



<http://zoobank.org/urn:lsid:zoobank.org:pub:3E33EEBE-981E-4708-9FCA-AD764B7A1D2A>

**The true identity of *Neoneura bilinear*is Selys, 1860, with the synonymy of *N. gaida* Rácenis, 1953, and the description of *N. confundens* sp. nov.
(Odonata: Protoneuridae)**

MARCEL T. WASSCHER¹ & JOHAN G. VAN 'T BOSCH²

¹Minstraat 15 bis, 3582 CA Utrecht, The Netherlands

E-mail: marcel.hilair@12move.nl

²Newtonplein 62, 2562 JX Den Haag, The Netherlands

E-mail: johanvantbosch@yahoo.co.uk

Abstract

Study of rough notes and sketches made by D.C. Geijskes in 1972 and the recently found original drawings by E. de Selys Longchamps done in 1884 from the male syntype of *Neoneura bilinear*is Selys, 1860, shows the syntype male and female (now lost for several decades) of *N. bilinear*is refer to the same species later described as *Neoneura gaida* Rácenis, 1953. Therefore *N. gaida* is considered a junior synonym of *N. bilinear*is Selys, 1860. A neotype is chosen for the true *N. bilinear*is (neotype ♂, Suriname, Kabalebo, 15 viii 1965, in RMNH). *N. bilinear*is sensu Williamson (1917) is redescribed as *Neoneura confundens* sp. nov. (holotype ♂, Suriname, Jodensavanna, Koela-kreek, 13 ii 1946, in RMNH). *N. confundens* has a wide distribution in South America north of the Tropic of Capricorn, but it is lacking from the central and lower Amazon. It occurs in several color morphs and also varies in male appendage, genital ligula, and female pronotum morphology.

Key words: Odonata, Zygoptera, Protoneuridae, *Neoneura*, new species, taxonomy, South America

Introduction

Neoneura Selys is a Neotropical genus of Protoneuridae erected by Selys (1860) with *N. bilinear*is Selys, 1860, as its type species by subsequent designation by Kirby (1890). The genus was reviewed by Williamson (1917) who treated 16 species and by Garrison (1999) who treated 23 species. Since Garrison's review, five new species have been described from Brazil (Machado 2002, 2003, 2005, 2007) and one from French Guiana (Juillerat 2007).

*Neoneura bilinear*is was described by Selys in 1860 from a specimen from Pará, Northeastern Brazil. In the short description, Selys (1860) included a brief description of the male appendage morphology. In his review of the genus, Williamson (1917) did not examine type material of *N. bilinear*is (at IRSN), but he had received drawings of the appendages made of the holotype (Williamson 1917: 211). He received them “from the good offices of Dr. Ris” which M. Menger, the artist at the Brussels Museum, had drawn. He redescribed *N. bilinear*is based on sixteen males and two females from Wismar, Guyana, and on one male from Poco Grand, Brazil. Williamson published illustrations of the male appendages and female pronotal morphology of what he considered to be *N. bilinear*is. At the end of his redescription he commented that “the detailed description has been prepared because the only other published description, that of de Selys, seems to be based on badly discolored material.” Despite the discoloration in his material, Williamson apparently had no doubts that his redescription referred to *N. bilinear*is sensu Selys, 1860.

D. C. Geijskes traveled to Brussels on 27–30 March 1972 to check the syntypes of *N. bilinear*is in the RBINS due to an inquiry by J. Cowley, who expressed doubts as to its identity according to correspondence from C. Longfield to M. Lieftinck in 1947. Lieftinck told Geijskes that “*N. bilinear*is was probably not one but two species. The Brazilian species being different from the species from the Guyanas” (Belle 2002).