

Xiphophorus couchianus



Female



Male

Strain Code: Xc

Phenotypes scored: None

Introduction:

Representatives of *X. couchianus* maintained in the Stock Center were collected in 1961, from Huasteca Canyon, Nuevo Leon, Mexico (Kallman, 1975). As of 1975, this stock had been maintained by inbreeding for 22 generations. This species is extinct in its natural habitat. Currently, the *X. couchianus* stock is in the 71st generation of inbreeding. Many generations of inbreeding have produced individuals homozygous at most, if not all, loci.

Sex determination / sexing:

Sex determination is XX / XY. *X. couchianus* fish are sexed at 1.5 months of age and reach sexual maturity at about 4 months of age.

Maintenance:

As *X. couchianus* is used as a parent in a number of hybrid crosses involving cancer research, production of sufficient numbers of offspring is a continual goal, for both line-maintenance and research investigations. Therefore, a minimum of six crosses, between males and females originating from different matings (i.e., pedigrees) are set up each generation. Currently, reciprocal crosses are set up between males and females within the same generation, but from different pedigrees (e.g., B and C). The new pedigree is designated by generation-number and assigned a letter (A, B, or C), according to which mating produced offspring first. For example the first mating to produce offspring in the 67th generation would be generating pedigree # Xc67(A), the second would have pedigree # Xc67(B) and so on.

Stock source:

The Stock Center received one shipment of *X. couchianus* from Dr. Kallman in 1992. This shipment contained 9 males and 8 females from the 48th generation of inbreeding. A second shipment of six females was received in October, 1993; these females were from the 51st inbred generation.