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## Odonata from Belgium collected by Jean De Riemaeker in the period 1900-1943

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### Abstract

The pharmacist Jean De Riemaeker collected zoological material all over Belgium between ca 1900 and 1943. The dragonflies of his collection were carefully recorded in his field notebooks. These contain species names and collecting localities for 30 species, several of which are currently endangered to critically endangered.

### Introduction

The dragonflies of Belgium and their occurrence across the country are at present considered to be documented in great detail. The simultaneous publication of a comprehensive book on their distribution and ecology in the two main national languages (Libellenwerkgroep Gomphus, 2006, and Groupe de Travail Libellules Gomphus, 2006), which compiles the contributions of several hundreds of recent observers besides all historical data available, has resulted in a fine-grained mapping of species

distributions. In addition, a series of excellent photographs renders the identification of almost every species comparatively easy. This, however, was by no way the case in earlier times; from the nineteenth century until the first half of the twentieth century, the correct identification of a dragonfly was not an easy matter. Yet, the period before World War II was also a time when amateurs, often with a scientific (although not necessarily a biological) background explored the country to enrich their personal knowledge and build up a private collection. Jean De Riemaeker was one among them. He was a

pharmacist, probably of Campinian origin, but later established in Ghent, with a broad interest in natural history, who traveled around the country collecting insects of all orders, mollusks, and vertebrates, including even bird nests and eggs, keeping extremely detailed records of his field trips and acquisitions from 1900 till 1943. All these were written down in French, in clear handwriting, in a series of notebooks that have survived to date.

Quite naturally, the width of his interests caused him to be rather superficial in certain groups, and dragonflies, although well represented (see below) were clearly not his prime interest. At the end of his collector's career, he produced a summary of his holdings (with some corrections of his earlier identifications), group by group, which revealed that he possessed 117 fully identified specimens of Odonata. To this he added another 25 specimens in an addendum, and the full list was found to contain 30 species collected in Belgium (very few specimens were from France), slightly under 50% of the total Belgian species richness.

The whereabouts of the collection are unknown. The insect part has probably not survived, but the notebooks eventually came in the possession of Dr Dirk Van Damme (Ghent University), who kindly made them available to me.

Because the period of activity of Jean De Riemaeker was preceding the major industrial development of large parts of Belgium, and the ensuing pollution of many rivers and other surface waters in Flanders in particular, his collection is a potentially important testimony to conditions that no longer exist. How he identified his Odonata is unknown, but there was clearly not a broad choice of works at his disposal. Most likely, he used SELYS (1840) and/or SELYS & HAGEN (1850), which contain tabular identification keys and a number of species illustrations, as he probably had access to the Belgian species list of SELYS (1888).

#### Annotated species list

(captures are in chronological order, number of specimens not given, nomenclature adjusted to contemporary norms)

#### Calopterygidae

*Calopteryx splendens*: Boom 24.VIII.1901, Olloy (Couvin) 13.VI.1905, Waulsort 16.VIII.

1908, Turnhout 11.VI.1911, 18.VI.1913  
*Calopteryx virgo*: Olsene, Deinze 28.VI.1904, Arlon 10.VIII.1904, Walzin (Furfooz) 22.VIII.1908, Oud-Turnhout 31.V.1911, Thielen 28.VI.1914

#### Lestidae

*Sympecma fusca*: Thielen 13.III.1919  
*Lestes dryas*: Cluyten 11.VII.04, Oostakker, 24.VII.1908  
*Lestes sponsa*: Vance (Arlon) 10.VIII.1904, Vinderhaute & Merelbeke 29.VII.1905, Merelbeke 10.VII.1908

#### Platycnemididae

*Platycnemis pennipes*: Turnhout 30.VII.1913

#### Coenagrionidae

*Coenagrion puella*: St Amandsberg 23.VI.1942, Waarschoot 30.VI.1943  
*Coenagrion pulchellum*: Brugge, around 1900, Vinderhaute 26.VI.04, Ronse 2.VI.1905, Gent & St Denijs 31.V.1906, Gent (Patijntje) 7.VIII.1907, Gent (Akkergerm) 13.VI.1910, Waarschoot 30.VI.1943  
*Ceriagrion tenellum*: Kalmthout 27.VII.1908  
*Enallagma cyathigerum*: Kalmthout 27.VII.1908  
*Ischnura elegans*: Bellem 13.VI.1904, Gent (Akkergerm) 13.VI.1910, St Amandsberg 23.VI.1942, Overmere 25.VIII.1943  
*Pyrrhosoma nymphula*: Gent 2.V.1910

#### Gomphidae

*Gomphus pulchellus*: Turnhout 18.VI.1913

#### Aeshnidae

*Aeshna cyanea*: St Denijs Westrem, 13.VIII.1907, 22.VII.1908, Turnhout 9.IX.1911, 18.VIII.1913, Melle 28.VI.1942, St Amandsberg 1.VIII.1942, Waarschoot 30.VI.1943  
*Aeshna grandis*: Arlon 9.VIII.1904, Turnhout 6.VIII.1911, Thielen 22.VI.1913  
*Anaciaeschna isosceles*: near Gent, 16.XII.1907, St Denijs Westrem 20.VI.1908

#### Corduliidae

*Cordulia aenea*: Oud-Turnhout 29.V.1911, Koekhoven 16.VI.1915

*Somatochlora metallica*: Oud-Turnhout 29.V.1911, Gierle 3.VI.1913, Koekhoven 16.VI.1915

#### Libellulidae

*Leucorrhinia dubia*: Kalmthout 27.VII.1908, Oud-Turnhout 29.V.1911, 1.VI.1911, 16.VII.1911

*Libellula depressa*: Olsene (Deinze), summer 1903

*Libellula fulva*: Cluyten 11.VII.1904, Destelbergen 1.VII.1942

*Libellula quadrimaculata*: St Denijs Westrem 20.VI.1908, Turnhout 12.V.1911, Oud-Turnhout 1.VI.1911, Raevens 3.V.1914

*Orthetrum coerulescens*: Wuustwezel 28.VII.1908

*Sympetrum danae*: Kalmthout 27.VII.1908

*Sympetrum flaveolum*: Gent 21.VIII.1904, Merelbeke 5.VIII.1906, Kalmthout 27.VII.1908

*Sympetrum meridionale*: Vance (Arlon) 10.VIII.1904

*Sympetrum pedemontanum*: Arlon 9.VIII.1904

*Sympetrum sanguineum*: St Denijs Westrem 16.VIII.1904, Deurle 11.VIII.1907, Overmere 25.VIII.1943

*Sympetrum striolatum*: St Denijs Westrem 19.IX.1906, Gent 11.VI.1908, summer 1910, Beerse 6.X.1915, Assenede 8.IX.1943

*Sympetrum vulgatum*: Overmere 25.VIII.1943

#### Short Discussion

Most of De Riemaecker's identifications appear credible, with the exception of two: *Orthetrum coerulescens* and *Lestes dryas* may have been confused with the much more common *O. cancellatum* and *Chalcolestes viridis*, two species curiously absent from his list. Also noteworthy is the absence of cordulegastrids and gomphids (*Gomphus pulchellus* being a lacustrine dweller), suggesting that running waters were not a priority for this collector.

Further, it is clear that easy catches, like *Sympetrum* species, are relatively over-represented, while strong flyers like *Anax* and even *Cordulegaster* are absent. There is indeed no reason to expect the powerful *Anax imperator* to have been rarer in the past, as confirmed by other contemporary papers, e.g. GOETGHEBUER

(1930). The value of De Riemaecker's collection, in the final analysis, is in a small number of species that have clearly contracted in range and abundance in the course of the twentieth century and are currently endangered or critically endangered: *Calopteryx virgo*, *Anaciaeschna isosceles*, and *Libellula fulva*. The two species *Somatochlora metallica* and *Sympetrum pedemontanum* are still doing rather well, yet may also have been more common and widespread in the past. As to *Sympetrum meridionale*, finally, this species is so rare that its status in Belgium has remained undecided to the present time; its presence in the swamps of Vance more than a century ago is therefore useful information.

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