



## Yucatan or Lyretail Molly ( *Poecilia velifera* )

Order: Cyprinodontiformes - Family: Poeciliidae



**Also known as:** Some names of the Yucatan molly - such as Segelkärppling or the specific name *velifera* - contain an element signifying "sail", aggravating the confusion with the sailfin molly. The French terms are used for both species indiscriminately, as is the Japanese name (which is simply the Japanese form of "sailfin molly").

**Type:** Freshwater / Brackish water/ Marine Environment - Livebearer

**Overview:** Another popular molly in the hobby, and another that has been selectively bred to produce several different varieties, such as albino, black, red etc. Some of these are the result of cross breeding with *P. latipinna*.

**Origin:** Endemic to southeastern Mexico but has been introduced into several other countries, including Colombia, Israel, Singapore and Taiwan.

**Description:** *Poecilia velifera*, the Yucatan molly, lives in coastal waters of the Yucatan peninsula. These live-bearing (Poeciliidae) fish are particularly well known for both the extreme size variation among males, and the sexual dimorphism between males and females in both body shape and behavior. It is outwardly similar to the Sailfin molly, *P. latipinna*, though larger overall and with a higher and longer dorsal fin in males. Full-grown fish are usually larger than 10 cm (4 in), though especially captive-bred individuals grow only to the size of Sailfin mollies. The dorsal fins are the most distinctive character for telling the species apart: Those of the Yucatan molly have nearly 20 fin rays, counting where the fin meets the back, whereas the Sailfin molly has less than 15 (intermediate numbers may indicate hybrids). If the males spread their dorsal fins in display, these have a distinct fan or trapezoid shape, with the upper edge being distinctly longer than the lower. The height of the dorsal fin, measured at the posterior edge, is a bit larger than the height of the tail. There also exists a (in our opinion) grotesque 'balloon' variety of this fish in which the body is malformed and rounded, giving a balloon-like appearance. This condition can cause swimbladder and digestive problems and may bring about premature death. It is difficult to distinguish young fish from *P. latipinna* and the only reliable method is to count the dorsal fin rays. *P. velifera* has 18-19, while *P. latipinna* has only 14. This species is more difficult to maintain than others in the genus, and water quality must be maintained rigorously, particularly if the males are to develop their stunning dorsal finnage to its fullest extent.

**Physical Characteristics:** Male *P. velifera* mollies of this population have gray-lavender to gray-green bodies with many parallel dotted horizontal lines. Often, the head and front of the body are orange. The caudal (tail) is orange in the center and sky blue or turquoise above and below with a black stripe on the lower margin. The dorsal is immense and has rows of black bars and an orange border. Females have gray-green bodies with many parallel dotted horizontal lines. The top photo is a young male about five months old. As he matures, his body will deepen and his dorsal will enlarge. The bottom photo is of a female who is about four months old. Females don't have the large dorsal fin that is sported by the males and lack most of the brighter colors of the male. This female, as is typical of this population, has rows of orange spots on her white belly. She also has typical rows of black spotting on her dorsal fin and fainter rows of black spots along her sides.

**Size:** Male 6" (15cm). Female 7" (17.5cm).

**Sexual dimorphism:** The male is slightly smaller and possesses both a gonopodium and a large, long sail-like dorsal fin.

**Lifespan:** This fish lives to be about three years of age.

**Behavior:** The adults are not significant fry eaters, so the fry can be reared with the adults. The fry will, however, usually grow faster if removed from the adults. The male uses its immense dorsal fin during courtship.

**Diet:** Omnivorous by nature, feeding on a variety of zoobenthos and detritus in the wild. Most foods will be accepted whether live, frozen or dried. However some vegetable matter should be provided in the diet, such as blanched spinach, cucumber or vegetable flake. Feeding is simple with the fish taking prepared foods as well as live and frozen foods. Periodic feedings of Daphnia or other live foods are helpful in color maintenance, general health and breeding. This species also requires vegetable material in its diet that can be supplied by feeding a commercial food or by providing algae, lettuce, cucumbers or fine leaved aquatic plants (Lemna, duckweed, is a good food).

**Breeding:** Relatively difficult compared to some livebearers. It is recommended to maintain this species in trios of 2 females to a single male as males can be quite vigorous in their pursuit of mates. Reproduces in the usual livebearer fashion. Gestation can take between 4-8 weeks, with up to 200 young being produced. 20-60 is more common however. These are relatively large and will accept brine shrimp nauplii, microworm or powdered flake from birth. The breeding tank should be heavily planted if the fry are to survive predation by the parents and other fish. The best method is to remove gravid females to a separate tank until they give birth. Interestingly wild-type fish are much less likely to eat their offspring than the domestic forms. They are bred like other mollies; in line with their general requirements, this is somewhat more difficult than in related species. It is especially hard to get males to grow their spectacular fins. Professional breeders often separate males and females in winter, so that they are eager to breed in spring. Young can then, climate permitting, grow in spacious outdoor basins during summer. Like other Poecilia, they are prone to hybridization with their relatives. Not infrequently, crosses are attempted with the Sailfin molly to breed a hardier fish. This is generally not very successful, and should not be attempted, as purebred Yucatan mollies are often quite hard to find, and hybrids will not have as massive dorsal fins as these. Several color variants are also available; these usually do not attain the large size of wild-type fish and may have been crossbred with *P. latipinna*.

**Aquarium Setup:** Especially small strains are suitable for keeping in an aquarium. However, this fish is not as easy to keep as the Sailfin molly, let alone the *P. sphenops* (black molly). Ideally a heavily-planted setup with some floating cover and areas of open water. The aquarium should be as large as possible as in small aquariums the development of the males' dorsal may be impaired. This may also occur in overcrowded conditions so stock the tank sensibly. They need spacious tanks with well-aerated, slightly brackish water to thrive. Direct sunlight and an ample supply of plant food, such as lettuce, peas, or certain algae, are necessary for optimal health; in subtropical areas, they can be kept outside in unheated tanks in the summer; in temperate zones, backup heating may be necessary. This strain of molly can also be kept in saltwater reef tanks, and provide clean-up duties for the tank. To transition a molly to saltwater, adjustment time is needed; increase the salt content to match the reef tank over a period of three hours.

**Minimum Tank Size:** 36" x 15" x 12"

**Water Conditions:** They are able to withstand higher temperatures than most pet fish. Although they can survive over 30°C for prolonged periods of time if other conditions are good, temperatures should be kept between 25 and 30°C. It is absolutely essential that the water is hard and alkaline, although brackish conditions are equally favourable. This species can even be acclimatized to full marine conditions without too much trouble.

- **Temperature:** 72-82°F (22-28°C)
- **pH:** 7.0-8.5
- **Hardness:** 15-35 dH

**Swimming Level:** Harem, a male and female 4 or 5

**Compatibility / Temperament:** A peaceful fish in a community aquarium but should only be kept with other species that can tolerate hard water. Good choices include other livebearers such as swordtails or platies (not other mollies as they may crossbreed), some Gouramis and hardy corydoras or Loricarids. Some barbs and tetras are also suitable. Can also be kept in a brackish setup with Chromides, gobies etc.

