

Nomenclatorial fossicking – unearthing forgotten Selysian species names of Belgian Odonata

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Abstract. Five forgotten available species group names in Odonata, introduced by Edmond de Selys Longchamps in 1831, are listed and their taxonomic status is discussed. The following synonymies are presented: *Agrio[n] cyaneus* Selys, 1831 and *Agrio[n] oeneus* Selys, 1831 are junior subjective synonyms of *Calopteryx virgo* (Linnaeus, 1758); *Agrio[n] cellaris* Selys, 1831 and *Agrio[n] virescens* Selys, 1831 are junior subjective synonyms of *Calopteryx splendens* (Harris, 1780). *Agrio[n] coralinus* Selys, 1831, an obvious coenagrionid species, is ranked as a *nomen dubium*.

Key words. Dragonfly, damselfly, Zygoptera, European *Calopteryx*, synonymy

Introduction

Digitalisation of old scientific literature and placing it on the internet with open access has made life quite easy for those of us who want to consult very old or otherwise highly inaccessible publications, either out of pure curiosity, or in search of details for scholarly purposes.

Thus, while searching for the contents of the first two publications of Edmond de Selys Longchamps for a brief biographic account of him for a Finnish language article (HÄMÄLÄINEN 2015), I consulted Philippe Vander Maelen's book titled *Dictionnaire géographique de la province de Liège* (sic) (VANDER MAELEN 1831). In the appendix of this book there are several articles by separate authors. Two are by Selys, one on birds and the other on insects. His first, longer, article (SELYS 1831a) is an annotated catalogue listing a total of 205 bird species recorded in the Liège region. The catalogue includes several species names associated with the Latin 'mihi' [meaning 'name given by me'] in brackets. Some of these species entries were provided with very brief Latin descriptions. I am not sure how many of these new names are available for zoological nomenclature, but no doubt all are synonyms.

Selys' first new dragonfly names

Selys' first entomological paper (SELYS 1831b) is much more modest and less coherent than his first ornithological paper. The last two of the four pages of this article contain mere lists of genera of Neuroptera (in the broad Linnean sense) and Lepidoptera recorded in the Liège region. Each generic name is listed with the number of species recorded. The first two pages contain more detailed text, which is largely devoted to the damselflies of the genus *Agrion* (Fig. 1). Each species is character-

ized in a few lines. In all binomial names the genus name is incorrectly spelled as *Agrio*. Since in the brief introductory text the generic name is correctly spelled as *Agrion*, and since he was familiar with this spelling of the genus via LATREILLE's (1805) *Histoire naturelle*, the incorrect spelling was undoubtedly a printer's error. Therefore *Agrio* must be ranked as an incorrect subsequent spelling. Consequently *Agrio* Selys, 1831 is not an available genus-group name, although it was listed in *Nomenclator zoologicus* by NEAVE (1939).

Seven species-group names in the genus *Agrio[n]* were presented. In addition to the species names *virgo* [Linnaeus, 1758] and *puella* [Linnaeus, 1758], Selys introduced five new names. Four of them (all qualified with word 'mihi') were in the *virgo*-group and one in the *puella*-group (Fig. 1). As far as I know, these names have not subsequently appeared in any Odonata catalogues, global or regional. However, they were duly listed in SHERBORNE's (1902–1922) *Index animalium*. Since the names were associated with brief descriptions, they are available names. *Agrio[n] cyaneus* seems to be a mature male of *Calopteryx virgo*, *A. cellaris* is a mature male of *Calopteryx splendens*, *A. oeneus* is female of *C. virgo* and *A. virescens* appears to be female of *C. splendens*, although the description is somewhat confusing. *Agrio[n] coralinus* was not furnished with the word 'mihi', although also it was a new name. This is obviously a coenagrionid species. However, its real identity remains uncertain, and it is best ranked as *nomen dubium*.

The taxonomic grouping of the European *Calopteryx* species had puzzled the early authors, starting with Linnaeus. It also took Selys quite a long time to achieve

ORDRE DES NÉVROPTÈRES.

Observations sur la famille des Libellules (connues sous le nom de Demoiselles.). Parmi les belles espèces de cette famille que l'on trouve aux environs de Liège, je citerai la *Libellula quadrimaculata*, qui est si rare aux environs de Paris, si commune dans notre province, et l'*OEschna*, si difficile à saisir et dont les ailes dorées brillent tant aux rayons du soleil.

J'ai étudié particulièrement le genre *Agrion* dont les nombreuses variétés ont fort embarrassé les naturalistes. Voici le résultat de mes observations sur les deux espèces adoptées par les auteurs :

Agrio virgo (Lat.), *Libellula virgo* (L.). Les quatre variétés indiquées par les auteurs me paraissent être autant d'espèces distinctes dont voici les caractères :

Agrio virgo (Espèce modifiée). Ailes sans taches, d'un brun clair, à reflets azurés; corps d'un bleu verdâtre brillant.

Agrio cyaneus (mihi), l' *Hélène* (Geoff.). Ailes sans taches, opaques, d'un bleu verdâtre foncé ainsi que le corps.

Agrio cellaris (mihi), la Louise (Geoff.). Ailes transparentes; un espace bleuâtre arrondi sur le milieu; corps d'un bleu verdâtre brillant.

Agrio oeneus (mihi), l'*Ulrique* (Geoff.). Ailes d'un jaune roussâtre; une petite tache blanche à chaque; corps d'un vert bronzé.

Agrio virescens (mihi). Ailes transparentes, d'un vert tendre sans taches; corps d'un vert bronzé.

Je n'ai pas encore trouvé l'espèce que Geoffroy nomme la *Felicie*.

Agrio puella (Lat.), *Libellula puella* (Linn.). Deux espèces distinctes sont comprises sous ce nom :

Agrio puella, l'*Amélie* et la *Dorothee*, (Geoff.). Corps bleuâtre ou verdâtre; presque blanc immédiatement après sa transformation; ailes transparentes avec un point marginal noir. Les mâles sont bleus. les femelles vertes. Cette espèce varie beaucoup dans la position des couleurs vertes. bleues et noires.

Agrio coralinus. Corps d'un rouge assez clair. Les anneaux de l'abdomen sont légèrement entourés de verdâtre; ailes transparentes avec un point marginal noir.

Genres.	Espèces.
Libellula.	10
OEschna.	4
Agrio.	6

Fig. 1. Facsimile of the text treating dragonflies in SELYS (1831b). Extracted from pages 57–59.

a solid taxonomic grasp of the different ‘forms’ of the European *Calopteryx*. Later Selys himself referred to his premature 1831 paper only once, but without specifying that he had introduced new species names in it. In his major book on the European dragonflies, *Revue des Odonates ou Libellules d’Europe* (SELYS & HAGEN 1850, footnote on p. 136) Selys wrote: »En 1831, j’ai suivi sans le savoir la première manière de voir de Linné en isolant comme autant d’espèces les âges et les sexes.« Freely translated: “In 1831, without knowing the original treatment [of LINNAEUS in his *Fauna Svecica* (1746)], I followed it by isolating many species based on age and sex.” For the treatment of the presently recognised *Calopteryx* species in *Fauna Svecica*, see HÄMÄLÄINEN (2008).

While H.A. Hagen prepared his *Synonymia Libellularum Europaeorum* (HAGEN 1840) he was not aware of the existence of Selys’ obscure 1831 paper. Therefore Selys’ new species-group names remained unlisted and were thus not analyzed in this otherwise very complete catalogue. Selys and Hagen first began corresponding in 1841 (WASSCHER & DUMONT 2013) and they soon developed a very close working relationship. Later, in his review of the world Neuroptera literature, HAGEN (1849) was rather circumspect in the wording of his comments on Selys’ 1831 paper. He noted that the author was only 17 years old when this ‘inadequate’ (»unzulänglich«) article was submitted, and failed to reveal that the paper included several synonymic names. In his long obituary of Selys, PLATEAU (1902) describes this paper as “a modest enumeration with only historical value”. In the recent detailed review of the life and work of Selys, WASSCHER & DUMONT (2013) commented on the paper thus: »virtually all names used in this article, including the ‘new species’, are wrong, and thus Selys still had a lot to learn«. However, the authors did not list the names of these ‘new species’ or comment on their status. The names were briefly listed in HÄMÄLÄINEN (2015).

In the references to Selys’ 1831 paper, both HAGEN (1863) and PLATEAU (1902) give its title as *Liste des genres d’insectes aptères, névroptères et lépidoptères de la province de Liège*. I do not know if there is a reprint of this publication with this title (which describes well its content, apart from the misspelling of Liège). However, in the original book by Vander Maelen (Appendice, p. 57) the title of Selys’ entomological contribution contains only the single word *Insectologie*.

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