

THE GENUS *NEONEURA* (ODONATA)

BY E. B. WILLIAMSON

The present paper is the outcome of an effort to identify material collected in Guatemala, British Guiana and Trinidad by B. J. Rainey, L. A. Williamson and myself. When Dr. Calvert learned I was studying this material he kindly offered me material and notes collected by himself in Costa Rica, informing me that his material included one probably new species. This species proved to be the same as one we had collected in Trinidad, and it is described and named in this paper. Through the good offices of Dr. Ris, I obtained drawings from M. Menger of species in the de Selys collection. Unfortunately since de Selys' work was done, the *Neoneura* specimens in his collection have been greatly damaged, and only a limited number could be figured. I have also, through the kindness of Dr. Calvert, Mr. Kahl, Dr. Henshaw and Professor Needham, been able to study the *Neoneuræ* in the several collections in their charge, so that I know at first hand all the species but *waltheri* and *rufithorax*, neither of which, most unfortunately, Menger could figure. The figures of appendages and thoracic patterns which accompany this paper, except where otherwise indicated, have been made by Mr. Kennedy, whose aid is gratefully acknowledged. The wing photographs were kindly made for me by Mr. Munz.

De Selys' separation of *Neoneura* into two groups on the basis of abdominal coloration served some purpose in identifying material, but gives no hint of relationships, since some of the closest allies are thereby separated. Real relationships are indicated, I believe, by the male appendages, and, to a lesser extent, by female thoracic color patterns and prothoracic hind lobes, but the females of several species are not known at this time. My ideas of relationships are indicated in the key to males and the sequence of species in the text.

The most valuable specific characters are found in the male appendages and the prothoracic hind lobes of the females. In the latter case it must be noticed that in those species in which lateral developments of this border occur, these developments are