

## A 'Re-discovered' Mexican Livebearer



Male specimen of the 'pseudo' (*Pseudoxiphophorus bimaculatus*)

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AT Puente Nacional near Rinconada on the road from Jalapa to Veracruz, the Rio Jalcomulco is spanned by an old stone colonial bridge. The torrent of water here cascading down the many miles from the snow-covered Mount Orizaba to the warm waters of the Gulf of Mexico is the home of the common wild green *helleri* swordtail and *sphenops* molly as well as of various cichlids and characins.

Here we found our first specimens of a long-forgotten livebearer; mentioned in a few of the old books and some of the more modern, better reference books, but which seems to have faded from popularity as less-aggressive species have become more and more available. This fish is *Pseudoxiphophorus bimaculatus*, otherwise known as the two-spot livebearer, or false-swordtail livebearer, although we, in Essex, prefer to call them 'pseudos' — it's much less strenuous!

In LIVEBEARING AQUARIUM FISHES by Dr Kurt Jacobs, the nomenclature has been updated, and the fish is described as *Heterandria bimaculatus*, which suggests a close relationship to our little friend the mosquito fish, *Heterandria formosa*. The idea of trying to hybridise the two species is somewhat mind-boggling, however, when one looks at the sheer size of

*bimaculatus*, and the relatively large gonopodium of the male fish!

In our recent travels to Eastern Mexico we confirmed that this species, whilst being very common in the State of Veracruz, has an extremely wide distribution. We have caught them as far North as the Rio Axtla in San Luis Potosi and right down as far as the Rio Tonalo in the southern jungle State of Tabasco; sometimes a mere mile from the sea, as at Puerto Mexico, and then as far upstream in such rivers as the Coatzacoalcos and Papaloapan. There are also different strains from the higher and comparatively cooler regions of the country near the city of Jalapa, for instance, and to our great surprise, another clandestine, splendid colony near the archaeological site of Tula, not far to the north of Mexico City where the winter nights are distinctly chilly, with occasional frosts. Combine your fish collecting with a trip to the Aztec pyramids as we did, and you should have a very interesting day!

No doubt the range of the 'pseudos' extends farther south beyond the Mexico Guatemala border into the adjoining countries of Central America, which is a vast distribution, especially when you compare this with another Mexican livebearing species, the Monterrey platy (*Xiphophorus*



*conchianus*), yet to be imported. Their entire worldly range is a mere 10 miles or so from Santa Catarina to Monterrey!

'Pseudos' are extremely interesting fish. They are quite aggressive (wild specimens, anyway) and, as already mentioned, a bit on the large size, females growing to 3½-4 inches, males growing rather smaller, 2½-3 inches. As regards temperament, it is not ideally suited to a community collection but it would appear as though subsequent generations are losing a certain amount of their vicious streak. Its shape reminds one of the killifish family, *Aplocheilichthys lineatus*, for example, being very thick-set and exhibiting certain 'primitive' characteristics, such as a flattened head peculiar to surface-dwelling species, a very long-base dorsal fin, wide caudal fin attached to a thick caudal peduncle, and a powerful torpedo-shaped body. The gonopodium of the male is extraordinarily long and has a fine hook at the tip so caution must be exercised when catching him, so as to avoid damage. Fish straight from the wild possess great jumping ability but tank-bred specimens seem less likely to leap to their doom; however, you have been warned!

These fish are a basic olive colour, each scale being outlined in black and reflecting a silver spot. As the scientific name suggests, these fish carry two blackish spots, one immediately behind the gill cover, and the other situated upon the upper half of the caudal peduncle. The former spot, however, tends to disappear with age and is more visible simply as a faint mark. All the fins are hyaline apart from the dorsal, which is edged in yellow and has a mosaic in black, giving one the impression of cut glassware, and the anal, which at times reflects a green-blue sheen. There are numerous local colour variations in stocks originating in different areas. The Tula population, for example, are basically gold with a gold spot in addition to the black spot. (Incidentally, these fish have a somewhat smaller dorsal fin than other specimens.)

In the wild, the *bimaculatus* is most often found in clear, fast-flowing rivers, exactly the same habitat as the *helieri* swordtail, which, however, prefers the deeper waters. By contrast, small plant-choked ponds and pools will more likely be inhabited by platys and gambusias. Mollies (*sphenops*) seem equally at home in either environment. Obviously the

'pseudo' requires rather generous quarters but we have kept a single, fully-grown female in a 14in. by 8in. by 8in. tank for 18 months with neither filtration nor aeration, and she remained in excellent condition, producing several broods of healthy fry during that time. This was one of the original batch brought into England in December, 1972 by members of the Southend AS, offspring from these adults being raised in a 24in. by 8in. by 6in. tank in the long, sunny June days in an outside fish house, subjected to wide-ranging temperatures. It was noted on some evenings that, by midnight, tank temperature had fallen to 90°F! But they are also equally comfortable in the sixties (°F), as long as the temperature changes are not too sudden. So, within reason, temperature changes and water conditions aren't too important.

Females become sexually mature at about 5 months old, sometimes later, and in our experience drop an average of only 15-25 youngsters, which are relatively large at birth. Broods of over 100 fry, though, have been recorded from females direct from the wild.

Many aquarists who have kept these fish, including ourselves, have found that only one, two, or possibly three males will sex out in an entire batch.

Obviously the first few weeks in any fish's life are absolutely vital, so a diet of brine shrimp, supplemented with daphnia, followed by chopped tubifex and white-worms should ensure healthy stock to continue breeding from. They will also do well on a diet of small guppies or other fry, this probably being closer to their natural diet in the wild! With their aggressive tendencies and greedy appetites, they might well be described as the poor man's *Belonesox*! With good maintenance, the young fish will reward you with very rapid growth, and a very inquisitive nature similar to that of cichlids.

This species is becoming increasingly popular with aquarists who wish to try their hand at something different, and they have the advantage of deporting well for those who are competitively minded. Show-wise, 'pseudos' scored a number of resounding successes at open shows during 1974, mainly in the south-east of England, and it will be interesting to see if this trend continues. Certainly these fish are becoming more widespread now, thanks to the efforts of a few dedicated breeders.

