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PŒCILIID FISHES OF THE GENUS *MOLLIENISIA* IN HISPANIOLA, WITH NOTICE OF A NEW *LIMIA* FROM THE SAMANÁ PENINSULA

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In 1915, Nichols reported two pœciliid fishes from the Samaná Peninsula in Santo Domingo, the only members of the family yet known from the eastern end of the island. *Heterandria zonata* Nichols, from a creek near the railroad station at Sanchez, appears to be identical with *Limia heterandria* Regan, 1913, ascribed, though apparently erroneously, to La Guayra, Venezuela (see Myers, 1925).

Nichols' other species, from Samaná, was identified as *Heterandria versicolor* (Günther), but it certainly is not that form, which has been confused with others and is definitely known only from the western end of the island (Haiti). I have Nichols' material at hand and have compared it with specimens of *Limia versicolor*. Most of the Hispaniolan *Limias* are deep-bodied fishes and *versicolor* is one of this group. It differs from all the island species in the advanced anal of the female, the origin distinctly before the dorsal. Nichols' specimens represent a slender species in which the anal of the female originates slightly behind the dorsal. In the male the gonopodium is proportionally much longer than in *versicolor* and the least depth of the caudal peduncle is contained nearly twice in its length to the dorsal base instead of only about one and a third times. The fish is, indeed, nearer to the true *Limia dominicensis*, a much misunderstood species, but it is still more slender and has a considerably longer gonopodium.

The largest male (Nichols, 1915, Fig. 1) has barely reached adult size and its long gonopodium, although it appears to have attained its full length, is not differentiated sufficiently at the tip for the generic characters to be visible. However, there seems little likelihood of it being anything but a *Limia*. It agrees with none of the known pœciliids of the island and seems without doubt to represent an undescribed species. I propose that it be called *Limia nicholsi*, the name to rest for the present on Nichols' description and figures. A more extended description will be presented in a review of the fresh-water fishes of Hispaniola.

As holotype I select the figured male referred to above, A. M. N. H. No. 5239a. There are four paratypes: the female figured by Nichols (1915, Fig. 2) and three very small specimens. All five specimens were collected by Mr. F. E. Watson in the San Juan River (fresh water) at Samaná, Dominican Republic.

I am pleased to be able to associate with this interesting little fish the name of John Treadwell Nichols, my first teacher in ichthyology.

In closing, it may be remarked that neither *Pœcilia melanogaster* Günther nor *Platypœcilus dominicensis* Evermann and Clark seems to be synonymous with *Limia dominicensis* (Cuvier and Valenciennes). I have examined type specimens of all three. Evermann and Clark's species must stand as *Mollienisia dominicensis* (E. and C.) a most remarkable extension of the range of this mainland genus. The Hispaniolan species is confined to mountain streams in the Artibonite system in Haiti and in the mountainous regions of central Santo Domingo. The American Museum has a fine series obtained by Dr. G. K. Noble at Lo Bracita, Province of Pacificador, in the drainage system of the Rio Camu, a tributary of the Yuna. The little stream in which the fishes were collected is a series of cascades tumbling down over the south slope of Quita Espuela. Dr. Noble tells me that the fishes were very common and exceedingly tame. What appears to be the same species was obtained abundantly in the Artibonite drainage of Haiti, by Dr. Albert W. Herre in 1928.

REFERENCES

- EVERMANN, B. W., AND CLARK, H. W.
1906. 'New Fishes from Santo Domingo.' Proc. U. S. Nat. Mus., XXX, pp. 851-855, Figs. 1-3.
- MYERS, G. S.
1925. 'Results of Some Recent Studies on the American Killifishes.' The Fish Culturist, Philadelphia, IV, No. 8, pp. 370-371.
- NICHOLS, J. T.
1915. 'On *Heterandria zonata* sp. nov. and *Heterandria versicolor* (Günther) from the Island of Santo Domingo.' Bull. Amer. Mus. Nat. Hist., XXXIV, pp. 603-604, Figs. 1-3.
- REGAN, C. T.
1913. 'A Revision of the Cyprinodont Fishes of the Subfamily Pœciliinæ.' Proc. Zool. Soc. London, 1913, pp. 977-1018, Text-figs. 168-173, Pls. xcix-ci.