

Occurrence, behaviour, and habitat preference of the Levant Pincertail, *Onychogomphus macrodon* Selys, 1887 in Turkey

(Insecta: Odonata)

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Abstract. The current status and distribution of the rare and threatened dragonfly *Onychogomphus macrodon* (Selys, 1887) was studied in Turkey 2006–2009. Despite an intensive search for the species, it was found only at one locality in the middle course of the Ceyhan river. Other localities in Turkey, from where the species has been reported in the literature which could not be confirmed. The habitat preference of the species is described and observations on the behaviour of both sexes were made. Some morphological details are described and notes on the colour are given. Literature records are summarised and reasons for the decline of this species are discussed.

Key words. Gomphidae, vulnerable species, Ceyhan Nehri, Turkey, distribution, protection.

Introduction

The distribution of *O. macrodon* (Selys, 1887) is restricted to the Middle East and comprises the river systems of Orontes (Asi Nehri), Ceyhan Nehri, and Jordan. The distribution is thus restricted to Turkey, Syria, Lebanon, Israel, Palestine and Jordan (SCHNEIDER 1987, DUMONT 1991, KALKMAN et al. 2004a). There are only a few records, with most of them dating from decades ago (SCHNEIDER 1987). The preference of *O. macrodon* for larger rivers in arid to semiarid regions may have contributed to the decline of the species in recent years, as agricultural development and industrialisation together with dam construction, water extraction and pollution have seriously changed these ecosystems (KALKMAN et al. 2004, SCHNEIDER 2004). Most records are based on single or observed individuals or exuviae (see Table 1). In the last six years there have been no records from Turkey despite an intensified exploration of the Turkish dragonfly fauna. The species is classified as vulnerable (criteria A3c + 4c) in the IUCN Red List of Threatened Species (RISERVATO et. al. 2009). There is almost no information on habitat preference and behaviour.

After an intensive search over three different years in different river systems in southern Turkey, we were finally able to rediscover a potential “source population” of the species in the relatively intact middle course of the Ceyhan river. This paper now gives information on the actual occurrence, behaviour and habitat requirements of the species, and emphasises that one of the last flourishing populations of *O. macrodon* in Turkey should be protected.

Methods

Field surveys were carried out by J. S., Karin HAARNAGEL, Horst SCHNEIDER and T.S. in July 2007, May/June 2008, and June 2009, with the focus on the regions where the species has been