

*Xiphophorus hellerii*, Doce Millas



Female



Male

Strain code: Doce

Phenotypes scored: Sword color, orange (or) and green (gr); rubra litoralis (RI).

Introduction:

This new strain of *X. hellerii* was collected from a small stream named Doce Millas, Rio Junapan drainage, Oaxaca, Mexico. Males express sword coloration as either orange (or) or green (gr). Some males also express an additional red line above the mid-lateral line, which can become much enhanced in older, dominant males. This coloration has been termed rubra litoralis (RI) and appears to be linked to the green sword color. Preliminary data also indicates that the orange sword color shows complete dominance over the green sword color. Sex determination and pigment inheritance is still being studied in this strain and is yet to be conclusively determined.

Sex determination / sexing:

These swordtails are sexed at 3 to 4 months of age, and can reach full sexual maturity at about 6 months of age.

Scoring:

Sword color of fully mature males should be scored with a dissecting microscope on a black background. The orange sword colors appears to exhibit complete dominance, so you will see either an orange or a green sword in males. RI is scored by observing the fish in an observation dish with the naked eye and this pattern appears as a second orange to red stripe above the mid-lateral line.

Maintenance:

Matings are set up to ensure perpetuation of the three color patterns found in this strain. Two matings are required for each coloration, resulting in a total of six matings for each generation. Females resulting from pedigrees fathered by a male with a green sword (i.e. green line) are used in all of the matings. The three mating types, set up in duplicate, will look as follows;

green line female (x) green male

green line female (x) green male with rubra litoralis

green line female (x) orange male.

Females produced from the green with rubra litoralis and orange matings are generally discarded and not required for stock maintenance.

Stock source:

Dr. Klaus Kallman, Dr. Steven Kazianis and Anthony Pedroza, collected in Oaxaca, 3/23/01.