## Dermogenys pusillus - The Wrestling Halfbeak Livebearer

## By Earl Blewett

This interesting little fish has been known to the aquarium hobby for a long time and by several names (Innes, 1966). It gets it name as a halfbeak due to the elongate lower jaw structure while the propensity for males to lock jaws and fight leads to the "Wrestling" nickname (Axelrod and Shaw, 1967).



Two of my males, showing off for the females

This fish has quite a few common names, including Sumatran Halfbeak, Malayan Halfbeak, and as we shall see below, Celebes Halfbeak (Dawes, 1995; Wischnath, 1993). It is found over a wide region of southeast Asia and has been introduced elsewhere, due to its popularity as a fighting fish (Alelrod and Shaw, 1967; Wischnath, 1993). They really do wrestle. On several occastions, I have found the two males, locked together, careening around the aquarium.

I talked a local fish store into ordering some halfbeaks on their next shipment. Their wholesalers' Fish List had Celebes Halfbeak Livebearer on it for \$12. I figured it wasn't likely the true Celebes Halfbeak, *Nomorhamphus celebensis* but would likely be *Nomorhampus liemi*. This would be fine, *N. liemi* is more colourful anyway. When the fish manager handed me a bag of small grey fish, he said they would be willing to come down to \$10 each. They were about 3" long and had a tiny bit or red or orange colour in the fins, not at all what I though would be coming.

They weren't what I expected but I took them home. They settled into a 25 gallon community tank fairly well. Don't believe what the older aquarium books say about them being tricky eater, they take flake food readily. I fed them daily with vestigal-winged fruitflies, *Drosophila melanogaster*, which they loved. They would eat worms from tweezers and soon became very tame and personable fish. Watching a halfbeak swimming midlevel in the tank, trying to close its tiny upper jaw over 3 - 4 fruitflies that are trying to escape is very funny. They can be a bit piggish. The fruitflies probably supply the necessary nutrients that some authors say are necessary, Vitamin D3 for instance.

I spent quite a bit of time studying the halfbeak photo's in various publications, the *Aqualog All Livebearers and Halfbeaks* was the most useful, and finally convinced myself they are indeed *Dermogenys pusillus* (Kempkes and Schafer,1998).

These are supposed to be brackish water fish and I kept them in a tank with1 teaspoon of salt per gallon, which is my standard water. They are in hard water, pH 7 – 7.5 at a temperature of 75 °F. The tank has floating hornwort and frogbit and crypts and dwarf sag on the bottom. There is a lot of open water for my *I. werneri* to swim around in. This is a community tank with *Heterandria formosa*, Amano Shrimp, Bumblebee Gobies and *Zoogoneticus tequila*. I have had no trouble with aggression from the halfbeaks towards other fish.



The boys going at it again

Initially, distinguishing the male and female was only possible by the male mating organ, a fusion of the anal fish called an andropodium (Wischnath, 1993). Older authors, such as Axelrod may call it a gonopodium but that is technically incorrect. As these young fish matured, the female became slightly longer and much more stocky. The males remained slim. Both male and female fish acquired more blue-grey body colour and red in the fins as they matured.

Males continually courted the females, following them much of the time. Some authorities say they can't store sperm and need to mate for each pregnancy (Alexrod and Shaw, 1967) while others say the opposite (Brembach, 1985) The gestation period between births for my females was 7 - 8 weeks. The first birth occurred when I was out of town. I returned to a thin female and absolutely no fry. These fish are in a community tank



A somewhat pregnant female. They get almost sausage-like near the end of gestation.



Here is a slim male, viewed from above.

with killifish and bumblebee gobies, so fry don't do well. The next week, I observed gobies chasing the other female around the tank. She was giving birth. I rescued one fry and transferred it and her to a prepared birthing tank of 2.5 gallons. The female had 10 more fry, of which 2 were stillborn and 1 had a swim bladder disorder (bellycrawler). She didn't bother the fry and after a day I returned her to the community tank. The halfbeak fry are copies of their parents and able to take fine powder food and baby brine shrimp immediately. They have the same mannerisms as adults and also stick closely to the surface. They could be scared easily but the only fish

that dislocated its lower jaw did it fighting with its own reflection. Contrary to some publications, dislocating the jaw is not fatal. The fry grow moderately quickly and take a wide variety of foods.

These are lively personable fish and I plan on keeping a colony of them going in my planted community tank.

## References:

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- 4. Innes, William T. (1966) *Exotic Aquarium Fishes*, 19<sup>th</sup> Edition. Metaframe Corporation. Maywood, NW.
- 5. Kempkes, Michael & Schafer, F. (1998) All Livebearers and Halfbeaks. Aqualog Verlag A.C.S. Gmbh, Germany.
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