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Forgotten duplicates from the Odonata collection of Edmond de Selys Longchamps rediscovered at the Übersee-Museum Bremen (Germany)

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Abstract

A selection of duplicates from the collection of Michel Edmond de Selys Longchamps was found at the Übersee-Museum Bremen/Germany (UMB). Selys determined a lot of Odonata in the UMB collection and sent 80 European and 76 exotic species to Bremen on 23 April, 1875. According to the labels 121 specimens could be assigned to this shipment and eleven specimens must have been sent to UMB in later years.

This collection includes two paralectotypes (*Progomphus gracilis* Hagen in Selys, 1853; *Palaemnema nathalia* Selys, 1886) and seven syntypes (*Rhinocypha trifasciata* Selys, 1853; *Dysphaea dimidiata limbata* Selys, 1859; *Argia sordida* Hagen in Selys, 1865; *Oxyagrion dissidens* Selys, 1876; *Oxyagrion haematinum* Selys, 1876; *Oxyagrion pavidum* Hagen in Selys, 1876; *Telagrion longum* Selys, 1876). In addition, a male specimen of *Euphaea tricolor subcostalis* Selys, 1873 might also belong to the original syntype series.

Altogether three specimens with labeled *nomina nuda* (*Diplax catharina* Selys, *Diplax fausta* Selys, *Dythemis bilineata* Hagen) and two labeled with manuscript names (*Diplax marcellina* Selys, *Perithemis ovata* Bates) are in this collection.

Key words

Übersee-Museum Bremen; Selys Longchamps; duplicates; paralectotypes; syntypes

Introduction

The Übersee-Museum in Bremen is one of the older museums in Germany. Some material in the collections extends back to the 17th century, but most material has been acquired since the 19th century. The “Naturwissenschaftlicher Verein zu Bremen”



(Natural Science Association Bremen) was established in 1864 and cared for the collections until they were transferred to the urban property of the city of Bremen in 1875. Presently there are more than 3000 Odonata in the entomological collection.



Fig. 1: Original labels of M. E. de Selys Longchamps (a = Europe, b = Asia, c = Australia, d = America, e = Africa).

Excluding more recently collected material e. g. by Hans Sauter (1871-1943) and Fritz Plaumann (1902-1994) there were some obviously very old specimens with conspicuous colored labels: white for European-, yellow for Asian-, pink for Australian-, green for American- and blue for African species (Fig. 1a-e). Detailed research showed, that they were written by Michel Edmond de Selys Longchamps. According to his diary, Selys had good contact with the ornithologists Gustav Hartlaub (1814-1900) and



Otto Finsch (1839-1917) in Bremen. These were noted in the recently published diaries of Selys (Caulier-Mathy & Haesenne-Peremans 2008) pertinent entries of which I include below (English translations follow in square brackets):

- Août 1874: 1. Samedi – ...Le docteur Finsch, bon ornithologiste, au musée. Le docteur Hartlaub, *idem*, collection superbe, quelques odonates rares (les deux femelles de *phyllopetalia*). [August, 1st 1874 – Dr. Finsch, good ornithologist at Museum. Dr. Hartlaub, fantastic collection, some rare Odonata (two female *Phyllopetalia*)].
- Avril 1875: 23. Vendredi – Achevé le choix de duplicata, emballé les odonates à renvoyer au musée de Bremen. J'en donne quatre-vingts européens et soixante-seize exotiques. [April, 23rd 1875 – Completed the selection of duplicates, sent Odonata back to the Museum Bremen. Gave 80 European and 76 Exotic specimens.]
- Avril 1877: 26. Jeudi – Rangé les agrions de Bremen. [April, 26th 1877 – Arranged the agrions of Bremen.]
- Mars 1884: 15. Samedi – Renvoyé à M. Finsch, à Bremen, les odonates et *micromus*. [March, 15th 1884 – Sent the Odonata and *Micromus* to Finsch at Bremen].

According to Leverkühn (1901) Hartlaub wrote in July 1900 about Selys (in German): “...Baron de Selys-Longchamps, der sich dem Bremer Museum in ungewöhnlichem Masse verpflichtet fühlte, weil wir ihm eine grössere Anzahl seltener, seiner Sammlung fehlender Orthopteren geschenkt hatten.“ [“...Baron de Selys Longchamps, who felt obliged to the Museum Bremen because we gave him a number of rare Orthoptera which were missing in his collection“]. So this is likely another reason why there are about 280 Odonata with determination labels of Selys at the UMB. I provide an annotated catalog of Selys duplicate material preserved at the UMB.

Annotated Catalog

There are 132 duplicates given by Selys in the collection at UMB to be found. Nearly all historical determinations of Selys are correct unless otherwise mentioned. Specimens of type series, possible types and *nomina nuda* have additional information. The localities are originally handwritten in French but are here translated to English. Some additional information on collectors or localities are given in square brackets.

Calopterygidae

- *Calopteryx haemorrhoidalis* (Vander Linden, 1825) – 1 ♂: Montpellier [France]; 1 ♂: Hieres [France].
- *Calopteryx splendens* (Harris, 1780) – 1 ♀: Belgium.
- *Calopteryx virgo* (Linnaeus, 1758) – 1 ♂, 1 ♀: Belgium.



- *Calopteryx virgo meridionalis* Selys, 1873 – 1 ♀: Pyrenees.
- *Calopteryx xanthostoma* (Charpentier, 1825) – 2 ♂♂, 1 ♀: Montpellier [France].
- *Hetaerina occisa* Hagen in Selys, 1853 – 1 ♀: Panama.
- *Mnais pruinosa* Selys, 1853 – 1 ♀: Japan.
Selys determination label: “*Mnais pruinosa* de Selys, race *strigata* de Selys”.
- *Neurobasis longipes* Hagen, 1887 – 2 ♂♂: Labuan, Borneo [Malaysia].
Selys determination label: “*Neurobasis florida* Hag.”.
- *Vestalis amoena/amaryllis* Selys, 1853/Lieftinck, 1965 – 1 ♀: Labuan [Borneo/Malaysia].
Selys determination label: “*Vestalis amoena* Hag.”.
- *Vestalis luctuosa* (Burmeister, 1839) – 1 ♂, 1 ♀: Java [Indonesia], Ploem [= J. C. Ploem].

Chlorocyphidae

- *Heliocypha biseriata* (Selys, 1859) – 1 ♂: Borneo.
- *Heliocypha fenestrata* (Burmeister, 1839) – 1 ♂: Java [Indonesia], Ploem [= J. C. Ploem].
- *Aristocypha trifasciata* (Selys, 1853) – 1 ♂: India.
Specimen from the original syntype series of *Rhinocypha trifasciata* Selys, 1853 (Fig. 2).



Fig. 2: Male syntype of *Rhinocypha trifasciata* Selys, 1853 with original labels by M. E. de Selys Longchamps.



Coenagrionidae

- *Acanthagrion* sp. – 1 ♂: Tijuca [Rio de Janeiro], Brazil, P. B. [= Paul de Borchgrave?].
Selys determination label: “*Acanthagrion gracile* R.”. The abdomen is missing.
- *Argia* sp. – 1 ♂: Tijuca [Rio de Janeiro], Brazil, P. B. [= Paul de Borchgrave?].
Selys determination label: “*Argia sordida* Hag., ♀”. According to the sex, the label obviously does not belong to this specimen.
- *Argia sordida* Hagen *in* Selys, 1865 – 1 ♂: Nova Friburgo [Rio de Janeiro], Brazil.
Specimen from the original syntype series of *Argia sordida* Hagen *in* Selys, 1865.
- *Ceriagrion glabrum* (Burmeister, 1839) – 1 ♂: Mauritius.
- *Ceriagrion tenellum* (de Villers, 1789) – 1 ♀: Savoye B., [France?].
- *Coenagrion hastulatum* (Charpentier, 1825) – 1 ♂, 1 ♀: Belgium.
- *Coenagrion lunulatum* (Charpentier, 1840) – 1 ♂: 1/6 [= June, 1st], Arlon [Belgium].
- *Coenagrion mercuriale* (Charpentier, 1840) – 1 ♂, 1 ♀: Virelles, Rolly, Belgium.
- *Coenagrion puella* (Linnaeus, 1758) – 1 ♀: 8 [= August], Longchamps [Belgium].
Selys determination label: “*Agrion lindenii* de Selys”.
- *Coenagrion pulchellum* (Vander Linden, 1825) – 1 ♂: 10/6 [= June, 10th], Longchamps, Belgium.
- *Coenagrion scitulum* (Rambur, 1842) – 1 ♂, 1 ♀: 10/6 [= June, 10th], Longchamps [Belgium].
- *Enallagma civile* (Hagen, 1861) – 1 ♂: Mass. [= Massachusetts?], USA, Morr. [= Herbert Knowles Morrison].
- *Enallagma cyathigerum* (Charpentier, 1840) – 1 ♂: Belgium, Vogels. [= Vogel-sanck?]; 1 ♀: 1/6 [= June, 1st], Arlon, Belgium.
- *Erythromma lindenii* (Selys, 1840) – 1 ♂: 8 [= August], Longchamps [Belgium].
- *Erythromma viridulum* (Charpentier, 1840) – 1 ♂, 1 ♀: Longchamps [Belgium].
- *Ischnura elegans* (Vander Linden, 1820) – 1 ♂: Tuscany [Italia]; 1 ♀: Longchamps, Belgium.
- *Ischnura posita* (Hagen, 1861) – 1 ♂: USA.
- *Leptagrion macrurum* (Burmeister, 1839) – 1 ♂: Brazil.
- *Nehalennia irene* (Hagen, 1861) – 1 ♂: USA.
- *Nehalennia speciosa* (Charpentier, 1840) – 1 ♂: Campine [Belgium or Netherlands].
- *Oxyallagma dissidens* (Selys, 1876) – 1 ♂, 1 ♀: Quito [Ecuador], de Ville [= Émile de Ville].
Specimen from the original syntype series of *Oxyagrion dissidens* Selys, 1876 (Fig. 3).
- *Oxyagrion haematinum* Selys, 1876 – 1 ♂: Minas Gerais [Brazil].
Specimen from the original syntype series of *Oxyagrion haematinum* Selys, 1876.



- *Oxyagrion pavidum* Hagen in Selys, 1876 – 1 ♂: Tijuca [Rio de Janeiro], Brazil, P. Br. [= Paul de Borchgrave].
Specimen from the original syntype series of *Oxyagrion pavidum* Hagen in Selys, 1876.
- *Palaemnema nathalia* Selys, 1886 – 1 ♂: Panama.
Specimen is a Paralectotype of *Palaemnema nathalia* Selys, 1886.
- *Telagrion longum* Selys, 1876 – 1 ♂: Brazil.
Specimen from the original syntype series of *Telagrion longum* Selys, 1876.
Last abdominal segment is missing.

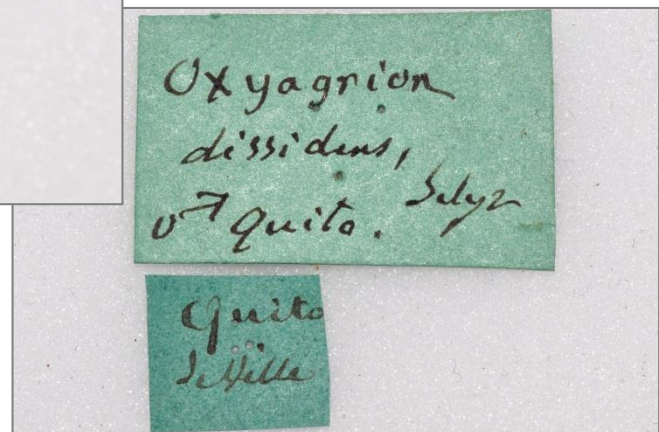


Fig. 3: Male syntype of *Oxyagrion dissidens* Selys, 1876 with original labels by M. E. de Selys Longchamps

Euphaeidae

- *Dysphaea dimidiata* Selys, 1853 – 1 ♂: Mount Ophir [Johor/Malaysia].
Specimen from the original syntype series of *Disphaea dimidiata limbata* Selys, 1859. Selys determination label: “*Disphaea dimidiata* de Selys race *limbata* de Selys” (Fig. 4).
- *Euphaea subcostalis* Selys, 1873 – 1 ♂: Borneo.
Selys determination label: “*Euphaea tricolor* de Selys, race *subcostalis* de Selys”.
Possibly a specimen of the original syntype series.
- *Euphaea variegata* Rambur, 1842 – 1 ♂: Java [Indonesia], Ploem [= J. C. Ploem].

Lestidae

- *Lestes virens* (Charpentier, 1825) – 1 ♂: Belgium, Vog. [= Vogelsanck?].



Platycnemididae

- *Platycnemis acutipennis* Selys, 1841 – 1 ♂: Montpellier [France].
- *Platycnemis latipes* Rambur, 1842 – 1 ♂: Montpellier [France]; 1 ♀: Hieres [France].

Polythoridae

- *Polythore cf. neopicta* Bick & Bick, 1990 – 1 ♂: Peru.
Selys determination label: "*Thore picta* Ramb.".



Fig. 4: Male syntype of *Disphaea dimidiata limbata* Selys, 1859 with original labels by M. E. de Selys Longchamps. Collected 1854 on Mount Ophir by Alfred Russell Wallace.

AnisopteraAeshnidae

- *Aeshna affinis* Vander Linden, 1820 – 1 ♂: Provence [France].
- *Aeshna cyanea* (Müller, 1764) – 1 ♀: Valais [Switzerland].
- *Anax imperator* Leach, 1815 – 1 ♀: 25/6 [= June, 25th], Longchamps, Belgium.
- *Boyeria irene* (Fonscolombe, 1838) – 1 ♀: Corsica [France], Ch. [= Bellier de la Chavignerie?].
- *Rhionaeschna confusa* (Rambur, 1842) – 1 ♀: En mer [at open sea], W. [= Walthere de Selys Longchamps?], Buenos Aires [Argentina].



Gomphidae

- *Gomphus flavipes* (Charpentier, 1825) – 1 ♀: Irkutsk, Siberia [Russia].
- *Gomphus minutus* Rambur, 1842 – 1 ♀: USA.
- *Gomphus pulchellus* Selys, 1840 – 1 ♂: 10/6 [= June, 10th], Longchamps, Belgium; 1 ♀: Montpellier [France].
- *Onychogomphus forcipatus* (Linnaeus, 1758) – 1 ♂: Provence [France]; 1 ♀: Sicilia [Italia], Chavig. [= Bellier de la Chavignerie].

Selys determination labels: “*Onychogomphus forcipatus* L. race *meridionale*”.
The male has a supplementary label “Ramb.” [= Collection Jules Pierre Rambur] (Fig. 5).

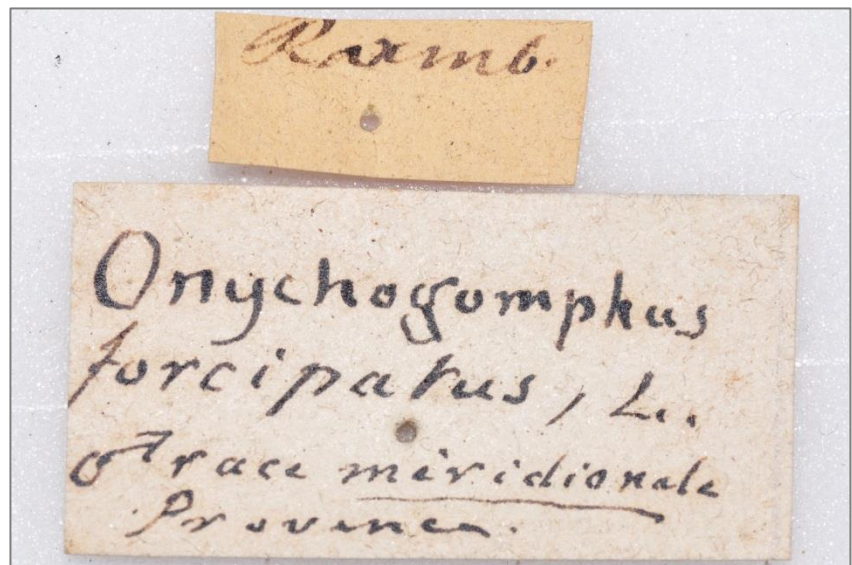


Fig. 5: M. E. de Selys Longchamps label of male *Onychogomphus forcipatus* (Linnaeus, 1758) with further label “Ramb.” [= Jules Pierre Rambur].

- *Onychogomphus uncatus* (Charpentier, 1840) – 1 ♂, 1 ♀: Montpellier [France].
- *Progomphus gracilis* (Hagen in Selys, 1854) – 1 ♂: Nova Friburgo [Rio de Janeiro], Brazil.
Paralectotype of *Progomphus gracilis* Hagen in Selys, 1854.

Cordulegastridae

- *Cordulegaster bidentata* Selys, 1843 – 1 ♂: Pyrenees.
- *Cordulegaster boltonii immaculifrons* Selys, 1843 – 1 ♀: Italia.

Macromiidae

- *Macromia splendens* (Pictet, 1843) – 1 ♂: Charente [France], Delamain [= Henry Delamain].

Corduliidae

- *Somatochlora alpestris* (Selys, 1840) – 1 ♂: Bernese Alps [Switzerland].



Libellulidae

- *Brachythemis contaminata* (Fabricius, 1793) – 1 ♂: India, Stev. [= Stevens?].
- *Brachythemis impartita* (Karsch, 1890) – 1 ♂: Senegal.
Selys determination label: “*Trithemis unifasciata* Oliv.”.
- *Brechmorhoga nubecula* (Rambur, 1842) – 1 ♀: Tijuca [Rio de Janeiro], Brazil, P. B. [= Paul de Borchgrave?].
- *Celithemis ornata* (Rambur, 1842) – 1 ♂, 1 ♀: Florida [USA].
- *Crocothemis erythraea* (Brullé, 1832) – 1 ♀: Luanda [Angola].
- *Crocothemis servilia* (Drury, 1773) – 1 ♀: Java [Indonesia].
- *Dasythemis mincki* (Karsch, 1889) – 1 ♂: Nova Friburgo [Rio de Janeiro], Brazil.
Selys determination label: “*Dythemis bilineata* Hag.” (*nomen nudum*).
- *Dasythemis venosa* (Burmeister, 1839) – 1 ♀: Brazil.
Selys determination label: „*Dythemis bilineata* Hag.“ (*nomen nudum*).
- *Diastatops obscura* (Fabricius, 1775) – 1 ♂: Brazil.
Selys determination label: “*Diastatops tinctoria* Ramb.”
- *Diplacodes lefebvrii* (Rambur, 1842) – 1 ♂: Senegal; 1 ♀: Dakar, Senegal.
Selys determination labels: “*Diplacina flavistyla* R.”.
- *Diplacodes trivialis* (Rambur, 1842) – 1 ♂: Java [Indonesia], Ploem [= J. C. Ploem].
- *Erythemis vesiculosa* (Fabricius, 1775) – 1 ♂: Surinam.
- *Erythrodiplax abjecta* (Rambur, 1842) – 1 ♂: Quito [Ecuador].
Selys determination label: “*Diplax* (?) *marcellina* de Selys” (manuscript name).
- *Erythrodiplax fusca* (Rambur, 1842) – 2 ♂♂: Brazil.
Selys determination label of one male: “*Diplax* (?) *catharina* de Selys” (*nomen nudum*).
- *Erythrodiplax media* Borros, 1942 – 1 ♂: Bahia [Brazil].
Selys determination label: “*Diplax* (?) *abjecta* Ramb.”.
- *Erythrodiplax* sp. Brauer, 1868 – 1 ♂, 1 ♀: Brazil.
Selys determination labels: “*Diplax* (?) *fausta* de Selys, ♂” (*nomen nudum*); “*Diplax* (?) *fusca* Ramb., ♀”. Both missing their abdomens.
- *Erythrodiplax umbrata* (Linnaeus, 1758) – 1 ♂: Tijuca [Rio de Janeiro], Brazil, P. Br. [= Paul de Borchgrave?]; 1 ♀: Pará, Brazil.
- *Leucorrhinia dubia* (Vander Linden, 1825) – 1 ♀: 9/7 [= July, 9th], Ardennes.
- *Libellula vibrans* (Fabricius, 1793) – 1 ♀: Florida [USA].
- *Macrothemis hemichlora* (Burmeister, 1839) – 1 ♀: Tijuca [Rio de Janeiro], Brazil, P. B. [= Paul de Borchgrave?].
- *Macrothemis tessellata* (Burmeister, 1839) – 1 ♀: Tijuca [Rio de Janeiro], Brazil, P. Br. [= Paul de Borchgrave?].
- *Neurothemis terminata* Ris, 1911 – 1 ♂: Java [Indonesia], Ploem [= J. C. Ploem].
Selys determination label: “*Neurothemis palliata* R.”.
- *Orthemis discolor* (Burmeister, 1839) – 1 ♂, 1 ♀: Brazil.



- *Orthetrum brunneum* (Fonscolombe, 1837) – 1 ♂: Valais [Switzerland]; 1 ♀: Corsica [France], B. Chav. [= Bellier de la Chavignerie].
- *Orthetrum brachiale* (Palisot de Beauvois, 1817) – 1 ♂: Luanda [Angola].
- *Orthetrum coerulescens anceps* (Fabricius, 1798) – 1 ♂: Corsica [France], B. Ch. [= Bellier de la Chavignerie].
- *Orthetrum pruinosum* (Burmeister, 1839) – 1 ♂: Java [Indonesia], Pl. [= J. C. Ploem].
Selys determination label: “*Libellula clelia* de Selys”.
- *Orthetrum sabina* (Drury, 1773) – 1 ♀: Java [Indonesia], Ploem [= J. C. Ploem].
- *Palpopleura lucia* (Drury, 1773) – 1 ♂: Zanzibar [Tanzania].
Selys determination label: “*Palpopleura marginata*”.
- *Palpopleura portia* (Drury, 1773) – 1 ♂: Zanzibar [Tanzania].
- *Palpopleura sexmaculata* (Fabricius, 1787) – 1 ♂: Shanghai [China].
- *Pantala flavescens* (Fabricius, 1798) – 1 ♂, 1 ♀: Luanda [Angola].
- *Perithemis bella* Kirby, 1889 – 1 ♀: Amazon, Bates [= Henry Walter Bates].
Selys determination label: “*Perithemis ovata* Bates” (manuscript name; Fig. 6).



Fig. 6: Female *Perithemis bella* Kirby, 1889 collected by Henry Walter Bates. Originally labeled as *Perithemis ovata* Bates (manuscript name) by M. E. de Selys Longchamps.

- *Rhyothemis graphiptera* (Rambur, 1842) – 1 ♀: New Holland, Australia.
- *Rhyothemis phyllis* (Sulzer, 1776) – 1 ♀: Malaysia.



- *Rhyothemis variegata* (Linnaeus, 1763) – 1 ♀: India.
- *Sympetrum depressiusculum* (Selys, 1841) – 1 ♂, 1 ♀: Petersh. [= Petersheim, Limburg], Campine [Belgium].
- *Sympetrum fonscolombii* (Selys, 1840) – 1 ♂: Belgium; 1 ♀: Corsica [France], Ch. [= Bellier de la Chavignerie?].
- *Sympetrum meridionale* (Selys, 1841) – 1 ♂: Belgium.
- *Sympetrum pedemontanum* (Müller in Allioni, 1766) – 1 ♂: Valais [Switzerland]; 1 ♀: Sierre, Valais [Switzerland].
- *Tamea binotata* (Rambur, 1842) – 1 ♂: Brazil.
- *Tamea carolina* (Linnaeus, 1763) – 1 ♀: Florida [USA].
- *Trithemis arteriosa* (Burmeister, 1839) – 1 ♂: Zanzibar [Tanzania].
Selys determination label: "*Trithemis distincta* R."
- *Zenithoptera viola* Ris, 1910 – 1 ♂: Brazil.
Selys determination label: "*Zenithoptera fasciata* F."



Fig. 7: Original labels by M. E. de Selys Longchamps of two *Tramea carolina* (Linnaeus, 1763) specimens at the UMB. Left side from the duplicate collection sent in April 1875 to Bremen and on the right side a specimen just re-determined by Selys (Label above by Selys, below of an unknown person).

Discussion

I found it necessary to distinguish between duplicates which Selys gave to Bremen and the specimens in the UMB that he had determined. This was possible by noting differences in the labels: specimens only determined by Selys have a second label with locality and sometimes determinations in a different handwriting (Fig. 7). It is possible that these specimens (over 150) were part of the Adam Heinrich Norwich (1771-1858) collection which was the basic entomological collection of the UMB (Alfken 1927). Presently 132 specimens at the UMB could be identified as from Selys's collection. Of these, 121 could be assigned to a shipment sent in April 1875, of which



57 were European and 64 were exotic specimens. All of these received an additional metallic copper-like label (Fig. 1a-e). According to the diary entry on 23 April, 1875 some specimens are missing. These may be lost or pertain to either unlabeled material or possessing dubious labels.

The remaining eleven specimens must have been given to Bremen in later years.

Type specimens representing nine species were found within this collection listed below using by original name combinations and sorted by date of description:

Paralectotypes:

- *Progomphus gracilis* Hagen in Selys, 1853 (♂)
- *Palaemnema nathalia* Selys, 1886 (♂)

Syntypes:

- *Rhinocypha trifasciata* Selys, 1853 (♂)
- *Dysphaea dimidiata* race *limbata* Selys, 1859 (♂)
- *Argia sordida* Hagen in Selys, 1865 (♂)
- *Oxyagrion dissidens* Selys, 1876 (♂ & ♀)
- *Oxyagrion haematinum* Selys, 1876 (♂)
- *Oxyagrion pavidum* Hagen in Selys, 1876 (♂)
- *Telagrion longum* Selys, 1876 (♂)

Additionally the male *Euphaea subcostalis* (labeled *Euphaea tricolor* race *subcostalis*) may also be from the original syntype series. Selys (1873) described *E. subcostalis* as a possible race of *tricolor* on the basis of males from Labuan (Borneo).

Progomphus gracilis, *Rhinocypha trifasciata* (Fig. 2) and *Dysphaea dimidiata* (Fig. 4) were included in the shipment of April 1875. All type specimens of Coenagrionidae were likely given to Bremen by Selys in 1877 during his arrangement of the agrions (see abridgements of diary in Introduction). When *Palaemnema nathalia* came into the possession of the UMB is uncertain. Calvert (1931) mentioned, that one male was lent from Brussels Museum to Friedrich Förster (1865-1918) in November 1905 to prepare a paper on the Legion Protoneura for the "Catalogue Systematique & Descriptif des Collections Zoologiques du Baron Edm. de Selys Longchamps". This publication was never finished and the circumstances surrounding this specimen remain unclear. Calvert did not examine it at the Royal Belgian Institute of Natural Sciences in Brussels (IRSNB) or in the Förster collection at Ann Arbor (Michigan, USA). It seems to be unlikely that the specimen at UMB is the one which Förster had originally borrowed from the Selys collection.

The specimen of *Dysphaea dimidiata* is of special historical interest: according to Selys (1859) the syntype series of *limbata* was collected by Alfred Russell Wallace (1823-1913). During his expeditions Wallace was on Mount Ophir in 1854 (Wallace 1869). Selys first description in 1859 was as "race *limbata*" which, in 1869, considered both



D. dimidiata and *limbata* to be distinct species (Selys 1869). Presently *D. limbata* is considered a junior synonym of *D. dimidiata*.

Altogether three *nomina nuda* and two manuscript names could be found on labels of Neotropical specimens as follows (presently valid names in square brackets):

- *Diplax catharina* de Selys [*Erythrodiplax fusca* (Rambur, 1842)]
- *Diplax fausta* de Selys [determination not possible]
- *Diplax marcellina* de Selys [*Erythrodiplax abjecta* (Rambur, 1842)]
- *Dythemis bilineata* Hagen [♂: *Dasythemis mincki* (Karsch, 1889); ♀: *D. venosa* (Burmeister, 1839)]
- *Perithemis ovata* Bates [*Perithemis bella* Kirby, 1889]

Diplax fausta could not be identified since the abdomen is lost. This *nomen nudum* is, as well as *D. catharina*, first mentioned by Hagen (1861). Brauer (1868) also listed both as undescribed species. Hagen (1877) already synonymized the undescribed *D. catharina* with *D. fusca*. This was confirmed by comparing the specimen preserved at UMB with *Erythrodiplax fusca*.

Dythemis bilineata was listed by Brauer (1868) and de Borre (1889). The male is *Dasythemis mincki* first described by Karsch (1889) and the female is *Dasythemis venosa*. Hagen was obviously prepared to describe the male correctly as a distinct species.

The manuscript names *Diplax marcellina* and *Perithemis ovata* represent *Erythrodiplax abjecta* and *Perithemis bella* respectively. The female *P. bella* (Fig. 6) was collected by Henry Walter Bates (1825-1892) during his expedition to Amazon from 1848 to 1859. Bates may have proposed the name to Selys.

Most of the exotic specimens in Selys collection are collected by other entomologists and given or sold to Selys from commercial naturalists like Samuel Stevens in London (Wasscher & Dumont 2013). In nearly all cases there are just initials or acronyms of the collectors given on the labels. Some of them could be clarified according to Selys's diary (Caulier-Mathy & Haesenne-Peremans 2008), others according to Selys's odonatological publications. For example a Dr. Ploem is mentioned by Selys (1869) as provider of specimens collected at Java.

The initials "P. B." on Neotropical specimens have already discussed independently first by Calvert (1957) than by Garrison (2006), who wrote that they probably refer to Paul de Borchgrave. Selys (e.g. 1869) mentioned Borchgrave as provider of specimens from Tijuca (Brazil). In case of the specimens preserved at the UMB all of them that are labeled "P. B." were collected in Tijuca. So it seems likely that all of these initials refer to Paul de Borchgrave. The type series of *Oxyagrion pavidum* was stated by Selys to have been collected by Borchgrave in Tijuca (Selys 1876), but here the initials "P. Br." were used. Some other acronyms could not be associated with a name.



The discovery of this former part of M. E. de Selys Longchamps collection illustrates that some interesting collections still be preserved at Museums. Although no label was found amongst the UMB material indicating that these were specimens of Selys, a letter dated April, 30th 1875 from Otto Finsch to Selys states "...a big notice 'determined by the R. H. Baron de Selys-Longchamps' forever shall remember on your benevolence".

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References

- Alfken, J. D., 1927. Entstehung und Entwicklung der entomologischen Abteilung des Museums für Natur-, Völker- und Handelskunde. In: Festschrift zum 70. Geburtstage und 40 jährigem Dienstjubiläum des Herrn Professor Dr. H. H. Schauinsland. Heilig & Bartels Verlag, Bremen.
- Brauer, F., 1868. Verzeichniss der bis jetzt bekannten Neuropteren im Sinne Linné's, Zweiter Abschnitt. Verhandlungen der kaiserlich-königlichen zoologisch-botanischen Gesellschaft Wien 18:711-742.
- Calvert, P. P., 1931. The generic characters and the species of *Palaemnema* (Odonata: Agrionidae). Transactions of the American Entomological Society 57: 1-111, plates 1-4.
- Calvert, P. P., 1956. The Neotropical species of the "subgenus *Aeschna*" sensu Selysii 1883 (Odonata). Memoirs of the American Entomological Society 15.
- Caulier-Mathy, N. & N. Haesenne-Peremans, 2008. Une vie au fil des jours, Journal d'un notable politicien et naturaliste Michel Edmond de Selys Longchamps (1823-1900), part 1 and 2. Commission communale de l'Histoire du Pays de Liege (Ville de Liege).
- de Borre, A. P., 1889. Répertoire alphabétique des noms spécifiques admis ou proposés dans la sous-famille des Libellulines. F. Hayez, Bruxelles.
- Garrison, R. W., 2006. A synopsis of the Genera *Mnesarete* Cowley, *Bryoplathanon* gen. nov. and *Ormenophlebia* gen. nov. (Odonata: Calopterygidae). Contributions in science 506: 1-84.



- Hagen, H. A., 1861. Synopsis of the Neuroptera of North America with a list of the South American species. Smithsonian Miscellaneous Collections, Washington.
- Hagen, H. A., 1877. Synopsis of the Odonata of America. Proceedings of the Boston Society of Natural History 18: 20-95.
- Karsch, F., 1889. Beiträge zur Kenntniss der Arten und Gattungen der Libellulinen. Berliner entomologische Zeitschrift 33: 347-392.
- Leverkühn, P., 1901. Zur Erinnerung an Dr. Gustav Hartlaub. Journal für Ornithologie 49: 337-359.
- Selys Longchamps, M. E., 1859. Addition au Synopsis des Caloptérygines. Bulletins de L'Académie Royale de Belgique 7: 437-451.
- Selys Longchamps, M. E., 1869. Secondes additions au Synopsis des Caloptérygines. Bulletins de L'Académie Royale de Belgique 27: 645-680.
- Selys Longchamps, M. E., 1873. Troisièmes additions au Synopsis des Caloptérygines. Bulletins de L'Académie Royale de Belgique 31: 469-519.
- Selys Longchamps, M. E., 1876. Synopsis des agrionines. Le grand genre Agrion. Bulletins de L'Académie Royale de Belgique 34: 247-322.
- Wallace, A. R., 1869. Der Malayische Archipel. Die Heimath des Orang-Utan und des Paradiesvogels. Reiseerlebnisse und Studien über Land und Leute. Georg Westermann, Braunschweig.
- Wasscher, M. T. & H. J. Dumont, 2013. Life and work of Michel Edmond de Selys Longchamps (1813-1900), the founder of Odonatology. Odonatologica 42: 369-402.



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