

**ON THE STATUS OF *ENALLAGMA YPSILON* NEEDHAM, 1942 (ZYGOPTERA: COENAGRIONIDAE) AND *MICRATHYRIA CARLOTA* NEEDHAM, 1942 (ANISOPTERA: LIBELLULIDAE)**

Going through the correspondence of the late Dr J. Ráčenis, I found an interesting note in a letter sent to him by Dr M.J. Westfall, Gainesville, dated Oct. 23, 1962, which reads as

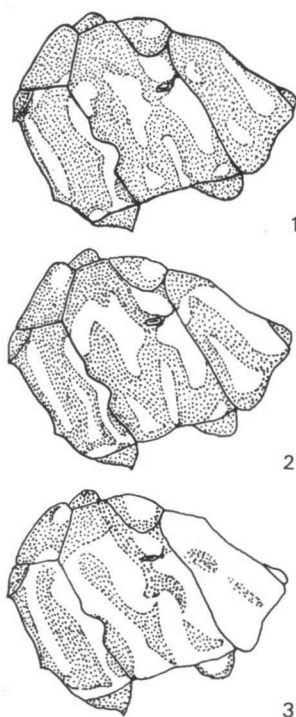
follows: "Have you any reason to believe that Needham's *Enallagma ypsilon* is not Calvert's *novae-hispaniae*? From the type which I have here I can not see any differences. Of course this is close to *cardenium*, *coecum* and a new species Mrs. Gloyd is working with. Also I believe that Needham's *carlota* is just *ocellata dentiens* in the genus *Micrathyria*. Do you have any evidence to the contrary?" — At least as far as

*E. ypsilon* is concerned, Dr Rácanis did not have it. Along with a list of specimens of many neotropical species he had examined at different museums in the United States, Europe and Venezuela I found the following handwritten note (translated from Spanish): "In the collection at Cornell University there is a box containing different species of *Enallagma*, among them a male specimen '*Enallagma* n. sp.?, El Valle, Venezuela, 4.V.39, G. Vivas Berthier'. This specimen is a typical *E. coecum* of the northern part of Venezuela". — Although the collecting dates differ by two days from those published by J.G. NEEDHAM (1942, *Boln Ent. venez.* 1:59-64) for the type of *ypsilon*, Rácanis probably held this type in hand. However, nothing has apparently been published yet about the status of this species and that of *M. carlota*.

*Enallagma ypsilon* Needham. — The only known specimen, the male holotype (taken at El Valle, Caracas, on May 2nd), has been checked by Dr M.J. Westfall, and he found *ypsilon* Needham to be identic with *coecum novae-hispaniae* Calv. (cf. above). Already the original description by NEEDHAM (1942; cf. above) lets one arrive at this conclusion, the more so when considering that he apparently did not compare his *ypsilon* with *coecum novae-hispaniae*. He only points to some differences between *ypsilon* and two northern species, namely *antennatum* (Say) and *praevarum* (Hag.).

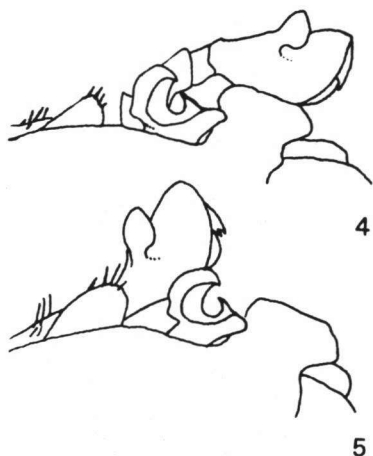
*Enallagma ypsilon* Needham, therefore must be regarded a synonym of *Enallagma coecum novae-hispaniae* Calvert.

*Micrathyria carlota* Needham. — The fact that the holotype is deposited in Maracay made me decide to pick up Dr Westfall's suggestions and to clarify the problem definitely. NEEDHAM (cf. above), when comparing his *carlota* with *ocellata dentiens* Calv., states: "It agrees fairly with that species in colour pattern, and in having a three-celled fore wing triangle". This could be misleading. In fact, both front wings of the holotype *carlota* have the triangle free, but a two-celled subtriangle. The same is true for a number of males of *ocellata dentiens* from different parts of Venezuela, in our collection here. Other males of this species have one or both subtriangles three-celled, one male from Caruachi, Bolivar, has one subtriangle free, the



Figs. 1-3. Colour pattern of pterothorax of Venezuelan *Micrathyria ocellata dentiens* Calv.: (1) holotype male of *M. "carlota"* Needham, Laguna La Ciénaga, Guárico; — (2) Male from Cata, Aragua; — (3) male from El Limón, Aragua.

other with only a short cross-vein near the distal posterior angle of the subtriangle. The triangles of all these specimens are always uncrossed. The superior caudal appendages of *carlota* agree in every respect with those of the *ocellata dentiens* males examined. In no way are they "more sharply upturned at tip" in *carlota*, as Needham states. Rather, the degree of this upturning appears to be somewhat variable in *ocellata dentiens*. Similarly, he mentions a "single, erect, sharp midventral spine on the sternum of the basal abdominal segment" in *carlota*. However, no such spine is present in the holotype, nor anything which would indicate that it has been broken off in the time since the description was



Figs. 4-5. Secondary genitalia, with the penis extracted, of Venezuelan

(4) holotype of (the anterior lamina being somewhat damaged); — (5) same specimen as in Fig. 2.

completed. The secondary genitalia, including the penis, have also been compared with those of some males of *ocellata dentiens*, but no differences have been detected. What can be said is that the holotype of *carlota* has a very dark pterothorax, with well developed metallic blue reflections, and with the yellow areas considerably reduced. The colour pattern is, however, fairly variable in *ocellata dentiens*. A similarly dark male was caught at Caruachi, Bolivar. On the other hand, I have checked a male specimen from El Limón, Aragua, which has very extended pale areas on the pterothorax. This male is still considerably paler than one belonging to the so-called *ocellata quicha* Calv., from Minatitlan, Veracruz, Mexico.

Due to the lack of consistent differences, either structural or in colour pattern, between *carlota* Needham and *ocellata dentiens* Calvert, I propose to place *carlota* Needham into synonymy with *ocellata dentiens* Calvert.

I am thankful to Professor Dr M.J. WESTFALL, Jr. for the permission to quote from his above mentioned correspondence.

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