

X. maculatus, JpYIr



Male

Strain code: JpYIr

Phenotypes scored: Pigment patterns: Eye color, iris red (Ir); spotted dorsal (Sd), dorsal red (Dr), shoulder spot (ss) and dot (D).

Introduction:

This stock has been maintained as a stock separate from the other *X. maculatus* since it originated from a Belize platyfish stock. The Y-chromosome carries a gene for red iris color (Ir) which is closely associated with P-3 P-allele, resulting in intermediate maturation rates in this stock. This stock also exhibits dot (D), shoulder spot (ss), spotted dorsal (Sd) and dorsal red (Dr), all characters derived from *X. maculatus* Jp163A.

Sex determination / sexing:

The chromosomal sex determination in JpYIr is XX / XY. The fish are sexed at 1.5 to 2 months of age and males mature at about three to four months of age.

Scoring:

Fish in this stock are scored for the traits Sd, Dr, Ir, D, and ss. Since the gene for Ir is Y-linked, females do not inherit these traits and are scored and subsequently discarded. Expression of Sd and ss may vary in males.

Maintenance:

This stock is maintained by breeding JpYIr males with the genotype $X^{SdDr} Y^{Ir} ss$ D to Jp163A females. The Jp163A females have the genotype $X^{SdDr} X^{SdDr} ss$ D. The mating scheme for maintaining this stock is:

$$\begin{array}{ccc} X^{SdDr} X^{SdDr} ss D & (x) & X^{SdDr} Y^{Ir} ss D \\ Jp163A & & JpYIr \end{array}$$

At least 2 matings are set up each generation to ensure production of one new pedigree in that generation. All male progeny should possess X^{SdDr} and Y^{Ir} and be used in matings to produce the successive generation.

Stock source:

Established 10/2/00 at the XGSC.