

The Purple Sulphur Limia:

Poecilia (Limia) sulphurophila

by JOSEPH FERDENZI

Whether you call it a *Poecilia* or a *Limia*, this livebearer is a very pretty fish, and pretty endangered, most likely. Its species designation, *sulphurophila*, is derived from the fact that it is native to warm, sulphur springs on the island of Hispaniola (sulphur + phila, which is Greek for "love," hence, "lover of sulphur"). This fish is relatively new to science, having been described as recently as 1980. Despite its very descriptive name, rest assured that no sulfur need be added to its water. In fact, this is a fish that makes no special demands.

Stock

I received my initial stock of these fish from Ted Colletti. Ted is known to many of us in the tri-state area as an expert in livebearers. He writes a monthly column on livebearers for Tropical Fish Hobbyist magazine, and is very active in the American Livebearer Association. In addition, he is also a long-time member of the North Jersey Aquarium Society, and a frequent guest at Greater City events. Ted received his stock from another well-known livebearer aficionado, Dominick Isla. Dominick apparently collected these fish on one of his Caribbean expeditions.

I have been maintaining these fish for about five years. I have not introduced stock from any other source. Hence, the stock is as pure today as when I received it. I have noted no problems from inbreeding. I believe that my stock originally came from La Zufrada Springs in the Dominican Republic. These springs are near Lake Enriquillo.

Description

Sulphurophila is a small fish. Males grow to about one and one half inches. Females are larger, about two inches in length. Males show a silvery/grey body with a purple/blue metallic sheen, especially when viewed with the light source in front of them. The males also sport a dorsal fin with a black spot at the base that is surrounded by some yellow. Females are similar in coloration,

but, of course, do not have the modified anal fin known as a gonopodium. The body shape of this fish is somewhat reminiscent of a *variatus* platy (*Xiphophorus variatus*), and they are very similar in appearance to another Hispaniola *Limia*, *perugiae*.

Behavior

These fish are active swimmers. They occupy all strata of the aquarium. I would describe them as peaceful fish, although males will sometimes chase each other away. But, there are no ripped fins or other injuries. I would assume that they would be fine in a community tank. While I have not kept them with other fish, I cannot imagine that they would not peacefully coexist with other fish of similar size.

Maintenance

These fish have been housed in a ten gallon tank. This has proven to be adequate for a group of eight adults and offspring. The tank is filtered with two small box filters. Each contains a two inch layer of crushed coral gravel. This helps to buffer the water and keep it alkaline. The current pH is about 7.2. Temperature is maintained at 75° - 78° F.

A partial water change regimen is required. Nothing is added to the new water, other than a chlorine/chloramine remover. The tank has a one inch level of normal aquarium gravel. It is heavily planted. In my case, the plant is Java



The Dominican Republic

Moss. It covers the entire bottom of the tank, up to about three inches from the surface. A 15 watt fluorescent bulb illuminates the tank for about 14 hours a day (it is set on a timer).

As for food, these fish are decidedly not fussy. They eat all the standard aquarium fare. A *sulphurophila* that does not eat is definitely ill. Speaking of which, I have had no disease issues with them.

Breeding

As these are livebearers, they reproduce by having the male inseminate the female in the usual way. I have not used breeding traps or isolated the female. Therefore, I cannot reliably say how many offspring are produced in an average birthing. I have, rather, densely planted their tank so that fry can escape predation, and have something to nibble. The parents do not seem especially bent on eating their fry. However, most adult fish will present some risk to newborn fry. It is, therefore, prudent to provide hiding places for the babies. A dense thicket of Java Moss does the job wonderfully. But, other bushy plants would probably work as well.

Scientific Name: *Limia sulphurophila*
Habitat: Zufrada Springs (Dominican Republic)
Size: Males 1.5" Females 2"
Water parameters: slightly alkaline (pH 7.2)
Temperature range: 75° - 78° F
Reproduction: Livebearer
Nutrition: Omnivorous
Disposition: Peaceful,
 Occupy all strata of the aquarium

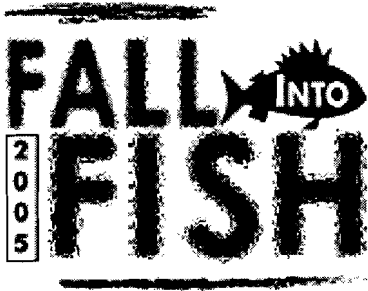
On occasion, I will remove some of the fry to a 15 gallon grow-out tank. Here, not only will they be safe from predation, but they will also not be out-competed for food by the adults. Increased access to nutrition should result in healthier fish and faster growth.

The Future

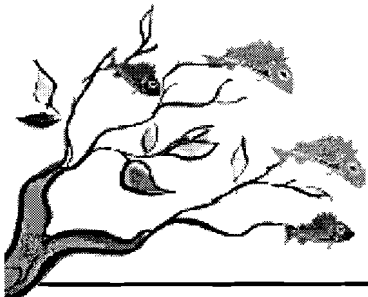
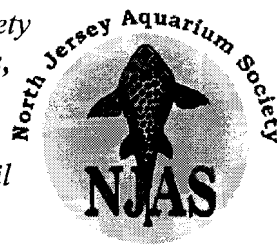
The prospects for survival of this fish in the wild are very uncertain. Freshwater is a precious commodity all over the world, but especially in developing nations where people are

very dependent on local agriculture. Such is the case in *sulphurophila*'s native area. Even the pumping of groundwater from miles away could effect the natural springs in which these fish are found.

Of course, aquarium husbandry of these fish is no guarantee that this species will survive. Nevertheless, it holds the potential for thwarting extinction. As such, I encourage maintenance and breeding of fish like the *sulphurophila*. Certainly, in the case of this species, devoting a modest ten gallon tank to its care is well within the means of most aquarists. Give it a try.



The North Jersey Aquarium Society will be having a 30-class, All-Species show, sanctioned by the American Cichlid Association (ACA) and the Northeast Council of Aquarium Societies (NEC).



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