

X. maculatus, JpYBr



Male

Strain code: JpYBr

Phenotypes scored: Pigment patterns: body color, body-red (Br); 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 body color (Br) which is closely associated with P-4 P-allele, resulting in late 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 JpYBr is XX / XY. The fish are sexed at two to three months of age and males mature at about five to six months of age.

Scoring:

Fish in this stock are scored for the traits Sd, Dr, Br, D, and ss. Since the gene for Br is Y-linked, females do not inherit these traits and are scored and subsequently discarded. Expression of Sd and ss may vary in males. An occasional female expressing Br has been noted and it is possible that these are XY females. These females are also scored and discarded.

Maintenance:

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

$$X^{SdDr} X^{SdDr} ss D (x) X^{SdDr} Y^{Br} ss D$$

Jp163A

JpYBr

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^{Br} and be used in matings to produce the successive generation.

Stock source:

Established 10/2/00 at the XGSC.