Emerald Dwarf Rasbora (Microrasbora erythromicron)

The emerald dwarf rasbora Microrasbora erythromicron is a tiny fish.

By Mike Hellweg

Although Microrasbora erythromicron is currently classified as a rasbora, it is more closely related to danios, and its classification may end up changing.
Photo by Gary Lange.The emerald dwarf rasbora (Microrasbora erythromicron) is a tiny fish. Barely an inch long when full-grown, it might go unnoticed in a dealer's tank. Although it is placed in the genus Microrasbora, that will likely change soon because it has been discovered that they are actually more closely related to danios than to rasboras. Though the species was described in 1918, it took another 60 or so years to make it into the tanks of hobbyists. Even today, it is not a common fish.

Its beauty and interesting behavior make it a fish to look for and work with once you get lucky enough to find it. It is a pinkish-orange fish with up to 15 emerald green bars along its side. There is a black spot at the base of the caudal fin. Males have reddish-orange in their fins, while females have clear fins and are a bit less colorful. It has a high body that gives it a stocky appearance. In happy, well-cared-for fish, the emerald green looks like it is glowing and is set off by the bright fins. The males spar and dance for one another, and the sight of a healthy group in a well-planted tank is not something you'll soon forget.

The dwarf emerald rasbora comes to us from the nation of Myanmar, once known as Burma. It is found in Lake Inle (often spelled "Inlay"), which is situated in western Shan State, the easternmost state in the nation, not far from the Chinese border. Lake Inle is known for the native lake-dwelling people known as the Inthas. Instead of using oars, they sit perched on the back of their dugout canoes and power the paddle with a strong kick of their foot. Lake Inle is a modest-sized lake about 14 miles long and 6 miles wide at its widest point. At about 3,000 feet, it can be considered a mountain lake. The water is unpolluted even today and is a popular tourist spot.

Providing M. erythromicron with a suitable habitat is fairly straightforward. A 10-gallon tank would be perfect for a small school of about a dozen fish. You might be tempted to add other small fish, but try to avoid this. These little guys will do very well by themselves, and they might even spawn in this tank. With other fish, you will probably never see a spawning, or if they do spawn, you'll never see the fry.

Water parameters are important. Because they are referred to as rasboras, the first thing that might come to mind is that they need soft, acid water. This is why most folks don't succeed with them. That is the exact opposite of what they actually need. They do best at a moderately high pH of 7.2 to 7.4, with moderately hard water (150 ppm to 300 ppm total hardness).You might need to add some dolomite or crushed coral to the gravel to maintain these water parameters. In addition, they prefer water that is on the cooler side; 72 to 74 degrees Fahrenheit is perfect. In the average home, no heater is required, as room temperature is just fine. Because Lake Inle is so clean and pure, it follows that they need frequent water changes to keep organic pollutants to a minimum. A buildup of nitrogenous waste will quickly cause them to deteriorate, and if not corrected quickly, the fish will die. They appreciate a heavily planted tank, and they will actually spend more time in the open if they know they have plenty of places to hide, if needed.

For food, you can use newly hatched brine shrimp, Grindal worms, or other small live foods. They love mosquito larvae, but with the advent of the West Nile virus in mosquitoes, it has become a questionable food source: Some claim that West Nile virus can be found in mosquito larvae, too. There is no need to risk contracting the virus yourself. These fish will take some prepared foods, but they should be small and moving. I've found they like freeze-dried bloodworms, freeze-dried and frozen Cyclops, and tiny pellet foods.

Provided with the above water conditions, they will spawn freely in the maintenance tank. They are continuous spawners that lay several eggs each day. They also enjoy munching on their eggs and fry, though in a well-planted tank a few will be missed and grow large enough that they'll be safe. It seems that once the fry are past the "it fits in my mouth so it must be food" stage, the adults ignore them. Setting up a separate spawning tank would be a better idea if you want to raise more than just the occasional baby.

You can use a 5-gallon tank for a couple of mature, well-conditioned pairs. To ensure that they are well-conditioned, separate the sexes for a week or so, and feed them heavily on live foods. To ensure they are mature, they should be

nearly one inch long and the males should have good, intense coloration. Females should be plump. I generally remove all of one sex from the tank to another tank, condition them and set up the breeding tank. Make sure you match water parameters in the breeding and conditioning tanks, so the fish aren't stressed when you move them. Add the females first, and then add the males right before the lights go off for the evening. Situating the spawning tank so that it receives indirect morning light might help trigger spawning.

Add a few mops made of acrylic yarn or a clump of Java moss lying on the bottom of the tank, and check these for eggs each day. The eggs are clear and about 1 millimeter in size. Move the mops or moss to another tank, and replace them. You can do this every day for about a week, after which you should move the adults back to the main tank. Add a slowly bubbling airstone to the hatching tank, but avoid a filter for at least the first couple of weeks.

The fry will hatch in three days at a temperature of 72 degrees Fahrenheit. You will see them as tiny slivers lying on the bottom. Don't get impatient and start feeding them too soon. About five days after hatching, you'll see some of them darting up into the water column and slowly spiraling back down to rest on the bottom. This is not the time to start feeding. Wait until they are actually up and swimming.

Add a clump of clean Java moss to the fry tank. That simply means Java moss with no hydra or other nasty critters that will eat the fry at worst and compete for food with them at best. The Java moss helps purify the water, and provides cover and a vast surface full of microfauna for the fry to graze upon all day. Additional feeding is necessary. You can usually start them out with infusoria. Add this to the tank daily. You can tell the fry are eating because they will have bulging bellies.

Instead of infusoria, you can also use prepared fry foods, such as some available Cyclops and powdered or liquid commercial fry foods. With commercial foods, it is a good idea to mix several together, then feed them to the fry three or four times a day. If you feed artificial foods, add a couple of snails to the tank to help clean uneaten food, or it will pollute the tank and kill the fry. Do small daily water changes, using airline tubing to siphon the bottom of the tank. Make sure the new water is exactly the same as the tank water in pH, carbonate hardness and temperature. The easiest way to do this is to use water from the adult tank to perform water changes on the fry tank.

After about a week of infusoria or commercial fry foods, start adding live, newly hatched brine shrimp. Use freshly hatched brine shrimp because they are smaller and more nutritious. Once you see that all of the babies are eating baby brine (usually after seven or eight days), you can stop the infusoria. You can also add microworms to the diet. They ignore vinegar eels because the young fish spend most of their time in the bottom third of the tank, and vinegar eels stay near the surface. Continue to do small water changes daily. Once they reach about three-eighths of an inch (about three weeks post-hatch), you can add a mature sponge filter to the tank. At about 1 month to 6 weeks, you can move them to a larger tank. I do this by slowly pouring them into a 10-gallon tank and adding more water over the next few days, not all at once.

If you've reached this point, congratulations. You've just had another successful Adventure in Fish Breeding.