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THE PURPLE SPIKE-TAIL PLATY (*Xiphophorus xiphidium*)

by Howard Preston.



Howard on river bank

Way back in about 1960, or it may have been a year or two earlier, an article entitled "The Purple Spike-Tail Platy from Mexico's Rio Soto La Marina System" by Dr. Myron Gordon appeared in the aquatic press.. This described in some detail how Gordon and his assistants first discovered the species in north-east Mexico many years previously: but it also enabled me to locate two populations of the "Purple Platy" on my visit to Mexico in February 1974.

With Christopher Lyon, at that time a member of the Southend Aquarists Society, I had spent the last week of our 3-week "holiday" exploring the areas to the north of Mexico City, and we had already found colonies of such rare livebearers as *Xiphophorus montezumae* and *Gambusia atrora*, and possibly an even more exciting find, *X. pygmaeus*, was to be discovered on the return journey southwards to the capital.

On the hot Wednesday morning of 13th February, we left the Los Arcos Courts motel just north of Ciudad Mante and drove north the fairly easy 135 kilometres to Cd. Victoria. The road was the old Pan-American highway, opened in the 1930's from Mexico City to Laredo, Texas, but traffic is not as heavy as might be expected as the newer faster road from Monterrey through San Luis Potosi takes much of the through traffic. The Tropic of Cancer is crossed up in the mountains to the south of Cd. Victoria, and that city is avoided by means of a modern by-pass.

Just 26 km. north of Cd. Victoria we crossed the Rio Santa Engracia, to which I shall return later. Another 14km. further north we crossed the Rio Purificacion to reach the village of El Barretal (which would therefore be roughly 40 km. north of Cd. Victoria), and this was the river where Gordon had found the fish we were seeking, many years before.

The cover picture has reproduced poorly, but shows me in the largely dried up river bed at El Barretal, and just as Gordon had described, there were a number of small pools where some fishes had been trapped as the river receded as the dry season advanced: these pools can be better imagined than seen in the picture! The bridge in the background carries the Pan-American highway.

The Purple Platies were there all right, and it was not difficult to catch a few, even though we only had ordinary aquarium hand nets. The purple colouration described by Gordon was not particularly evident but some of the males had striking combinations of yellow and steel blue, and the tail "spikes" were particularly well developed. We just took a few small and medium sized fishes, as we found they usually travelled better than the adults. The pools contained other fishes too but mostly they were "sphenops" Mollies which appeared to have small black spots, but the spots were seemingly of parasitic origin and not a colour pattern!

I spent only a short time in the river bed of the Rio Purificacion because I was anxious for the safety of our other fishes in the heat of the car in the midday sun. Later that day we returned southwards and took a side turning which led east off the main road and was signposted "Hacienda Santa Engracia" and the junction was near Km. 26 north of Cd. Victoria: with little doubt this road ran roughly parallel to the Rio Santa Engracia, but we found little of interest except a dusty village near a level crossing of one of the main lines of the Mexican National Railroad. Then, returning towards the main road, I discovered a tiny stream flowing under the road and no doubt running into the main Rio. Just as Gordon had done many years ago, here we found a few Purple Platies, but they were smaller and less brilliant in colour than the El Barretal colony, maybe though because they were only young fishes. I believe that the few surviving xiphidium in this country at the time of writing nearly five years later are descended from this Rio Santa Engracia collection, but I cannot be sure, as the two stocks may well have been mixed.

In the first Journal I described how in 1974, by following more or less the route taken by Dr. Myron Gordon many years previously, I collected two populations of *X. xiphidium*, one from the Rio Purificacion at El Barretal and the other from a tiny stream near the Rio Santa Engracia. As I have just recently re-visited this region, it seems appropriate to add a little more detail. Coming south down the Pan-American Highway in 1979 we reached the Rio Purificacion at El Barretal with only about an hour's daylight left. The narrow main stream had completely changed its course within the wide river bed (probably several times during a 5-year period!), and I had to walk nearly half a mile to find a suitable small isolated pool, in this case only a couple of inches deep and a few feet across where at last I found the fish I wanted. I caught only a few fry (together with some baby Mollies); and at the time of writing, 3 months later, there are 5 survivors, in the possession of Dave Cheswright. It was disappointing not to find more Purple Platies, and I had had to work quite hard to get these!

Cd. Victoria where I stayed that night is a not unpleasant small city. Few motels are still springing up, not cheap, and no doubt catering for the American tourist trade who are after the much larger fish to be caught in the lakes to the north-east! The coffee served at breakfast has certainly improved anyway !

At the height of the dry season, early in April, the Rio San Marcos flowing through the centre of Cd. Victoria was almost completely dry: possibly a few isolated pools within the wide river bed, but it was not very practical to explore for these in the city centre, where access was difficult if not embarrassing ! And there was really no need, for the fish I wanted could be found in several locations just a few miles to the north.

And on the next morning, I had the chance to prove this statement. Returning north up the Pan-American Highway for just about 8 km. (5 miles), I spotted a small stream passing under the road. The exact distance and the name of the village will be found in my missing notes, however, it can be identified because it is about 100 metres south of an "Inspeccion Fiscal" (which seems to be an obligatory stop for truck drivers). Here, after quite a long search, I captured 5 or 6 *X.xiphidium*, young and adult, but the story does not have a happy ending for most died within the next few days, some succumbing to gill parasites. The last one, back home in May this year, was developing into quite a nice male but died rather suddenly.

It may be concluded that *Xiphophorus xiphidium* is not a particularly rare species in the region around and to the north of Cd. Victoria in the State of Tamaulipas, but it may present problems for the aquarist !

In the first two articles I described in some detail how and where I found this species in a number of locations near the city of Cd. Victoria in north-east Mexico, by exploring the same area where Dr. Myron Gordon had discovered the fish many years earlier.

With my primitive equipment and organisation, I was of course only able to bring a handful of live specimens home both in 1974 and again in 1979. A few others have reached us in the past year or so from D.G.L.Z. members, This species does not always respond well to normal aquarium care and therefore will, in my opinion, always remain quite a rare fish.

There is a school of thought which classifies this fish as merely a sub-species of *Xiphophorus variatus*. Certainly *X. xiphidium* females are extremely similar in outward appearance to both *X. variatus variatus* and *X. variatus evelynae*, as well as *X. montezumae*, so I suggest that they should never be kept together, as apart from the obvious dangers of crossbreeding, only an expert could identify and separate them again! Rather a similar situation to some of the killifish! The Purple Platy is best regarded as a separate species in its own right, whatever the ichthyologists may say.

The main physical characteristic is the small sword on the tail of the male fish: this only develops with maturity and is much more prominent than the tiny suggestion of a tail-spike on the male Pygmy Swordtail (*X. pygmaeus*). The purple colouration suggested by the common name only appeared intermittently on the original stock and first generation offspring in the tanks of Dave Cheswright and also Steve Jordan (of Harlow). I would say that we never have been able to equal the colours (blue and yellow too) found in the 1974 stock from the Rio Purificacion at El Barretal. Has any other reader any comments on this? We seem to have the same problem with size, in that aquarium produced stock never quite grows as big as the wild fish. This is not a large species anyway and probably always stays a little smaller than the *variatus* Platies.

Like most of the other members of the genus, there is a wide variety of black markings (crescent, twin-spot, spotted body, moon, etc.) which may or may not be present,, Domesticated strains tend to become uniform after a few generations as certain of these features become eliminated from, or concentrated in, the stock. The presence or absence of any of these markings cannot therefore be taken as proof that a particular fish is from a given location.

Dave Cheswright has probably been as successful as anyone with these Platies, and his fishes have had no special treatment, being kept in moderately hard water with 'average' conditions as regards feeding, temperature and the like. They have produced broods of usually 15 to 20 normal Platy-sized fry which grow well enough -up to a certain point! They don't waste away (as the Montezuma Swords tend to), and may be kept as community fish (if you have enough of them!) as their temperament is peaceful.,

Contrarywise, they do not do well for me, only a few miles away from Dave Cheswright. I do not use air or filtration and the fish house temperature varies quite considerably, otherwise conditions are very similar. Many other species do well enough under my set up, so here again is a suggestion that the Purple Platy does need that little bit of extra care. It would be interesting to have the views of other members.

