prior to setting them up for spawning. Males and females are separated and fed a diet of high-quality live and meaty frozen fish foods. They love newly hatched brine shrimp, small daphnia, grindal worms, small white worms, small black worms and frozen foods like frozen bloodworms, brine shrimp, glass worms and others.

One secret to successfully getting fish to spawn is the use of live foods. These are different insects, worms and crustaceans raised by hobbyists specifically for feeding fish. They are similar to the food animals that the fish encounter in the wild.

Microscopic life, known collectively as "infusoria," is often a required first food for newly hatched fish. Their feeding response may be triggered by a certain movement that can only be made by a certain type of living microscopic animal. Without this visual stimulation in their first food, they will starve. I've discovered that some fish require live foods to spawn successfully in captivity. In my experience, the jelly bean tetra is one of those fish. Many hobbyists who try to condition their fish with dry foods complain about low egg production, infertile eggs and reluctance to spawn. Don't skimp on this step.

Live foods are similar to what the fish feed upon in the wild, and they gorge themselves at the beginning of the rainy season as all kinds of terrestrial insects, worms and other critters are washed into the water. Something in the live food is a necessary part of conditioning these fish for spawning. I've seen recent research that indicates it's possibly some missing enzymes that the fish can only get from eating insects, worms and crustaceans, but I couldn't tell you what it is exactly. I just know that the fish respond positively when conditioned on live foods and that spawning is successful after doing this. Hobbyists and fish breeders going back at least to Chinese goldfish breeders in the 14th century have made note of this in numerous books and articles.

The spawning aquarium should be a 5- to 10-gallon aquarium set up with water-logged peat on the bottom. Add the "peat juice" produced when boiling the peat, too. This helps lower the pH and binds up some of the

carbonate hardness, helping for a better fertilization rate.

I prefer to use the loose, stringy peat, as opposed to the fine-milled peat that can be found in "peat pellets." I cover this with a fine spawning grate made of plastic canvas with a one-eighth-inch or so mesh. This is to keep the parents from reaching the eggs.

Add a clump or two of clean (no hydra, no snails) Java moss (*Vesicularia dubyana*). Set up the aquarium where it will be exposed to indirect daylight, because the first rays of daylight stimulate the fish to spawn.

The adults must be drip-acclimated to the spawning aquarium, as the water conditions will probably be pretty different from what they are used to. This is a further stimulant.

Set them up with the female going into the spawning aquarium first, followed by the male just before the lights go out. If they are properly conditioned, they will spawn at first light, and usually are done before you wake up. Remove them as soon as they are done spawning. You can remove the egg grate, too.

It will be difficult to see the eggs because of the peat, but you might be able to see a few. The best indicator of a successful spawn is that the female is noticeably thinner, and both fish will be hanging in the water, breathing heavily and seeming to be trying to catch their breath. As soon as they do, they start hunting for food-and eggs are excellent food, so remove the adults right away.

Fry will hatch in about 24 to 36 hours, depending on temperature. They will hang from just about any surface in the aquarium for several days and can often be seen as tiny, almost splinters of glass attached to the sides of the aquarium. About day five, they'll attempt to swim, and by day six, all will be swimming. Now it's time to start feeding. The fry are very tiny and do best with infusoria as a first food for at least two weeks. At the end of the two-week period, start adding newly hatched brine shrimp. When all fry are taking the brine (as evidenced by their bright orange bellies), you can discontinue the infusoria. Once they're on baby brine, you're on your way. I avoid water changes for the first month, then only do small water changes with "aged" water from another aquarium.

After about two months, they're past the danger period, and you can start doing regular water changes with your local water.

I've had no luck with anything but infusoria for feeding the fry. Perhaps that is why they are not raised commercially. Another reason could be that a good spawn is only about 40 to 50 fry. You'd need a lot of pairs to make raising them profitable. Give these little fish a try — if you work at it, you can get them to spawn.