

Xiphophorus xiphidium, Peduncular Spot



Female (+)



Male (Ps ct)

Stock code: Ps

Phenotypes scored: Tail patterns: peduncular spot (Ps), cut crescent (ct), and wild type (+).

Introduction:

Progenitors of this stock were collected from a small stream at Santa Engracia, Tamaulipas, Mexico. This site is geographically isolated from San Carlos, the locality of *X. xiphidium* Sc. This locale is also a short distance from Rio Purificacion, a river inhabited by other populations of *X. xiphidium*. The *X. xiphidium* Ps stock is so named in reference to an allele present in this stock that encodes the tail spot pattern, peduncular spot (Ps).

Sexing:

X. xiphidium Ps fish are sexed at 2 months of age and rechecked a month later.

Scoring:

These fish can be scored for the three different tail patterns as soon as they reach sexual maturity (4 to 5 months old). As the fish age, the tail pattern may spread, and Ps can mask 'ct' or '+' phenotypes. Three-dimensional growth can be associated with this pattern, and should be noted.

Maintenance:

The mating scheme for this stock requires two generations to complete and requires fish from the *X. xiphidium* Sc strain. This scheme ensures that all of the tail spot patterns will be maintained. A heterozygous Ps fish (Ps +) is mated with a *Xiphidium* Sc fish, known to be homozygous for cut crescent (ct ct). This mating produces both male and female offspring that are Ps ct and ct+. The first generation offspring are then inbred to produce the second generation, i.e., a Ps ct fish is crossed to a ct + fish. This mating produces both males and females that are Ps +, Ps ct, ct +, and ct ct. All fish, except the Ps+ fish, are discarded, and the entire process is repeated. The mating scheme is listed below:

1st generation parentals:	Ps stock (Ps+)	x	Sc stock (ct ct)	(P1)
F1 phenotypes/genotypes:	Ps ct	,	ct +	(F1)
2nd generation parentals:	Ps ct	x	ct +	(P2)
F2 phenotypes/genotypes:	Ps +, Ps ct,	ct +,	ct ct	(F2).

Stock source:

Prof. Klaus Kallman, the New York Aquarium, 6/24/93.