

## **The Variatus Platy from the Rio Panuco System**

by J.H.Preston (1963)

Since its introduction to the aquarium world in the early 1930's the Variatus Platy has increased steadily in popularity, and today it ranks among our most widely kept livebearers. It is a native of Mexico and is found chiefly in the Rio Panuco and its tributaries. This is further north than its closely related neighbour, the common maculatus platy. All platies are only found in rivers that flow into the Atlantic Ocean; they are absent from the stream on the western side of the country which empty in to the Pacific Ocean. The generic name of the platies was changed several years ago from *Platypoecilus* to *Xiphophorus* because in the light of modern knowledge it was considered that there was no longer justification for including swordtails and platies in separate genera. So the scientific name of the variatus is now *Xiphophorus variatus*.

From an aquarists point of view, the variatus is in many ways an ideal fish. It is a livebearer, one of the most popular groups of aquarium fishes. It is hardy, peaceful, colourful and its maximum size of 2 to 3 inches is just right for most community collections. The Variatus is not unduly fussy about water conditions or temperature, although it should not be kept for long periods at over 80 degrees F. At the other end of the scale, it has been reported that the species can stand a temperature as low as 50 degrees. Of course it would be unwise to suddenly subject your fish to these low ranges if they had been maintained and bred for some generations at a constant steady 78 to 80 degrees, say. Feeding the adult variatus presents no problems as nearly all foods are readily taken.

A certain amount of vegetable matter should be included in the diet, however. Bemax provided it is not fed more than three times weekly is excellent. It is surprising how many items from the kitchen may be utilised as fish food, for example, raw meat scrapings, peas, and tiny pieces of scrambled eggs or boiled fish. I feed tubifex worms to my variatus once weekly and have never yet observed any ill effects; I take care however that the worms are clean and fresh.

The young platy variatus are a dull muddy brown colour, and it is unfortunate that the adult colours develop very slowly and in some specimens the colours never become spectacular. Most females remain on the dull side although some may develop a yellow dorsal and red caudal fins. Some of the tank raised strains have females with a fair amount of body colour too. Male colouration varies greatly, but in the original wild imported stock there was a tendency to two distinct types – the yellows and the blues. The yellows normally had a bright canary yellow dorsal and a red tail, the basic body colour was yellow. The blues had a distinct blue sheen on the body and both dorsal and caudal fins were yellow. Fish approximating to both these types are common today and there are endless intermediate variations. The body is overlaid with yellow, blue, green, red, or mauve markings, the more the better. Inexperienced fishkeepers are baffled by what appears to be a "gravid spot" in the male. Many males do show a dark blue-green patch in the region of the gravid spot, and practically all females exhibit a gravid spot typical of livebearer whether they are carrying young or not. In pregnant females the spot enlarges when birth is imminent. The correct way to sex these fish is by the anal fin, which in the female is rounded and fan shaped, and in the male forms the spike-like gonopodium.

In addition to the basic colours there are several markings in black which may or may not be present in both sexes. Probably the commonest is the "twin spot" or "split crescent" marking appearing as two large spots, one at the top and one at the bottom of the caudal peduncle. Some fish possess a complete crescent- this may be sex linked as I cannot ever recall seeing it on a male fish. A third common trait is the presence of small black spots on the body, usually in the dorsal area. I

would expect that these markings are inherited as dominant traits in accordance with Mendelian principals; one day I hope to have the opportunity to find out by breeding experiments.

### TO BE CONTINUED

This article by Howard was found in Southend, Leigh & District Aquarist Society Quarterly Magazine for Spring 1963. This copy has just come to hand and is the first one to be edited by Howard

### THE VARIATUS PLATY FROM THE RIO PANUCO SYSTEM

By J.H. Preston (continued from the Spring Issue)

Firstly I must correct a false impression that I gave in the Spring article. Since I wrote that I have watched a brood of crescent marked Variatus growing up, and several have sexed out into males. So the crescent marking is obviously not sex-linked.

My suggested method of breeding Platy variatus is as follows. The fish should be not less than six months old, and one year is better. Females should be virgins. One pair only may be used, but if many youngsters are desired, use one or two males and several females. The breeding fish should of course be in first class condition; they should be left together for three weeks, with of course no fish of a similar type in the same aquarium, and after this period all the females should be gravid. It is best to place each female in a separate container to drop their young, which usually takes place 4 to six weeks after fertilisation. A well planted tank is the best method of saving the babies; provided a careful watch is kept to see when they appear, losses will be small. The female is best removed immediately after the birth, and feeding of the fry commenced. Although fine dry food will be taken, if good growth is desired however, generous amounts of brine shrimp are needed, together with some micro worms and liquid fry food. If daphnia are available so much the better. After seven to ten days, the fry should be taking Grindal worms, and growth should be rapid. A maturity is reached, an adult diet may be gradually substituted. I recommend from the earliest possible date as if this not done, not only will all the fish remain smaller, but there will be every opportunity for brothers and sisters to inbreed at a early age. This is most undesirable and is likely to produce only runts.

*Xiphophorus variatus* will produce hybrids with all other members of the genus, and the results of such matings are somewhat unpredictable. The so-called Black Variatus platy has recently been available in Southend; this looks as though it was produced by crossing the Variatus with the Black Platy. I do not know the origin of the Marigold Platy, but I strongly suspect this is a hybrid, because from my observation broods of Marigolds contain an unusually high proportion of males. Although there are undoubtedly possibilities for further new types to be developed, such work is best left to experts who have plenty of time, patience, and lots of tank space.

This second part of the article was found in the Summer issue of the S.L.A.D.A.S. Magazine.