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The scientific names of Friedrich Försters odonate taxa*

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*Dedicated to my dear wife Traute Fliedner, née Kalies, in grateful recognition of her support for my work on the meaning of the scientific names of odonates.

Abstract

This paper explains the almost 200 scientific names given to the Odonata by the German scientist Friedrich Förster (1865-1918), as well as the names of other scientists into which these taxa are currently classified. Förster's life and work are presented, followed by explanations of the names and there is a discussion of what he preferred when assigning names and an evaluation of his work.

Zusammenfassung

In dieser Abhandlung werden die fast 200 wissenschaftlichen Namen erläutert, die der deutsche Wissenschaftler Friedrich Förster (1865-1918) den Odonata gegeben hat, sowie die Namen anderer Wissenschaftler, in die diese Taxa derzeit eingeordnet werden. Zuvor werden jedoch Leben und Werk Försters vorgestellt, im Anschluss an die Namenserklärungen folgt eine Erörterung was er bei seiner Namensvergabe bevorzugte und eine Bewertung seines Schaffens.

Key words: Odonata, dragonflies, Germany, type material, history of odonatology, biography, taxonomy, nomenclature

Preface

Since Linnaeus, it has been common practice to designate zoological species with a combination of two names, a generic name shared with closely related species and a second one unique to that species. Since Latin was the international language of science at that time, these names were to be Latin or formed from a Latinised Greek. Since these languages are no longer generally understood, it has now become common for taxonomists to provide an explanation of what a scientific name is intended to mean. But this did not apply to the period before the middle of the 20th century. However, since scientific names can contain important information about characteristics of appearance, morphology, similarities, type locality, distribution area, habitat preferences, or even about collectors, patrons or friendships among scientists, it seems useful to provide information that helps to understand older names. And so I thought it might be worthwhile to try an interpretation of the scientific names which Friedrich Förster gave to dragonflies, since at the beginning of the 20th century he was among the prolific taxonomists in odonatology, and to give an impression of his life and personality as well.

Material and Methods

Förster's scientific names for Odonata have been extracted from Bridges (1994) and have been checked by means of Paulson & al (2024) to ensure that taxonomic changes since then have been followed up. The first descriptions of the taxa have been accessed, the Greek and Latin words which are at the base of the names have been listed, the probable meaning of the names has been explained resorting to the first description, if possible, if not, conjectures have been made as how they might apply. The names have been listed in their chapters in alphabetical order to facilitate how to find the respective explanations. Förster's generic names have been treated first, then the species names, after that his species-group names which are now considered to be synonyms, subsequently the actual genera, into which Förster's species now are sorted, as they are an essential part of the scientific names.

Finally, I provide some considerations about Förster's preferences in nomenclature, about his personality and his intentions in odonatological research. But first some biographical information will be given.

Life and work

Johann Friedrich Nepomuk Förster was born on 5 February 1865 in Kehl, a small town opposite Strasbourg, as the second child of ten, to Johann Friedrich Förster (1830-1889), a customs official from Leutershausen in northern Baden, east of Mannheim, and his wife Eulalia, née Schwanz (1838-1901), who came from Neuhausen, a village now incorporated in the small town Engen not far from Baden's border with the German Kingdom of Württemberg, where customs duties were still levied at the time. At that small town, where Johann Friedrich was

Fig. 1: Portrait of Friedrich Förster sent to E.B. Williamson with his death notice.

(© K.T. Eldredge, University of Michigan Museum of Zoology, Insect division).

positioned for some time, the couple seems to have come together, and their first child, a daughter, was born there in 1862. The family's residence changed according to the father's place of work: after their time at Kehl, where also their next child was born in 1866, the family lived at Randegg, now part of Gottmadingen near the border to Switzerland until, in Dezember 1877, they moved to Mannheim. Two younger brothers of Friedrich died before their seventh year.

At Mannheim Friedrich attended a secondary school (Realgymnasium) until his final examinations (Abitur) in the summer of 1886, which were a precondition for studying at a university. Normally this exam is absolved with 18 years, but Förster does not seem to have had access to a secondary school at Randegg and therefore his education was delayed. Subsequently he studied natural science at Heidelberg University until December 1889. Among the courses he took for several semesters was microscopy, which discipline certainly helped him later in his taxonomic work. Already as a student he joined the 'Badischer Botanischer Verein (Badenian Botanical Association)', in the journal of which he published his first papers, among these catalogues of Charophyceae (Förster 1889) and other Algae (Askenasy & Förster 1892) from Baden. In this context also might be seen the obituary that Förster (1892) wrote for a Mannheim naturalist named L. Eyrich (1841-1892), who may have been his teacher at the school for a while and whose results from the investigation of diatoms in Baden Förster (1898c+d) later published.

Having completed his university studies Förster chose the teaching profession. For this after passing his government examination in 1890 to become a teacher in one of the advanced schools he had to complete a period of practice in teaching at the respective type of school as an unpaid volunteer successfully before he could be employed. When he had absolved this at Ladenburg and Mannheim in 1892 he was sent to Schopfheim, a little town in southern Baden, not far from Basel in Switzerland as a 'Lehramtspraktikant' (a sort of trainee for teaching) until September 1898. During this time, he shifted his main interest from botany to odonatology (see below).

He then was transferred to Mannheim as a 'Lehramtsassistent' (assistant teacher) for a school year. In June 1899 he was given a post as 'Professor' (≈ secondary school teacher with an academical education) at Bretten. Three years later on 29th of October 1901 at Mannheim, where his parents lived, he married Gottliebin Common, born at Maulbronn 30th of August 1880 as fifth child of the farmer and carpenter Gottlieb Konrad Common (1843-1918) and his wife Elisabeth Gottliebin Common, née Sommer (1846-1892). As the name 'Gottliebin' was very old-fashioned, whereas it seems to have been traditional in that family, Förster's wife called herself Elise instead. In the following years their sons were born: Fritz (1902), Karl (1904), Reinhold (1906) and Erwin (1907) (Fig. 2). A fifth son born in November 1908, died before he was three months old in February 1909.

From his letters to E.B. Williamson and from Mayer (1989) we know that Förster not only was interested in odonatology: He asked Williamson also for Lepidoptera and Coleoptera, skins of North American birds, seeds of North American trees and flowers, which he wanted to cultivate in his garden, and living turtles, of which he received 5 consignments from August 1901 to February 1905. These he tried to acclimatize in vain. He also kept native songbirds in aviaries and informed Williamson about their capture by letter. Other birds kept by him were owls, parrots and cockatoos.

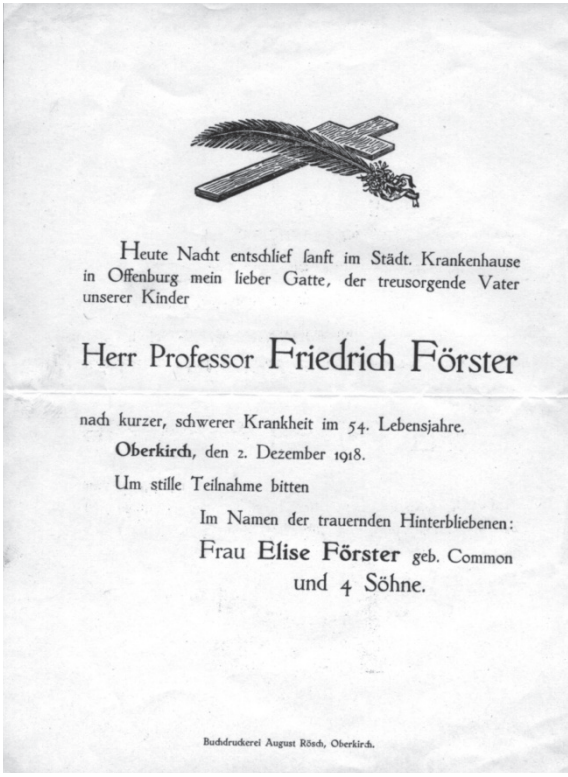
Fig. 2: Förster with his family ca 1914. From left to right: Elise Förster, Fritz Förster (* 1. 11. 1902), Erwin Förster (* 25. Mar. 1907), Karl Förster (* 10. Feb. 1904), Reinhold Förster (* 21. Feb. 1906) and Friedrich Förster.

Another field of interest was archeology, in which he engaged excavating Alemannian burial mounds (cf. Bühr & Förster 1902 and letters to Williamson), Neolithic sites (Förster 1912), and in paleontology, taking part in the congress at the opening of the 'Anthropological Museum Cologne' 1907, where prehistoric questions were discussed, furthermore joining excavations at the site of the *Homo heidelbergensis* in a sand pit near Mauer (Förster 1913a+b) and in the King Otto Cave discovered in 1896 on the Franconian Jura (Anonymous 1919). So it seems that in these matters he observed what was currently happening in these fields and got involved. Paleozoological relics from Mauer made him ask Williamson to find him a source from where he could obtain antlers, skulls and even skins of Arctic animals such as beaver, deer, moose or even bison for comparison; he informed Williamson that he received corresponding items from northern Russia (7-iii-1909).

Förster's time in Bretten also brought about his collaboration with Lord Walther Rothschild. The collector C. Wahnes (more about him below p. 32) was not only Förster's main source for Odonata from New Guinea, but he also offered other zoological items like birds of paradise or marsupials. Apparently Förster was afraid of losing this rich source if he did not ensure that Wahnes could sell these goods at a good price. So already in January 1897 Förster recommended Wahnes to Selys as a source of birds, butterflies or dragonflies from New Guinea for himself or the Brussels Museum, and later, in a letter he asked Williamson if he

(or Vanderbilt University, where Williamson at that time held a fellowship) would like to buy some birds of paradise (June 1901). In 1906 Förster indeed sold birds of paradise and snapping turtles from New Guinea – undoubtedly obtained from Wahnes – to the Natural History Museum Wiesbaden (Pagenstecher 1907: 10), and he successfully arranged a sale of such items to Rothschild's zoological museum in Tring (Rothschild & Hartert 1906). This led to joint publications (Foerster & Rothschild 1906, 1907, 1911, 1914) and to mutual dedications of species (Förster 1906e + 1913c; Rothschild & Hartert 1906 + 1911). During this time Förster described two more taxa of marsupials from New Guinea (Förster 1913c). This cooperation continued still after the death of Wahnes in 1910, as Förster continued conveying specimens from New Guinea to the Tring Museum from his new source, the Lutheran missionary Christian Keysser (1877-1961), who worked at the station Sattelberg 1899-1920 and collected also animals and plants from the German colony Kaiser-Wilhelm-Land (cf. Förster 1914b, in which publication he dedicated a *Rhododendron* species to his wife).

In 1914 shortly after the outbreak of World War I Förster was transferred to a school at Oberkirch in the Black Forest, probably to fill a gap that had been left by the call-up of a science teacher to the front. Förster hoped to avoid this translocation trying to get the local council on his side (text translated from Mayer 1989: 138): "I own a piece of land in Bretten, which I use in part for scientific purposes. I have always been happy to make the experiences I have gained available to the residents of Bretten and, as is well known, have always kept my facilities open to visitors. If I were to move away, I would be forced (since my property would then be completely unsupervised) to take away or sell the most valuable items, which would result in the destruction of what I had creat-



Heute Nacht entschlief sanft im Städt. Krankenhause in Offenburg mein lieber Gatte, der treusorgende Vater unserer Kinder

Herr Professor Friedrich Förster

nach kurzer, schwerer Krankheit im 54. Lebensjahre.

Oberkirch, den 2. Dezember 1918.

Um stille Teilnahme bitten

Im Namen der trauernden Hinterbliebenen:
Frau Elise Förster geb. Common
und 4 Söhne.

Buchdruckerei August Rösch, Oberkirch.

Fig. 3: Förster's death notice

The German text means: "Tonight my dear husband, the devoted father of our children, Professor Friedrich Förster, passed away in the municipal hospital in Offenburg after a short, serious illness at the age of 54. Oberkirch, December 2, 1918. On behalf of the bereaved family: Mrs. Elise Förster, née Common and 4 sons."

ed with great effort and expense. This would certainly be a disadvantage for some of the residents of Bretten. In order to avoid this, I ask for the support of the honorable local council so that my transfer can be reversed." But he pleaded in vain, and so the family moved there. Shortly after the armistice Förster died on 2nd of December 1918 in a clinic at Offenburg, the next major town, "nach kurzer schwerer Krankheit [after short serious illness]", as his death notice says (Fig. 3). He probably succumbed to the Spanish flu, a pandemic that claimed more victims than the fighting on the battlefields.

In an appreciation in his school's annual report it was said (in translation): "He knew how to give his students a wealth of inspiration through his extraordinarily rich knowledge in the natural sciences" (Huber 2005).

He left behind a wide range of collections, the whereabouts of which are still not fully known.

Almost 600 Lepidoptera were purchased by the Tring Museum in 1922, and about 5,000 more were sold in London, as was his collection of Coleoptera. Small mammal remains and siliceous wood from Mauer were acquired by the Karlsruhe Natural History Museum in 1928, which secured further parts of the bequest, mollusks, minerals, letters, offprints, manuscripts and correspondence in 1971 (see Mayer 1989: 140). His correspondence later was transferred to the General State Archives in Karlsruhe, where it is now kept (strangely enough under the name 'Wilhelm Förster').

A first part of Förster's botanical collection - 776 herbarium specimens of plants, most collected by F. Förster himself in Germany, but also from Southern Europe, Near East and Northern Africa and in addition, several hundred herbarium specimens from around the world collected by others - was purchased by the Botanische Staatssammlung Munich in 1950, another part of nearly 600 herbarium specimens from Europe were added as a gift in 1958 (Fleischmann, in litt.).

Let us now turn to Förster's odonatological activities: His first scientific publications from 1888 to 1892 deal with botanical topics from southwest Germany. There is no indication of an engagement in odonatology.

Contrary to Brauer, about whom is passed down that aged 16 he planned to write a work on dragonflies like that of Charpentier (Handlirsch 1905: 132), and to Ris, who at the age of 18 had compiled the first dragonfly fauna of the whole of Switzerland, nothing like that is known from Förster, whereas he mentions in a letter to Williamson in January 1902, that then he had been studying the 'Indian' [= south-east-Asian] odonate fauna for ten years.

The first sign of his odonatological interest was a letter from December 1895 to Selys, asking him where he could obtain several of his publications that he had not been able to buy in Germany (letter kept at the RBINS in Brussels, like many others from Förster, M. Wasscher, in litt.). In this letter Förster also describes the present state of his collection: "Ma collection est encore très petite (je n'ai que peut-être quarante espèces de Sumatra (Tebing Tinggi, Padang), de Java et de Ceylon) mais j' éspère en 1896 d' obtenir des récoltes de Matadi (Congo) et de l' Argentinie et d' Asie Mineure [My collection is still very small (I have only perhaps forty species from Sumatra (Tebing Tinggi, Padang), Java and Ceylon) but I hope in 1896 to obtain collections from Matadi (Congo) and from Argentina and Asia Minor]."

But not before February 1896 Selys sent the requested publications, with the excuse that he had not been able to comply with Förster's request sooner for health reasons (Schneider

Fig. 4: Photography of odonate species from his collection sent by Förster to Selys for consultation. As at that time he had no camera the picture was taken by a friend or rather a professional photographer.

Legend:

"1. Protorthemis ? metallic. 2.Neurothemis equestris ♀
Malacca ca Malaria Ceylon dimorph
3. n.g. n.sp bei Ortheh- (sic) 4. Onychogomphus
Malacca trum Hartmanni ♂ Type
Komatipoort, Transvaal
5. Diplacina Wahnesi 6. Nesogomphus javanicus
Bongu Neuguinea n.g. n.sp. Malang, det (??)
7. Palpopleura Darjeeling Java"

& Simons 2012). This was the beginning of an intensive collaboration with the 'father of odonatology', also to be seen from the correspondence from Förster to Selys: a total of 69 letters and postcards are found in the archive at RBINS distributed over the years as follows: 1895 (1), 1896 (17, sometimes 3 in one week), 1897 (22), 1898 (10), 1899 (13) and 1900 (6), the last one December 5th. This period probably also represented Förster's final introduction to odonatology, as Selys, for example, checked his species identifications and publications (Wasscher & Dumont 2013, note 33) (Fig. 4). Further support from Selys may be seen in that three of Förster's first five odonatological treatises, each of which described only individual species from the Indo-Austral region, were published in the Annales de la Société Entomologique de Belgique, each containing additional notes by Selys (cf. Hämäläinen 2009: 7). Already in 1896 Förster contributed five sheets to Selys' collection of watercolours (see Verspui & Wasscher 2016: 135; Caulier-Mathy & Haesenne-Peremans 2008: 1332).

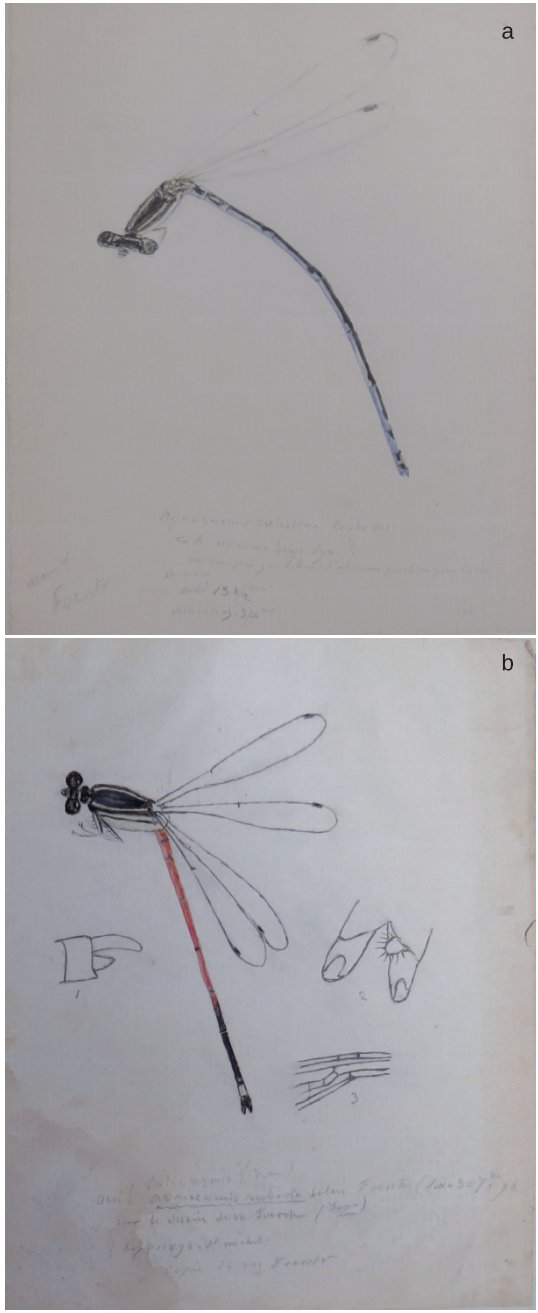


Fig. 5a, b: Watercolors in the Selys collection by Förster, sent in preparation of his publications from 1896. a "*Agriocnemis coelestina* Foerster ms ← *A. minima* Selys Syn. ? " b "*Agriocnemis rubeola* Selys selon Foerster" (30. July [18]96). (photography: M. Wasscher, © RBINS)

Obviously, these were part of the preparations for Förster's first odonatological publications in his endeavor to identify species from a distance or to point to characteristics without exchanging specimens (in return Förster at least received one similar colored drawing from Selys (Förster 1896b: 327-328)). *Nosoticta selysii* (see p. 56) and *Pseudagrion semicolon* (see p. 82) were determined as new by Selys. Species that Förster considered describing were *Agriocnemis coelestina* (fig. 5a) and *Alloneura confraterna* (erroneously misspelled as *Alloneura controtern* in Verspui & Wasscher 2016: 20, table 4). These, like *Agriocnemis rubeola* (Fig. 5b), turned out to be species previously described by Selys (Fig. 5a + b).

At the meeting of the Belgian Entomological Society on 7 November 1896, Selys arranged for Förster (and for Ris) to be admitted as members. The extent of Selys' encouragement for Förster may be seen from the fact that already in a letter dated July 28, 1897, he addressed the 'Father of Odonatology' (obviously on his suggestion): "Monsieur et cher collègue (a que vous désirez) [Sir and dear colleague (as you wish)]."

From Selys' diary we learn of a visit by Förster from 18 to 20 November 1899 with a thorough introduction to the collection and during which the drawings of the Calopterygids and Agrionids were studied on two evenings (Caulier-Mathy & Haesenne-Peremans 2008: 1385). On this occasion Förster was allowed to select ca 80 duplicate specimens from the United States and Japan for his collection. In his last year, Selys even entrusted Förster with the task of publishing the genus *Nasiaeschna* in his name (Förster 1900a: 93).

Förster showed his gratitude for all this help by the dedication of three species and two genera, of which the last – published in 1904 – was a synonym.

After Selys' death he agreed to write the catalogue of the 'Agrionines' in the collection, and from the letters to Williamson we know, that he asked for his assistance for the American species (June 1901), and mentioned that he had received agrionid specimens from Williamson (Apr. 1904) and that he visited the Selys collection at least twice (Sept. 1905; July 1907), but no manuscript was ever written. He may have underestimated the dimensions of the task, as Selys had worked on the systematics of this group until the last years of his life (according to Paulson et al. 2024, a good 630 species and 280 synonyms of the Coenagrionoidea were described at the time of Förster's death). Furthermore, he was not yet married at the time of his acceptance and could not yet foresee how much time it would take to look after his growing family in addition to his demanding job and his many other interests. As a result, he might have planned to complete this task during his retirement, which he never reached.

Probably because Förster's first odonatological papers focused on the Indo-Australian region he was asked by A. Mocsáry, the entomological curator of the Hungarian National Museum (see p. 49), to attend to the collections from New Guinea made by S. Fenichel and L. Bíró (see pp. 69 + 19). To this material Förster in the respective publications (1898a, 1900a, 1903a) added specimens of his own collection obtained from C. Wahnes (see pp. 4-5). At the same time the focus of his papers expanded due to collections from southern Africa (1897d, 1898b, see *hartmanni* p. 43), Madagascar (1899b, see *fickei* p. 40) and Central Asia (1900b, see *holdereri* p. 44), the access to or the acquisition of which resulted from regional contacts in southern Baden. An interest in the Northern Hemisphere might be seen from Förster 1902, which however is his only publication with this regional focus and also the only one that refers to his own odonatological observations in the field. This paper however includes an African species as well, erroneously linked to the fauna of that northern region (see *commoniae*

p. 37). This interest might have been motivated by the results of the Holderer expedition, and especially by his contact with E.B. Williamson, who had sent him specimens of his new *Ischnura kellicotti* in April 1899, which led to an exchange of letters and material, not only of dragonfly specimens (see above p. 3 and p. 4). From Förster 1902: 5 we know that he had also been in contact with J.G. Needham about North American odonate species, but that seems not to have been continued.

About that time, he also contacted F.F. Laidlaw with corrections of his publication, which was intended to compile the knowledge about Odonata from the Malay peninsula (Laidlaw 1902a; 1902b: 382). For details of the resulting cooperation between the two scientists, see p. 12 below.

An additional regional focus of Förster's studies is to be seen from five publications in the years 1903 until 1907 on neotropical Odonata based on acquisitions from this region of the world in his collection (1903c, 1905b, 1906a, 1906d, 1907a). But other publications from these years (1904, 1905b) dwell again on Odonata from South-East Asia.

A large collection from East Africa, which was entrusted to him for description, led to two publications, the second of which attempted to create a system of African and Madagascan Libellulids (1906b+c), but which did not prevail as a result of Ris's different systematic approach in his catalogue of the Collection Selys (cf. Ris 1908: 126/328).

His next odonatological publications deal with the systematics of Aeshnidae (1908a+b) and Synthemistidae (1908c); from the first of these we learn that he had been in letter contact about aeshnids with R. Martin, who at that time was editing the respective part of the Catalogue of the Selys collection and dedicated a species to him (Martin 1909a: 154), which later turned out to be a synonym of *Agyrtacantha dirupta* (Karsch, 1889). This dedication might be a sign of gratitude for Förster's working for him in the preparations of that calalog, which is mentioned in a letter to Williamson from May 1907.

Apart from the odonatological evaluation of two expeditions to Syria, Palestine and the Sinai Peninsula (1909b), which he was entrusted with, Förster's last four odonatological publications from 1909 until 1916, which bear the common title "Beiträge zu den Gattungen und Arten der Libellen [Contributions to the genera and species of dragonflies]", deal with a miscellany of taxa from diverse families and genera from various regions in the southern hemisphere.

It might be interesting to know how his collection came together:

Apparently Förster knew how to find sources to expand his collection: Partly he purchased his material in the usual way from insect dealers like Staudinger & Bang-Haas at Dresden, Fruhstorfer and Rolle at Berlin, Schneider at Basel, but he was resourceful in opening up other sources as well. So in his time at Schopfheim he found out – probably by the brother of the collector, that a young man from the neighbourhood, Karl Hartmann, was in Transvaal collecting Odonata, which he acquired for his collection (Förster 1897b; 1898b). Or he got in contact with Julius Holderer, from 1894 to 1897 administrator of the district, to which Schopfheim pertained, due to shared interest in entomology, and with whom in the summer of 1897 he made a joint excursion to the Swiss Valais. After that Holderer organized and led a Badenian expedition to Central Asia from 1897 to 1899, from which Förster received the dragonflies collected there for publication (Förster 1900b). About that time, he also might have purchased the specimens collected by E. Weiske in Australia, who returned to Germany in May 1900 (see *weiskei* p. 62). Förster also managed to receive Odonata from the chief

of the German Imperial Post Office in Tientsin (China) {today's Tianjin}, Fr. Kuchenbeiser (1999a: 69) or the director of the German Middle School in São Paulo, F.W. Bauer (1906a: 15), or the missionaries of the Basel Mission in Cameroon, H. Bohner (1842-1905) (1906c: 46) and G.H. Stahl (1909a: 213; cf. *stahli* p. 57), the last of whom he might have met during his training at Basel in 1894. Förster also secured important material from the expedition of A. Grubauer to Malacca (1901-02), about whose first expedition to New Guinea (1891-92) he might have been informed in connection with his respective studies (see *grubaueri* p. 43). The collection obtained from Malacca led to his cooperation with F.F. Laidlaw (see p. 12). Some specimens collected in the inner of Paraguay in 1897 he bought from someone called Stichel (see Garrison et al. 2003: 41 s.v. *aratrix*). Whether this pertains to the well-known lepidopterist Hans Stichel (1862-1936), who not much later efficiently published on South American lepidoptera, I could not find out. Förster also received material from the Naturhistorisches Museum Wiesbaden for determining Odonata (1909a: 222), which had been collected by Kurt Seyd during a journey around the world (see Pagenstecher 1907: XII).

Access to the collection by exchange with other odonatologists might be expected. That Förster got material from Selys and Williamson has already been mentioned, whom he provided with some specimens himself too. A few specimens he also got from Needham (Förster 1902: 5) and Uchida (Förster 1909a: 233), but that seems to have been it.

After Förster's death his widow tried to save his collections for science, especially that of Odonata, asking E.B. Williamson, if he might find an institution in the United States willing to acquire the collection, because a buyer could not be found in Germany due to the severe inflation after the war (in its final phase at the 15th of November 1923 one US dollar was worth 4,200,000,000.00 marks). For several years, despite economic hardship, she refused all offers to sell parts of the odonatological collection so that it might be preserved as a whole for science. Finally, after inspection by an authorized representative (probably Frederick M. Gaige, 1880-1976), the UMMZ was willing to purchase the collection, which was sent to the USA in May 1924. However, the agreed payment of US$ 750 was not made until February 1927. But much of the collection "had been destroyed by dermestids and discarded before its acquisition into the collection" of UMMZ and "considerable detective work had to be done not only to identify types but to decipher Förster's handwriting on the labels and to interpret abbreviated locality data and notation" (Garrison et al. 2003: 2).

The severe infestation by pests can certainly be explained by the fact that the widow, busy caring for four teenage boys and untrained in the maintenance of scientific collections, was unable to take care of their proper conservation.

The messy state of Förster's collection after its arrival in Ann Arbor, which was lamented by Kennedy and others (see Seehausen et al. 2023: 20), may have been attributed to the dragonflies, most of which were originally in glass cases, which had to be repacked in card-board boxes for transportation and stacked as tightly as possible. This task was carried out by Mr. Marquardt from the Staudinger company.

A large part of Förster's odonatological library had been sent to Williamson and Kennedy by his widow in 1921.

It might be worthwile to turn to Förster's conduct and role in the odonatological world, as can be seen from Förster's letters to Laidlaw and Williamson, their publications and the Ris correspondence.

From the correspondence to Ris we know, that leading odontologists like Kennedy, Morton, Muttkowski, Tillyard, Martin were quite dissatisfied with Förster, including E.B. Williamson (see Seehausen et al. 2023: 75). A frequently expressed criticism was that Förster did not respond to letters, but his arrogance in creating new taxa was also mentioned and the fact that borrowed material was not reliably returned.

So let us consider what can be said about Förster's cooperation with Laidlaw and with Williamson. For the former, in addition to what emerges from the publications of both, we have eight letters from Laidlaw to Förster from 1902 to mid of 1904, nearly all undated, and one letter from Förster from November 1903.

In 1902 Laidlaw had published on the odonatological results of the Skeat expedition (1899-1900) to the Malay Peninsula, in which he had participated as zoologist shortly after obtaining the BA at Cambridge. In his publication he tried to give a complete survey of the odonate fauna of that region, adding information from literature and the information given by W.F. Kirby and D. Sharp on the collections of the British Museum of Natural History and the Cambridge University Museum of Zoology (Laidlaw 1902a: 63-64).

Förster having purchased a large consignment of Odonata from that region collected by A. Grubauer (see p. 11) and noticing some errors in that paper, because his publication on New Guinean dragonflies (1900a) had not been taken into account, contacted Laidlaw (see Laidlaw 1902b: 381-382). For this assistance Laidlaw dedicated a damselfly to Förster (*Protosticta foersteri*) based on a single female specimen.

So, when Laidlaw had been entrusted with describing the Odonata from the Malay Peninsula collected by an expedition undertaken by N. Annandale and H.R. Robinson (1900-01), he invited Förster to join forces, so that the summing up of the odonate fauna of the Malyan Peninsula might be as complete as possible.

In the first one of Laidlaw's remaining letters from February 11th, 1903, he stated that Mr. Annandale wanted the Odonata manuscript for April. He asked whether Förster would make his new descriptions available for a joint publication. Colored figures on a plate would be possible; if Förster would allow his lists to be included and there would be no problem about separata. He added a prospectus of the Fasciculi Malayenses, the series in which the results of the Annadale-Robinson expedition were to be published. If April were to be too early for Förster, the submission might be postponed. Laidlaw's endeavor to win Förster over is clearly documented.

Laidlaw's next letter shows that he had in mind first to treat the Anisoptera and then to pass on to the Zygoptera beginning with the calopterygids, as he had done in Laidlaw 1902a. He announced that he would send specimens of gomphines and libellulids, for which he would like to rely on Förster's promised help in identifying them. However, since the specimens were not his, he had to request that the specimens be returned. He suggested that Förster might write the text on gomphids and corduliids; he soon would send his part on libellulids for Förster's additions, himself being nearly finished with the legions *Platycnemis* and *Protoneura*. He asked if Förster might contribute to a synoptical table of the genus *Micromerus* [now *Libellago*, see p. 90 s.v. *Chlorocypha*] which shows that at that time he was working on the calopterygids.

In the third letter written not much later the plan was to be changed: Mr. Annandale, as he wanted the first part to be published in July 1903, suggested that the calopterygids should

be published first. If Förster wanted to join his account, he could submit his observations in French or German or Laidlaw could translate them into English. Laidlaw added a list of the respective calopterygids asking Förster to add the pertinent ones from his collection for publication.

Förster not only allowed incorporation of the known species collected in Malacca by A. Grubauer in Förster's collection in Laidlaw's list but also provided some notes on the species, which were taken over by Laidlaw in his publication (1903a), which was published in October.

In the next letter, written probably in October in a hurry (the signature is missing) Laidlaw offered to send more separata of Laidlaw 1903a and informed him that he had no time for more work on Malayan Odonata being occupied by a publication on marine Turbellaria (Laidlaw 1903b). He asked when Förster would be able to send him the *Echo* he (Förster) had spoken of.

This letter is followed chronologically by Förster's only surviving letter from their correspondence written November 3rd.

From it is to be seen that Förster was in the process of determining the collection acquired from Grubauer (see p. 11), but he had not finished preparing all specimens. He stated that at least twenty species of 'agrionines' are found in it, to which he attends on Laidlaw's request, apparently in preparation for their joint publication of 1907. He announced a new taxon *Orolestes orang*, which however, when published, was classifieded in the platycnemidid genus *Trichocnemis* (a Selysian homonym already outdated by *Coeliccia* Kirby 1890) in Laidlaw & Foerster 1907: 2. It is not clear, whether Förster had recognized his own mistake or Laidlaw was responsible for the amendment. We also learn that Förster sent a description of the male of *Protosticta foersteri* (Laidlaw, 1902) from that collection, which later was adopted in English translation, as can be seen from the German word 'fadenförmig [thread-like]' added in brackets (Laidlaw & Förster 1907: 10), but that the specimen is in Förster's collection was not mentioned.

In his letter Förster asked for more separata from Laidlaw 1903a, as he wants to send copies to W. de Selys, Grünberg, Karsch and others. He promised to send a *Neurothemis* and a new *Trithemis* and separata of Förster 1903b and he hopes to have also those of Förster 1903c (published in November). Förster also asked whether it would be possible to get all Fasciculi Malayenses on the Annandale & Nelson expedition, and recommended his friend Fritz Hartmann (see *hartmanni* p. 43) in case Curculionidae were to be described from that.

In his next letter (November 24th) Laidlaw announced further reprints of the calopterygid paper and wrote that he had asked Annandale to send Förster 25 reprints in the future. He was happy about the many Agrioninae in Förster's collection and listed those from the Annadale collection, with which there was little overlap. Then follow some remarks on Libellulinae and that Laidlaw regrets having omitted Förster's note on the biotope of *Echo modesta* (see p. 107) which he would include in the next publication as his information was valuable. Concerning the entire series of the Fasciculi Malayenses it will not be possible for Förster to get them all, but if he (Laidlaw) receives any separata he will forward them to Förster for he has subscribed the whole series. The Reptilia and Amphibia part (Boulenger 1903) he can lend to Förster. As to the Curculionidae he has written to Annandale giving him F. Hartmann's address.

From the next letter we learn that the *Echo* from Förster has arrived and that Laidlaw looks forward to obtain odonate specimens from Tonkin, for which he has sent 10 shillings (so it seems that Förster acted as an intermediary to Fruhstorfer in this matter). Laidlaw is very busy due to an examination in in his newly started medical studies.

In a letter from the first half of 1904 Laidlaw wrote that he had then finished the Agrioninae (including two new species), Libellulinae and Aeschnidae (only three species) from Malacca. He asked if Förster had ever noticed a brush-like structure at the anal appendages of *Platysticta* (now *Drepanosticta*) *quadrata*. Förster's New Guinea paper (1903a) has pleased him. He no longer has much time for Odonata because of his study of medicine and because he is working on Turbellaria for the British Museum (and for Professor W. A. Herdman (1868-1924)). After a journey to London he will send specimens for Förster's collection and Boulenger 1903 which he has finished reading. He has mentioned Hartmann to Annandale, but does not know the result (only a few Coleoptera have been collected).

The last letter must have been written before September 1904. Laidlaw thanks Förster for specimens whose purchase Förster arranged and is glad that Förster states that his (Laidlaw's) *Neurothemis* is a new species (The future publication of that species in the Fasciculi, which however never materialized, is mentioned in Förster 1904: 363 {repr. 6}). Laidlaw agrees that Förster should give a short introduction of his Malacca species in the Insekten-Börse and a more extensive description in the Fasciculi Malayenses. Mr. Annandale suggests to include one or two figures on a plate and he is anxious to know when the manuscript will be ready for the publishers. Could Förster manage until the end of September? About the Tonkin Odonata Förster will probably hear from him in two days. At the end, Laidlaw explains his dissatisfaction with Förster's classification of a *Trichocnemis* (see below).

Their joint publication on the damselflies of the 'Legions *Platycnemis* and *Protoneura*' from the Annandale & Nelson expedition (Laidlaw & Foerster 1907) did not come about before December 1907. In it the descriptions of some new species or of species described before are given by Laidlaw in English, those of new species by Förster in German, and there are additional notes by Förster translated by Laidlaw. In this publication Förster dedicates a subspecies to Laidlaw, which later was elevated to specific rank (see p. 46).

In Laidlaw's letters from the beginning a *Trichocnemis* had been mentioned that was sent to Förster for assessing. That it seemed relevant to Laidlaw is to be seen by its being mentioned in the first three letters. In the seventh letter we learn that Laidlaw wants to call it *sylvicola* (= inhabiting woods, sylvan). In the eigth one he objects to Förster's identification with *Trichocnemis octogesima* Selys, of which he has not seen a specimen, because according Selys' description the median sector arises from the nodal vein, whereas in all his five specimens it arises before it. In the final publication (Laidlaw & Förster 1907: 4) Förster's identification is followed, but Laidlaw's reservations are not dispelled, as can be seen from his remark after the description of Förster's subspecies *albicauda* (p. 6): "The specimens I have referred to *T. octogesima* are, I think, quite different from this 'race,' and save the neuration resemble DE SELYS type where they differ from albicauda." Later it was recognized that Laidlaw's specimens pertained to *Coeliccia didyma* Selys; but this was not even included in Laidlaw's revision of the genus *Coeliccia*, where he states (1932: 12): "This account is necessarily incomplete as I have not been able to examine specimens of *octogesima* and *borneensis*, both of which require re-examination."

In the year after their joint publication Förster dedicated the species *Periaeschna laidlawi* to the British odonatologist (see p. 46).

But that seems to be the end of their cooperation. The only mention of Förster by Laidlaw I could find in a publication from 1914, where he refers to Förster's remarks on *Disparoneura* in their joint publication of 1907, whereas he thanks R. Martin and F. Ris explicitly in a publication on Bornean Odonata, where Förster is not mentioned. Whether that was due to the fact that the Fasciculi Malayenses were not continued, or to the difficulties of the lengthy correspondence over the great distance, is unclear. Laidlaw may as well have been too busy with other commitments besides his medical studies and other odonatological connections (Fraser, Ris, Martin, Williamson) might have proved to be more efficient. Certainly, Förster was in close contact with Williamson in the years from 1904 to 1907 and that several of his major publications that did not relate to the Indo-Malay region were published during this period.

Now we will turn to what emerges from Förster's letters to Williamson and those of the latter one to Ris.

Kept at the UMMZ are Förster's 25 letters and postcards and one fragment to Williamson dating from 1899 to 1909 (1899: 3; 1900: 1; 1901: 3; 1902: 5; 1903: 1; 1904: 2; 1905: 5; 1906: 2; 1907: 2; 1909: 1). As in a letter from April 1904 seeds of *Carex* and *Scirpus* sent by Williamson are mentioned, which were not asked for in any of the earlier preserved letters, there might have been a few more, but certainly not many. Of the letters from Williamson to Förster only one from July 1904 is preserved at the Generallandesarchiv Karlsruhe.

According to a letter of Williamson to Ris in April 1916 there was no later correspondence from Förster, while Williamson continued to send papers and specimens (Seehausen et al. 2023: 72); he also kept the correspondence from Förster's widow and his son after Förster's death. So it seems that Förster did not write any more, at first because being more interested in other things, and from 1914 because of the difficulties of World War I (in that time Erich Schmidt for example, asked Ris, who lived in a neutral country, to forward his letters abroad (Fliedner 2023: 13). That Förster did not mean to end the contact might be seen from his dedication of a *Burmagomphus* taxon to Williamson in 1914.

As mentioned above, contact between the odonatologists came about with Willamson's sending his new *Ischnura kellicotti* and that subsequently Förster requested also many things not related to odonatology, which Williamson reliably fulfilled, even when other people also were involved in the process (see p. 3).

Wasscher & Dumont (1912: 397 n. 33) supposed that "After the death of Selys, the tutor role was taken over by Edward Williamson with whom he exchanged many letters and specimens."

A tutor role of Williamson, however, cannot be seen from the correspondence. There is a letter of Selys to Williamson in November 1900, in which he thanks the young odonatologist for sending specimens of *Ischnura kellicotti* and other American species and for 'The dragonflies of Indiana', and in which he suggests to contact Förster for odonatological literature, whom he had allowed to publish the description of the genus *Nasiaeschna* two years before, and whom he described thus: "M. Foerster est jeune, zélé, et publie sur les Odonates dans différents périodiques en Allemagne. Vous auriez peut-être de l'avantage à vous adresser à lui pour des tracts ou separata odonalologiques [Mr. Foerster is young, zealous, and publishes on the Odonates in various periodicals in Germany. You would perhaps find it advantageous to address yourself to him for tracts or separata on odonalology]" (Gloyd

1983b: 23). This recommendation was given well after Williamson's first contact to Förster before April 1899.

In his letters to Williamson, Förster never asked for scientific advice or discussion; his odonatological requests only concern American Odonata, at first a general listing of genera from which he would like to receive specimens (April and June 1899), later also lists are mentioned which Williamson had provided to choose from (June 1899; Oct. 1900). In July 1901 Förster requested two species of *Argia* and asked whether Willamson would be willing to revise the North American species in his scheduled part of the catalogue of the 'Agrioninae' in the 'Collection de Selys'. In April 1902 he indicated that he would like to see photographs of his *Libellulae papuanae* (see p. 48) included in the work that Williamson was planning with Needham (Williamson had apparently announced that he would include wing photographs with Needham's help in the planned work on the dragonflies of Burma; cf. Williamson 1905: 165; 1907: 267). One wing photograph originating from those preparations was sent to Förster in July 1904, whereas the regional restriction of the publication to Burma did not allow it to be included there.

Finally in September 1907 Förster thanked Williamson for an *Enallagma calverti* and mentioned that he would be interested in *argias* from Central America, where Williamson had made expeditions.

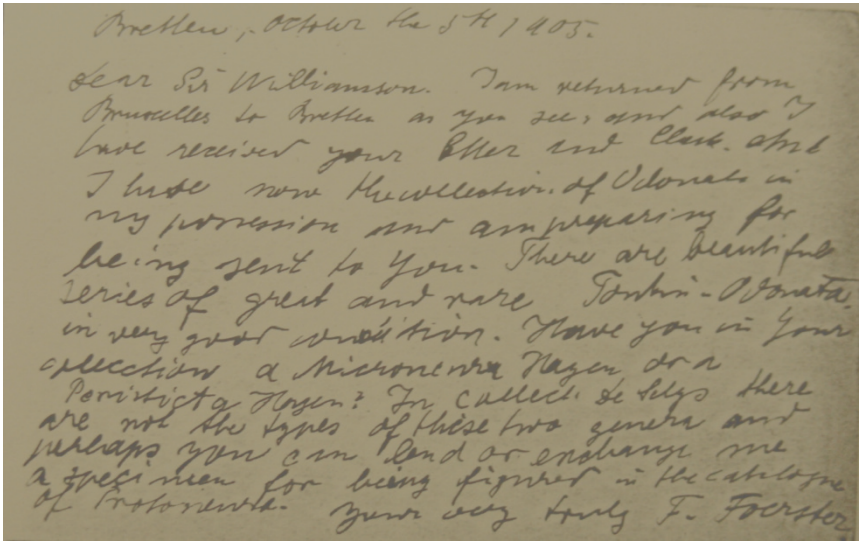
Let us see what Förster did for Williamson

In return, Förster offered various odonates from Germany or duplicates from his collection from New Guinea, Southeast Asia or later also Africa, but in the following letters there are excuses as to why he had not sent anything thus far: more specimens should still be caught, captured specimens still had to be prepared, his work load or other problems had prevented him from action, he hoped to find time in the winter to select duplicates from his collection. What he really sent were separata in June 1901 and August 1905, and odonate specimens in October 1901, in April 1902, in June 1904, in July 1906. Whether more Odonata were ever sent when Förster wrote, that it was time to send promised specimens or that he would be preparing a second box remains unknown. Also, whether Willamson accepted Förster's offer in his last letter in March 1909 to acquire 120 – 150 Odonata from Siberia collected by E. Weiske for US $ 15.00 I could not find out.

Apparently in response to Williamson's information about his intention to work up the odonates of Burma, in January 1902, Förster mentioned some publications that could be useful for this project and offered to identify specimens from there based on his ten years of experience with 'Indian' dragonflies and to determine whether they had already been described. Williamson evidently accepted this offer; for in April 1904 Förster informed him that a *Rhinocypha* specimen sent to him was *R. quadrimaculata*, the other one, which Williamson thought to be a new species from the *ignipennis* group, was immature and therefore would be difficult to identify. In June he sent back the two specimens with the comment that the second was *R. perforata* (presently *Heliocypha p.*), and he added specimens of other *Rhinocypha* species to convince Williamson of the identification. But in his letter from July 1904, Williamson was skeptical about this latter identification, hoping that new material from Burma might settle the question, while for the first species (*R. quadrimaculata*) Förster's identification was accepted (Williamson 1905: 176). But as the hope for new specimens of the second one failed, in that publication the other specimen, after some differences

were listed, was described under *ignipennis* with the remark: “it differs less from *ignipennis* than any other species known” (p. 180).

In Williamson’s preserved letter more subjects were touched: differences of *Rhinocypha* species were discussed, a method of preserving odonate specimens was mentioned, it was regretted that Förster would not be able to visit the United States as well as Williamson was unable to travel to Europe for a long time, the latter’s plan to make a collection trip to Honduras, the remark that the last two years had been not successful for dragonfly collecting in the US, and that also he had not had enough time for other field work, especially for collecting turtles or birds. Also personal matters were mentioned, commiseration with Förster because of his illness in winter and other misfortunes which had hampered his scientific work, sorrow that the Williamsons did not have any children, while the Förster already had two sons, given that both couple had been married for about the same time, and the regret about Mc Lachlan’s death in May.



Bretten, October the 5th 1905.

Dear Sir Williamson. I am returned from Bruxelles to Bretten as you see, and also I have received your letter and Check. And I have now the collection of Odonata in my possession and am preparing for being sent to you. There are beautiful series of great and rare Tonkin-Odonata in very great condition. Have you in your collection a Microneura Hagen or a Peristicta Hagen? In collect. de Selys there are not the types of these two genera and perhaps you can lend or exchange me a specimen for being figures in the catalogue of Protoneura. Your very truly F. Foerster

Fig. 6: Postcard to E.B. Williamson, 6th of October 1905

“Bretten, October the 5th 1905

Dear Sir Williamson. I am returned from |Bruxelles to Bretten as you see, and also I | have received your letter and Check. And | I have now the collection of Odonata in || my possession and am preparing for | being sent to you. There are beautiful |series of great and rare Tonkin – Odonata | in very good condition. Have you in your | collection a *Microneura* Hagen and || *Peristicta* Hagen? In collect. De Selys there | are not the types of these two genera and | perhaps you can lend or exchange me | a specimen for being figures in the catalogue | of *Protoneura*. || Your very truly F. Foerster.”

The text mentions Förster's stay in Brussels in August of that year and a letter and check from E.B. Williamson regarding the acquisition of the dragonfly collection from H. Fruhstorfer, which was to provide material for Williamson's publication on the dragonflies of Burma. In return, Förster requests specimens for his planned agrionine catalog of the Selys Collection.

In the summer of 1905, Förster arranged for Williamson, who had asked him for gomphids from the Malay Peninsula, to acquire a collection of about 200-300 odonates from South America, Southeast Asia and Japan for US $ 20.00, which he sent to him in November adding a note, which abbreviations were used in their labels (Fig. 6). The gomphids remain a topic in the correspondence, as in July 1906 Förster promised to write about them when he had studied them better. This promise obviously referred to specimens that Williamson had sent him for identification (see Williamson 1907: 303 + 307). In May 1907, Förster stated that gomphids could not be distinguished merely by the wing veins; in September of that year, he informed him that the species that Williamson wanted to name *earnshawi* after its collector and had intended as the type species for his new genus *Burmagomphus* was identical to *Gomphus vermiculatus* (!) Martin (for which in the letter before he had still used the correct name), but that the new genus was justified. Williamson followed this assessment (adopting Förster's wrong spelling), since René Martin, to whom he had sent another specimen of the intended species, was not sure whether the taxa were different (Williamson 1907: 303 footnote), and he made Martin's species *vermicularis* the type species of *Burmagomphus*, which he called *vermiculatus* - like Förster in his letter to him (see Williamson 1907: 275). In reality, Förster and Martin both were mistaken; Fraser saw, that Williamson's type specimen of *Burmagomphus*, which he had called '*vermiculatus* Martin', really pertained to a new species (1926: 410). Fraser – having in 1924 (p. 113) already had an *Onychogomphus* named *earnshawi* – did not name the new species after its collector, as Williamson had intended, before the assessments of Förster and Martin had dissuaded him, but after the thwarted author *Burmagomphus williamsoni*. That name however was preoccupied, as Förster (1914a: 75) had already used it for a different species. So Lieftinck renamed the type species *B. arboreus* (1940: 111).

Williamson commented on his relationship to Förster in a letter to Ris in April 1916: "In several years he [Förster] kept me sending him material with the understanding that he was accumulating material there for me (…) he was welcome to what I sent without any exchange, but at the last I sent him some valuable Burmanese material for study and return – and from that day (…) I have never heard from him. I have continued to send him papers and specimens. (…) Surely the man is a rascal (which I do not wish to think) or is decidedly pathological (which I believe)" (Seehausen et al. 2023: 72).

With other odonatologists Förster did not forge any major exchange. This, the end of the correspondence with Williamson and the lack of answers to inquiries, which other odontologists complained about, may be due to the increasing demands of his family situation in addition to his extensive professional commitments, and the continuation of his many other interests, which left no time for this. But considering the only twenty years of work with dragonflies, his results should not be underestimated.

It is appropriate now to turn to Förster's role in odonatological nomenclature:

Förster named 34 genera, of which 17 turned out to be synonyms or homonyms, one is not identifiable due to the loss of the only type specimen (53.0 %), and 165 species or subspecies, of which 73 are synonyms (44.2 %). This is a very high percentage, as Wasscher & Dumont (2013: 384) list that in Fraser 28% of the species names are synonyms, in Hagen 26%, in Selys 20%, in Ris 14% and in Lieftinck 5%. This gives the impression that Förster was not too diligent in his nomenclature. That led R. Tillyard to comment in a letter to Ris: "It seems

to me that he is trying to create types simply for the fun of the thing, or else to enhance the value of his own collection!“ (Seehausen et al. 2023: 57).

Genera

Allopodagrion 1910: 54

Gr. ἄλλος [allos] other, another + πούς [pous] (stem ποδ-[pod-]) = foot + (obsolete) genus name *Agrion* see below)

Fabricius (1775: 425) chose the name *Agrion* [Gr. ἄγριος [agrios] = living in the fields / wild] for a genus to comprise the Zygoptera, probably because they do not live in a domestic area. Later other genera were promulgated from this genus, for instance by Leach (1815) the genera *Lestes* and *Calepteryx* (later emended to *Calopteryx*), the latter one “those Agrionida with coloured wings”. In the course of the 19th century *Agrion* was widely accepted as a genus for all non-Calopterygid damselflies not attributed to other genera. From the 1850's new zygopteran taxa were established, in which *–agrion* as second element of the names to show that they did not pertain to calopterygids (for reasons why *Agrion* is no longer a valid genus see entry *Coenagrion* p. 91). Selys (1862: 12) chose the name *Podagrion* [≈ leg-*Agrion*] for a genus of six American species with long or very long legs. Seeing later that the name was preoccupied by a genus of Hymenoptera he changed it to *Megapodagrion* [≈ longfoot-*Agrion*] (Selys 1885: cxliv). In his reassessment of the genus Förster saw that the wing venation of the species *Podagrion contortum*, which had been among the first to be classified in the genus *Podagrion* Selys, differed sufficiently from the other species thus necessitating a new genus. So the genus name just means “another sort of *Podagrion*”.

Ammogomphus 1914a: 73 = ***Gomphoides*** Selys, 1854: 73

Gr. Ἄμμων [Ammōn] = Libyan-Egyptian god, equalised with Zeus (Gr.) or Jove (L.), depicted with coiled ram's horns; for *–gomphus* see below

In Förster's introduction of the new genus there is no indication of what might have led him to choose this name; but in the description of the male of his type species (now *Gomphoides perdita*, females were unknown to him) he mentions (p. 74) “die halbkreisförmigen, am Rande fein gezähnten Öhrchen [the semicircular auricles, finely toothed at the edge].” So this may have prompted his choice of name. The genus name *Gomphus* (Gr. γόμφος [gomphos]= bolt for shipbuilding) was introduced by Leach (1815: 137) for species with the feature “Abdomen clavate in both sexes”. The Gomphidae now form one of the largest dragonfly families at all.

Selys established a genus and subgenus *Gomphoides* (≈ looking like a *Gomphus*) in a ‘cohorte’ within his ‘Legion Gomphus’, in which the triangles are divided by veins.

Argas 1914a: 61 = ***Argia*** Rambur 1841: 254 (misspelled)

Bironides 1903a: 521

Gr. –ίδης [–idēs] = (male) descendant of … (not to be confounded with the suffix –οειδής [–oeidēs] = looking like a …)

This is a dedication to the Hungarian collector Lajos Bíró (1856-1931). Its reason for the dedication is to be seen in the description of the single species upon which Förster based his new genus (p. 524, in translation): "A single male of this strange species … captured by Mr. BÍRÓ in 1901 and dedicated to him." The man upon which the eponym is based undertook a one-man expedition to New Guinea between 1896 and 1902 collected more than 200,000 zoological specimens, from which also now new species are described (see Vas 2023), a large botanical collection and ca 5,600 ethnographical objects, together with thorough documentation. For more about him see Antoni 2014: 180; Beolens 2018: 47.

Dromaeschna 1908a: 191 (fig. 7a+b)

Gr. δρόμος [dromos] = race, foot-race / race court / orchestra in the theatre + *–aeschna* (see below)

Fabricius (1775: 424) had established a genus *Aeshna* to comprise the Anisoptera with a long abdomen (this feature he did not make known before the second edition of his publication in 1793: 383). But he did not explain the origin or derivation of the name. In entomology it was first found spelled with a c before the h in the entomological work of the English scientist T. Moufet(ius) (1634: 69), where it seems to have been used to denote Ephemeroptera and Plecoptera, which name most probably was misspelled from *Aeschra* [Gr. αἰσχρά [aischrá]= the ugly one]. As this name had not been adopted by Linnaeus, Fabricius felt free to use it for his new odonate genus, but he kept the spelling without the c. In the 19th century, however, the name generally was used in the emended form with the c and therefore this orthography is maintained in all the compound names introduced since then. But in July 1911 the ICZN decided in opinion 34, that the name of the genus *Aeshna* itself henceforth should be spelled in the Fabrician way without the c (for more see Fliedner 2024).

The name *Dromaeschna* must refer to the criterion, by which Förster separates his taxon from the Selysian genera *Acanthaeschna* and *Austroaeschna* (Fig. 7). This is the “Area, welche durch die Basis des Sektor inferior trianguli, dessen inneren Ast und die Submedianader gebildet wird [area formed by the base of the inferior triangular sector, its inner branch and the submedian vein]” (p. 190), which in the key is said to be tetragonal in *Acanthaeschna*, longitudinally oval in the nominate form of *Austroaeschna* and nearly circular in his new subgenus *Dromaeschna*, which however now is classified as a genus. That means that Förster has applied the element *Drom-* in a meaning which is unusual in entomological nomenclature, where it normally refers to the way of locomotion, like in *dromedarius* (one-humped camel) or *Dromaeus* (the Australian ratite Emu) or to long legs as in the genus *Dromogomphus*. In this case Förster probably refers to the round form of the orchestra in ancient Greek theatres, whereas this meaning of *dromos* is only documented in a dictionary from late antiquity.

Eusynthemis 1903a: 545

Gr. εὖ [eu]= well + συν– [syn–] = together, along with (for *–themis* in anisopteran genus names see below)

In his new classification of the cordulines Selys established a genus *Synthemis* (1870: ci, cf. 1871: 557), not explaining his choice of name as usual. The publication had al-

Fig. 7a, b: *Dromaeschna weiskei* a. ♂ b. ♀. The feature of the wing venation, which led to the name, is clearly visible in both specimens (© Günther Theischinger)

ready been announced by Hagen 1867: 62 and Brauer 1868c: 740. The element *–themis* [Gr. θέμις = law as established by custom / the goddess of order] had been introduced by Hagen in 1861, when he was in need of names for new libellulid genera (see Fliedner & Endersby 2019: 116) and he and Brauer from 1867 onwards had continued to create names for other libellulid genera with this element, so that it became a stem for libellulid dragonflies. It must be remembered that *Synthemis* was introduced as a genus in the subfamily Cordulinae of the Libellulidae, so that the name was to say: "Libellulid genus alongside other ones." Presently Corduliidae and Synthemistidae rank as families of their own; so this information is no longer correct and the element *–themis* now is found in taxa of all three families.

Förster 1903a: 543 described a new *Synthemis* species, the females of which differed considerably from the usual ones in that genus by their conspicuous ovipositor, which he assessed to be archaic in evolution (see below p. 26 s.v. *Palaeosynthemis*). For this taxon he introduced a new subgenus and at the same time sorted *Synthemis brevistyla*, the only species of that genus the female of which was known to him, in a separate subgenus *Eusynthemis*, to signify that it was an evolutionary fully developed species. He justified his decision thus: "Es erlauben die bisherigen Gattungsbegriffe nicht, dass *primigenia* und *brevistyla* in einer Gattung verbleiben können, wenn auch zugegeben werden muss, das alle *Synthemis*-Arten in Bezug auf Gattungsmerkmale etwas unfertiges, variables an sich tragen [The existing genus concepts do not allow for *primigenia* and *brevistyla* to remain in one and the same genus although it has to be admitted that in terms of generic characters all *Synthemis* species have something incomplete and variable]." Meanwhile both taxa are classified as genera.

Huonia 1903a: 515

L. suffix *–ius –ia –ium* = pertaining to

This is a toponym, referring to the Gulf Huon at the north-eastern coast of New Guinea, from where most specimens were, from which Förster described the species *H. epinephela* (p. 40) and *H. talassophila* (p. 58).

Hylaeagrion 1906a: 15; 3 reprint = ***Aeolagrion*** Williamson 1917: 242

ὑλαῖος [hylaios] = belonging to the wood; for *–agrion* see *Allopodagrion* p. 19

Förster based his genus on two species from Suriname, the first of which he thought to be *Leptagrion croceum* (Burmeister) [L. = saffron-coloured], the other one he described as *H. argenteolineatum* (see p. 65). Why he chose that genus name, he does not say. Perhaps he had gotten some additional information about the biotope, where all his five specimens had been caught, from the entomological sellers, the firm Staudinger–Bang-Haas at Dresden.

Williamson saw, that Förster's description of the Burmeister species did not agree with that taxon, which is really a *Leptagrion* the females of which do not have a vulvar spine; as to the second species he recognized it to be a junior synonym of *Leptagrion dorsale* (Burmeister) [L. = concerning the back, perhaps because its being almost totally black], which – following a rating by Selys (1876b: 975) – he classified into a new genus, which he named *Aeolagrion* (Gr. αιόλος [aiolos] = nimble / changeful of hue, shiny / checkered),

probably in reference to the back of the thorax in his new species *A. demerarum*, which he says has “a dark metallic middorsal stripe.”

Karschia 1900a: 91 (homonym) = ***Plattycantha*** Förster 1908b: 215 (see p. 28)

This is an eponym which is explained by Förster in an evaluation of aeshnid genera near *Gynacantha*: “Vielleicht lassen sich Gyn. cornuta, angulata (= microstigma de Selys?) und dirupta Karsch ? zu einer natürlichen papuanischen Gruppe vereinigen, welche zu Ehren des um die Aeschniden-Systematik hochverdienten Entomologen Herrn Prof Karsch in Berlin den Namen Karschia führen möge [Perhaps *Gynacantha cornuta, angulata* (= *microstigma* de Selys?) and *dirupta* Karsch ? might be united into a natural Papuan group, which should bear the name Karschia in honour of the entomologist Prof. Karsch in Berlin, who is highly merited in Aeschnid systematics].“

The name however had to be replaced, because it was preoccupied by a genus of spiders established in 1889.

The eponym Ferdinand Anton Franz Karsch (later Karsch-Haack) (1853-1936) since 1878 was employed at the Berlin Zoological Museum and, after 1881, taught at the agricultural college there. first as private lecturer, later as professor. From 1885 to 1900 he edited the periodical Entomologische Nachrichten and from 1886 to 1995 as well as the Berliner Entomologische Zeitschrift. In 1899 he became curator of the entomological department at the Zoological Museum. More than 250 publications by him deal with entomological or arachnological themes, mostly on systematics. In his publications after 1903 he dwelled on homosexuality in animals and mankind and after 1905 he mostly used the name Karsch-Haack, adding his mother’s maiden name to his own. For more about him see Endersby & Fliedner 2015: 55; Hämäläinen 2017; Beolens 2018: 212).

Limnetron 1907a: 163; 7 reprint

Gr. λίμνη [limnē]= pool of standing water left by the sea or a river, marshy lake + ἦτρον [ētron]= abdomen

Förster did not explain his choice for this name. Nor is anything in the descriptions of the genus itself or in that of its single species which would help to understand its meaning. The first element of the name could point to the habitat of the genus which however is a taxon of streams within forests; so Förster might have been mistaken in this respect; but what might have induced him to choose a name combined from a habitat and a body part? Förster emphasizes that the new aeshnid taxon pertains to the “Gruppe Brachytron Karsch” (1907a: 166, cf. Karsch 1991: 284; the name *Brachytron* is contracted from *Brachy-ētron* = short abdomen). So that relation Förster might have had in mind when creating the name.

Malayaeschna 1909a: 219 = ***Heliaeschna***, Selys 1882: 667

Mod.L. *Malayi* = Malays (ethnic group in Southeast Asia and Indonesia), for *–aeschna* see *Dromaeschna* p. 20

Species of *Heliaeschna* Selys are known from from Africa and Southeast Asia. Förster saw differences between these groups and established a subgenus for the ‘Indian’ (= Southeast Asian) species under the name *Malayaeschna*.

Selys (1882: 667) separated his genus *Heliaeschna* from *Gynacantha* without an explanation for his choice of name, but most probably it is a combination of Gr. ἕλικες [helikes] (= forked tendrils of the vine) with genus name *Aeshna* in reference to this feature: "♀ Le 10e segment prolongé en dessous en une plaque fourchue pro combante, à branches fines, longues, aiguës, écartés [♀ 10 th segment elongated beneath into a prominent forked plate with fine, long, pointed splayed branches]."

Malayogomphus 1914a: 79 = ***Leptogomphus***, Selys 1878: 442

Mod.L. *Malayi* = Malays (ethnic group in Southeast Asia and Indonesia); for *–gomphus* see *Ammogomphus* p. 19

Förster had a gomphid from Java (his *Malayogomphus semiteres*, see p. 83), which he could neither place in the genera *Burmagomphus* nor *Gomphus*; he assessed it to be near to, but not identical with *Anormogomphus*, which, according to Selys, was distinguished from all other gomphids by a rounded anal edge of the males hindwings. Förster did not see that his 'new' taxon really was *Leptogomphus lansbergei* Selys, 1878 and that so that Förster's new genus was relegated to synonymy. For *Leptogomphus* see p. 95.

Matronoides 1897a: 101

Lat. *matrona* = married woman, wife, matron + Gr. –οίδης [–oidēs] = looking like a …

The history of this taxon, which got its name because of its similarity to the genus *Matrona*, shows Förster's uncertainty and tentative approach when classifying it into the taxonomic arrangement of odonates. In his description of *Matrona* (*Matronoides*) *cyaneipennis* he wrote: "Ich besitze leider augenblicklich keine ächte Matrona De Selys in meiner Sammlung; es scheint mir aber ein neues Genus vorzuliegen, für welches ich den Namen **Matronoides** vorschlagen möchte und dessen genauere Begründung ich zutreffenden Falles nachtragen werde [Unfortunately, I currently do not have any authentic *Matrona* De Selys in my collection; however, this seems to me to be a new genus for which I would like to suggest the name *Matronoides* and, if I am right, I will add a more detailed justification]."

Having ranked *Matronoides* in this publication first as a subgenus of *Matrona* and then provisionally as a genus, in his next publication (1897b: 204) he classified both taxa as subgenera of *Neurobasis*. Now however they both are classified as full genera (cf. Hämäläinen & Fliedner 2022).

Mesogomphus 1906b: 323 = ***Paragomphus*** Cowley, 1934: 201

Gr. μέσος [mesos] = middle; for *–gomphus* see see *Ammogomphus* p. 19

As a reason for his new taxon he opines (p. 322): "dass die kurzbeinigen afrikanischen Onychogomphus mit Gomphus s. str. den Verlauf des Innenastes des Sector inferior trianguli gemeinsam haben, also dieser Gattung näher verwandt sind, während sie durch die Länge der Appendices anales, was ich aber für wenig wichtig halte, mehr zu Onychogomphus neigen [that the short-legged African *Onychogomphus* have the course of the inner branch of the sector inferior trianguli in common with *Gomphus* s. str, and are therefore more closely related to this genus, while they tend more towards *Onychogomphus* due to the length of the appendices anales, which I consider to be of little impor-

tance].” So, his generic name is: ‘a gomphid by its characteristics between *Gomphus* and *Onychogomphus*’. But unfortunately, the name chosen by Förster was preoccupied by a genus of fish. So, Cowley (1934: 201) replaced it with *Paragomphus* (≈ a taxon close to *Gomphus* {Gr. παρά [para] = beside, near}). Gloyd's (1983a) objection to Cowley's naming of *P. cognatus* (Rambur) as the type species is invalid since Förster's *P. nguelicus* has been found out to be a junior synonym of this species.

Microtrigonia 1903a: 524

Gr. μικρός [mikros] = small, little + τρίγωνον [trigōnon] = triangle + L. *–ius –ia –ium* = pertaining to

The name was chosen in reference to the triangle in the fore wings: “Cardinalzelle im Vorderflügel sehr klein, im Hinterflügel etwa dreimal größer, in allen vier Flügeln ungeadert wie die Hypertrigonalräume [Triangle in the fore wing very small, about three times larger in the hind wing, not veined in all the four wings like the hypertrigonal spaces].” (For the genus *Microtrigonia* see Theischinger & Richards 2014).

Myagrion 1914a: 68 = ***Acanthagrion*** Selys, 1876: 304

Gr. My is the equivalent of the Latin letter M; for *–agrion* see *Allopodagrion* p. 19

Förster chose the name evidently due to a structure on the upper side of the tenth segment of the single male, on which he based this taxon (p. 68): “Das 10. Abdominalsegment … ist oben spitzwinklig eingeschnitten, die Basalecken des Einschnittes nach hinten in einen geraden, wagrecht abstehenden, sehr spitzen Dorn ausgezogen, der etwa 1/6 so lang ist wie das 10. Segment [The 10th abdominal segment ... is incised at an acute angle at the top, the basal corners of the incision extend backwards into a straight, horizontally projecting, very pointed spine that is about 1/6 as long as the 10th segment].” This incision together with the horns would form the letter M. That Förster attaches crucial importance to this structure to justify a new genus is to be seen on p. 69: “Die Verlängerung der letzten Segmentdecke des Abdomens in zwei Dorne konnte ich bisher nirgends beobachten [So far I have not been able to observe the extension of the upper side of the last abdominal segment into two spines].“ Förster did not see, that he had created a junior synonym of *Acanthagrion* (from Gr. Gr. ἄκανθα [akantha] = prickle, thorn), which received its name from a feature common in the Ischnurinae: “Une épine ou pointe aiguë au bout du 8e segment de la femelle en dessous” [A spine or sharp point below the end of the 8th segment of the female]” (Selys 1876a: 250).

Neocharis 1906d: 68 = ***Heliocharis*** Selys, 1853: 55

Gr. νέος [neos] = new, fresh + χάρις = grace, beauty, sweetness, here a reference to Selys’ genus *Heliocharis*

Förster based his taxon on a species (*N. cothurnata*, see p. 67), the wing venation of which, in his opinion, differed from the related genera *Heliocharis* (see below) and *Dicterias* Selys (Gr. δεικτηριάς [deiktērias] = female mime, because of the superficial similarity of the sole species to red zygopteran species like *Pyrrhosoma nymphula* or *Ceriagrion tenellum*, see Selys 1854: 192) and *Cyanocharis* Needham (Gr. κυανοῦς [kyanous] = blue, due to the abdominal colour of his type specimen, which really was a *Heliocharis amazona*). The genus

Heliocharis was described from a single male of *H. amazona* in the collection of the explorer H.W. Bates. It was defined from characters of wing venation and other morphological features. Selys does not explain his choice of name, but he might have gotten some information about the sun loving behaviour of the species from the explorer himself (on Bates' manuscripts from the possession of Selys see Seehausen 2022).

Oreoxenia 1899b:189 = ***Neodythemis***, Karsch 1889: 252

Gr. ὄρειος [oreios] = of or from the mountains, mountain-haunting + female form of ξένιος [xenios] = belonging to friendship, hospitable (latinized female form)

Förster based this genus on some characters of wing venation from a single male which came from a mountain region near the northern Cape of Madagascar (p. 191): "Heimat: La Montagne de L'Ambre im Norden von Madagascar [Country: La Montagne de l'Ambre in the North of Madagascar]." Karsch established his genus *Neodythemis* (Gr. νέος [neos] = new, fresh + *Dythemis* see below) to a group of genera characterized by: "Hinterleib des Männchens schlank, dünn, am hinteren Ende etwas erweitert, ähnlich *Dythemis* [abdomen of the male slim, lean, at the distal end somewhat dilated, similar to *Dythemis*]." *Dythemis* (Gr. δύο [dyo] = two) was among Hagen's first names with the element *–themis* for 'libellulid dragonfly (see p. 20 s.v. *Eusynthemis*). *Dythemis* probably received its name because of the bituberculated 10th abdominal segment in the females.

However, a few years later Förster stated (1906c: 23): "So bin ich auch ziemlich überzeugt, dass meine Oreoxenia ouvirandrae identisch mit Neodythemis Hildebrandti Karsch ist [So I'm pretty convinced that my Oreoxenia ouvirandrae is identical to Neodythemis Hildebrandti Karsch]." Which synonymy is now agreed upon.

Palaeosynthemis 1903a: 546

Gr. παλαιός [palaios] = old in years / ancient + *Synthemis* (see *Eusynthemis* p. 20)

Förster established this taxon, which is now a synthemistid genus in its own right, as a subgenus of *Synthemis* for a new species from New Guinea, which he assessed to be most archaic in an evolutionary sense, so that he named it *primigenia* (≈ first of its kind).

Palaiargia 1903a: 549

Gr. παλαιός [palaios] = old in years / ancient; for *Argia* see p. 89

Selys (1865: 416) had established a subgenus *Onychargia* (≈ claw-*Argia*) for a species from Malaysia with bifid claws of equal length within the genus *Argia*, in which were still found a few species from the Old World. In 1878 he included a species from New Guinea in this genus, the male and female he described as different taxa. Förster saw that the female could not remain in that genus because its bifid claws were not of equal length. But since it differed from the neotropical components of *Argia*, he chose the name *Palaiargia* to signify that this new genus pertained to the Old World.

Pentaphlebia 1909a: 211 (fig. 8)

πέντε [pente] = five + φλέψ [phleps, stem φλεβ– (phleb–)] = vein + adjectival suffix –ιος –ια –ιον [–ios –ia –ion] = associated with, pertaining to

The element *–phlebia* = veined is found in odonatological nomenclature since it was

Fig. 8: *Pentaphlebia stahli* ♂ from Cameroon, South-West Province, Mount Kupe. (© Rosser Garrison) The picture clearly shows the 5 antenodal cross veins on which the name of the genus is based.

introduced by Selys (1854: 81) for the gomphid genus *Diaphlebia* [≈ crossed by a transverse vein, referring to the discoidal triangle, a feature also found in the related genus *Zonophora*, as a subgenus of which *Diaphlebia* was introduced].

Förster gives as distinguishing feature of the males: "♂ in der Regel mit nur 5 Antenodalqueradern, der Arculus wie bei der nächstverwandten australischen Gattung Diphlebia aus der 2. Antenodalquerader entspringend [♂ usually with only 5 antenodal transverse veins, the arculus arising from the 2nd antenodal transverse vein, as in the closest related Australian genus *Diphlebia* [≈ two veined, in reference to the antenodals)]. In modern odonatological taxonomy the relationship of *Diphlebia* and *Pentaphlebia* is by no means as close as Förster thought.

Philonomon 1906b: 308 = ***Diplacodes*** Kirby, 1889: 263 +307

Gr. φιλο- [philo–] = fond of, loving + νομῶν [nomōn, genitive plural] = of the pastures

The name seems to refer to behaviour or biotope; but nothing about that is found in the description of the genus or the type species, the definitions of which are based on morphological features.

For *Diplacodes* see p. 92

Plattycantha 1908b: 215

Gr. πλατύς [platys] = wide, broad /flat, level + *Gynacantha* (see p. 93)

This is a substitute name. In 1900a (p.91-93) Förster had separated a genus from *Gynacantha* Rambur, of which a distinguishing feature was "♀. Abdomen an der Basis etwa bis zur hintern Breite des Thorax aufgeblasen, Segment 3 fast überall gleichmäßig breit [Abdomen inflated at the base to about the posterior width of the thorax, segment 3 almost uniformly wide everywhere]." This new genus he named *Karschia* (see p. 23).

When he learned that *Karschia* was preoccupied, he chose the name *Plattycantha* instead, which certainly was intended to mean 'broad *Gynacantha*'. The orthography of this name is somewhat peculiar and probably goes back to the fact that Förster never had learned Greek: the word *platys* is never written with double t, but one of its meanings in German, platt (= flat) would be spelled incorrectly with just one t, and the name *Gynacantha* is formed by the elements *gynē* and *akantha*, so that a correctly formed denomination would have been *Plat-acantha*. But perhaps Förster has chosen that irregular reference to *Gynacantha* because the name should not be understood literally as "broad thorn".

Pronomaja 1909a: 225 = ***Uracis*** Rambur, 1842: 31

Gr. προνομαία [pronomaia] = proboscis (of a fly or a bee)

The name, at first, seems enigmatic, because a proboscis is never found among the mouth parts of a dragonfly. Förster chose this name for a "Uracis-artigen Libelle mit sehr langer Legröhre [*Uracis*-like dragonfly with a very long ovipositor]", which he wanted to separate from *Uracis*, "da sie völlig divergente Dreiecke besassen [because they had completely divergent triangles]" (p.224). So it might be that he chose the name because he thought that this special ovipositor, whereas it had a completely different function, looked like a proboscis. The species in question (see *mimetica* p. 73) had been validly described by Calvert (1909: 227) before as *Uracis ovipositrix*. Ris (1911: 410) rejected Förster's decision to establish a new genus for the species.

The name *Uracis* (from Gr. οὐρά [ura] = tail (in entomology often for abdomen, sometimes for appendage) and ἀκίς [akis] = any pointed object) was introduced by Rambur in reference to the pointed ovipositor of the females, which extends beyond the end of the abdomen.

Protoaeschna 1908b: 216 = ***Anaciaeschna***, Selys, 1878c: 317

Gr. πρωτο– [proto–] = foremost, first; for *–aeschna* see *Dromaeschna* p. 20

Foerster does not give any explanation for his choice of name; but it might be assumed, that he saw this genus as archaic in evolution. He mentions the similarity to *Isoaeschna isoceles*, which, since Schmidt (1950) was often placed in the genus *Anaciaeschna*. That taxon had been based on *Aeschna jaspidea* Burmeister as a subgenus of *Aeshna*, for which Selys stated: "Le nouveaux sous-genre ressemble donc aux *Anax* [The new subgenus therefore resembles *Anax*]" (for *Isoaeschna* see Schneider et al. 2023).

Protolestes 1899b: 187

Gr. πρωτο– [proto–] = foremost, first; for *–lestes* see p. 95

The name is introduced in a key, in which Förster separates his new genus from others described by Selys in the 'Légion Podagrion', all with the element *–lestes* in their names. Förster does not explain his choice of name, but the new taxon differs from the other Malagasy podagrionid genera thus (p. 186): "Nur ein Hilfssector zwischen nodalis und subnodalis (Alternative: 2 oder mehr Hilfssektoren) [Only one supplementary sector between the nodal and the subnodal ones [alternative: 2 or more supplementary sectors)]." So, it can be assumed that he considered it to be more archaic than the others.

Pseudorthemis 1899b: 171 = ***Protorthemis*** Kirby, 1889: 261, 290

Gr. ψευδ– [pseud–] = false, pretending to be + *Orthemis* (see below)

In 1897 Förster had classified his new species *wahnesi* [see p. 86) as a *Protorthemis* Kirby, following a suggestion by de Selys (see Förster 1897b: 40 footnote 1). But having studied Kirby's publication more thoroughly he saw that his species differed from Kirby's type species by the position of the arculus in relation to the triangle and in its abdominal shape. Therefore he stated (1899b: 171): "Um einstweilen Klarheit zu schaffen, möchte ich mit Hilfe der beiden genannten Merkmale die Aufstellung einer neuen Untergattung Pseudorthemis (non Pseudothemis Kirby) empfehlen, mit der bisherigen Protorthemis Wahnesi als Type und wahrscheinlich coronata als weiteren Art oder Rasse [To remove lack of clarity for the time being, I would like to recommend the creation of a new subgenus *Pseudorthemis* (non *Pseudothemis* Kirby) taking into account the two characters mentioned, with the previous *Protorthemis wahnesi* as the type and probably *coronata* as another species or race]. But later in 1903a: 536 he stated: "den Unterschied zwischen meiner Untergattung *Pseudorthemis* und *Protorthemis* betrachte ich jetzt auch als spezifisch [I now consider the difference between my subgenus *Pseudorthemis* and *Protorthemis* to be specific too …]. Förster's taxon was sunk by Ris (1910: 147; cf. p. 108).

Hagen (1861: 161) had instituted a genus *Orthemis* (Gr. ὀρθός [orthos] = straight; for *–themis* see *Eusynthemis* p. 20) for libellulids with a straight abdomen not inflated at the base (see Fliedner 2020: 43). Kirby (1889) transferred the species from the Indonesian region thus far placed in *Orthemis* into his new genus *Protorthemis* (Gr. πρῶτος [prōtos] = foremost, first, probably judging these species to be more archaic in an evolutionary sense). At the same time he created a genus *Thermorthemis* (Gr. θερμός [thermos] = hot) for species from Madagascar and Africa; from then on, the genus *Orthemis* has been known to be confined to the Americas.

Rhionaeschna 1909a:220

Gr. ῥίον [rhion] = any jutting part of a mountain, whether upwards or forwards + *Aeshna* (see *Dromaeschna* p. 20)

Förster based this genus on a single species *R. brevifrons* (Hagen), which has a peculiar prominent vertex: "Sehr merkwürdig ist die Bildung der Ocellenblase. Sie ist von vornher eingestülpt, sodaß sie eine Art Haube bildet, unter welcher die mittelste Ocelle sitzt. Vor der Ocelle ist die Stirn mit einer kreisförmigen Mulde versehen. Gesicht etwas kugelig vorgewölbt; die Stirn sanft nach oben und hinten gerundet, ohne Vorderkante, da die Kantenlinie fast in die Mitte der Oberseite zu liegen kommt [The formation of the vesicule near the ocelli is very remarkable. It is concave anteriorly, so that it forms some kind of hood, under which the middle ocellus is positioned. In front of the ocellus the frons has

a circular depression. The face bulges somewhat forward globularly; the frons is rounded softly upwards and backwards, without an anterior edge, as the line of the edge is positioned nearly in the middle of the upper side].”

Selysioneura 1900a: 106

Gr. νεῦρον [neuron] = sinew, tendon [in entomology: wing vein]

Förster explains his choice of name in a footnote: “Meinem Freunde und Lehrer in der Odonatenkunde, Herrn Baron Ed. de Selys Longchamps zu Lüttich in Erinnerung an gemeinsame Studien gewidmet [Dedicated to my friend and teacher in odonatology, Baron Ed. de Selys Longchamps in Liège in memory of shared studies].“

The second element of the name finds its explanation on p. 108: “*Selysioneura* gehört zur Legio *Protoneura* Selys [*Selysioneura* pertains to the Legio *Protoneura* Selys] … Es sind überhaupt keine sectores trianguli mehr entwickelt. Wir haben somit in *Selysioneura* die primitivste aller bisher bekannten Protoneurengattungen vor uns [No sectores trianguli are developed at all. In *Selysioneura* we have before us the most primitive of all *Protoneura* genera known until now].”

For the relationship between Förster and the ‘Father of Odonatology’ see p. 6-9 and Wasscher & Dumont 2013.

Selysiophlebia 1905a: 75; 1 reprint = ***Gynacantha*** Rambur, 1842: 209

for *–phlebia* see p. 26 s.v. *Pentaphlebia*

This is an eponym for the ‘Father of Odonatology’. Förster gave as the reason for introducing a new genus for the type species (see *aratrix* p. 64), which agreed in wing venation completely with *Gynacantha*, the difference in the shape of the male’s appendages from all other species of that genus. But he also admitted that he had reservations for this eponym: “Die Form gehört zur Gattung Gynacantha in Hinsicht auf das Geäder, ist aber, wie gesagt, ohne Analogon unter den alt- und neuweltlichen Gynacanthen. Herr De Selys, dem ich diese Untergattung zueignete, indem ich ihm ein Exemplar mitteilte, war der Gründung der neuen Untergattung Selysiophlebia abgeneigt, da er seine Gattungen fast ausschließlich auf das Geäder gründete [The taxon belongs to the genus Gynacantha according to ist venation, but, as already mentioned, has no analogue among the Old and New World Gynacanthas. Mr. De Selys, to whom I dedicated this subgenus by conveying a specimen to him, was disinclined to found this new subgenus *Selysiophlebia*, since he based his genera almost exclusively on wing venation].”
For *Gynacantha* see p. 93.

Skiallagma 1906a: 15; 1 reprint = ***Xiphiagrion***, Selys 1876: 321

Gr. σκιά [skia] = shadow + *Enallagma* (see below)

Förster states about his new taxon: “Enallagma dürfte auch die nächstverwandte Gattung zu Skiallagma nov. gen. sein [*Enallagma* probably is also the closest related genus to *Skiallagma* nov. gen.].” But to this statement Williamson 1917: 241 objects: “I can hardly agree, since against the *Enallagma*-like character of the quadrangle (which is not at all characteristic, by the way, being a common form of quadrangle) one can set at once the absence of postocular spots and the origin of A at the cubito-anal crossvein.” The first

element of the name seems to point to a biotope of the type species, as nothing about shadow in coloration or pattern is found in the first description; but also, about that topic nothing is mentioned there, as in the case of the genus *Hylaeagrion* (see p. 22) published in the same paper.

Charpentier (1840: 21) had considered a subgenus *Enallagma* (from Gr. ἐνάλλαγμα [enallagma] = change, as 'giving the possibility of confusion') for all the similar coenagrionids in which the males are mainly blue with black markings. This taxon was firmly established in its present sense by Selys 1876a: 496.

About the provenance of his type specimens Förster writes: "Zwei ♂ ♂ in meiner Sammlung aus der Umgebung der Stadt Sao Paolo (Provinz Sao Paolo), Brasilia, welche ich der Gefälligkeit meines Freundes F. W. Bauer, Direktor der deutschen Mittelschule zu Sao Paolo, verdanke [Two ♂ ♂ in my collection from the area around the city of Sao Paolo (Sao Paolo Province), Brasilia, which I owe to the favor of my friend F. W. Bauer, director of the German middle school in Sao Paolo]." So, one might surmise that from him Förster had gotten to know something about its biotope, from where his specimens were. But, as Garrison (2014) pointed out, *Skiallagma baueri* really pertains to the species *Xiphiagrion cyanomelas* from the Indopacific region, and therefore Förster's two specimens in his collection were probably mislabeld as to locality. The genus *Xiphiagrion* (Gr. ξίφος [xiphos] = sword, for *–agrion* see *Allopodagrion* p. 19) was described by Selys (1876a: 250) for a group taxa, Ischnurinae, the distinguishing feature of which is "Une épine ou pointe aiguë au bout du 8e segment de la femelle en dessous [A spine or sharp point below the end of the 8th segment of the female]."

Termitophorba 1906b: 305 = ***Brachythemis*** Brauer, 1868b+c: 367 +736

L. *termes* (stem *termit*-) = woodworm; by Fabricius (1793: 87) introduced as genus name for termites + Latinised feminine form of Gr. –φορβος [–phorbos] = fed

This name would point to its behaviour, but nothing about that is found in Förster's description of the genus or its sole species. This also applies to the name *Philonomon* published in the same treatise (see p. 27). Later it turned out that Förster's type species was the species *Brachythemis lacustris* described by Kirby in 1889, so its genus name was also a junior synonym. The genus *Brachythemis* (Gr. βραχύς [brachys] = short + *–themis* ≈ libellulid dragonfly, see p. 20 s.v. *Eusynthemis*) was established by Brauer (1868: 736) for species with this feature: "Hinterleib kurz, dick, vom Grunde an allmälig dünner, spitz [Abdomen short, thick, getting thinner from the base gradually, pointed]."

Thermagrion 1906b: 336

Gr. θερμός [thermos] = hot; for *–agrion* see *Allopodagrion* p. 19

Förster based his new genus on a single ischnurid female, collected in southern Ethiopia. The name probably means 'agrionid from the hot zone.' As the type specimen is lost and a second specimen of that species has never been identified, this taxon is now thought to be obsolete and no longer found in the World Odonata List. The hypothetical identification with *Enallagma* in Bridges is therefore invalid (as would be a putative synonymy to *Africallagma* Kennedy [≈ *Enallagma* from Africa] because of its sub-Saharan type locality.)

Toaeschna 1905b: 21 = ***Tetracanthagyna*** Selys 1883: 744

To = a people in Tonkin [name of Northern Vietnam in colonial times]; for *–aeschna* see *Dromaeschna* p. 20

In his first description Förster says (p. 24): “Heimat. Diese interessante große Aeschnide wurde von Herrn H. F r u h s t o r f e r bei Than Moi im Lande der To unfern Langson erbeutet und dürfte sich unter denjenigen großen Aeschniden befunden haben, die er im Tale des Song Kuong bei einer am Fuße hoher senkrechter Kalkfelsen entspringenden Quelle antraf. Type in coll. m. [Country: This interesting large Aeschnid [*T. fontinalis* = *Tetracanthagyna waterhousei* Mc Lachlan, 1898] was captured by Mr. H. Fruhstorfer near Than Moi in the country of the To near Langson and was probably among the large aeshnids that he encountered in the Song Kuong valley at a spring rising at the foot of high, vertical limestone cliffs. Type in my collection].” But later (Förster 1909a: 215) after some correspondence with R. Martin, which included the sending of his type species to the French specialist, he acknowledged the priority of the name *Tetracanthagyna* Selys to his genus *Toaeschna* “trotzdem seiner Aufstellung ganz andere Prinzipien zugrunde liegen [despite the fact that its erection is based on completely different principles]:” Selys (1883: 744) was induced to establish a subgenus to *Gynacantha* by the description of a remarkable new aeshnid by Waterhouse in 1877, the distinguishing feature of which was: “le 10^{e} segment de la femelle terminé par quatre pointes [the 10th segment of the female ending in four spines].”

Wahnesia 1900a: 105

Förster explains to whom the genus is dedicated: “Herrn C. Wahnes in Bongu, dem langjährigen entomologischen Erforscher der papuanischen Region gewidmet [Dedicated to Mr. C. Wahnes, the entomological explorer of the Papuan region for many years]“ (for another statement by Förster on Wahnes see p. 86 s.v. *wahnesi*).

Eponym of this genus is the German naturalist Carl Wahnes (1833-1910): He collected in the Australasian region after his 53rd year. His first collecting trip took him to South Borneo and East New Guinea, including the Bismarck Archipelago and the Solomon Islands, which regions were under the protectorate of the German Empire since 1886 (colonies from 1899). Förster apparently contacted him after Wahnes’ first return to Germany in 1896 (in a letter dated 30 January 1897 he recommends Wahnes to Selys as a source of birds, butterflies or dragonflies from New Guinea for himself or the Brussels Museum; for his later recommendation to Lord Rothschild see pp. 4-5). Three more trips led Wahnes to New Guinea, only with short intervals to Germany until his final return in 1909, when, aged 76, he came back seriously afflicted by malaria. He died of it shortly before his 77th birthday (the year of birth given by Beolens 2018: 434 is not correct).

A problem of the genus *Wahnesia* was that Förster based it on two new species for which he never gave a real description; but as in a key on p. 103 a feature of wing venation was given, by which the intended genus was characterized the name is now accepted (see Garrison et al. 2003: 15).

Species

[Brackets () in the head lines show, that the taxon originally was described in a different genus]

acaciae [*Pseudagrion* 1906c: 56] (fig. 9)

Gr. ἀκακία [akakia] = shittah tree, Acacia Arabica

Why Förster named this species after a tree he does not say. Probably the name is intended to refer to the provenance of his specimens from South Africa. As Förster was in contact with the collector of his specimens (Karl Hartmann) the name also may point to the biotope where the damsels of this species were caught. According to Klaas-Douwe B. Dijkstra (in lit), they live near "Rivers in open landscapes, but sometimes shaded by gallery forest."

Fig. 9: *Pseudagrion acaciae* ♂ Zambia, Livingstone, 03. Feb. 2006. (© Jens Kipping)

albicauda [*Coeliccia* (1907b: 5)]

L. *albus –a –um* = white + *cauda* = tail (in entomology used for abdomen or appendage)

The taxon was described as a 'Rasse [race]' of *C. octogesima* (Selys) [the eightieth, possibly due to the mark in the shape of an 8 formed by the two superimposed green oval spots of the antehumeral band which Selys specifically mentions, but with the wrong Latin word]. Its name refers to the coloration of the posterior part of segment 10 and the appendages of the males (p. 5): "Hinterecken des 10 Segments schräg abgeschnitten elfenbeingelb, ebenso die Appendices anales weisslich gelb [Posterior corners of the 10-segment obliquely cut off ivory yellow, also the anal appendages whitish yellow]."

alcicorne [*Pseudagrion* 1906c: 64]

L. *alces* = elk (moose) + *–cornis –is –e* = horned

The name is a reference to the male upper appendages (p. 66): “Appendices anales schwarz, die obern fast so lang als Segment X, von der Seite gesehen aus breiter Basis breit schaufelförmig erweitert, der Hinterrand der Erweiterung zweimal ausgebuchtet, sodass 2 Endzacken und eine Mittelzacke entstehen, sodass das Ganze grosse Ähnlichkeit mit einer Geweihschaufel des Elchhirsches hat [Anal appendages black, the upper ones almost as long as segment 10, seen from the side from a wide base expanded broadly in the shape of a shovel, the rear edge of the extension bulged twice, so that there are two end points and a middle point, which as a whole has a great resemblance to an antler of the elk deer].”

amabilis [*Austrargiolestes* (1899a: 71)] (fig. 10)

L. *amabilis –is –e* = worthy of love, lovely, amiable, attractive

What made Förster to call this species lovely, he does not say. Perhaps it was the colorful appearance on the prothoracic dorsum: “Lèvre supérieure bleu métallique ses côtés jusqu’aux yeux rouge orange. Une bande transversale et un prolongement médian au rhinarium et une bande transversale au nasus rouge orange avec une vestige de bande noire effacé entre eux [Labrum metallic blue, red orange as far as the sides of the eyes. A transverse band and a median extension to postclypeus and a transverse band at anteclypeus red orange with a trace of a black band obliterated between them]” and “Prothorax noir velouté, le lobe basal, une tache triangulaire de chaque côté en dessus du lobe médian rouge orange [Prothorax velvety black, the basal lobe, a triangular patch on each side above the median lobe red orange].”

Fig. 10: *Austroargiolestes amabilis* ♂ ♀ **. (© Günther Theischinger)**

amata [*Oligoaeschna* (1903b: 245; 1 reprint)]

L. *amatus –a –um* = loved, beloved

There is no clue in the first description why Förster chose this name, but certainly it is a reference to the charming character of dragonflies.

antarcticum [*Limnetron* 1907a: 166; 9 reprint)]

L. *antarcticus –a –um* = from the antarctis

This toponym is clearly exaggerated, for the locus typicus, Sapucay in Paraguay, is very far from the Antarctic Circle (for the species see Del Palacio & Muzón 2014).

astrolabica [*Nosticta* (1898a: 299)] (fig. 11)

Late L. *astrolabium* (Latinized from Greek ἀστρο-λάβος [astro-labos] = star-taker) was a nautical instrument to determine latitude, a precursor of the sextant + *-icus –a –um* = pertaining to

The name does not refer to the nautical instrument directly. The taxon, which was described as a subspecies of *Nosticta finisterrae* (see p. 41), got its name from the type locality at the North Eastern coast of Papua New Guinea [then the German colony Kaiser-Wilhelm-Land] (p. 300): "Fundort: Astrolabebai [found at the Astrolabe Bay]." This bay was named after the ship of the first European commander, who is proven to have accessed it, the French explorer J. Dumont d'Urville (1790-1842).

Fig. 11: Scan of *Nosticta astrolabica* ♂ from Papua New Guinea, Madang Ohu Village Reserve. (© Rosser Garrison)

auripes [*Platycypha* [1906c: 54)]

L. *aurum* = gold + *–pes* = –footed

The name alludes to the color of the tibiae (p. 55): "Die Tibien sind stark erweitert wie bei Libellago caligata (1/2 mm breit), auf der Aussenseite (Überseite) lebhaft goldgelb, auf der Innenseite (Unterseite) etwas heller und matter [The tibiae are greatly expanded as in *Platycypha caligata* (1/2 mm wide), bright golden yellow on the outside (upper side), somewhat lighter and duller on the inner side (underside)]."

aurulenta [*Rhinocypha* 1903a: 547]

L. *aurulentus –a –um* = of the color of gold, golden

The species might have received its name due to the wings of the males (p. 548): “Flügel hyalin, gelblich getrübt, das letzte Drittel (9 mm lang) schwarzbraun, bei gewisser Beleuchtung mit prächtigem goldenem und kupferrothem Reflex, die Zellen dicht hinter dem Pterostigma metallisch blau [Wings hyaline, yellowish clouded, the last third (9 mm long) black-brown, with a magnificent golden and copper-red reflection under certain lighting, the cells close behind the pterostigma metallic blue].“

The name, however, might also have been evoked by the numerous yellow markings on various parts of the body in both sexes: at the labium, in the face between labrum and eyes and near the nasus, at the bases of the antennae, behind the ocelli and at the rear margin of the head, at the rear of the prothorax, fine longitudinal stripes on the thorax, in the interalar space and a fine line beneath the fore wings; in the females there are also lateral longitudinal stripes from segment 1 to 7, which are light blue in the males.

biroi [*Nannophlebia* (1900a: 83)]

This species from Astrolabe Bay, New Guinea, about which Förster stated (p. 84): “Ein Pärchen im Besitze des Ungarischen Nationalmuseums, von Biró 1897 erbeutet [A couple in the possession of the Hungarian National Museum, captured by Biró in 1897]“, was dedicated to its collector Lajos Biró (1856-1931). In the preface Förster had stated that this second publication on the Odonata from New Guinea for most part was based on the new material sent to the Hungarian National Museum by Biró. (more about him see *Bironides* p. 19).

braueri [*Nannophlebia* (1900a: 85)]

This is an eponym pertaining to the outstanding Austrian entomologist Friedrich Moritz Brauer (1832-1904, about him see Fliedner 2020). Förster does not give a reason for this dedication, but he had placed its female specimen from the Sattelberg, New Guinea, in the genus *Tetrathemis*, which had been established by Brauer. But three years later Förster (1903a: 521) reclassified this species and the species *biroi* described directly before it in the genus *Nannophlebia*, about which Selys, when establishing it, had stated (1878c: 315): “La *Nannophlebia* est en réalité une *Nannodythemis* avec la taille et la stature des *Tetrathemis* [*Nannophlebia* is actually a *Nannodythemis* with the size and stature of *Tetrathemis*]. By the way: This taxon is not found in Ris’ Libellulines, where *biroi* is considered a junior synonym of *N. lorquini lorquini* Selys.

buehri [*Oligoaeschna* (1903b: 245; 2 reprint)]

For his dedication of the species Förster gives this explanation: “Herrn Notar Bühr in Brettan (!), dessen Sammeleifer meine Sammlung zahlreiche Exemplare verdankt, freundschaftlichtst gewidmet [Most kindly dedicated to Mr Bühr, notary in Bretten, to whose enthusiasm my collection owes numerous specimens].” The eponym Hermann Bühr (1868 - ?) had been born in Kehl (also Förster’s birthplace). After his legal training, he got his first job as a notary in Engen in southern Baden in 1898, then in 1901 he was transferred to Bretten, where Förster was living at the time. The two then seem to have become friends. Joint archaeological excavations are documented in Bühr & Förster 1902. From 1904 onwards he was entrusted with the notary's office in Modau in the Odenwald in eastern

Baden, but was dismissed from civil service in 1910. I was unable to find out anything about his further life (Bühr's first name is erroneously given as 'Heinrich' in Hämäläinen 2016: 24 and Beolens 2018: 62).

calverti [*Cratilla lineata* 1903a: 537]

Förster does not explain why he named this taxon from the Malabar Coast after Philip Powell Calvert (1871-1961), which was the second one to be dedicated to the American odonatologist, who is not even in the list of Förster's correspondents given by Mayer (1989). So probably it is intended to be an expression of his esteem for this scientist, who at that time had already begun to publish not only on dragonflies from the American continents, but also from tropical Africa and the Indian Ocean region. Förster wanted his taxon to be a new species, lighter than *C. lineata*, but it was downgraded to subspecific rank by Lieftinck (1953: 201). On the eponym see Beolens 2018: 66; Fliedner & Endersby 2019: 26). *Cratilla lineata* (Brauer, 1878a: 202) [L. *lineata* = lined] got its name due to the fine yellow longitudinal lines from the first to the eight abdominal segments on the dorsum and on each side.

capricornis [*Paragomphus* (1914a: 79)]

L. *capra* = goat + *–cornis –is –e* = horned

The name refers to the distinctly shaped upper appendages of the males (p. 80): "Obere Appendices anales gemshornartig nach unten gebogen wie bei *O. lineatus*, aber stärker und gleichmäßiger [Upper anal appendages curved downwards like a horn of a chamois {*Rupicapra* ≈ rock goat} like in *O(nychogomphus) lineatus*, but bent more and more evenly]."

cervicornu [*Selysioneura* 1900a: 106]

L. *cervi* (genitive case) = of a deer + *cornu* = horn, antler

Like in the foregoing entry the name is due to the shape of the males' upper appendages (p. 107): "Obere Appendices anales des Männchens so lang als das 9te Segment, nach oben und innen gebogen. Von der Seite gesehen gleichen sie ganz dem Gehörne von *Cervus capreolus* [Upper anal appendages of the male as long as the 9th segment, curved upwards and inwards. Seen from the side, they resemble the antler of *Cervus capreolus* {a roe deer}]."

commoniae [*Pseudagrion* (1902: 75; 7 reprint)]

L. suffix *–ius –ia –ium* = belonging to, pertaining to, in ancient Rome often used in family names

The species was described from a single male from Erythraea. Förster explains his choice of name for this species which he erroneously classified in the Palaearctic genus *Erythromma* (76): "Meiner l(ieben) Frau gewidmet [Dedicated to my dear wife]" (about Elise [Gottliebin] Förster, née Common (1880-1964) see p. 3). Later (2014b: 223) with the same wording he dedicated to his wife a *Rhododendron commonae* from the Finisterre Range in Papua New Guinea (then a German colony).

convergens [*Gynacantha* (1908b: 214)]

L. *convergens* = inclining together

This is another species in which the male's upper anal appendages have led to the name. It was described from a single male, where Förster mentions "kleine Art mit dreizinkigem Gabelanhang des Weibchens [small species with a three-pronged forked

appendage in the female].” The slightly complicated description of the convergent upper appendages reads (p. 215): “Obere Appendices anales so lang als das neunte und zehnte Segment zusammen. Erstes Viertel, von oben gesehen, schmal stielförmig, zweites und drittes Viertel doppelt so breit. Endviertel wieder schmal wie die Basis. Der Aussenrand der ersten drei Viertel ist fast gerade, im letzten Viertel ist er etwas nach innen gebogen. Der Innenrand ist erst etwas convex nach aussen, bei Beginn des letzten Viertels plötzlich eingedrückt und schwach nach oben gerichtet, wodurch er bis zum Ende eine leichte konkave Ausbuchtung erhält [Upper appendices anales as long as the ninth and tenth segments together. First quarter, seen from above, narrowly stalk-shaped, second and third quarters twice as wide. End quarter narrow again like the base. The outer edge of the first three quarters is almost straight, in the last quarter it is curved slightly inwards. The inner edge is initially slightly convex outwards, then suddenly caved in at the beginning of the last quarter and slightly directed upwards, giving it a slight concave bulge until the end].” The source of his information on the ♀ is unclear.

cornuta [*Plattycantha* (1900a: 94)]

L. *cornutus –a –um* = having horns or horn-like appendages; horned

Förster described this species from three ♀♀ caught on the Saddle Mountain at the Huon Gulf in Papua New Guinea. The only horn-like structure in his description is found on p. 95: “Segment 10 fast halbsolang als Segment 9, unten mit einem 1 mm langen, zungenförmigen Anhang versehen, der am Ende eine 2-zinkige Gabel von höchstens 1/3 mm Länge trägt [Segment 10 is almost half as long as segment 9, with a 1 mm long, tongue-shaped appendage at the bottom, which at the end has a 2-pronged fork no more than 1/3 mm long].”

culminicola [*Onychothemis* 1904: 362; 3 reprint]

L. *culmen* (stem *culmin–*) = height, peak, top, summit + *–cola* = dweller, inhabitant of

Förster’s specimens were caught by Albert Grubauer (see *grubaueri* p. 43) in Malaysia near Camp Jor, which is situated “auf der Wasserscheide zwischen Perak und Pahang, bis zu einer Höhe von mehr als 1000 Meter [Camp Jor, on the watershed between Perak and Pahang, up to an altitude of more than 1000 meters] “(p. 355). So the name is plausible by referring to the elevation of its type locality.

cyaneipennis [*Matronoides* (1897a: 101)]

L. *cyaneus –a –um* = dark blue, sea blue + *–pennis –is –e* = winged

The description of the striking blue wings of Förster’s single male specimen reads: “Flügel breit, ihr Hinterrand stark gerundet, vollkommen dunkel-braun mit Ausnahme des Vorderrandes der 10-12 ersten Costalzellen, welcher punktartig ungefärbt erscheint, oberseits mit herrlich blauem Reflexe. Unterseite der Vorderflügel glänzend dunkelblau, der Hinterflügel glänzend dunkelgrün [Wings broad, their rear margin strongly rounded, completely dark brown with the exception of the front margin of the 10-12 first costal cells, which appears uncolored in dot-like manner, with a wonderful blue reflection on the upper side. Underside of the forewings shiny dark blue, the hindwing shiny dark green].”

cyanura [*Allocnemis* 1909a: 234]

Gr. κύανος [kyanos] = dark blue enamel / lapis lazuli /blue cornflower + οὐρά [ūra] = tail (in entomology used for abdomen or appendages)

This name is a misnomer, as the coloration of the last two segments and the appendages is not dark blue, as to be seen from the description (p. 235): “Segment 9, 10 und die obern Appendices anales schön hell himmelblau, ihre Unterseite und die untern Appendices dagegen braun [Segments 9, 10 and the upper anal appendices are a nice light sky blue, while their underside and the lower appendices are brown].” But that mistake is found in scientific names more often.

declivium [*Umma* 1906c: 51]

L. *declivium* (genitive plural) = of the slopes

Förster writes about the provenance of his specimens (p. 53): “Nguelo im Berglande von Ost-Usambara [Nguelo in the mountains of East Usambara].” The specific epithet may refer to the mountain slopes in that region.

dendrohyrax [*Notogomphus* (1906b: 326)]

Dendrohyrax (from Gr. δένδρον [dendron] = tree + ὕραξ [hyrax] = mouse, shrew-mouse) is the scientific name of a genus of Procaviidae from the Afrotheria, named by John Edward Gray in 1868. What made Förster chose this name for the dragonfly from “Nguelo im Bergland von Ost-Usambara [Nguelo in the mountains of East Usambara]”, he does not say. But certainly, in that region also tree hyraxes are found. The name might be an allusion to the type of biotope where the dragonfly was caught.

dives [*Argia* 1914a: 61]

L. *dives* = rich, wealthy / sumptuous, splendid, precious

The name probably refers to the magnificent varicolored appearance of the single male, from which Förster described the species mentioning the golden look of face, prothorax and parts of the thorax (p. 61): “Gesicht feurig goldglänzend, mit etwas kupferrotem Ton, Nasus und Stirn dunkler. Prothorax und ganze Thoraxvorderseite bis zur zweiten Seitennaht kupfergoldig, der Rest der Thoraxseiten und die ganze Unterseite milchblau, längs der dritten Seitennaht dunkler. Hinterseite und Unterseite des Kopfes schwarz, die Augen dort gelb gerandet. Oben im Hinterwinkel am Augenrande jederseits ein blaßblauer Punkt. Unterlippe ganz gelb [Face shining flaming golden, with a slightly coppery red tone, nasus and forehead darker. Prothorax and the entire front of the thorax up to the second lateral suture are copper-gold, the rest of the sides of the thorax and the entire underside are milk blue, darker along the third lateral suture. The back and underside of the head are black, the eyes there have yellow rims. At the top of the back corner on each side of the eye there is a pale blue dot. Lower lip completely yellow].“ It might be mentioned, that Förster after the enigmatic heading ‘Argas (!) dives n.sp.’ added in parentheses '*Argia cuprea dives*'; so there can be no doubt that he did not want to establish a new genus.

eburnea [*Nososticta* (1897e: 336)]

L. *eburneus –a –um* = of ivory / ivory-colored

The color of the markings on the abdomen of Förster’s male specimens (females are colored differently) is at the base of the name (p. 337): ♂ “Abdomen sehr dünn, schwarz. Alle unten beschriebenen Zeichnungen elfenbeinweiss oder –gelb [Abdomen very thin, black. All markings described below are ivory white or yellow].“

ellenbeckii [*Trithemis* 1906b: 314]

Förster explains his choice of name (p. 316). “Dem Arzte der Expedition, Herrn Dr. Ellenbeck gewidmet, der zugleich Leiter der entomologischen Abteilung der Forschungsreise war [Dedicated to Dr. Ellenbeck, the expedition's physician, who was also its head of the entomological section]”. The expedition referred to was that of Carlo Freiherr von Erlanger to East Africa in the years 1899-1901. For more about the eponym Hans Ellenbeck see Beolens 2018: 121.

epinephela [*Huonia* 1903a: 517]

Gr. ἐπινέφελος [epinephelos] = clouded, overcast

As usual Förster does not give any explanation for his choice of name; it probably refers to the slightly clouded wings of the male (p. 519): “Flügel hyalin, an der Basis besonders in der hinteren Hälfte deutlich bis zum Ende der Membranula etwa 1 mm. weit nach der Spitze zu gelbbräunlich angeflogen [wings hyaline, at the base especially in the posterior half clearly tinted yellow-brownish up to the end of the membranula about 1 mm far towards the tip].”

farinosa [*Nesciothemis* (1898b: 169; 4 reprint)] (fig. 27 p. 97)

L. *farinosus –a –um* = floury, mealy

The species was described from three ♂♂. The pruinosity of the abdomens of Förster’s three male specimens has led to the name (p. 170): “Abdomen am Grunde mässig verdickt (3 mm breit), nach hinten allmählich verjüngt (etwa wie bei *O. coerulescens* Fabr.), bis zum 4. oder 6. Segment vollständig bläulichweiss bereift, dann ganz schwarz … Unterseite der Segmente 1—3 und Basis von 4 gelb, längs der Nähte blau bereift, dann schwärzlich mit blauweisser Bereifung, welche bei sehr alten Stücken die ganze Unterseite überzogen hat [Abdomen moderately thickened at the base (3 mm wide), gradually tapering towards the rear (approximately as in *O. coerulescens* Fabr.), completely covered in bluish-white pruinosity up to the 4th or 6th segment, then completely black ... Underside of segments 1-3 and base of 4 yellow, blue pruinosity along the seams, then blackish with blue-white pruinosity, which in very old pieces covers the entire underside].”

fickei [*Protolestes* 1899b: 188; 3 reprint]

Förster informs us about his reason for the dedication in the beginning of his treatise (p. 186): „Von Herrn Stadtrath H. Ficke zu Freiburg i(m) B(reisgau) erhielt ich vor einiger Zeit eine kleine Sendung von Libellen zur Bestimmung zugesendet, welche in der Montagne de l'Ambre im Norden von Madagascar gesammelt waren und deren vollständige Bearbeitung mir durch Überlassung der Typenunikate seitens des Herrn Ficke in freundlicher Weise ermöglicht wurde, wofür ich genanntem Herrn hiermit meinen besten Dank ausspreche [Some time ago, I received a small consignment of dragonflies for identification from Mr. H. Ficke, city councillor in Freiburg in the Breisgau, which had been collected in the Montagne de l'Ambre in the north of Madagascar. Mr. Ficke kindly made it possible for me to fully process these dragonflies by providing me with the unique types, for which I would like to express my sincere thanks to the above-mentioned gentleman]” and in a footnote to the description of the species (p. 188) “Herrn Stadtrat H. Ficke, welcher sich auch durch Einrichtung des Freiburger Museums für Natur- und Völkerkunde Verdienste um die Naturgeschichte erworben hat, zugeeignet [Dedicated to City Councillor H. Ficke,

who also made a significant contribution to natural history by establishing the Freiburg Museum of Natural History and Ethnology].“ For more about Hugo Ficke (1840-1912) see Beolens 2018: 133.

finisterrae [*Nososticta* (1897b: 41)]

L. *finis terrae* (2 words) = the end of land

This toponym finds its explanation at the end of Förster’s description (p. 42): “J’ai vu 1 ♂ et 3 ♀, qui m’ont envoys par MM le Dr O. Staudinger et A. Bang-Haas qui ont reçu ces exemplaires de Milne-Bay, extrémité orientale de la Nouvelle-Guinée [I saw 1 ♂ and 3 ♀, which were sent to me by Messrs. Dr. O. Staudinger and A. Bang-Haas who received these specimens from Milne-Bay, eastern extremity of New Guinea].”

fraudatricula [*Argia* 1914a: 64]

L. *fraudatricula* = she, the little one, who cheats or defrauds

The name certainly is intended to highlight the similarity of this taxon to another *Argia* species (p. 64): “In Färbung der *A. medullaris* sehr ähnlich ... Diese Form entspricht offenbar der *A. medullaris* ähnlich wie *Hetaerina carnifex bogotensis* der *H. carnifex charca* Calvert aus Bolivien und Peru. Form des Pterostigma, Färbung des Kopfes und Form der Appendices unterscheiden sie von *medullaris*, wie oben gezeigt [Very similar in color to the *A. medullaris*...This form apparently agrees with the *A. medullaris* similarly to *Hetaerina carnifex bogotensis* with the *H. carnifex charca* Calvert from Bolivia and Peru. By shape of the pterostigma, coloration of the head and shape of the appendages it is distinguished from *medullaris*, as shown above].”

gobica [*Sympecma* (1900b: 258)] (fig. 12)

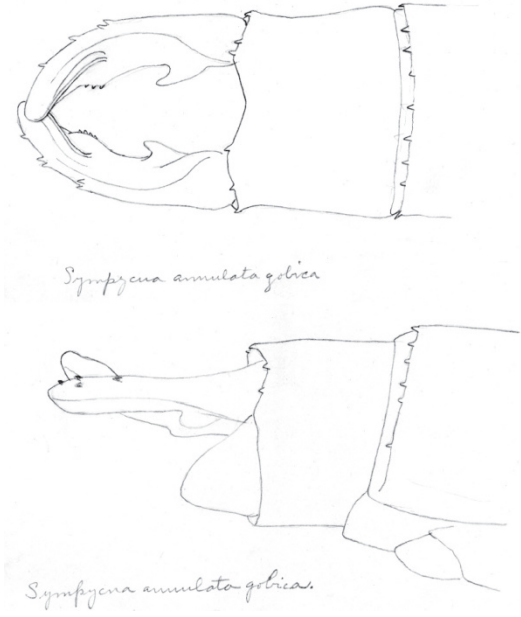


Fig. 12: *Sympecma gobica*, male appendages.

This drawing was made by C.H. Kennedy, when he prepared the Förster collection for use after its arrival at the University of Michigan Museum of Zoology (UMMZ) in 1924. This drawing is one of those illustrations, through which the species named by Förster were to be made more readily available to science. Kennedy was known for the artistry of his biological illustrations and at times made a living from them (see Fliedner & Endersby 2018: 48).

The taxon was described as "*Sympycna annulata* [= *Sympecma paedisca*] Rasse *gobica*", but it has been elevated to specific rank. Förster's indication of the type locality is (p. 259): "*Symp. gobica* wurde am 2. Mai 1898 am Rande der Gobi bei Chami in beiden Geschlechtern angetroffen [*Sympecma gobica* was found in both sexes on May 2, 1898 on the edge of the Gobi near Chami {Hami / Kumul in western Xinjiang, China}]."

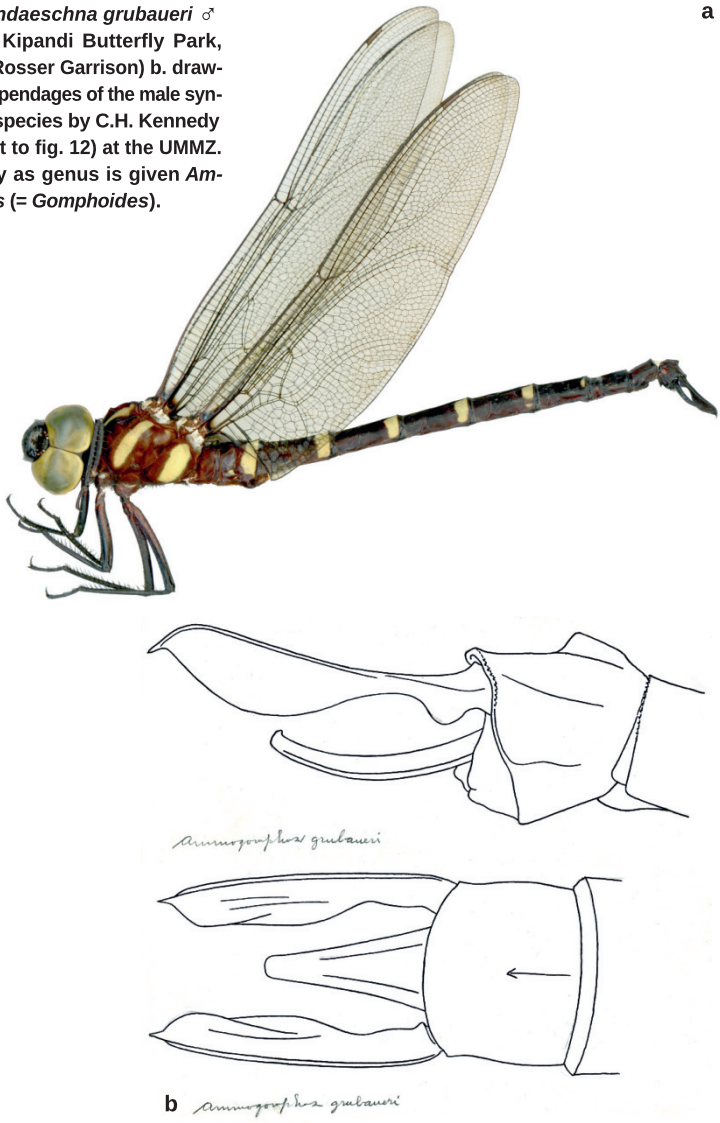


Fig. 13: a. *Indaeschna grubaueri* ♂ fom Sabah Kipandi Butterfly Park, Malysia (© Rosser Garrison) b. drawing of the appendages of the male syntype of the species by C.H. Kennedy (cf comment to fig. 12) at the UMMZ. Erroneously as genus is given *Ammogomphus* (= *Gomphoides*).

grubaueri [*Indaeschna* (1904: 355; 1 reprint)] (fig. 13 and cover)

This species is named after the collector of the type specimen, Albert Grubauer (1869-1960). Förster (1904) introduces his treatise as follows: "Herr Albert Grubauer … hatte die Freundlichkeit, mir die Bearbeitung der von ihm in den innern Hochgebirgen von Malakka gesammelten Odonaten zu übertragen … Von dieser Gegend dürfte noch nie eine größere Ausbeute an Odonaten nach Europa gekommen sein, weshalb Hr. Grubauer auch manche schöne Entdeckung machen konnte [Mr Albert Grubauer … was kind enough to entrust me with the analysis of the odonates he had collected in the inner high mountains of Malacca ... It is unlikely that a greater yield of odonates has ever come to Europe from this region, which is why Mr Grubauer was also able to make some beautiful discoveries]."

Grubauer, who was born in Passau (Bavaria), before the First World War undertook five collecting journeys to the South-East-Asian region (Papua New Guinea 1891-1892, Malacca 1898, Myanmar1902, Java and Central Sumatra 1908-1909, Northern Borneo and Sulawesi 1911). A sixth journey to Tibet and China, which already had been planned, was precluded by the World War I. A travelling companion on the first of these voyages was Sámuel Fenichel, who collected for the Hungarian National Museum (see *fenicheli* p. 68), but due to dissensions Grubauer had already returned to Germany after a few months. Zoological and enthnological material collected by Grubauer is found in museums in St. Petersburg, Vienna and Munich (for more about the eponym see Krpata 2019). For further odonate species collected by Grubauer in Förster's collection see *albicauda* p. 33, *capricornis* p. 37, *culminicola* p. 38, *laidlawi* p. 46, *orang* p. 52 and *williamsoni* p. 63.

hartmanni [*Crenigomphus* (1898b: 166; 1 reprint)]

The reason for the dedication of this species can be seen from the introduction to the first part of the publication, which had appeared the year before (Förster 1897d: 215): "Unter obiger Überschrift {Odonaten des Transvaalstaates} gedenke ich die Odonaten bekannt zu geben, deren Besitz ich Herrn Karl Hartmann von Fahrnau i(m) W(iesental), z.Zt. in Transvaal, verdanke. K. Hartmann hat es seit kurzem unternommen, die Gegend um den Zusammenfluss des Nelspruitriviers und des Krokodilriviers heran bis Koomatiport zu erforschen und seine Tätigkeit besonders der Entomologie zugewandt [Under the above heading {Odonaten des Transvaalstaates} I am going to publish on the odonates, for the possesion of which I am indebted to Mr. Karl Hartmann from Fahrnau in the Wiesental, presently in Transvaal. K. Hartmann has recently undertaken to explore the area around the junction of the Nelspruit River and the Crocodile River up to Koomatiport and has turned his activities particularly towards entomology]."

The German physician, ethnographer and naturalist Karl Eduard Robert Hartmann (1832-1893), whom Beolens (2018: 176) mentions, can by no means be the eponym, because the specimens described by Förster were collected in the years 1896/97, meaning after the death of Beolens' candidate.

The real eponym was Karl Eugen Hartmann, born 1866 at Schopfheim (a little town near the border to Switzerland), as son of the saddler and upholsterer Johann Friedrich Hartmann (1827-1888) and his wife Katharina (née Seufert, * 1834), who about 1872 with their family moved to Freiburg. Their eldest son, Karl Friedrich Hartmann (1859-1932), mentioned as Fritz Hartmann in Förster 1906c: 2 as a specialist for curculionids, worked

as a clerk at a shoe factory in Fahrnau (today incorporated into Schopfheim). In another publication of that year the collector of Förster's specimens is mentioned as 'Karl Hartmann, Stuttgart' (1906b: 308; in 1906c: 59 erroneously 'Freiburg' is mentioned as place of residence). An inquiry to the Stuttgart City Archives revealed, that in October 1902 the 'Kaufmann [merchant]' Karl Eugen Hartmann', living in Stuttgart, got married in Feuerbach (now incorporated in Stuttgart, then a town in its own right). One of the witnesses to the marriage was Karl's eldest brother Karl Friedrich Hartmann. Karl and his wife had two children (1903 a boy and 1906 a daughter, who got married in Berlin-Schönberg in 1922). But as already in 1906 in Stuttgart lived two merchants named Karl Hartmann, his further course of life could not be found out.

holdereri [*Coenagrion* (1900b: 264)]

The eponym is already to be seen from the title of the paper in which the dedication is found "Libellen, gesammelt im Jahre 1898 in Central-Asien von Dr. J. Holderer [Dragonflies collected in 1898 in Central Asia by Dr. J. Holderer]" and the reason of the dedication is found on p. 254: "Das gesammelte Material … wurde, wie alle Insecten-Unikate, dem Beschreiber überlassen. Ebenso stellte Dr. Holderer die Mittel zum Druck der Farbentafel bereitwilligst zur Verfügung [The collected material … was, like all unique insect specimens, left to the describer. Dr. Holderer also willingly provided the means to print the color plate]."

Julius Holderer (1866-1950), after successfully completing his law studies in Heidelberg in 1893 became an administrative official in Baden. In 1894 he became administrator in the district of Lörrach where Förster was then working as a teacher in Schopfheim (a joint entomological excursion to the Valais in the summer of 1897 by both of them is mentioned in Förster 1900b: 261). At about this time, Holderer was granted leave from his administrative duties to carry out a two-year expedition to Asia together with the geologist Karl Futterer, which took them via Turkestan, the Pamir Mountains, Tibet and China to Shanghai. His administrative work in the Baden service then took him to Heidelberg, Bretten, Kehl and Pforzheim, where he retired in 1931. That he is named as an entomologist in Beolens 2018: 186 does not correspond to the facts given here.

huanacina [*Argia* 1914a: 67]

L. suffix *–inus –a –um* = pertaining to

This is probably a toponym. Förster had used this name already for a taxon from Bolivia, which he thought to be a *Tramea*, in 1909: 229 (see p. 70). Joachim Hoffman (in litt.) informed me that he believes the name to be an orthographical error. There is a Quechua region in southern Peru and northern Bolivia named 'Huanca', so that an adjective form referring to that region would correctly be huancana [= pertaining to the Huanca-region]. That would fit for this taxon from the Amazonas region in southeast Peru as well as for the other taxon from the "Yungas de la Paz (Bolivia)".

Instead, one might also think that the name is derived from the Peruvian region of Huánuco (Quechua Wanuko) around the city of the same name in the Andes, which also includes the Huánuco Pampa, also known as Wanako Pampa.

humida [*Palaiargia* 1903a: 552]

L. *humidus –a –um* = damp, moist, dank, wet, humid

Förster does not explain his choice of name, but he states the provenance of his specimens to be (p. 552): “Zahlreiche ♀♀ vom Sattelberg am Huongolf von BÍRÓ und WAHNES gefangen, im Ungarischen National-Museum und in meiner Sammlung in welcher sich auch das einzige von WAHNES gesandte ♂ befindet [Numerous ♀♀ from Sattelberg (‘Saddle Mountain’) at the Huon Gulf caught by BÍRÓ and WAHNES, in the Hungarian National Museum and in my collection, which also contains the only ♂ sent by WAHNES].”

This gives a clue, for Förster in the same publication (p. 519) informs us about the type locality of *epinephela* (see p. 40): “Auf dem Sattelberg am Huongolf, im regenfeuchten Walde, von BÍRÓ und WAHNES I—V. 1899 gesammelt [On the Sattelberg at Huongolf, in the rain-damp forest, collected by BÍRÓ and WAHNES I—V. in 1899].”

hyalina [*Erythrodiplax* 1907a: 157; 6 reprint]

This taxon was described on the basis of specimens caught in Paraguay as a subspecies of *E. nigricans* {= being blackish} (Rambur, 1842) the special feature of which is: “Den Paraguay-Exemplaren fehlt der braune Schatten unter dem Pterostigma (Subrasse hyalina) [The Paraguay specimens lack the brown shadow under the pterostigma (subrace hyalina)].” Borror (1942: 132-134) raised Förster’s name to specific rank.

japonica [*Matrona* (1897c: 208)]

Mod. L. *Japonicus –a –um* = Japanese

Förster described this taxon from Japan as “Neurobasis (Matrona) basilaris Selys. Sousrace Japonica Foerster.” In a revision of the genus *Matrona* Yu et al. 2015 secured its status as a separate species.

javanica [*Gomphidia* 1899a: 66]

L. *–icus –a –um* = pertaining to …, from …

This is a toponym. Förster’s single type specimen was from: “Patrie: Malang, Java oriental [provenance: Malang, Eastern Java].“

jorina [*Pseudothemis* 1904: 363; 4 reprint]

L. *–inus –a –um* = pertaining to

This type was by no means given the either Frisian or Nordic female first name Jorina, but in reality, it is a toponym. Förster's specimens were collected by A. Grubauer (see p. 43) at Camp Jor in Malaysia, to which the name refers.

kirbyi [*Wahnesia* 1900a: 105]

There is no real description of the species nor an explanation why it is dedicated to the eminent British entomologist William Forsell Kirby (1844-1912) (about him see Endersby & Fliedner 2015; 57, Hämäläinen 2017 and Beolens 2018: 220-221). For the story concerning the status of this taxon see Garrison et al. 2003: 15.

lacustris [*Platycypha* (1914a: 61)] (fig. 14)

scientific L. *lacustris –is –e* = living in or at a lake, pond, or pool

This name reflects the provenance of the type specimens from “Entebbe am Victoria Nyanza [at the Lake Victoria]," Uganda. Förster classified the taxon as a subspecies of *Platycypha caligata* Selys, but Pinhey (1962: 904) elevated it to specific rank.

Fig. 14: *Platycypha lacustris* ♂ from Zambia, Mwinilunga, 23.Nov. 2014. (© Jens Kipping)

laidlawi [*Prodasineura* (1907b: 12)]

This species is described in a publication of Laidlaw where Förster's role as second author is described thus (p. 1): "Thanks to Dr. Förster's kindness I am able to add to my account of these species some very interesting notes written by him, as well as descriptions of new species and subspecies in his collection. Of these notes I have translated some (printed here between square brackets). These deal with species already described; whilst his descriptions of new species or subspecies, as well as his review of certain species belonging to the genus Disparoneura, I have left unaltered in German." The taxon was described as a subspecies of *Disparoneura notostigma* Selys in the mentioned paragraph on the genus *Disparoneura* Selys. For the cooperation between Förster and Laidlaw see p. 12-14; for the eponym see Beolens 2018: 233.

laidlawi [*Periaeschna* (1908b: 214)]

Förster explains his choice of name thus: "Ein Pärchen (♂ ♀) von Albert Grubauer erbeutet und Mr. Frank F. Laidlaw, Demostrator in Zoology of the Owens College in Manchester gewidmet, welchem wir die ersten Nachrichten über die Lebensweise der Libellen der malayischen Halbinsel verdanken [A couple (♂ ♀) captured by Albert Grubauer and dedicated to Mr. Frank F. Laidlaw, Demostrator in Zoology of the Owens College in Manchester, to whom we owe the first information about the life of the dragonflies of the Malay Peninsula]." For information on the eponym see foregoing entry.

lilacina [*Trithemis* 1899a: 63]

I could not find the word *lilacinus –a –um* in any Latin dictionary accessible to me, but I am sure that Förster wanted to describe the lilac coloration for this species because

he ends the description of his single male type specimen (p. 64): “C’est une Trithemis de groupe de la *festiva* Ramb., remarquable par le devant du thorax lilas ou rouge aurore chez l’adulte, certainement jaunâtre chez les jeunes [It is a Trithemis from the group *festiva* Rambur, remarkable by the front of the thorax which is lilac or aurora red in adults, certainly yellowish in young ones].”

maclachlani [*Anax* 1898a: 290] (fig. 15)

The dedication sheds a light on Förster's collaboration with the British scientist (p. 292): “*Anax Maclachlani* ist die erste von Neu-Guinea bekannt gewordene *Anax*-Art. Wie mir der

Fig. 15: Plate from Förster 1898a, drawn by himself. The ♂ of *Anax maclachlani* is found under no. 1, its enlarged appendages under no. 2. (The other figures are: no. 3 *Agrionoptera karschii* ♀ [syn of *A. insignis* Rambur], no. 4 its thorax laterally; no. 5 *Lathrecista pectoralis* Brauer var. *interposita* ♂; no. 6 rear margin of the prothorax of the ♀ of *Nososticta salomonis* Selys ca 50-times enlarged).

berühmte brittische Neuropterolog, dem diese Art gewidmet ist, mittheilt, kommt auf den Inseln im Nordosten von Neu-Guinea diese oder eine nahe verwandte Art vor, die Herr R. Mac Lachlan selbst beschreiben wird, falls sie sich von unserer Form unterscheiden sollte [*Anax maclachlani* is the first *Anax* species known from New Guinea. As the famous British neuropterologist to whom this species is dedicated informs me, in the islands of the north-east of New Guinea this or a closely allied species occurs, which Mr. R. Mac Lachlan will himself describe if it would differ from our form].” In the Generallandesarchiv Karlsruhe three letters of McLachlan to Förster from the last months of 1897 are kept, in which various subjects are touched. In these McLachlan mentioned specimens from islands North East of New Guinea which probably pertained to the *Anax* Förster was going to describe. He mentioned that there is no trace of a spine at the external apex, which feature was adopted in Förster’s description. McLachlan opined that variations in coloration of specimens could be due to the state of preservation and warns that slight changes in the position of viewing the appendages might be important. In the last letter he thanked Förster for the dedication of the species and informed him about the correct spelling of his name.

On the British entomologist Robert McLachlan see Endersby & Fliedner 2015: 53-55; Beolens 2018: 282-283.

malaccense *Orthetrum triangulare* 1903a: 542

Mod. L. *malaccensis –a –um* = from Malacca

Förster introduces this taxon in a group of *Orthetra*, which he erroneously deems to be geographical ‘races’ of *Orthetrum pruinosum*, thus: “Die gracilste Form dieser Gruppe, die mir bekannt ist, wird durch das oben erwähnte *O. triangulare malaccensis* (sic) repräsentirt [The most gracile form of this group that I know of is represented by the above-mentioned *O. triangulare malaccense*].” Selys (1878: 314) does not explain his species name *triangulare* [L. = triangular]. It may refer to the dark basal spot in the hindwings, which is roughly triangular, but also to the fact, that in this species, like in *O. pruinosum*, the triangle of the hindwings is transversed.

marsupialis [*Microtrigonia* 1903a: 526]

L. *marsupium* = pouch, purse + *–alis –is –e* = pertaining to, belonging to, associated with

The scientific name of the type species of Förster’s new genus *Microtrigonia* sounds enigmatic, but it can be explained. In that publication Förster (p. 513) constituted a special group of “Libellulidae papuanae (libellulids from Papua),” which he explained thus: “Mit diesem Namen will ich eine Gruppe von Libelluliden bezeichnen, welche als Brennpunkt ihres Vorkommens Neu-Guinea besitzen und durch deren Aufstellung ein völlig neuer Weg betreten sei. Die hierunter verstandenen Gattungen gehören den verschiedensten Ordnungen nach BRAUER und KARSCH an, sind aber alle durch einige Merkmale verbunden, die sich mir beim Studium der Neu-Guinea-Libellen von selbst aufdrängten. Ich möchte die hierher gehörigen Gattungen den Marsupialien vergleichen, die alle durch das Vorhandensein des Beutels, in welchen die Jungen vor der völligen Reife gelangen, verbunden sind und dabei proto-typisch verschiedene Entwicklungsrichtungen der höheren Säugethiere vertreten, wie z. B. den Nagethiertypus, den Raubthiertypus u. a. m. [By this name I am going to describe a group of libellulids which have New Guinea as the focal point of their occurrence and whose establishment will break a completely new path. The genera taken into account here belong to the most diverse orders

according to BRAUER and KARSCH. But they are all connected by a few characteristics that came to mind when I was studying the New Guinea dragonflies. I would like to compare the genera belonging here to the Marsupials, which are all connected by the presence of the pouch into which the young enter before they are fully formed and thereby represent prototypically different directions of development of the higher mammals, such as: the rodent type, the predatory animal type, and others]."

That means: With this name Förster wanted to refer to this analogy between marsupials and the Libellulidae Papuanae, the common feature of which is (p. 513): "Allen Gattungen der Libellulidae papuaninae ist gemeinsam die abnorme Gestalt des sogenannten Genitallappens des ♂ [All genera of the Libellulidae papuaninae have in common the abnormal shape of the so-called genital lobe of the ♂]."

metallica [*Teinobasis* (1898a: 300)]

L. *metallicus –a –um* = of or belonging to metal, metallic

The name probably refers to the steel blue coloration on thorax and abdomen of the male (p. 301): "Thorax oben bis zu den vorderen Seitenkanten stahlblau, bis zur Mittelnaht der Seiten ebenso, aber schwächer, wobei eine graubraune Färbung immer mehr überhand nimmt. … Abdomen oben stahlblau, vordere Hälfte des Segmentes 1 oben blass-gelb… [Thorax dorsally steel blue up to the front side edges, as well as up its the lateral median suture, but weaker, with a gray-brown color becoming increasingly predominant. ... Abdomen steel blue above, front half of segment 1 pale yellow above...]."

miraculosa [*Micromacromia* (1906c: 31)]

L. *miraculum* = a marvellous thing, wonder, marvel, miracle + *–osus –a –um* = full of, abounding in, given to

What is astonishing in this taxon from the Usambara mountains Förster explains on p. 34: "Das ♀ dieser Art ist also eine typische Neodythemis Karsch, während das Männchen zur Gattung Micromacromia Karsch gehört [So the ♀ of this species is a typical *Neodythemis* Karsch, while the male belongs to the genus *Micromacromia* Karsch]." But already earlier in his treatise he had stated (p. 23): "So sind bei der Usambara-Species die Sectores trianguli im Hinterflügel kaum merklich getrennt, entspringen im Vorderflügel sogar aus einem Punkt. Demnach muss das Tier zur Gattung Micromacromia Karsch gestellt werden, wodurch gezeigt ist, auf welch schwachen Füssen die Gattung Micromacromia steht [In the Usambara species, the sectores trianguli in the hindwing are barely noticeably separated and even arise from one point in the forewing. Accordingly, the animal must be placed in the genus *Micromacromia* Karsch, which shows how weak the base of the genus *Micromacromia* is]." The species is finally placed in the genus *Micromacromia* by Ris (1919: 1052). How *Micromacromia* and *Neodythemis* are to be distinguished see Dijkstra & Vick 2006.

mocsaryi [*Gynacantha* 1898a: 292] (fig. 16)

In the first description itself the dedication of the species is not explained, but it is evident from the preface of the paper, where Förster, after explaining that by the Hungarian National Museum he had been entrusted with describing the museum's odonates collected by Biró and Fenichel in German New Guinea near Astrolabe Bay, states (p. 271): "Es ist mir zum Schlusse noch eine angenehme Pflicht, Herrm A. Mocsáry, Custos am un-

garischen Nationalmuseum, dem geschätzten Hymenopterologen, für seine freundlichen Bemühungen in der Sache meinen besten Dank auszusprechen [Finally, it is a pleasant duty for me to express my deepest gratitude to Mr. A. Mocsáry, Custodian of the Hungarian National Museum, the esteemed hymenopterologist, for his kind efforts in this matter].“ The Hungarian entomologist Alexander Mocsáry (1841-1915) after having studied at Vienna in 1870 became assistant at the Hungerian National Museum, rising to curator of the entomological department and vice director in 1882 and was appointed director in 1910 (cf. Beolens 2018: 292).

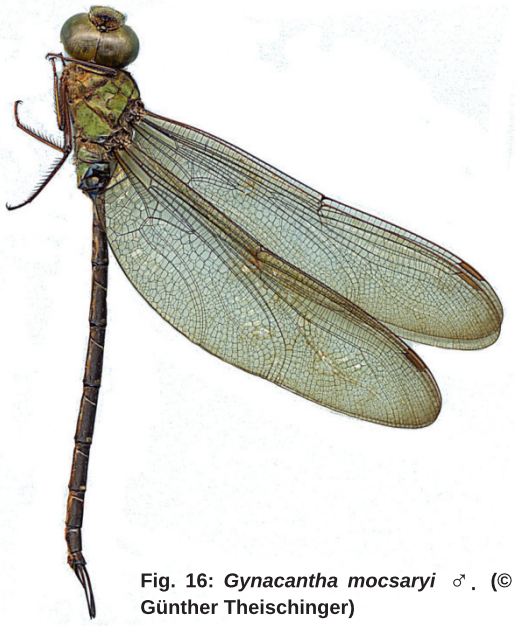


Fig. 16: *Gynacantha mocsaryi* ♂. (© Günther Theischinger)

monoceros [*Phyllomacromia* (1906b: 319)]

Gr. μονοκέρως [monokerōs] = with but one horn

The feature to which the name points is a hornlike extension of the tenth abdominal segment (p. 320): “Segment 10 kaum halb so lang als breit, oben die ganze Segmentdecke in ein fast gerades 2 mm langes Horn ausgezogen [Segment 10 is barely half as long as it is wide, at the top the entire segment is extended into an almost straight 2 mm long horn].”

montivagans [*Metagrion* (1900a: 103)]

L. *mons* (stem: *mont-*) = mountain + *vagans* = wandering, roaming

In that publication is no information where or by whom the type specimen was caught. But from Garrison et al. 2003: 16 one can see that it came from a mountainous region of New Guinea. “Gegalau / Sattelberg b[ei] / Simbang / Deutsch Neu- / guinea.” On the validity of this genus see Garrison et al. 2003: 15 (see also Lieftinck 1935: 233, where a description of the species is given).

naninus [*Orientogomphus* (1905: 19)]

L. *nanus* = a dwarf + *-inus –a –um* = pertaining to, resembling

Förster explains his choice of name (p. 21): “De Selys glaubte, daß die Untergattung *Heterogomphus* nur große Formen enthalte. Diese zierliche Art ist daher durch ihre Kleinheit sehr ausgezeichnet, wenn sie auch in Rücksicht auf Form des Abdomens und der Appendices von den großen Arten der Gattung nicht wesentlich abweicht und in der Färbung der Rasse *cochinchinensis* des *H. Smithii* sehr nahe kommt [De Selys believed that the

subgenus *Heterogomphus* contained only large forms. This delicate species is therefore very distinguished by its small size, even though it does not differ significantly from the large species of the genus in terms of the shape of the abdomen and appendices and is very close in coloring to the *cochinchinensis* race of *H. Smithii*]."

novaeguineensis *Crocothemis servilia* 1898a: 288

Mod. L. *Novaeguineensis –is –e* = from New Guinea

Förster assessed this taxon, the specimens of which had been collected by Biró (see p. 20) at the Astrolabe-Bay, as a subspecies of *Crocothemis erythraea*. *C. servilia* he only knew from Rambur's description (1842: 80) and was convinced it to be another subspecies of *C. erythraea*.

nyansana [*Copera* (1916: 25)] (fig. 17)

Mod. L. *Nyansanus –a –um* = pertaining to Lake Victoria (in Bantu languages 'nyanza' means 'large mass of water' or 'lake')

The provenance of Förster's single male specimen was: "Entebbe, Victoria Nyanza. 1 ♂ in coll. m. [1 ♂ in my collection]."

Fig. 17: *Copera nyansana*, tandem, Gabon, Bateke plateau, 16. Sept.2012. (© Jens Kipping)

obsoletum [*Acanthagrion* (1914a: 69)]

L. *obsoletus* = old, worn out, fallen into disuse, thrown off, obsolete, faded; (of color) dirty looking, dingy

Why Förster chose this name for his taxon he does not say, as usually.

The name might be due to the following observation of the author which he assessed to be unusual: “Die Verlängerung der letzten Segmentdecke des Abdomens in zwei Dorne konnte ich bisher nirgends beobachten [So far I have not been able to discover the dorsal extension of the last segment of the abdomen into two spines elsewhere].” So he might have thought this feature to be outdated by evolution, and he established a new genus *Myagrion* for it. He obviously was unaware that the forked apical process of S 10 was to be found in the genus *Acanthagrion* (Selys, 1876: 304), in which one of the decisive characteristics of the males is “Bord du {segment} 10^{e} plus ou moins prolongé ou redressé en lame échancrée [Edge of 10th {segment} more or less extended or raised into a notched blade].” The explanation of the name in Fliedner 2021a: 86 that the name might refer to the fact that in Förster’s single male specimen the wings due to old age were “leicht getrübt [slightly unclear]” is less probable.

orang [*Indocnemis* (1907b: 2)]

Malay language: orang = human being

Förster does not explain what made him choose this very name; but as it was found in Malaysia at “Camp Jor auf der Wasserscheide zwischen Pahang und Perak [Camp Jor on the watershed between Pahang and Perak]”, he might have thought that a Malayan name might evoke a local flair.

pagenstecheri [*Rhinocypha* 1897e: 333]

The reason of the dedication is clear from Förster’s first paragraph of the publication: “Schon 1896 erhielt ich ein ♀ einer neuen Rhinocypha aus Sumba, welches ich meinem verehrten Freunde, dem hochverdienten Kenner der indo-australischen Lepidopterenfauna, Herrn Geheimrat Dr. Arn. Pagenstecher in Wiesbaden zu widmen gedachte, der mich kurz vorher mit seiner Arbeit über die Lepidopteren von Sumba und Sambawa erfreut hatte. Zu meinem Vergnügen erkannte ich nun in einer kürzlich von H. Fruhstorfer als *Rh. eximia* erhaltenen Art die prächtige neue *Rhinocypha* von Sumba und kann ich jetzt beide Geschlechter bekannt geben [As early as 1896 I received a ♀ of a new *Rhinocypha* from Sumba, which I intended to dedicate to my esteemed friend, the highly deserved expert on the Indo-Australian lepidopteran fauna, Privy Councillor Dr. Arn. Pagenstecher in Wiesbaden, who had recently delighted me with his work on the lepidopterans of Sumba and Sambawa. To my delight I now recognized the magnificent new *Rhinocypha* from Sumba in a species recently obtained by H. Fruhstorfer as *Rh. eximia*, and I can now publish both sexes].” The taxon *sumbana* described as a subspecies ranks now as species of its own right (see p. 58).

Arnold Andreas Friedrich Pagenstecher (1837-1913) was a German physician and lepidopterologist. He grew up in Wiesbaden and after studying medicine he settled in his home town to practice medicine, where he advanced to the status of a privy medical counseller. He published on Lepidoptera from the South East Asian region and in 1882 became inspector and 1900 honorary director of the Natural History Museum of his home

town (not of that at Hamburg, as Beolens 2018: 319 erroneously writes). Förster received some odonatological material from him (see Garrison et al. 2003: 6, 47, 51) and also later sold birds of paradise and snapping turtles from New Guinea to the museum (Pagenstecher 1907: XIX + XXI) and determined Odonata for it (see Pagenstecher 1909: XII).

pallidinervis [*Phyllomacromia* (1606b: 317)]

L. *pallidus* = pale, pallid, colorless + *–nervis –is –e* (in entomological terminology) = veined

The wing veins of Förster's single female specimen were partly yellow (p.318): "Geäder schwarzbraun. Costalader ganz gelb bis zur Flügelspitze, dagegen alle übrigen Sektoren schwarzbraun. Gelb sind die Queradern in Costal- und Subcostalraum, im Hypertrigonalraum und mehr oder weniger alle übrigen Queradern bis zur Aussenseite des Discoidaldreiecks und vorn bis zum Nodus ["Venation black-brown. Costa completely yellow up to the wing tip, while all other sectors are black-brown. The transverse veins in the costal and subcostal space, in the hypertrigonal space and more or less all other transverse veins up to the outside of the discoidal triangle and anteriorly up to the node]." The taxon was described by Förster in the genus *Macromia*, but he already stated (p. 318): "Es ist möglich, dass diese gelbadrige Art zur Untergruppe Phyllomacromia gehört, was sich ohne Kenntnis des ♂ nicht entscheiden lässt [It is possible that this yellow-veined species belongs to the subgroup *Phyllomacromia*, which cannot be decided without knowledge of the ♂]."

paraguyensis [*Erythrodiplax* (1905a: 76, repr. 4)]

L. suffix *–ensis –is –e* = pertaining to

The taxon was described from a single ♀ specimen from "Costa Aquaray (Inner-Paraguay)."

perdita [*Gomphoides* 1914a: 73]

L. *perditus –a –um* = lost, hopeless, desperate, ruined past recovery

Förster does not give a clue why he chose this very name for this taxon which he made type species of his new genus *Ammogomphus* split from the genus *Gomphoides*, of which it is in reality a younger synonym. So he might have wanted to say that in his classification it was lost for the genus *Gomphoides*.

pluvialis [*Trithemis* 1906c: 30] (fig. 18)

L. *pluvialis* = belonging to rain, rainy

As usual Förster in his description gives only characters of morphology and coloration of his sole specimen. But one can imagine, that the taxon from the Usambara Mountains might have been collected in the rainy season.

primigenia [*Palaeosynthemis* (1903a: 543)]

L. *primigenius –a –um* = first of all, first of its kind, original, primitive

This is Förster's type species of his subgenus *Palaeosynthemis* (see p. 26). In this context he had stated that he assessed the genus *Synthemis* to be "eine der ältesten Cordulinen-Gattungen [one of the oldest genera of cordulines]." He had seen, that the female of his new species had a long ovipositor, which apparently he thought to be an archaic feature, while in the species *Synthemis brevistyla* (the only species of that genus, of which he knew the female had just a small vulvar scale. So he stated (p. 545): "Es erlauben die bisherigen Gattungsbegriffe nicht, dass *primigenia* und *brevistyla* in

Fig. 18: ***Trithemis pluvialis*** **♂, Zambia, Ntumbachushi Falls 08.April 2011. (© André Günther)**

Fig. 19: ***Umma saphirina*** **♂, Uganda, Bwindi, 15. Jan. 2016. (© Jens Kipping)**

einer Gattung verbleiben können, wenn auch zugegeben werden muss, das alle *Synthemis*-Arten in Bezug auf Gattungsmerkmale etwas unfertiges, variables an sich tragen [The existing generic terms do not allow *primigenia* and *brevistyla* to remain in one genus, although it must be admitted that all *Synthemis* species have something unfinished and variable about them as regards to generic characteristics]."

sambawana [*Procordulia* (1899a: 64)]

L. suffix *–anus –a –um* = pertaining to …, of …

This is a toponym (p. 65): "Patrie: L'île de Sambawa entre Floris et Sumba [Homeland: Sambawa Island between Floris and Sumba]."

saphirina [*Umma* 1916: 23] (fig. 19)

L. *sa(p)phirinus –a –um* = of sapphire, sapphirine

The name might refer to the wings of the male (p. 23): "Flügel blau irisierend, mit schwarzem Geäder [Wings iridescent blue, with black veins]", or to its abdomen (p. 24): "Körper glänzend metallblau und metallgrün wie bei *longistigma* [Body shining metallic blue and metallic green like in *longistigma*]."

schneideri [*Orthetrum* 1903a: 541]

About the type locality and the eponym we find in the first description: "Heimath: Rayahberge. Serbo Dalak. Plateau von Hoch-Sumatra, entdeckt von Herrn Gustav Schneider jun. Basel im Jahre 1899 [Provenance: Rayah Mountains. Serbo Dalak. Plateau of High Sumatra, discovered by Mr. Gustav Schneider Jr. Basel in 1899]." For the eponym Gustav Schneider (1867-1948), known to Förster probably from his time at Schopfheim, which town is not far from Basel, see Beolens 2018: 372.

selysi [*Podopteryx* (1899a: 70)]

This is an eponym dedicated to the 'Father of Odonatology'. Förster does not give a reason for his dedication, but before he begins the description itself, he informs us about the distinctive features of the subgenera *Argiolestes* and *Podopteryx* in Selys' genus *Argiolestes* stating that his new taxon does not fully match the characteristics of wing venation of either Selysian subgenus.

selysii [*Nosticta* (1896a: 423)] (fig. 20)

In his first publication on dragonflies Förster thanks the 'Father of Odonatology' for his assistance (p. 424): "Dédié à l'auteur spécialiste du sous-ordre des Odonates, M. le baron de Selys-Longchamps, sénateur belge, qui a eu la bienveillance de reviser ma determination [Dedicated to the author specializing in the suborder of the Odonates, Mr. Baron de Selys-Longchamps, Belgian senator, who was kind enough to revise my determination]."

selysii [*Anax* 1900a: 88]

Why Förster dedicated the species to Selys he does not say in the first description; but in his preliminary remarks he declares his intention to compare species that are not published up to then with the specimens in the Selys collection (p. 81) and later (p. 93) establishes the genus *Nasiaeschna* authorized by Selys. This is Förster's last dedication to Selys during the lifetime of the 'Father of Odonatology'.

Fig. 20: *Nosticta selysii*. Drawing by Friedrich Förster in the Selys – Severin- Collection (© RBINS). This drawing was made for the communication between Förster and Selys before the publication of the species in 1896.

sjoestedti [*Pseudagrion* 1906b: 62] (fig. 29 p. 103)

Förster gives as reason for his dedication of the taxon based on a single ♂ from Cameroon (p. 64): “Herrn Yngve Sjöstedt, Stockholm, dem wir die ersten biologischen Beobachtungen über die Libellen von Kamerun verdanken, gewidmet [Dedicated to Mr. Yngve Sjöstedt, Stockholm, to whom we owe the first biological observations on the dragonflies of Cameroon].”

For more about the Swedish entomologist and ornithologist see Endersby & Fliedner 2015: 72-73; Beolens 2018: 389; Fliedner 2023: 57).

soembanum *Orthetrum testaceum* 1903: 542

Mod. L. *Soembanus –a –um* = from the island of Sumba [under Dutch rule Soemba], one of the Lesser Sunda Islands

Förster separated this subspecies, the type specimen of which was from Sumba, from *O. testaceum* [L. = the brickcolored] (Burmeister 1839: 859) on differences in size, in the penile structure and the black coloration of the tibiae, which he says to be yellow in the nominate species.

stahli [*Pentaphlebia* 1909a: 213] (fig. 8 p. 27)

Förster explains his reason for the choice of name (p. 211): “Herr Missionar H. Stahl hatte die Freundlichkeit, mir zu Nyasoso im Hinterlande von Kamerun einige Insekten zu sammeln. Da mir dieser Platz nach allen Mitteilungen von besonderem faunistischen Interesse zu sein schien, so bat ich Herrn Stahl um seine Unterstützung, und wenn sich der genannte Herr in Rücksicht auf seinen anstrengenden Beruf einer intensiveren Sammeltätigkeit nicht widmen konnte, so zeigen doch die wenigen Proben, die eingegangen sind, eine Fauna an, die neben Formen des Aestuariums Neues und Interessantes darbietet [The missionary Mr. H. Stahl was kind enough to collect some insects for me at Nyasoso in the hinterland of Cameroon. Since this place seemed to me to be of particular faunal interest, according to all information, I asked Mr. Stahl for his support, and although the gentleman mentioned could not devote himself to more intensive collecting due to his strenuous job, the few samples that were received nevertheless show a fauna that, in addition to forms of the estuary, offers new and interesting things].”

Gottlieb Heinrich Stahl (1875-1954) was born in the northern Black Forest. After an apprenticeship as a bookbinder, he joined the Basel Mission. After six years of training, he was sent to Cameroon in 1901. After the outbreak of the First World War, he was taken prisoner by the English in London, but was released to Germany in 1915. For the rest of his life, he worked in the home service of the Basel Mission, primarily in Hesse and Württemberg (Beolens 2018: 396 erroneously cites the year when Stahl joined the Basel Mission for his start in Cameroon).

As Basel is not far from Schopfheim Förster might have met Stahl during his time there.

stygia [*Rhinocypha* 1897c: 210]

L. *Stygius –a –um* = of the Styx, Stygian, of the lower world, infernal

In ancient mythology the Styx was the river separating the world of the living from that of the dead. It had so deadly powers that a living person died at the slightest contact with its water and a deity, who swore a false oath by the Styx, instantly passed out for one year, which ignominy was avoided eagerly. In this case the name probably refers to dark coloration which was associated with the netherworld. About this the first description says for the males (p. 210): “Corps entièrement noir. Tête et thorax noir de velours, abdomen noir chatoyant, surtout à la fin des segments [Body entirely black. Velvet black head and thorax, shimmering black abdomen, especially at the end of the segment]” and for the females (p. 211): “Corps noir, varié de jaune citron [Body black, varied with lemon yellow].”

subfumata [*Cora* 1914a: 60]

L. prefix *sub–* = beneath / slightly + *fumus* = smoke, steam + *–atus –a –um* = provided with, marked with

Förster described this taxon as a subspecies of *Cora semiopaca* Selys, 1878, which is now classified in the genus *Miocora*. Typical feature of that species is, according to Selys, a broad opaque band that almost occupies the last third of the wings. Förster

characterizes his taxon: “Wie die Type, aber etwas größer, mit breiteren Flügeln. Die braune Querbinde beginnt erst etwas nach der Mitte zwischen Nodus und Pterostigma und ist nach innen convex begrenzt. (Bei *semiopaca* schon nach dem ersten Viertel, der Innenrand ist ganz gerade [Like the type, but slightly larger, with broader wings. The brown transverse band begins just after the middle between the nodus and pterostigma and is convex towards the inside. (In *semiopaca* the dark band exists already after the first quarter, its inner edge is completely straight.)].” That means: that the dark transverse band is narrower than in the Selysian taxon which led to the name of the species (≈ not quite so smoke colored).

sumbana [*Rhinocypha* 1897e: 335]

L. suffix *–anus –a –um* = pertaining to

Förster’s specimens were from “Patadalu, Sumba- (Sandelholz-) Insel [Pantadalu, Sumba- (Sandalwood-) Island]” (p. 336). The taxon was described as “*Rh. Pagenstecheri* m. subrasse *sumbana* n. sbr.“, but was elevated to specific rank (Lieftinck 1936: 114; 1953: 131).

superstes [*Bironides* 1903a: 523]

L. *superstes* = that remains alive after another's death, outliving, surviving

The name of this species from the group 'Libellulidae Papuanae' (see p. 45 s.v. marsupialis), which Förster (p. 524) describes as 'strange', suggests that he viewed it as archaic in the evolutionary sense, although he doesn't say that explicitly.

terpsichore [*Macromia* 1900a: 86]

Gr. Τερψιχόρη [Terpsichorē (≈ delight in dancing)] was the Muse of dance and chorus

This is the first of the Nine Muses (the inspirational goddesses of literature, science, and the arts) which found her way into odonatological nomenclature. Förster’s paradigm was followed by Laidlaw (1915), Ris (1913 + 1916), and Lieftinck (1929, 1950 + 1953), so that they all are represented among the names of odonata as examples of charming and inspiring femininity.

thalassophila [*Huonia* 1903a: 520]

From Gr. θαλασσο– [thalasso–] = concerning the sea + –φιλος [–philos] = loving (Latinized feminine form)

Förster’s specimens were from Papua New Guinea, Madang province Simbang at the Huon Peninsula, and from the forest near Bongu at the Huon Gulf which places both are near the sea. An additional remark throws some more light on the choice of name: “Ein merkwürdiges Beispiel der Speciesbildung aus Gebirg und Ebene. Es erfährt ein Analogon durch das Auftreten der kleinen Neurothemis elegans GUER.-BRAUER {= ***N. manadensis* (Boisduval, 1835)**} in den Küstenebenen von Nord-Neu-Guinea und das Auffinden der grossen *N. oculata* GUERIN-BRAUER {= ***N. stigmatizans* (Fabricius, 1775)**} im Hinterlande (im Hansemann-Gebirge durch BÍRÓ) [A strange example of species formation from mountains and plains. It has an analogue through the occurrence of the small *Neurothemis manadensis* (Boisduval, 1835) in the coastal plains of northern New Guinea and the discovery of the large *N. stigmatizans* (Fabricius, 1775) in the hinterland (in the Hansemann Mountains by BÍRÓ).”

uchidai [*Somatochlora* 1909a: 233]

In the first description is a long explanation of the dedication of the species to the Japanese scientist: „Von dem japanischen Odonatenforscher Uchidas (!) erhielt ich 2 Arten von Somatochlora in zusammengehörigen ♂♀. Ich habe mich über diese interessante Zusendung Herrn Uchidas gegenüber bereits vor einem Jahre brieflich ausgesprochen, aber nicht mehr erfahren, ob der Genannte meine Angaben in Japan publiziert hat. So seien dieselben hier bekannt gegeben [From the Japanese odonatologist Uchida I received 2 species of *Somatochlora* in pairs ♂♀ that belong together. I wrote to Mr. Uchida about this interesting consignment a year ago, but I have not found out whether he has published my information in Japan. So these will be published here].” In the following paragraph he informs us that René Martin (1908: 30) had combined a wrong ♂ with the ♀ of *Somatochlora viridiaenea* (Uhler, 1858), which new taxon, in which the abdomen in both sexes is unicolored metallic green, he was going to name “nach Herrn Uchidas (!) Somatochlora Uchidai [after Mr. Uchida *Somatochlora uchidai*].” About the Japanese entomologist and ornithologist Seinosuke Uchida (1884-1975) specialized on Mallophaga see Beolens 2018: 421.

ungulata [*Micrathyria* 1907a: 153; 1 reprint]

L. *ungulatus –a –um* = having claws or hoofs

The name refers to the unusual shape of the hamulus: “Hamulus dick stammförmig. Er gleicht von unten gesehen vollkommen einem ausgehöhlten, mit Hufeisen versehenen Pferdehufe, ist also unten am Ende etwas hufartig verbreitert, dort ausgehöhlt, die schmale Randleiste nach hinten jederseits verlängert, so daß dadurch ein äußerer und ein etwas kürzerer innerer Ast entsteht. Der innere und der äußere Ast etwas hornartig nach außen gebogen, die inneren Äste beider Hamuli dicht anliegend, so daß sie ungefähr eine rechteckige Platte mit bifidem Ende bilden [Hamulus thickly trunk-shaped. Seen from below, it completely resembles a hollowed-out horse's hoof with horseshoe, for it is somewhat broadened at the end like a hoof, hollowed out there, and the narrow edge molding is extended backwards on each side, so that an outer and a slightly shorter inner branch are created. The inner and outer branches curve outwards somewhat like a horn, the inner branches of both hamuli are close together so that they form approximately a rectangular plate with a bifid end].”

usambarica [*Zosteraeschna* (1906c: 48)]

Mod. L. *Usambaricus* = pertaining to Usambara, concerning Usambara

Förster gives as provenance of his specimens (p. 51): “Nguelo, Bergland von Ost-Usambara [Nguelo, mountains of eastern Usambara].” But the distribution of the species ranges to South Africa.

variegata [*Argia* 1914a: 65] (fig. 21 a-d)

L. *variegatus –a –um* = made of various sorts or colors, variegated

In the first description the taxon is characterized: “Art mit hellblauem Thorax und oben gabeliger schwarzer Humeralbinde [Species with light blue thorax and a black humeral stripe forked at the top].” But in the description of the male more colors are added. So the face and the triangular postocular spots are characterized as blue-green, as is the

a

b

c

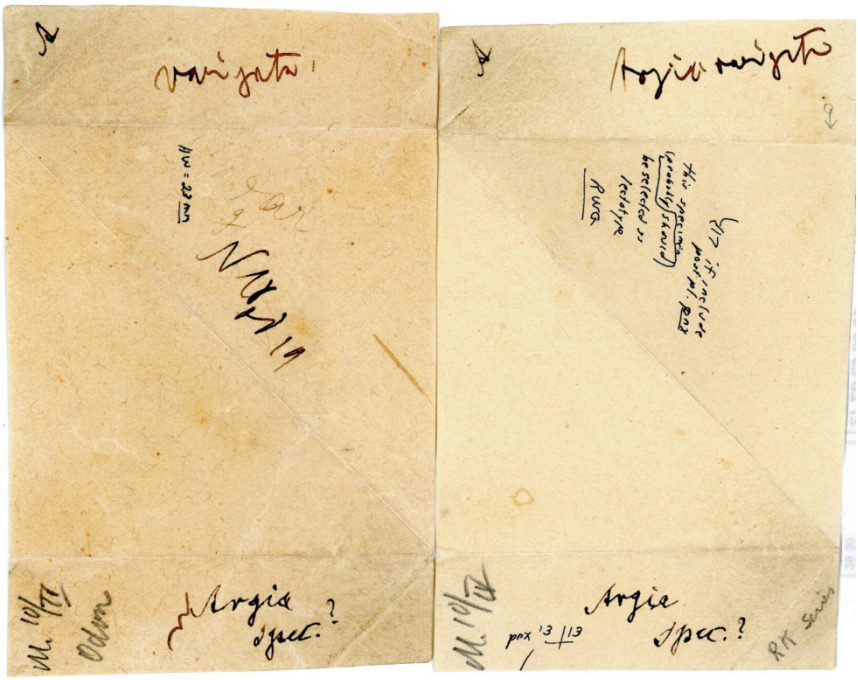
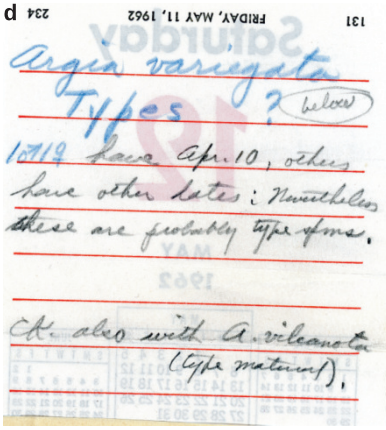


Fig. 21: ***Argia variegata*****, a syntype ♂ b syntype ♀, c envelopes of the ♂ and ♀ syntypes at UMMZ d Comments by L.G. Gloyd on the possible type status e index card from UMMZ (photographs Rosser Garrison).**



anterior part of the prothorax, the labrum is somewhat brownish-yellowish, the occiput waxy yellow, the thorax pale blue or silver blue, ventrally whitish blue, the ventral side of the first abdominal segment is clouded brown, the blue lateral sides of the abdomen are yellowish ventrally. The female is said to be similar in color to the males, but blacker at the abdomen and on segments 3-7 a median longitudinal stripe of light yellowish-green color, occupying slightly more than the middle third.

venatrix [*Oligoaeschna* (1903b: 356; 2 reprint)]

L. *venatrix* = huntress

As Förster's description of his single male specimen is restricted to morphology and coloration, there is no clue why he chose this special name. It is not enlightening either since all dragonflies are predators.

victoriae [*Chlorocypha* (1914a: 61)] (fig. 22)

This is a toponym; the type locality is "Entebbe, Victoria Nyanza, Uganda". Victoria Nyanza (or Lake Victoria) ist he largest lake of Africa, which in 1858 in spite of having several

Fig. 22: *Chlorocypha victoriae* ♂ Cameroon, Yaunde, 01.June 2008. (© Jens Kipping)

names in indigenous languages was renamed by the explorer J. H. Speke (1827-1864) after the British Queen Victoria, who ruled from 1837 until 1901. Her name id the Latin word for victory.

(*webbianum*) [*Thermagrion* 1906b: 336]

L. suffix *–anus –ana –anum* = pertaining to

The taxon was described from: “Ein einziges ♀ von Ginea bei Ginir, 15. März 1901 (V. Webbigebiet) (A single ♀ from Ginea near Ginir, March 15, 1901 (V. Webbi area)]” (p. 337). This location is situated in the Oromia region in Ethiopia, in the language of which ‘webi’ means ‘river’. As the type specimen is lost, we do not know to which species the name might pertain. Also the genus based on it is therefore void.

weiskei [*Dromaeschna* 1908a: 192] (fig. 7a+b p. 21)

This species is named after the German traveller Emil Weiske (1867-1950), who collected Förster’s specimens near Cairns, Queensland. His voyages had led the eponym from 1890 via California, Hawaii, Fiji Islands, New Zealand to Australia, always earning his living mainly in agriculture, on Hawaii also in military service, professions which left him time and opportunities to collect ethnological and natural history items. In Australia in 1897 he decided to make a living from his collecting activities. In 1900, after having lost one hand by an unfortunate fishing incident with dynamite in British New Guinea, he returned to Germany. There he got married. He sold most of his material to museums and private collectors, but left enough for an exhibition from which the family lived. Later expeditions led him to Siberia (Lake Baikal and the border region to Mongolia (1908) and to Argentina and Paraguay (1911-1913). In 1920 he moved with his family to Saalfeld (Thuringia) where he built his own museum, which opened in 1922. Its collections in 1979 were transferred to the Stadtmuseum Saalfeld. Material he amassed is found in many museums of natural history and ethnology, among these Berlin, Munich, Leipzig, Dresden, Vienna, London. He did not describe species himself lacking scientific education, but from what he collected more than 80 species were described, among these another dragonfly species and two synonyms named by Förster (cf. Beolens 2018: 441).

williamsoni [*Polythore* (1903c: 356; 2 reprint)] (fig. 23)

Förster explains his choice of name in a footnote (p. 356): “** Mr. E.B. Williamson, dem trefflichen Kenner der Tierwelt seines Heimatlandes Indiana freundschaftlichst gewidmet [Dedicated most amicably to Mr E.B. Williamson, the excellent adept of the wildlife of his native Indiana].“ About the American banker, odonatologist and grower of Irises Edward Bruce Williamson (1877-1930) see Beolens 2018 448, Fliedner & Endersby 2019: 80-81, about his relation with Förster and his family above p. 3-5; 15-18.

williamsoni [*Burmagomphus* 1914a: 76]

E.B. Williamson in 1907 had established the genus *Burmagomphus*. So it certainly was appropriate that Förster dedicated his new taxon of that genus to its author and odonatological friend to whom he owed a lot: “Der Burmagomphus von Hochmalakka kann höchstens als eine kleinere Rasse des vermicularis betrachtet werden. … Er soll daher den Namen B. vermicularis Williamsoni führen [The *Burmagomphus* of High Malacca can at most be considered a smaller race of the *vermicularis*. ... It should therefore be called *B. vermicularis williamsoni*].“ For information about the eponym see the entry above.

Abb. 23: *Polythore williamsoni* ♂, Paralectotype at UMMZ. (© Rosser Garrison)

Synonyms

adamantina, Rhinocypha 1903a: 547 — ***Aristocypha cuneata*** (Selys, 1853: 60)

L. *adamantinus –a –um* = made of steel, extremely hard (borrowed from Greek)

The name does not seem to make sense, as the Greek word for steel translated literally would mean something like 'insuperable, not to be tamed', and the adjective derived from it refers to the firmness of the material, not to other qualities. But Förster states after the description that his new taxon and the species *quadrimaculata*, *spuria*, *cuneata* and *fenestrella* of the same genus (now *Aristocypha*) "gehören zu den brillantesten Insekten der Erde [are among the most brilliant insects on earth]." So it is clear, that he wants to describe the lustre of the body or of the coloured parts of the wings, following the terminology of his mentor Selys, who for example describes the wings of a species as "bleu acier brilliant [brilliantly steel blue]" (1859: 442).

The name of the species *A. cuneata* [≈ wedgeshaped] refers to a "coin mésothoracique couleur de chair [Flesh-colored mesothoracic wedge]."

alba, Disparoneura 1906b: 338 — ***Elattoneura glauca*** (Selys 1860: 443)

L. *albus –a –um* = white (without lustre)

Förster described this taxon from a single male, which got its name from the colour of its abdomen: "Körper elfenbeinweiss, wenig braunschwarz gefleckt [Body ivory white, slightly spotted with brown-black]." Selys' name is based on an error: he thought that his species *Disparoneura glauca* – in spite of different coloration – represented a species established by Burmeister (1839: 821) as *Agrion glaucum* (blue Agrion, today's *Africallagma glaucum*). In 1876 (p. 533) Selys – not noticing his error – described Burmeister's taxon anew from specimens from Gabon as *Enallagma gabonense* (see Calvert 1898: 40-41).

andinum, Amphiagrion 1909: 231 — ***Protallagma titicacae*** (Calvert, 1909: 203)

Mod. L. *Andinus –a –um* = from the Andes

Förster's specimens were from several locations in the Andes (p.232): "Vorkommen. Quaqui,

Peru, 6.4.1907, woher das Wiesbadener naturhistorische Museum durch K. Seyd drei Pärchen erhielt. Ein weiteres ♂ besitze ich aus der Cordillere von Bolivia, aus Yungas de la Paz und ein ♀ von Coroico (Bolivia). (1500 m s. m gefangen.) O. Garlepp [Provenance. Quaqui, Peru, April 6, 1907, from where the Wiesbaden Natural History Museum received three pairs from K. Seyd. I have another ♂ from the Cordillera of Bolivia, from Yungas de la Paz and a ♀ from Coroico (Bolivia). (caught at 1500 ASL) O. Garlepp].” At nearly the same time Calvert had published his taxon from several specimes, collected by three persons from two different places, one in Peru and one in Bolivia (p. 206: “Both of these localities are on the Lake Titicaca and therefore at an elevation of 12.500 feet (3711 metres) above the sea, one of the highest altitudes from which Odonata as yet have been reported.” Hence the name of the species.

angulata, Karschia 1900a: 96 **Agyrtacantha microstigma** (Selys, 1878c: 316)

L. *angulatus –a –um* = with corners, angular

The reason for Förster’s choice of name was (p. 97): “Kopf: Obere Stirnkante winkelig vorspringend [Head: Upper frontal edge protruding at an angle].” But he was not sure about his new taxon, as he already took in consideration that it might be the so far unknown ♀ of the Selysian species (p. 96): “Möglicherweise gehört das unten beschriebene ♀ zu *microstigma* de Selys, was der Vergleich des z.Zt. noch unbekannten Männchens der *angulata* oder des ♀ der *microstigma* Type später entscheiden dürfte [It is possible that the ♀ described below belongs to *microstigma* de Selys, which question the comparison of the currently still unknown male of the *angulata* or the ♀ of the *microstigma* type might decide later]”.

The Selysian name of the species *microstigma* [= small pterostigma], described from a single ♂ from the Moluccas, was evoked by this feature (p. 316): “pterostigma très petit, brun noir-âtre, mince, surmontant 2-3 cellules [pterostigma very small, blackish-brown, narrow, surmounting 2-3 cells].”

aratrix, Selysiophlebia 1905a: 75; 2 reprint **Gynacantha chelifera** McLachlan, 1896: 416

L. *aratrix* female form of *arator* = ploughman

Why Förster chose this name is to be seen from the description of his new genus *Selysiophlebia* which he split from the genus *Gynacatha* based on two males of the taxon in question. The name refers to the male appendages, that do not match the orientation of the ninth and tenth segments, but are “aufgerichtet und und schwach nach hinten gebogen, so dass das Abdomenende die größte Ähnlichkeit mit dem Hinterteile eines Pfluges hat [erect and slightly bent backwards, so that the abdominal end bears the greatest resemblance to the rear end of a plough].” The feminine form of the species name was chosen in accordance with the gender of the obsolete genus name.

McLachlan named his taxon from a single male specimen in his collection with an unpublished manuscript name by Selys, which is combined from Gr. χηλή [chēlē] = hoof / crab's claw and the Latin suffix *–fer –fera –ferum* = bearing. Selys (1857a: 362) had first used it in the name *Microgomphus chelifer*, in reference to the upper appendages, one branch of which “fait presque l' effet d'une pince d' ecrevisse [almost looks like a crayfish claw].”

Also in the other species for which he chose the same epithet, *Homeoura chelifera* (Selys 1876a: 319) the name is chosen in reference to the special shape of a curved upper appendage. McLachlan's species also shows that feature and, in addition, it is mentioned to be special (p. 417). So that most probably led to the name.

argenteolineatum, *Hylaeagrion* 1906a: 16 (4 reprint) ***dorsale*, *Aeolagrion*** Burmeister (1839: 819)

L. *argenteus -a -um* = of silver, made of silver + *linea* = string, line + suffix *atus -a -um* = marked with, equipped with

The name of Förster's taxon, which he described from three males, refers to linear markings of the thorax (p. 16; 5 reprint): "Vorderseite des Thorax schwarz, hierauf eine schmale, hellblaue (silberblaue) Antehumeralbinde bis zur Grenznaht der Vorderseite. Die Naht schwarz. Dann eine etwas metallische hellbraune oder olivengrünliche Juxtahumeralbinde bis zur nächsten Seitennaht. Über letztere eine weitere silberblaue Binde, dann wieder rotbraun oder grünlichbraun bis zur folgenden Seitennaht, hinter welcher der Thorax hellblau ist bis zum Ende [Front of thorax black, on this a narrow, light blue (silver-blue) antehumeral stripe up to the border seam of the front. The suture black. Then a somewhat metallic light brown or olive-greenish juxtahumeral stripe up to the next lateral suture. Over the latter another silver-blue stripe, then again reddish brown or greenish brown to the following lateral suture, behind which the thorax is light blue to the end]."

For *A. dorsale* (Burmeister) see entry *Aeolagrion* p. 22.

baueri, Skiallagma 1906a: 15; 2 reprint ***Xiphiagrion cyanomelas*** Selys, 1876a: 321

This is an eponym, explained by Förster thus: "Zwei ♂♂ in meiner Sammlung, aus der Umgebung der Stadt Sao Paolo (Provinz Sao Paolo), Brasilien, die ich der Gefälligkeit meines Freundes F.W. Bauer, Direktor der deutschen Mittelschule zu Sao Paolo, verdanke [Two ♂♂ in my collection, from the area around the city of Sao Paolo (province of Sao Paolo), Brazil, which I owe to the kindness of my friend F.W. Bauer, director of the German middle school in Sao Paolo]." But Förster had evidently mistakenly mixed up the provenance of his two males. Garrison (2012) found that they were actually specimens of the species *X. cyanomelas* Selys, distributed from the Philippines to Indonesia. The name of the Selysian species is Latinised from Greek, meaning dark blue and black, in reference to the main colouring of the males. Concerning the eponym I could not find further information. Two other species based on specimens obtained from Bauer are Förster's *Tramea paulina* (p. 77) and *Erythrodiplax acantha* Borror, 1942, the types of both taxa collected in 1904.

bicornis, Macromia 1906b:320 ***Phyllomacromia paula*** (Karsch, 1892: 15)

L. *bicornis –is –e* = two-horned, two-pronged, having two points

Förster states in his first description (p. 321): "M. bicornis unterscheidet sich von der habituell sehr ähnlichen M. monocoros (!) leicht durch den zweispitzigen Anhang der Decke von Segment 10. … Die Grösse, das sehr schlanke Abdomen der M. bicornis geben der Vermutung Raum, dass sie das ♂ der nur in einem ♀ bekannten, von Karsch beschriebenen M. paula sein könnte, welch letztere im Kamerungebirge fliegt. Die bei paula un-

metallische Stirn, sowie einige andere Färbungsunterschiede würden dagegen sprechen. Sicher lässt sich die Frage nicht entscheiden [*M. bicornis* differs slightly from the habitually very similar *M. monoceros* by the two-pointed appendage on the upper surface of segment 10. ... The size and the very slender abdomen of the *M. bicornis* lead to the assumption that they might be the ♂ of the *M. paula* described by Karsch only from one ♀, which flies in the Cameroon Mountains. *Paula's* non-metallic forehead and some other differences in coloration would speak against this. The question cannot be decided with certainty].” Later it turned out that Förster’s assumption was correct.

Karsch does not say explicitly what made him choose the name. But as in his publication, in which he deals exclusively with his new species, the name of the collector Paul Preuss is printed spaced and as he states that in size and proportions his taxon is near to *Phyllomacromia sophia* (Selys) one can guess that by these criteria he was induced to resort to the female’s first name (*paula*), which is well known in many European languages. It is not probable that the Latin adjective *paulus –a –um* [= little, small], on which the European names Paul and Paula are based, and which Ris used to name a *Diplacina* (Fliedner 2021a: 64) is the basis of the name, as according to Karsch the abdomen of *P. sophia* is shorter than that of his new species.

biroi, Tramea loewi 1898a: 273 ***Tramea eurybia*** Selys, 1878c: 298

Among the New Guinean Odonata Förster received from the Hungarian National Museum for description was a *Tramea* ♂ from Astrolabe-Bay which Förster took to be *Tramea loewi*, but differing in coloration from the type described from Seram (Maluku Islands). He therefore described it as a subspecies and named it after its collector Lajos Biró (1856-1931), to whom he later dedicated further taxa (see *Bironides* p. 19 and *biroi* p. 36). But his specimen actually belonged to a different *Tramea* species described by Selys twenty years before from Sulawesi under the name *eurybia* [Gr. = of broad sway]. In Selys’ description the specific epithet is capitalised. So it is clear that Selys chose this name from ancient mythology, where *Eurybia* is a minor sea goddess, the daughter of Pontos and Gaia, the impersonations of sea and earth. In 1909 Förster described other *T. eurybia* specimens from the Sattelberg near Astrolabe Bay as another subspecies to *T. loewi* (see *petaurina* p. 77).

bitarsatus, Mesogomphus 1906b: 325 ***Paragomphus genei*** (Selys, 1841: 246)

L. prefix *bi–* = twice, double + *tarsus* = (in entomology) the extreme part of the leg, to which the claws adhere + *–atus –a –um* = furnished with …, equipped with …, marked with …

Förster’s taxon received its name, because the tarsi of the fore- and middle legs differ in colour from the hind legs (p. 326): “Beine grünlichgelb, an den bedornten Kanten fein schwarzbraun. Tibien und Tarsen der Hinterbeine kastanienbraun-schwärzlich. Die gelben Tarsen der Vorder- und Mittelbeine am Ende des 1. Drittels fein aber scharf querüber schwarzbraun liniert [Legs greenish yellow, fine black-brown on the spiny edges. Tibia and tarsi of hind legs chestnut brown-blackish. The yellow tarsi of the fore and middle legs at the end of the 1st third are finely but sharply lined across with black-brown].” Selys explains his dedication thus (1841: 246): “J’ai dédié au savant professeur Géné (sic), si connu par excellents ouvrages sur les reptiles et les insects de la Sardigne, et à l’obligeance duquel je dois la communication qui m’a été faite des Libellules du Musée de Turin [I have dedicated the species to the erudite Professor Gené, so well known for his ex-

cellent works on the reptiles and insects of Sardinia, and to whose kindness I owe the access to the dragonflies of the Turin Museum." Carlo Guiseppe Gené (1800-1847) since 1831 was professor of zoology and director of the Royal Zoological Museum at Turin (for more about the eponym see Fliedner 1997: 55-56 and Beolens 2018: 150).

bogotensis, Cora 1914a: 60 ***Cora modesta*** Selys, 1869: 680

L. suffix *–ensis –ensis –ense* = pertaining to (often in geographic sense)

As provenance of his single male specimen, which he classified as a subspecies of *Cora terminalis* McLachlan, Förster gives: "West-Cordillere von Kolombia. Sta.Margarita 2300 m. s. m. [Western Cordillera of Colombia. Sta.Margarita 2300 metres ASL]." The name refers to the capital of that state situated on the Eastern Cordillera (and named by Förster *bogotenois* in French instead of Latin) is a little farfetched. Later this taxon turned out to be synonymous to *C. modesta* [L. = keeping due measure, moderate, modest]. Selys might have chosen that name in reference to the pterostigma, which is shorter and narrower than that of the *Cora* species thus far described.

ceylanicum, Orthetrum 1903a: 541 ***Orthetrum pruinosum*** (Burmeister, 1839: 858)

Mod. L. *Ceylanicus –a –um* = pertaining to or from Sri Lanka (then named Ceylon) [Ceylonese]

In Förster's 1903 paper, he deals with what he sees as varieties of the species *Orthetrum pruinosum* Burmeister (cf. *malaccense* p. 48), among which he lists an *Orthetrum carnaticum* Kirby [correctly *Indothemis carnatica* (Fabricius), see Kirby 1891: 204; mod. L. *carnaticus –a –um* = from the Indian region Karnataka]. About that species Förster writes (p. 541): "*O. carnaticum* KIRBY scheint mir eine Gebirgsform des ceylonesischen *O. pruinosum* BURM. darzustellen [*O. carnaticum* KIRBY seems to me to represent a mountain form of the Ceylonese *O. pruinosum* BURM.]" and adds in a footnote: "A.a. O. nennt KIRBY das Abdomen dieser nirgends genau beschriebenen Form inky-black. Sollte die hier beschriebene Form vom *carnaticum* KIRBY verschieden sein, so möge sie *O. ceylanicum* heissen (*pruinosum* Rasse) [l.c. KIRBY calls the abdomen of this form, which is not described in detail anywhere, inky-black. If the form described here is different from the *carnaticum* KIRBY, it should be called *O. ceylanicum* (*pruinosum* race)]." It might be added, that Förster nowhere mentions to which of Kirby's many publications he refers. Burmeister's *O. pruinosum* [L. = covered with hoarfrost, pruinous] received its name because mature males show a reddish violet pruinosity.

cothurnata, Neocharis 1906d: 70 ***Heliocharis amazona*** Selys, 1853: 55

L. *cothurnatus –a –um* = wearing cothurns (high shoes worn by actors in ancient tragedy).

The name refers to the long legs of this species, a common feature of his new genus *Neocharis* (cf. p. 25), as Förster points out (p. 69): "Diese sonderbare Gattung hat, wie schon bemerkt, grosse Ähnlichkeit mit einem riesigen Megapodagrion, sowohl was Form des Thorax als auch die langen Beine anlangt [This strange genus, as already remarked, bears a great resemblance to a gigantic *Megapodagrion*, both in the form of the thorax and in the long legs]."

Selys' species name refers to the type locality: "Patrie: Bords de l'Amazone, dans la Bolivie [Country: Banks of Amazonas River, in Boliva]."

dagnina, Argia 1914a: 62 ***Argia indicatrix*** Calvert, 1902: 82

L. suffix *–inus –ina –inum* = pertaining to

This is a toponym, referring to the type locality, which is is presented as follows: “Heimat: Westcordillere von Colombia, St. Jose, Rio Dagna, März 1909, 200 m s. m. Typen 2 ♂♂ in coll. m. [Provenance: Western Cordillera of Colombia, St. Jose, Dagna River, March 1909, 200 metres ASL.Types 2 ♂♂ in my collection].” But Förster or the typesetter made a mistake with the name of the river, which is actually called Río Dagua.

Calvert explained his choice of name: “The specific name indicatrix is suggested by the resemblance of the superior appendage in oblique view (fig. 39 s) to a hand with the index-finger extended.”

erlangeri, Philonomon 1906b: 310 ***Diplacodes luminans*** (Karsch, 1893: 22)

This is an eponym. Förster’s specimens were from a German expedition from 1899 to 1901 to Ethiopia and Somalia and Lake Turkana (then named Lake Rudolf) inclusively, led by the ornithologist Carlo von Erlanger (1872-1904) who died in a car accident near Salzburg. The expedition brought back ca 20.000 insects and more than 10.000 skins of birds and mammals. After von Erlanger’s death his mother entrusted Förster with the collected Odonata (1906b: 302). Förster explains his choice of name in a footnote (p. 310, 1): "Dem Andenken des nun verewigten Forschers und Leiters der Expedition, Carlo von Erlanger gewidmet [Dedicated to the memory of the now eternalized explorer and leader of the expedition, Carlo von Erlanger]” (more about the eponym Beolens 2018: 126). But the species, which is widespread in subsaharan Africa, was already described by Karsch from Togo under the name *luminans* [L. = brightening, illuminating, lighting up], probaly in reference to several ‘honiggelb’ [honey yellow] markings of head, prothorax, thorax and abdomen, and wing bases and pterostigmata.

erlangeri, Trithemis 1906b: 312 ***Trithemis donaldsoni*** (Calvert, 1899: 235)

This species was also described from the odonate collection of the expedition described in the foregoing entry and dedicated to the same eponym, whereas neither was mentioned explicitely. Unfortunately, this taxon had been described earlier by Calvert, who explained his choice of name (1899: 228): “Dr. A. Donaldson Smith, of Philadelphia, in his expedition through Somaliland and Gallaland to lake Rudolph, collected some Neuroptera, which he presented to the Academy of Natural Sciences of Philadelphia. These, some twenty-seven specimens, embrace thirteen species of Odonata …; among them are two new species and one new genus of Odonata. This fact, together with the very slight information hitherto existing of the fauna of the region, justifies the publication of the present paper.” (more about the American traveller and big-game hunter Arthur Donaldson Smith (1864-1939) Beolens 2018: 111).

fenicheli, Orthetrum 1898a: 279 ***Orthetrum villosovittatum*** (Brauer, 1868a: 167)

Förster explains his choice of name (p. 280): “1 Pärchen im ungarischen Nationalmuseum, dem tüchtigen ungarischen Forschungsreisenden Samuel Fenichel gewidmet, welcher leider in Neu-Guinea seinen Tod fand [1 pair dedicated to the proficient Hungarian explorer Samuel Fenichel, who unfortunately met his death in New Guinea].” Förster had been entrusted with the Odonata portion of the Hungarian National Museum, which had been collected in New Guinea by Lajos Biró (see *Bironides* p. 19) and Sámuel Fenichel (1868-1893), an archaeologist, entomologist and ethnologist (see Antoni 2014; Beolens 2018: 132). Ris (1910: 238) saw that the species described by Förster was *O. villosovittatum* (L. *villosus –a –um* = shaggy, hairy + *vittatus –a –um*

= wearing a band or ribbon (usually a headband) named by Brauer due to this feature (p. 168): “Thorax einfarbig olivengelb, nur jederseits vorne von der Wurzel der Vorderflügel bis zum Prothorax eine schwarzbraune unten dunklere und braun zottig behaarte Strieme [Thorax unicolorously olive yellow; but on each side anteriorly from the base of the forewing to the prothorax a blackish brown streak, darker below, and covered with brown shaggy hair].”

fontinalis, Toaeschna 1905b: 24 ***Tetracanthagyna waterhousei*** McLachlan, 1898: 443

L. *Fontinalis –is –e* = pertaining to Fons (the Roman god of springs)

The choice of name is explained thus (p. 24): “Diese interessante große Aeschnide wurde von Herrn Fruhstorfer im Lande der To unfern Langson erbeutet und dürfte sich unter denjenigen großen Aeschniden befunden haben, die er im Tale Song Kuong bei einer am Fuße hoher senkrechter Kalkfelsen entspringenden Quelle antraf [This interesting large aeshnid was captured by Mr. Fruhstorfer in the country of the Tos not far from Langson and was probably among the large aeshnids that he found in the Song Kuong valley at a spring that rises at the foot of high, vertical limestone cliffs].”

The first description of *Tetracanthagyna waterhousei* from Borneo is found in McLachlan’s publication in which he elevates *Tetracanthagyna* Selys, 1883, which had been based on *T. plagiata* (Waterhouse, 1877) from subgeneric to generic rank. The name of the new taxon was adopted from the manuscript name given by Selys on the label of a ♀ specimen in the collection of the British Museum. The eponym, Charles Owen Waterhouse (1843-1917) was an English entomologist. He was employed as an Assistant Keeper at the British Museum of Natural History at London. His area of expertise was Coleoptera (for more see Beolens 2018: 439). The association of Förster’s species with *waterhousei* was already noted by Martin (1909a: 143).

friedericella, Diplacodes 1905a: 75; 2 reprint ***Erythrodiplax maculosa*** (Hagen, 1861: 187)

There is no information whether the specific epithet refers to a real person or just the female’s first name, which induced Förster to name the species *friedericella* [= little Friederike (engl. Frederica ≈ peaceful ruler)]. From Garrison et al. 2003: 56 it can be seen, that Förster labelled the single female specimen in the male Latinised form ‘*fridericulus* [= little Friedrich (engl. Frederick)]’. It should be noted that Förster himself had Friedrich as his first name. The different gender on the labels of his collection might be explained by the fact, that a generic name ending in *–odes* might be masculine and feminine as well. So Förster might have at first been uncertain to which the gender the new species name should be adapted. The status with Hagen’s taxon was noted by Ris 1919: 1161. Hagens name *maculosa* [L. = spotted] of the species was evoked by several light spots: “front chalybeous, each side with a white spot; thorax fuscous, each of the sides with obsolete, yellow spots; … abdomen brownish-black, segments each side with a triangular yellow spot.” (For the type of *E. maculosa* see Garrison & Ellenrieder 2019: 111).

garleppi [Mecistogaster (1903c: 356; 2 reprint)] ***Platystigma buckleyi*** (McLachlan, 1881: 32)

Förster named this Peruvian taxon, a pair of which he had bought from Staudinger & Bang-Haas, after its collector Otto Garlepp (1864-1959) (for more about him see Beolens

2018: 148). But whereas in the caption he had classified it as a new species, in the line below he called it "(M. Buckleyi, Rasse [race] Garleppi)." Garrison et al. 2003: 24 synonymized these species.

Mc Lachlan named this species after the British zoologist Clarence Buckley (* 1832), who collected insects, birds, mammals and reptiles from 1868 to 1880 in Ecuador and Bolivia, among these dragonflies, which are described in McLachlan 1878 and 1881. McLachlan mentions Buckley's return to England in 1880, in 1887 he is mentioned as 'the late Mr. Buckley. Further information about his origins and his life is missing, but the quality of the material he provided is praised. Six birds, four amphibians and one reptile are also named after him (Vane-Wright 1991; Beolens 2018: 61; Hämäläinen 2021).

hartmanni, Libellago 1897d: 218 ***Platycypha caligata*** (Selys, 1853: 57)

This taxon was the first dedicated to Karl Hartmann (see *hartmanni* p. 43) as a subspecies of *Platycypha caligata* [L. *caligatus –a –um* = booted, wearing heavy boots/brogans), which received its name from the "tibiae très dilatés [= very dilated tibiae]" of the males (p. 58). But he only created a junior synonym of the nominate taxon.

huanacina, Tramea 1909a: 229 ***Pantala hymenaea*** (Say, 1840: 18)

L. suffix *–inus –a –um* = pertaining to

This species name is rather enigmatic if it is not a misspelling of huancaina [= pertaining to the Huanca region in southern Peru and northern Bolivia] (see entry *huanacina* p. 44). Förster saw already in one of his next publications (1910: 51, note): "Meine l. c. beschriebene Tramea huanacina aus Bolivien gehört zur Gattung Pantala und ist wohl identisch mit der aus Nordamerika beschriebenen P. hymenaea Say [The *Tramea huanacina* described by me loc.cit. from Bolivia belongs to the genus *Pantala* and is probably identical to the *P. hymenaea* Say described from North America]." Say does not explain why he chose the name *hymenaea* (L. *hymenaeus –a –um* = concerning a membrane, latinized from Gr. ὑμήν [hymēn] = thin skin, membrane + suffix –αιος (-aios)= concerning). But in his description, he mentions among the features by which the species might identified "whitish nervures in the brown anal margin of the posterior wings and the snow-white anal membrane".

ikutana, Crocothemis 1906c: 27 ***Crocothemis divisa*** [Karsch], 1898: 342

L. *–anus –ana –anum* = pertaining to

This is a toponym referring to "Boa, Ikuta, am Fusse der Luitpold-Kette, Britisch-Ostafrika [Boa, Ikuta, at the foot of the Luitpold Mountain Range, British East Africa]." That place probably is Ikutha in Kenya near the north western border of the Eastern Tsavo National Park.

Karsch mentions as one of the features, by which his species *Crocothemis divisa* [L. = divided] is distinguished from the syntopically occurring *C. erythraea*, "das symmetrisch geteilte Dreieck im Hinterflügel [the symmetrically divided triangle in the hind wing].

interposita, Lathrecista pectoralis var. 1898a: 287 ***Lathrecista asiatica*** (Fabricius, 1798: 283)

L. *interpositus –a –um* = placed between, interposed

Förster explained his choice of name: "Die auf der Tafel abgebildete Var. *interposita*

scheint einen Übergang zu De Sélys *L. festa* zu bilden, welche ich als eine Rasse der *pectoralis* betrachte [The variety *interposita* shown on the plate seems to form a transition to De Sély's *L. festa*, which I consider to be a race of *pectoralis*].” But as both taxa mentioned by him are junior synonyms of Fabricius' widespread species *Lathrecista asiatica* [L. = from Asia], described from a specimen from India, Förster's taxon is also synonymous with it.

karschii, Agrionoptera 1898a: 282 ***Agrionoptera insignis*** (Rambur, 1842: 123)

Förster provides his reason for his choice of the name in a footnote: “Herrn Prof. Dr. F. Karsch in Berlin, dessen Arbeit über die Arten und Gattungen der Libellulinen mir bei obiger Abhandlung von großem Nutzen war, zugeeignet [Dedicated to Prof. Dr. F. Karsch in Berlin, whose work on the species and genera of Libellulines was of great use to me in the above treatise].” Ferdinand Anton Franz Karsch (1853-1936; later Karsch-Haack) was a German zoologist with an interest in arachnological and entomological systematics. From 1881 he taught at the Agricultural College at Berlin and from 1899 he was curator of the Entomological Department of the Berlin Zoological Museum (for more about him, see Beolens 2018: 212 and Fliedner & Endersby 2019: 47). Actually the specimens in the Hungarian National Museum belonged to a species previously named by Rambur as *insignis* [L. = conspicuous, eminent, notable] because: “Cette espèce est très-remarquable par l'étroitesse de la base des ailes inférieures [This species is very remarkable by the narrowness of the base of the hind wings].”

komatina, Zygonyx 1906c: 25 ***Zygonyx natalensis*** (Martin, 1900: 106)

L. *–inus –ina –inum* = pertaining to

Both species names of the taxon are toponyms referring to the provenance of the type specimens from South Africa. Förster stated (p. 26): Vorkommen: Komatipoort am Komatifluss in Transvaal [occurrence: Komatipoort at the Komati River in Transvaal].” Martin explained his choice of name: “Une femelle du Natal [one female from Natal]. “

kuchenbeiseri, Cordulegaster 1899a: 68 ***Anotogaster sieboldii*** (Selys, 1854b: 107)

Förster's explanation of his choice of name for his specimens from “Ta-chiao-sse”, in the mountains one day's trip west of Beijing (p. 69): “Je dois cette belle espèce à mon ami Fr. Kuchenbeiser, chef de la poste impériale allemande à Tientsin (Chine). [I owe this beautiful species to my friend Fr. Kuchenbeiser, head of the German Imperial Post in Tientsin (China) {today's Tianjin}].” More about Förster's eponym I do not know. Selys only explains his choice of name in his Monograph des Gomphines (1857: 606): “J'ai dédié cette espèce au savant professeur, M. de Siebold, bien connu par ses travaux sur la Faune et Flore du Japon [I dedicated this species to the erudite professor, Mr. de Siebold, well known for his work on the Fauna and Flora of Japan].” The eponym went to Japan in Dutch service, where he collected lots of botanical, zoological and ethnological material. About this he wrote in numerous publications after his return from Japan after being banned from there due to the suspicion of being a spy (for more see Beolens 2018: 384-385).

leopardina, Atoconeura 1906c: 38 ***Atoconeura biordinata*** Karsch, 1899: 371

L. *leopardinus –a –um* = of a leopard, resembling a leopard (in scientific names used for spotted species)

The species is mainly black with yellow spots. Förster (p. 38) conceded that Karsch's species – described from a single female – was unknown to him and stated concerning his male specimen (p. 39): "Ein einziges ♂ in coll. Foerster, von A. biordinata Karsch durch das blauschwarze Netzwerk der Thoraxseiten verschieden, die bei biordinata einfach blauglänzend mit 2 gelben Binden sind. Karsch kannte allerdings nur das immature ♀, sodass die Identität beider Formen immerhin möglich wäre [A single ♂ in coll. Foerster, different from *A. biordinata* Karsch by the blue-black reticulation of the thorax sides, which in *biordinata* are simply shiny blue with 2 yellow bands. However, Karsch only knew the immature ♀, so that the identity of both forms would at least be possible]." This possibility proved to be true (Ris 1912a: 750). The species name *biordinata* [L. ≈ arranged in two rows] by Karsch is due to this feature (p. 372): "im Vorderflügel … das Discoidalfeld mit nur zwei Zellreihen [in the forewing… the discoidal field with only two rows of cells]."

machadina, Uracis fastigiata 1910: 52 **_Uracis fastigiata_** (Burmeister, 1839: 850)

L. *–inus –ina –inum* = pertaining to

Förster (1909a: 227) had described an aberration *pura* [L. = clear] of Burmeister's species *U. fastigiata* with hyaline wings, from a single male from Chiriqui (Panama), whereas Calvert 1909: 219 stated that the wing tips in specimens from there had the darkest coloration for that species. But Förster later realized that there was a slight dark shadow in the wings of that specimen. Seeing that this darker coloration was more pronounced in specimens from the Rio Machado (Southern Brasilia) in his collection he described it as *forma machadina* [L. = variety from Rio Machado]. Burmeister did not explain his choice of name, which was described from a male from Bahia. L. *fastigiatus –a –um* is composed of *fastigium* = top of a gable, summit and can be used synonymously to apex and *–atus –a –um* = furnished with, marked with. As the female was unknown to Burmeister the name cannot pertain to the spectacular ovipositor in that genus, as erroneously stated by Fliedner (2006: 20), but must, instead, refer to the coloured wing tips: "alis in apice fuscis [the wings at the apex dark brown]", supplemented by the comparision with *U. imbuta* [L. the tinted]: "die Flügel breiter, der Endfleck deutlicher [the wings broader, the apical spot more pronounced]."

machadina, Argia 1914a: 63 **_Argia difficilis_** Selys, 1865: 20; 413

L. *–inus –ina –inum* = pertaining to

Like in the foregoing entry this is a toponym, referring to Rio Machado in Mato Grosso (Brasilia).

The name *difficilis* [L. = difficult] chosen by Selys is due to his difficulty of correctly identifying the species (p. 413): "Autant qu' on peut en juger d'après l'examen d'une femelle unique, cette espèce est voisine de la *lilacina* par la reticulation, et la *sordida* par la taille. Par les lames élevées du thorax, qui sont peu sensible, séparées en crêtes s' effacent en dehors et situées en dedans sur une partie enfoncée, elle rapelle également la *lilacina* [As far as can be judged from the examination of a single female, this species is close to *lilacina* in reticulation, and *sordida* in size. It is also reminiscent of *lilacina* in the high blades of the thorax, which are not very sensitive, separated into ridges that recede on the outside and are situated on a sunken part on the inside]." See Garrison &

von Ellenrieder (2007) concerning the nomenclatural history of the names *difficilis* and *machadina*.

macrostigma, Dasythemis 1907a: 167; 10 reprint **Dasythemis venosa** (Burmeister, 1839: 848)

Gr. μακρός [makros] = long (in measure or in time), large in size or degree + στίγμα [stigma] = tattoo-mark, mark, spot

The name refers to the size of the pterostigma: "Länge des Pterostigma $3^{1}/_{2}$ mm, dessen Breite $^{4}/_{5}$ mm. … Pterostigma … sehr breit und verhältnismäßig groß (im Gegensatz zu nervosa Ramb., liriopa Karsch) [Length of the pterostigma $3^{1}/_{2}$ mm, its width $^{4}/_{5}$ mm. ... Pterostigma ... very wide and relatively large (in contrast to *nervosa* Rambur, *liriopa* Karsch)]." Burmeister's name *venosa* cannot have the usual meaning 'full of veins, abounding in veins', because it is the first species from a group characterized by this feature: "Flügelzellen von normaler beträchtlicher Größe und entsprechend geringer Anzahl. α Mit einer einzigen Zellreiche in dem Felde hinter dem Dreieck der Vorderflügel [Wing cells of normal large size and correspondingly small number. α With a single row of cells in the field behind the triangle of the forewings]." So the Latin suffix *–osus –a –um* in this case must have the alternative meaning 'remarkable by …', which is confirmed by the statement "venis alarum omnibus infuscatis [all the wing veins darkened]."

maita, Rhionaeschna 1909a: 221 **Rhionaeschna brevifrons** (Hagen, 1861: 129)

Förster described the species from Arequipo in Peru. The name might have some relation to that locality but the author does not explain what the name should mean. I only hesitatingly suggest an interpretation: In the language of the Aymara Mayta means 'Noble Land'. On the internet is found that Maita is a female name found in Spain and in Latin America based on the Basque word maite = love. Förster did not realize that his taxon had already been described by Hagen under the name *brevifrons* [L. = with a short front], who in his description states: "front short, broad, above with a T-spot in the middle …"

mimetica, Pronomaja 1909a: 226 **Uracis ovipositrix** Calvert, 1909: 227

Latinised from Gr. μιμητικός (mimētikos) = able to imitate, imitative (mimetic)

Förster wanted this new taxon, which he assessed to be a "Uracis-artigen Libelle mit sehr langer Legröhre [*Uracis*-like dragonfly with a very long ovipositor]", to be type species of his genus *Pronomaja* (see p. 28). But that species is not only similar to those of the genus *Uracis* (see p. 28), it is one, described by Calvert nearly at the same time under the name *ovipositrix* (L.≈ female egg layer) in reference to the ovipositor also mentioned by Förster.

montana, Thore 1914a: 60 **Polythore ornata** (Selys, 1879: 400)

L. *montanus –a –um* = of mountains, belonging to mountains

Förster chose the name for a single female with hyaline wings from Pozuzo in Peru, from where he had also received four males (see *pozuzina* p. 77), since he was not sure that these specimens belonged to the same species. In his description of *pozuzina* he used the term 'Montana' for the mountain slopes of the region covered with lush forest. The taxon was synonymized with *Polythore pozuzina* by Schmidt (1943: 248), which he downgraded to a subspecies of *P. ornata* (Selys). The final synomysation with the Selysian species is found in Bick & Bick 1986: 262-264). Selys chose the name *ornata* [L. = decorated,

adorned] probably in reference to the apical part of the males' wings which is adorned dark black with a brownish inner margin the extension of which opaque region is variable.

nguelicus, Mesogomphus 1906b: 323 **Paragomphus cognatus** (Rambur, 1842: 167)

L. suffix *–icus –ica –icum* = pertaining to

The name finds its explanation in Förster's statement: "Diese Art, hier beiläufig erwähnt, stammt von Nguelo im Berglande von Ost-Usambara [This species, mentioned here in passing, comes from Nguelo in the mountains of eastern Usambara]." Rambur named the species *Libellula cognata* [L. = sprung from the same stock, related by blood, kindred, having affinity with, similar] because of the similarity he saw to *Onychogomphus forcipatus*, a species distributed from Portugal to Central Asia.

nigrescens, Orthetrum 1906c: 47 **Orthetrum stemmale** (Burmeister, 1839: 857)]

L. *nigrescens* = becoming black, blackish

The taxon was mentioned by Förster in a casual remark: "Ich finde, dass die ostafrikanischen Arten in Westafrika immer etwas Melanismus zeigen, wohl im Einklang mit den meteorologischen Verhältnissen, so z. B. contractum, das in Kamerun in einer Form mit oft fast schwarzem Thorax fliegt (Subrasse nigrescens) [I find that the East African species in West Africa always show some melanism, probably in accordance with the meteorological conditions, e.g. *contractum* [*Libellula contracta* Rambur = *Orthetrum stemmale* Burmeister], which flies in Cameroon in a form with an often almost black thorax (subrace *nigrescens*)]." Burmeister's name *stemmale* [Gr. + L. *stemma* - wreath, garland; l. *-alis* - belonging to, concerning] is a reference to a "fascia frontis media nigra [black middle fascia of the frons] ", which is more thoroughtly is described by Calvert (1898: 84) thus: "the frons above the horizontal carina blackish …, and uniting with a narrow black stripe in front of the vertex and antennae, leaving a yellow spot on the superior surface of the frons surrounded by the black".

nutrina, Erythrodiplax 1914a: 72 **Erythrodiplax corallina** (Brauer, 1865a: 502)

L. *–inus –ina –inum* = pertaining to

The Spanish word nutria originally means the otter (*Lutra lutra*), but in many languages it is now used for the large semiaquatic rodent *Myocastor coypus* from South America, which is now also found in many parts of North America, Europe and Asia due to the descendents of escaped specimens from fur farms. Förster does not explain his choice of name; but in Borror 1942 (89) the information is found that Förster's label has as its name *chinchillina* [L. = pertaining to Chinchillas]. So it is probable that Förster had in mind to refer to the provenance of his specimen by choosing an animal typical for the region. As chinchillas do not live in a semiaquatic way the author seems to have changed his mind before the publication and chosen a different animal known to be from South America. This is similar to his earlier use of the birds of paradise as a reference to the origin of his specimens from New Guinea (see p. 76). In his first description Förster enumerates differences from *E. corallina* [L. = coral-red], which Brauer had named so due to red coloured body parts of his specimen (frons, thorax, abdomen, appendages).

occidentalis, Sapho iridipennis 1906b: 330 **Phaon iridipennis** (Burmeister, 1839: 827)

L. *occidentalis –is –e* = western, westerly, west-

Förster saw in his specimens from Bipindi (Cameroon) a smaller pterostigma and prevailingly green coloration as a western subspecies of *Phaon iridipennis*, which he – differing from Selys' classification – surprisingly placed in the genus *Sapho* (see Hämäläinen & Fliedner 2022: 118). Burmeister's species *P. iridipennis* [L. = winged iridescently] got its name because its forewings glimmer in several colours ("alis anticis limbo luteo, disco coeruleo micante [forewings with a yellow edge, with an area glittering blue]."

ouvirandrae, Oreoxenia 1899b: 191 ***Neodythemis hildebrandti*** Karsch, 1889: 252

Mod. L. *ouvirandrae* (genitive case) = the Madagascar laceleaf's …

The name of the aquatic plant *Ouvirandra* endemic to Madagascar and the Comores (now known as *Aponogeton madagascariensis*) is explained by its author (Thouars 1806: 2) as being derived from its indigenous denomination 'ouvirandrou'. Why Förster chose this name or whether it plays a role in the reproduction of the species he does not say. So it may be a reference to the type locality of Förster's specimens (La Montagne de l'Ambre im Norden von Madagascar [in the north of Madagascar]), similarly as Förster also chose names of endemic animals for this purpose (see entries *nutrina* p. 74 and *paradisea* p. 76). Förster 1906c: 23 noted its synonymy with the Karschian species. Karsch had named the species after the collector of his specimens, the German naturalist and explorer Johann Maria Hildebrandt (1847-1881) (for more about him see Beolens 2018: 182).

ouvirandrae, Hemistigma 1914a: 70 ***Hemistigma affine*** (Rambur, 1842: 94)

Mod. L. *ouvirandrae* (genitive case) = the Madagascar laceleaf's …

On Förster's species name see the foregoing entry. In this case the type locality is "Tananarivo (Madagaskar)". Rambur chose the name *Libellula affinis* [L. = neighboring, adjacent, next, bordering/associated with] for this Madagascan species, because it was "extrêmement près [extremely close to]" the species *H. albipuncta* [L. = white spotted] from Senegal described directly before.

papuana, Crocothemis 1910: 54 ***Crocothemis nigrifrons*** (Kirby, 1894: 19)

Mod. L. *Papuanus –a –um* = Papuan

The Papua are the indigeneous peoples of New Guinea and nearby islands. By this name Förster refers to the New Guinean type locality of his specimens, Stephansort at Astrolabe-Bay. Kirby's name refers to its black coloration: "Male. – Head black, sutures of the rhinarium and labrum yellowish, face smooth and shining."

papuanus, Hydrobasileus brevistylus 1903a: 528 ***Hydrobasileus brevistylus*** (Brauer, 1865b: 978)

Mod. L. *Papuanus –a –um* = Papuan

Förster described this taxon as a 'Subrasse' of *Hydrobasileus brevistylus*. As in the foregoing entry the name is a reference to the type locality at the Astrolabe-Bay. Brauer had combined in his name L. *brevis –is –e* = short and the terminus styli, which in entomology referred to the anal appendages: "appendicibus analibus sup. maris longitudine segmenti penultimi, appendicibus feminae brevissimis, nigris [the male's superior anal appendages as long as the second last segment, the female's very short, black]."

paradisea, Neurothemis 1898a: 277 **_Neurothemis decora_** (Brauer, 1866a: 567)

Medieval L. *paradiseus –a –um* = pertaining to paradise (the abode of the virtuous dead in many religions, in Christian and Muslim also referred to as Heaven)

Paradisea was one of the first Latin names for the pretty birds of paradise. Of these the first dried skins, which had been prepared without feet, came to Europe with the survivors of the Magellan-Expedition in 1522. Therefore the tradition arose that they were from paradise on Earth and continuously flying coming down to the ground only at the end of their lives. Förster does not explain his choice of name, but it is most probable, that by this, he wanted to point to New Guinea – sometimes called island of the birds of paradise – as type locality of his specimens at the Hungarian National Museum. At the end of his description Förster states (p. 278): "Soweit aus der sehr genauen Beschreibung Brauer's hervorgeht, ist die *N. paradisea* wohl eine Subrasse der *N. decora* Brauer, deren ♂ unbekannt ist, vielleicht auch ganz identisch mit *decora*, was der Vergleich der Männchen zeigen wird [As far as can be seen from Brauer's very precise description, the *N. paradisea* is probably a subrace of the *N. decora* Brauer, whose ♂ is unknown, perhaps completely identical to *decora*, which the comparison of the males will show]." Brauer's species name *decora* [L. = beautiful, good looking] goes back to a suggestion of J.J. Kaup (1803-1873), director of the Grand Ducal Museum at Darmstadt, who had sent ca 50 specimens from the Netherlands East Indies (today's Indonesia) for description. It probably refers to the coloration of the wings of the female specimens, the basal two thirds of which are blackish brown, sparkling beautifully violet particularly beneath, and between this area and the pterostigma a milkywhite band not reaching the rear margin (Brauer 1866a: 567).

paradisearum, Neurobasis australis 1898a: 296 **_Neurobasis australis_** Selys, 1897: 428

L. *paradisearum* = of the birds of paradise (gen. pl.)

The name of this taxon might have been chosen in allusion to the magnificent plumage of male birds of paradise, of which the colorful hind wings of Förster's only male specimen might have reminded him of: "Das Hauptmerkmal dieser Subrasse besteht in … sowie in der Färbung der Hinterflügel, welche veilchenblau sind, wie etwa bei der *N. Kaupi*, doch mit merklich grünen Glanze, besonders am Hinterrande [The main characteristic of this subrace is … as well as the coloring of the hindwings, which are violet-blue, like the *N. kaupi*, but with noticeably green gloss, especially on the hind edge]." But it is just as possible that also in this case - as in the foregoing entry - the name was chosen just as an indication of the type locality (Astrolabe Bay in New Guinea) (see Hämäläinen & Fliedner 2022: 122). Selys might have chosen the name *australis* for his taxon from Waigeo and the Aru islands, which he established as one of five 'races' of *Neurobasis chinensis*, because its provenance from a region south of China, unaware that it was not the southernmost of these subspecies (see Hämäläinen & Fliedner 2022: 50). But already Förster in his publication assessed *australis* to be a species of its own right.

paradoxa, Eusynthemis 1908c: 28 **_Choristhemis flavoterminata_** (Martin, 1901)

Gr. παράδοξος [paradoxos] = contrary to expectation, incredible

Förster (1903a: 546) had split the genus *Synthemis* Selys into the taxa *Eusynthemis*, without an ovipositor (see p. 20) and *Palaeosynthemis*, with a long one (see p. 26). But

in this paper he described a new *Eusynthemis* species which did not did not fit into this dichotomy and was contrary to his expectation (p. 25): “Von *Synthemis* seien zwei weitere Arten beschrieben, deren eine, *P.* [sic] *paradoxa*, eine dreieckige Legscheide besitzt, die das Hinterende von Segment neun erreicht, so daß Übergänge von *Eusynthemis* zu *Palaeosynthemis*, was die Scheidenbildung anbelangt, existieren [Two other species of *Synthemis* are described, one of which, *E. paradoxa*, has a triangular ovipositor that reaches the posterior end of segment nine, so that transitions from *Eusynthemis* to *Palaeosynthemis* exist in terms of ovipositor formation].” Martin’s name *flavoterminata* [L. = terminated yellow] refers to the two last abdominal segments: “Abdomen très mince et long, noir varié de jaune comme suit: ... 9-10e jaunes [Abdomen very long and thin, black varied with yellow as follows: … 9-10th yellow].”

parvulum, Orthetrum villosovittatum 1903a: 540 ***Orthetrum villosovittatum*** (Brauer, 1868a: 167)

L. *parvulus –a –um* = very small, little

Förster chose this name for a small male specimen from Koer Island (Maluku Islands): “Klein. Abdomen 27 mm., Länge eines Hinterflügels 29 mm [Small. Abdomen 27 mm, length of a hind wing 29 mm].” For *O. villosovittatum* see *fenicheli* p. 68.

paulina, Tramea 1910a: 52 ***Tramea binotata*** (Rambur, 1842: 36)

L. *Paulinus –a –um* = pertaining to Sao Paulo

The name was chosen in reference to the provenance of Förster’s ♂ specimen from Sao Paulo. The species name *binotata* [L. = marked doubly] refers to this feature: “Ailes postérieurs … ayant une petite bande d’un brun roux au bord abdominal … n’allant pas jusque l’angle anal, n’ etant pas échancrée a son bord intérieur, et commençant à la quatriême nervure [Hindwings... having a small reddish-brown stripe at the abdominal edge... not extending as far as the anal angle, not being indented at its inner edge, and beginning at the fourth vein].”

petaurina, Tramea loewii 1909a: 230 ***Tramea eurybia*** Selys, 1878c: 298

L. *–inus –ina –inum* = pertaining to

This is another name where Förster, by reference to a typical animal from the type locality, tried to introduce an indirect toponym (see entries *nutrina*, *paradisea*, *paradisearum*) for a subspecies from Astrolabe Bay, New Guinea, of a species distributed from Seram, Maluku Islands to Australia. In this case it is *Petaurus*, a genus name introduced for the wrist winged gliders from Australia and New Guinea, by the British Botanist and Zoologist G. Shaw (1751-1813) in 1791 with a name derived from a Greek word family pertaining to aerialists. Förster did not see that his specimens instead pertained to a species described earlier by Selys from Menado, Sulawesi (for which see p. 66 s.v. *biroi*). The name was later adopted by Lieftinck (1949: 8) for a female specimen of a *Microtrigonia*, which had been erroneously been classified as the unknown female of Förster’s species *M. marsupialis*.

pozuzina, Thore 1914a:59 (fig. 24) ***Polythore ornata*** (Selys, 1879: 400)

L. *–inus –a –um* = pertaining to

This is a toponym; about the place in question Förster writes (p. 59): “Pozuzu, nach Sievers

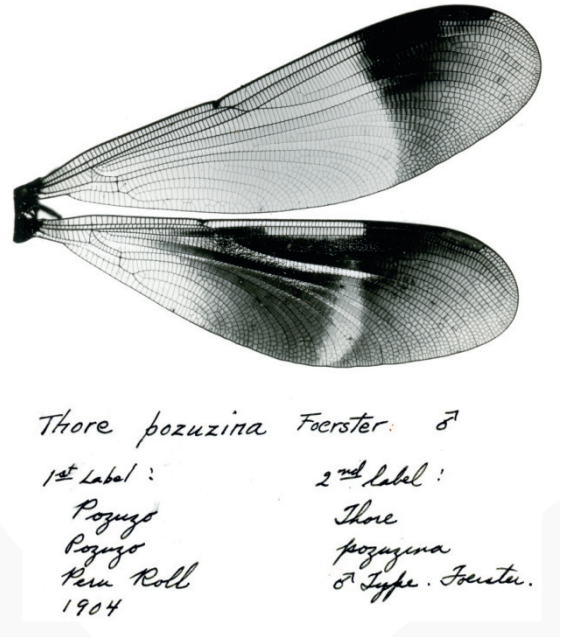


Fig. 24: *Thore pozuzina*, photograph of wings of probable lectotype male from the Förster collection currently in the UMMZ.

eine deutsche, im Jahre 1857 gegründete Kolonie, liegt am Pozuzu, einem Nebenflusse des Pachitea, am Ostgehänge der peruanischen Cordillere zum Palcazu [Pozuzu, according to Sievers a German colony founded in 1857, is located on the Pozuzu, a tributary of the Pachitea, on the eastern slope of the Peruvian Cordillera to the Palcazu]. Wilhelm Sievers (1860-1921) was a German geographer, who undertook three expeditions to South America, the last one to Ecuador and Peru in 1909. About his taxon Förster states (p. 60): "Diese Art gehört mit *Thore victoria*, *boliviana*, *ornata* und *Williamsoni* in eine Gruppe [This species belongs in a group with *Thore victoria*, *boliviana*, *ornata* and *Williamsoni*]." For the Seylsian species *ornata* see *montana* p. 73.

protoë, Micrathyria 1907a: 153; 2 reprint **_Micrathyria hypodidyma_** Calvert, 1906: 224

This name looks Greek, but it is not, whereas there are Greek words differing from it by one different or additional letter. It must, therefore, be seen as a noun in apposition. About the status of his taxon, which he described as a new species, Förster stated (p. 157): "Der M. didyma sehr nahe und wohl nur eine Rasse derselben [Very near to *M. didyma* and possibly just a race of it]." Selys in Sagra, 1857b: 453 had named that species *didyma* [Gr. = double, twofold] due to a double spot on segment 7 (p. 454): "segmento septimo macula majore geminata [the seventh segment with a major double spot]."

Calvert (1906: 224) had described his taxon from specimens from tropical South America similar to the Selysian species as its subspecies, in these also one from Sapucay in Paraguay, wherefrom also Förster's specimens were: "These individuals seem worthy

of a varietal name, and, if they have not yet received one (a question almost impossible to determine from the published descriptions), may be known as **Micrathyria didyma hypodidyma**." As the Gr. prefix ὑπο- [hypo-] may mean 'under' to express subjection or subordination, the name probably is meant as 'classified within *didyma*'. Having received the respective fascicle of the Biologia Centrali-Americana Förster acknowlwdged priority of Calvert's nomenclature on p. 167 (repr. 11).

pseudochiri, Protoaeschna 1908b: 217 ***Anaciaeschna jaspidea*** (Burmeister, 1839: 840)

This epithet is the genitive case of the name *Pseudoch(e)irus*, a genus of possums established by Ogilby (1837: 457). It is formed from Gr. ψευδο– [pseudo–] = false, pretending to be and –χειρος [–cheiros] = –handed, referring to the peculiar form of the front paws, the toes of which not having an opposable thumb nevertheless allow to clutch branches of trees. The choice of name would fit to others, where Förster chose a name of an endemic animal or plant to refer indirectly to the type locality of his new species like *paradisea* (p. 76) or *ouvirandrae* (p. 75). But the name refers not to the genus *Pseudocheirus* in its present sense, which is restricted to Australia and Tasmania, but to *Pseudochirulus* (≈ little *Pseudochirus*) and *Pseudochirops* (≈ looking like a *Pseudochirus*) which were introduced as subgenera of *Pseudochirus* by Paul Matschie (1915), soon after Förster's publication, but now rank as genera of their own right. Of the 14 species of these two genera, 11 are restricted to New Guinea and the neighbouring islands.

In the description of the species Förster emphasises the similarity of his taxon to *Aeshna brevistyla* Rambur, but there is nothing which would explain his choice of name. He did not see that it was really *Anaciaeschna jaspidea* [L. = jasperlike]. Burmeisters first description gives no clue, why the name was suggested by Graf Hoffmannsegg, but from Hagen 1867 (32-33) it is seen, that in the females of the species the thorax is olive-green with greenish yellow bands on the sides, which might have reminded the inspirer of the name of the precious stone.

ptilorhina, Eusynthemis 1908c: 26 ***Eusynthemis nigra*** (Tillyard, 1906: 489)

Gr. πτίλον [ptilon] = soft feather, down + ῥίς (stem ῥιν–) [rhis/ rhin-] = nose

Förster's description does not allow one to understand directly what is meant by the name which refers to the fringed markings of the frons. His description reads: "Vorderseite der Stirn gelb oder gelbgrün, am Augenrande fein schwarz gesäumt und in der Verlängerung der Mittelfurche, herab bis zum Nasus, durch eine feine schwarze Linie geteilt [Frontal side of the frons yellow or yellow-green, at eye margin finely seamed with black and in the extension of the central furrow, down to the nasus, divided by a fine black line]." But from Tillyard's description of the species one can see "front hairy". The name *nigra* [L. = black, dark coloured] is due to a feature, by which the species is distinguished from the similar *E. guttata* [L. = spotted, speckled, derived from *gutta* = drop] (p.491): "Abdomen almost entirely black" (cf. Endersby & Fliedner 215: 188+206).

puella, Nesoxenia 1898a: 284 ***Nesoxenia mysis*** (Selys, 1878c: 311)

L. *puella* = girl, maiden

Certainly this is an example of the 'female theme' used by Förster in naming Odonata, evoked by the prettiness of the species: "Eine niedliche Art, von der wohl die *N. cingulata* Kirby und die *N. interrogata* De Sélys von Mysore nördlich Jobbi nur größere Inselformen

darstellen [A cute species, of which the *N. cingulata* Kirby and the *N. interrogata* De Sélys from Mysore north of Jobbi [Schouten Islands north of New Guinea] are only larger island forms]. The other taxa mentioned by Förster are also synonyms of *N. mysis*. That name is from ancient literature. In a comedy of Terentius, a Latin author from the second century B.C., a handmaid is named Mysis, which originally meant a woman from the region Mysia in North Western Asia Minor, which would fit for a Roman slave girl. The name *mysis* was introduced into odonatological nomenclature for a fossil taxon by Hagen (1863: 269), in a publication where he names six of eight new odonate taxa with names from antiquity's literature or mythology, in these also a *thais*, another female name from one of Terentius' comedies. Selys chose this name for a species from "Patrie: Mysol, près de [near to] la Nouvelle Guinée" (today's Misool, one of the Raja Ampat Islands south west of New Guinea).

pygmaea, Crocothemis erythraea 1906c: 29 ***Crocothemis sanguinolenta*** (Burmeister, 1839: 859)

L. *Pygmaea* = (in antiquity) female member of a legendary tribe of dwarfs in Ethiopia who are in danger of predation by cranes (name derived from Greek πυγμή [pygmē] = fist, as an indication of their small size)

Förster thought his specimens, the size of which was smaller than in average in *Crocothemis erythraea* specimens, belonged to a subspecies of that taxon, stating as a difference: "das Abdomen verhältnismässig schlanker, mehr rund und nach hinten stärker verjüngt [the abdomen being relatively slimmer, more rounded and more tapered towards the rear end]". He did not see that they really pertained to *C. sanguinolenta* [L. = full of blod, blood-red] described by Burmeister from the Cape Province as being "*sanguinea-fulva* [yellowish blood-coloured]."

reinholdi, Diphlebia 1910: 55 ***Diphlebia euphoeoides*** Tillyard, 1907: 398

There is no explanation, who Reinhold might be, after whom Förster named the species, but there can be no doubt, that the eponym was Förster's third son Reinhold (*21.2. 1906 † 1940) (fig. 25). E.B. Williamson agreed to be his godfather. In the 1920's due to economical problems he emigrated with his three brothers to the United States of America, but came back with his younger brother to Germany in the early 1930's. These two tried to help endangered Jews with their American passports, but they were caught. Reinhold was imprisoned in a mental institution near Achern, but in the second half of 1940 he was gassed along with the other inmates in the Grafeneck Castle killing center as part of the National Socialist euthanasia program (His brother Erwin survived the Second World War in a penal battalion). The name *euphoeoides* [mod. L. = looking like a *Euphaea*] was chosen by Tillyard to resemble the name of the only other species known from Australia then, *D. lestoides* [L. = looking like a *Lestes*], which had been described in Selys 1853: 67 with a species *agrioides* [L. = looking like an *Agrion*] from Mexico (Gonzalez-Soriano & van Ellenrieder 2009) in the genus *Amphipteryx*. In the following years Tillyard established two more names ending in *–oides* in *Diphlebia*. The spelling *euphoeoides* is due to a linguistic error of Tillyard: There are some Latin words containing the diphthong *–ae–*, which in medieval times were spelled with *–oe–*, like *caeruleus* (L. = blue). But for the genus name *Euphaea*, derived from the Greek adjective εὐφαής [euphaēs] = very bright, the spelling with *–oe–* is not correct.

Fig. 25: Reinhold Förster in December 1919.

rivularis, Macrogomphus 1914a: 80 ***Macrogomphus albardae*** Selys, 1878b: 416

L. *rivulus* = a small brook, petty stream, rill, rivulet + *–aris –is –e* = related to, pertaining to

This is a name referring to a biotope. About that nothing is found in Förster's first description, but it seems that he had information about that from the collector H. Fruhstorfer (1866-1926), in the 'Tagebuchblätter' (1902) of whom the village 'Than Moi, Tonkin' [Dong Mo, Lang Son province, Vietnam], is mentioned, but the collection site not specified. Förster did not see that his specimens really pertained to a species that Selys in 1878b had described and named from specimens collected in Palembang (Sumatra), which he had obtained from his friend, the Dutch lawyer and naturalist H. Albarda (1826 - 1898) (for him see Beolens 2018: 6).

rufina, Termitophorba 1906b: 306 ***Brachythemis lacustris*** (Kirby, 1889: 329)

L. *rufus –a –um* = red (of various shades), redhaired + suffix *–inus –a –um* = pertaining to

In ancient Latin *Rufina* is the name of a *Claudia* from Brittany in an epigram by the poet Marcus Valerius Martialis (1st century), who most probably was a redhead. That does not apply to the taxon in question. Most probably it refers to the coloration of the body of Förster's single male specimen: "Ganzer Körper beim lebenden Insekt prächtig karminrot oder blutrot, die Augen mehr braun, am Schläfenrande sehr schwach ausgebuchtet. Beim Trocknen verändert sich diese Farbe besonders am Thorax in Rostbraun [In the living insect, the entire body is magnificently crimson or blood-red, the eyes are closer to brown,

very slightly bulging at the edge of the temples. As it dries, this color changes to rusty brown, particularly on the thorax].” Kirby’s name *lacustris* [scientific L. = living in or at a lake, pond, or pool] refers to biotope about which in the first description is nothing is said. But it seems not entirely to be accurate. Dijkstra & Clausnitzer 2014: 163 state “All species favour exposed, standing or slow-flowing water, generally with bare banks, often perch on the ground, and are most active towards the end of the day.”

salomonis, Agrionoptera similis 1898a: 284 ***Agrionoptera insignis*** (Rambur, 1842: 123)

L. *Salomonis* = Solomon’s (genitive case)

This is a toponym referring to the Solomon Islands. The taxon is described as a subspecies of *Agrionoptera similis* Selys [L. = the similar one], which was described as a ‘race?’ of *Agrionoptera insignis* from Maluku Islands with a ‘variété’ *papuensis* from New Guinea, very similar to *insignis* “ne diffère de l’insignis type, que par l’absence de nervule médiane autre que la normale [which differ from the *insignis* type only by the absence of a median nerve other than the normal]” (Selys 1879a: 303). *A. similis* Selys in Paulson et al. 2024 is treated as a doubtful species, but Förster gave it full specific rank, classifying his new taxon from the Shortland Islands, a western island group of the Solomons, and *papuensis* as subspecies of it. For *A. insignis* see *karschii* p. 71.

sanguinolenta, Trithemis 1906b: 312 ***Trithemis arteriosa*** (Burmeister, 1839: 850)

L. *sanguinolentus –a –um* = full of blood, bloody, blood-red

The taxon, classified as *Trithemis* by Förster, is credited to Burmeister, whose *Libellula sanguinolenta* now is placed in the genus *Crocothemis*, the similarity of which to *Trithemis* Förster emphasises 1906c: 20-21. In fact, it is a different species described by Burmeister, which received its name *arteriosa* [L. full of arteries / conspicuous by arteries] due to the colour of the wing venation: “venis omnibus sanguineis [all veins blood red].”

schoana, Ischnura 1906b: 332 ***Proischnura subfurcata*** (Selys, 1876a: 534)

L. suffix *–anus –a –um* = pertaining to

This is a toponym, referring to the Ethiopian historical region Shewa surrounding Addis Ababa, Latinised as Schoa. The name *subfurcata* [L. = slightly forked] refers to the cerci (Selys 1876a: 534): “les supérieurs paraissant en forme des tubercules réniformes, rapprochés [the upper ones appearing in the shape of reniform tubercles, close together].”

semicolon, Pseudagrion 1896b: 326 ***Pseudagrion crocops*** Selys, 1876b: 512

This is a name referring to pattern resembling the interpunction mark: “Prothorax schwarz, ockergelb gezeichnet wie folgt: Am Vorderrande eine quere Basallinie. Auf dieser stehen in der Mitte 2 senkrechte Längsstrichlein, über welchen sich 2 Punkte befinden, sodass es aussieht, als ob man 2 Strichpunkte nebeneinander gesetzt hätte [Prothorax black, ochre yellow marked as follows: At the front edge a transverse basal line. On this in the middle there are two vertical longitudinal lines, above which there are two dots, so that it looks as if two semicola had been placed next to each other]” (fig. 26). But Förster already states his taxon to be very near to *Ps. cocrops* [Latinised from Gr. κρόκος {krokos} = saffron + ὤψ {ōps} = eye, face] from Manado (Sulawesi), named by Selys due to this feature: “Lèvres, face, front jusqu’au niveau des deux ocelles postérieurs entre les yeux jaune safran vif; le reste de la tête noirâtre avec deux taches post-

oculaires jaunâtres Presque effacées [Lips, face, forehead up to the level of the two rear ocelli between the eyes bright saffron yellow; the rest of the head blackish with two dark yellow unconspicuous postocular spots].” (See Seehausen et al. 2025: 15 for new findings on the synonymy of the two species).

Fig. 26: *Pseudagrion semicolon*: Förster’s colored drawing in the Selys – Severin collection, sent to Selys in preparation of the publication (see p. 9) (© RBINS). The first two lines of the legend, written by Selys, read: “Pseudagr. croc semicolon Foerster de Mangkassar / près crocops.“

semiteres, Gomphus 1914a: 77 ***Leptogomphus lansbergei*** Selys, 1878b: 446

L. *semi-* = half + *teres* = rounded off, rounded, round, smooth

The name of Förster’s taxon probably refers to this feature (p. 78): “Öhrchen des 2. Segmentes halbkreisförmig, am Rande ungezähnt [Auricles of the 2nd segment semicircular, not serrated at the edge].” Selys had named the species after the person from whom he had obtained his specimen: “Une femelle envoyée par M. Van Lansberge, gouverneur general des Indes Néerlandaises et entomologiste très distingue [One female received from M. Van Lansberge, Governor-General of the Dutch East Indies and a highly distinguished entomologist]” (more about the eponym Beolens 2018: 236).

septentrionis, Neurothemis 1904: 363; 5 reprint ***Neurothemis intermedia*** (Rambur, 1842: 91)

L. *septentrionis* = of the North (genitive case)

In his description of this taxon, the specimen from Sikkim, was compared with species of the genus from Borneo, Malacca, and Sulawesi in reference to which it had the northern-

most provenance. Later it was found out that Förster's specimen pertained to *N. intermedia*, which is also found in even more northerly side of Himalaya. Rambur does not explain why he named his species *intermedia* [L. = intermediate], but in his description throughout he refers to *Sympetrum flaveolum* (Selys), but mentions among the differences the higher number of antenodals, which would point to his new genus *Polyneura* (= multi-veined), which however because of homonymy was renamed *Neurothemis* by Brauer. So these could be the reference points for the choice of that name.

severini, Dromaeschna 1908a: 191 ***Dromaeschna forcipata*** (Tillyard, 1907a: 727)

Förster explains his choice of name (p. 1929: "Diese schöne Art sei Hern G. Severin, Kustos am Kön(iglich) Belg(ischen) Naturh(istorischen) Museum, dem unermüdlichen Förderer des grossen Odonatenkataloges der Collection de Selys gewidmet [This beautiful species may be dedicated to Mr. G. Severin, curator at the Royal Belgian Natural History Museum, the tireless promoter of the great Odonata catalogue of the Collection de Selys]." Guillaume Severin [1862-1938] had assisted Selys, especially by drawing Anisoptera for his aquarelle collection. After the death of his patron Severin took responsibility for finding authors for the description of the Collection de Selys. Förster had promised to edit the Agrionines, but never delivered any manuscript for it. But he was in contact with Severin for his access to Selys' collections and he also lent specimens to him which he might illustrate (more about the eponym Beolens 2018: 381). But the species already had been described by Tillyard the year before, who named it *forcipata* [L. = equipped with pincers] due to the upper appendages of the males which he described as "3mm., depressed, forcipate, black, wide apart at the bases."

sikorae, Pseudagrion 1906c: 59 ***Africallagma glaucum*** (Burmeister, 1839: 521)

This species was named after the collector of Förster's male specimen (p. 60-61): "Diese ausgezeichnete kleine Art wurde am 10. Februar 1901 von dem um die entomologische Erforschung Madagaskars so hoch verdienten Herrn P. (!) Sikora auf der Insel Reunion, wo der Forscher allzufrüh sein erfolgreiches Leben beschliessen musste, entdeckt … Die Type dieser dem Andenken P. Sikoras gewidmeten niedlichen, wohl kleinsten bekannten Pseudagrion-Art befindet sich in meiner Sammlung. [This excellent little species was discovered on February 10, 1901, by Mr. F. Sikora, who made such a great contribution to the entomological research of Madagascar, on the island of Reunion, where the researcher had to end his successful life all too early ... The type of this cute, probably smallest known *Pseudagrion* species, dedicated to the memory of F. Sikora, is in my collection]." The Austrian zoological naturalist and collector Franz Sikora [1863-1902] travelled to many countries, in which Sardinia, Turkey, East Africa including Sansibar and finally settled in Antananarivo, the capital of Madagascar in 1888. He collected mainly insects, but also other animals and plants, which he sold to European Museums, especially the Natural History Museum at Vienna, but also to other public and private collections. In 1894 he had to leave Madagascar due to political unrest. He moved with his family to Réunion, but returned to Madagascar several times. In 1902 he died of black water fever on Réunion (Stagl 2002). About the coloration of his species, Förster tells us that Sikora had informed him that in life the insect was light blue. That colour Förster erroneously supposed to be due to pruinosity, which on his specimen due to the preservation in alcohol had vanished (p. 62). Probably because of this error

he did not see that his specimen pertained to the species *Africallagma glaucum* [L. = greenish blue, blue-grey], which Burmeister had described from the region near the Cape of Good Hope, naming it after its predominant colour.

simillima, Gynacantha 1900a: 98 ***Gynacantha mocsaryi*** Förster, 1898a: 292

L. *simillimus –a –um* = most similar (superlative)

Förster does not explain this name explicitly, but in the description of his single male specimen he gives slight differences for nearly every feature from his species *G. mocsaryi* (see p. 49), so that the similarity to that taxon is at the base of the name. But he already realized that "Unterschiede im Kleingeäder bei den indischen Gynacanthen veränderlich sind und ihnen kein grosser specifischer Werth beizumessen ist, besonders wo es an Material fehlt [Differences in the small veins of the Indian gynacanths are variable and no great specific value can be attributed to them, especially where there is a lack of material]."

somalicus, Lestes 1906b: 339 ***Lestes pallidus*** Rambur, 1842: 252

L. *Somalicus* = pertaining to the Somali-region (now south-eastern state of Ethiopia)

This toponym refers somewhat vaguely to the type locality. "Bucka, Manefluss, … Webbigebiet [Bucka, Mane River, … Webbi area]. 'Webi' in Oromo language means 'river' and Förster's denomination "Webbi area" apparently refers to the region south-east of the Bale and the Ahmar Mountains with their many rivers. What Förster calls "Manefluss" most probably is the Webi Mena; the locality Bucka I could not identify. Rambur chose the name *pallidus* [L. = pale] in reference to the sides of the thorax and the ventral part of the abdomen, which he described as 'blanchâtre' [= whitish].

subhyalina, Trithemis 1898a: 289 ***Diplacodes haematodes*** (Burmeister, 1839: 849)

L. *subhyalinus –a –um* = not quite hyaline

The name refers to the partly tinged wings: "Vorderflügel im Submedianraum und in den 2 ersten Zellen nach der Membranula mit kaum merklicher gelber Trübung … Hinterflügel: … Die ganze Flügelbasis bis etwa zur Breite der Innenseite des Dreiecks schwach gelb [Forewing in the submedian space and in the first 2 cells after the membranula with barely noticeable yellow clouding … Hindwing: … the entire wing base up to about the width of the inner side of the triangle faintly yellow]." Burmeister gave the name *haematodes* [Gr. αἱματώδης {haimatōdēs} = looking like blood] to a single male in Germar's collection, which he described as "obscure-sanguinea [darkly blood-red]." During life adult males are much brighter (cf. Silsby 2001: 170).

sumatrana, Tetracanthagyna waterhousei 1914: 83 ***Tetracanthagyna waterhousei*** McLachlan, 1898: 443

late L. *sumatranus –a –um* = pertaining to Sumatra

Förster described his ♀ specimen from Sumatra as a subspecies of *T. waterhousei* because he was not sure if it belonged to the nominal taxon, which according to Martin 1908: 144 was known from Borneo and Tonkin (northernmost part of today's Vietnam), as he had no access to a ♀. For *T. waterhousei* see *fontinalis* p. 69.

torrenticola, Caconeura 1903a: 552 ***Nosoticta astrolabica*** (Förster, 1898a: 299)

L. *torrens* = torrent, rushing stream + *–cola* =dweller of …

This is one of Förster's names clearly referring to biotope, about which nothing is said in the description of the species. But as the locus typicus of his specimens is the Sattelberg in New Guinea, it is not farfetched to suppose that he had gotten information on the biotope from the collector C. Wahnes. Förster did not see that his specimens pertained to the taxon *N. astrolabica* (see p. 35) described by him five years earlier.

turfosa, Cordulia aenea 1902: 69; 1 reprint **Cordulia aenea** (Linnaeus, 1758: 544)

mod. L. *turfosus –a –um* = peaty

In his publication Förster notes that in 1898 at a peaty water body in the Black Forest Mountains he caught a *Cordulia aenea*, which he otherwise only knew from muddy oxbows in the Rhine Valley. He concluded that the peaty biotope was similar to that of the North American species *C. shurtleffii* and – also seeing morphological similarities – (p. 4) "dass ich hier die ursprüngliche *aenea*-Form der Postglacialzeit gefunden habe, die an die Existenz der Sphagnummoore der Renntierzeit gebunden ist und sich daher nur in hochgelegenen Mooren erhalten hat oder durch Einwanderung der Rheinthalform wieder gebildet wurde [that I have found here the original *aenea* form of the postglacial period, which is linked to the existence of the sphagnum moors of the reindeer period and has therefore only been preserved in high-altitude moors or has been reformed by immigration of the Rhine valley form]." His separation of this form from the nominal taxon, which was named by Linnaeus due to its "viridi-aeneo [= green bronce coloured]" thorax, resulted in the name becoming a junior synonym.

unimacula, Diplacodes tetra 1906b: 307 **Diplacodes lefebvrii** (Rambur, 1842: 166)

L. *unus –a –um* = one + *macula* = spot

Rambur had named the species *Diplacodes lefebvrii* after the French entomologist Alexandre Lefèbvre (1797-1868; about him see Fliedner 1997: 58 and Beolens 2018: 239), who at an Egyptian oasis had caught the four females on which the description was based. But in the same publication, Rambur described the species a total of four more times based on specimens from other localities in Africa and Mauritius, and certainly also due to the amount of variability in coloration and size, which Ris pointed out in his treatise on the Libellulines (1911: 465), from which he synonymised these taxa. Rambur believed these varieties to be different species. One of these was *Libellula tetra* [L. *t(a)eter –tra, –trum* = repulsive, loathsome], probably named due to the blackish brown coloration of his male specimen. In his publication, Förster first dealt with the genus *Diplacodes*, for which Kirby had chosen *L. tetra* Rambur as type species. Förster therefore distinguished *D. lefebvrii* (with a list of two of Rambur's and another synonym) from *L. tetra* based on the size and colour of the face. From this his taxon *unimacula* was said to differ by "eine ganze Zelle bis zu der einzigen Submedianquerader scharf begrenzt braun [one cell up to the single submedian transverse vein totally sharply defined brown]."

wahnesi, *Protorthemis* 1897b: 39 **Protorthemis coronata** (Brauer, 1866: 565)

This is an eponym. Förster begins his paper with this information (p. 39): "M. C. Wahnes, le voyageur intrépide, qui a recueilli tant de Lépidoptères rares à Bornéo, à la Nouvelle-Bretagne et à l'archipel de Salomon pendant dix années, m'a envoyé une nouvelle espèce de Libelluline d'Astrolabe (Nouvelle-Guinée), qui selon M. de Selys, appartient au genre *Protorthemis* … [Mr. C. Wahnes, the intrepid traveller, who collected so many rare

Lepidoptera in Borneo, New Britain and the Solomon Islands during ten years, sent me a new species of Dragonfly from Astrolabe (New Guinea), which according to M. de Selys, belongs to the genus *Protorthemis*…]" (for the eponym Carl Wahnes (1835-1910) see *Wahnesia* p. 32). It is to be seen that at this time he was still very dependent on the advice of Selys. In 1899c: 171 Förster, due to the position of the arculus, even wanted to establish a new subgenus *Pseudorthemis* (see p. 29) for his taxon and "wahrscheinlich auch die mir unbekannte *Pr. coronata* Brauer [probably also *Pr. coronata* Brauer, unknown to me]. The identity of these species was stated by Ris (1910: 149). *Pr. coronata* [L. = furnished with a garland or crown] was one of the species J.J. Kaup (1803-1873) had named, but the description of which he had commited to Brauer (see Fliedner 2020: 5). The name might refer to yellow markings of the male's head, which perhaps reminded Kaup of a crown: "Stirne vorne schwarz, etwas metallisch, die Quernath (sic) fein gelb gesäumt und an den Seiten am Augenrande jederseits eine kleine gelbe Makel [Frons black in front view, somewhat metallic, the transverse suture bordered by a fine yellow line and laterally at the margin of the eye on both sides a small yellow mark]" (Brauer 1866: 565).

Actual Genera

Acanthagrion Selys, 1876a; 304

Gr. ἄκανθα [akantha] = prickle, thorn + obsolete genus name *Agrion* (see p. 19 *Allopodagrion*)

This genus was described as one of seven subgenera within *Agrion* Fabricius of which the common feature was "Une épine ou pointe aiguë au bout du 8e segment de la femelle en dessous" [A spine or sharp point below the end of the 8th segment of the female]" (p. 250). Later two of these subgenera turned out to be synonyms, but the other five have now been elevated to generic rank. Other names from this group pointing to the same feature are *Oxyagrion* [= pointed Agrion] and *Xiphiagrion* [sword Agrion].

Africallagma Kennedy, 1920: 87

Combination of L. *Africa* with *Enallagma* (see below)

Charpentier (1840: 21) wrote that he considered *Enallagma* a subgenus, but refrained from retaining it. As the name he had chosen the Greek word ἐνάλλαγμα [enallagma] [= change, meant as 'giving the possibility of confusion'] for all the similar coenagrionids in which the males are mainly blue with black markings. This taxon was firmly established in its present sense together with *Acanthagrion* (see foregoing entry) by Selys 1876a: 496. Kennedy introduced the name *Africallagma* for the Sub-Saharan *Enallagma* species characterized thus "Generic characters as in *Enallagma*, except apex of segment 10 in male is elevated into an apical keel, notched at apex."

Agrionoptera Brauer, 1864: 163

Gr. ἄγριος [agrios] = living on the fields, wild + –πτερος –ος –ον [-pteros] (in compounds) =winged

The first part of the name refers to the genus name *Agrion*, which originally incorporated all of the Zygoptera. Brauer saw in the wings of this libellulid genus a similarity to zygopteran wings: "Vorder- und Hinterflügel fast gleich gross, letzterer am Grunde nicht erweitert,

kaum breiter als ersterer, beide am Hinterrande abgerundet, in der Gestalt den Flügeln der Agrioniden (Euphaea) im weiteren Sinne ähnlich [Forewing and hindwing of about the same size, the latter not expanded at the base, hardly broader than the former, both rounded at the rear margin, the shape of the wings similar to those of the agrionids in a broader sense (*Euphaea*)]."

Agyrtacantha Lieftinck, 1937: 56

Gr. ἀγύρτης = vagabond + ἄκανθα = thorn

In his paper Lieftinck deals with the problems caused by Martin's erroneous adoption of Förster's name *Plattycantha* (see p. 28) as *Plat(t)acantha* and *Cornacantha* (Martin 1908: 8, 1909a: 154 + 155), because the latter is based on *Plattycantha cornuta*, which Förster 1908a: 216 explicitly had named as type species of his genus *Plattycantha*. So Lieftinck established for *Triacanthagyna dirupta* Karsch, which Martin had made the type species of his genus *Platacantha* the new genus *Agyrtacantha*. The first element of the name probably refers to the range of the species of this genus in comparision to those of the genus *Plattycantha*, which – according to Lieftinck 1937: 65 – "being confined to the higher mountain zone of New Guinea … have a more spotted distribution than the species of *Gynacantha* or *Agyrtacantha*." This explanation differs from that in Endersby & Fliedner 2015: 98, which was based on the meaning of agyrtes [= impostor] in Modern Greek. The second element is a reference to Rambur's genus *Gynacantha* (see p. 93) in which the tenth segment of the females ends in 2-4 prongs. Selys 1883: 744 had split this genus into subgenera according to the number of the spines, *Tetracanthagyna* with four spines, *Triacanthagyna* with three spines, *Gynacantha* and *Heliaeschna* with two spines, which however later all were elevated to generic rank.

Allocnemis Selys, 1863: 173

Gr. ἄλλος –η –ον [állos] = other, another + κνημίς [knēmis] = greave, legging as a reference to the genus *Platycnemis* (= broad greave, because of the widened tibiae)

The taxon was described by Selys in a publication intended to cover the taxa closely related to the genus *Platycnemis*. These he classified as 'sous-genres' in his 'légion Platycnemis'. As distinguishing feature of the new subgenus he stated (p. 174): "Ils se séparent … des autres sous-genres précédents par les ailes plus petiolées [They are separated from the other aforementioned subgenera by the more petiolate wings]." So the name means: "Another platycnemidid taxon". However, it later turned out, that not all genera, to which Selys had given names ending in *–cnemis*, pertained to the Platycnemididae, so that the morpheme *–cnemis* may just mean 'Coenagrionid damselfly'.

Anax Leach, 1815: 137

Gr. ἄναξ = sovereign, king

Leach does not give any explanation for his choice of name, but it certainly refers to the large size of the species. The explanation from its dominant behaviour at the waterside is rebutted by Hämäläinen (2023).

Anotogaster Selys, 1854b: 101

Gr. prefix before vowels ἀν– [an–] = un–, without, not … + οὖς (stem: ωτ–) [ous / ōt–] = ear +γαστήρ [gastēr]= paunch, belly (in entomology used for abdomen)

The name refers to a feature of the males in this genus explained more thoroughly in Selys 1858b: 852: “Pas des oreillettes au 2e segment même chez le mâle … Le mâle est la seule Gomphine de ce sexe privée des oreillettes [No auricles in the 2nd segment, not even in the male ... The male is the only Gomphine of this sex without auricles.].”

Argia Rambur, 1842:254

Gr. Ἀργεία [Argeia] = the woman from Argos

In ancient mythology Argia was the wife of Polyneikes, son of Oedipus, who wanted to regain rule over Thebes with six allies, after he had been expelled by his brother and rival Eteokles. Such a genus name taken from antiquity however would be unique with Rambur, as all others created by him refer to a quality of the respective genus or compare it with a bird of prey. So there must be a special reason for this choice of name. In his description of the genus Rambur emphasizes the closeness of the new genus to *Agrion* in wing venation: “par le ptérostigma et les deux nervules du premier espace costal elles se rapprochent des Agrion [by the pterostigma and the two small veins of the first costal space they are close to *Agrion*].” So probably the name was thought to be as near to *Agrion* as possible without causing confusion. It should be noted that of the five species included by Rambur in this genus, only two were from America. Two more were from India and one from the island of Waigeo off New Guinea (cf. *Palaiargia* p. 26); but these are now placed in other genera, so that the genus *Argia* now is confined to the Americas (cf Fliedner 2021b: 33).

Atoconeura Karsch, 1899: 371

Gr. ἄτοκος [atokos] = having never yet brought forth, barren / not bearing interest / not paying interest + νεῦρον [neuron] = sinew, tendon [in entomology: wing vein]

Karsch stated about this libellulid genus, which was based on a single immature female: “Die Stellung dieser Libelle im System ist mir zur Zeit noch unklar [The position of this dragonfly in the system is not yet recognized by me].” Adding to his difficulties “die sperrige Aderung und die geringe Zahl von Antenodalqueradern [the unwieldy venation and the small number of antenodal cross veins].” So the name might be thought as ‘with a venation inconclusive for classification’ (for the genus *Atoconeura* see Dijkstra 2006).

The element *–neura* (≈ veined) for a genus, which was distinguished from others by a special feature of its wing venation, was introduced into odonatological nomenclature by Rambur 1842: 127, when he named a libellulid genus *Polyneura* (≈ with many veins); but as that name was preoccupied, because Westwood earlier had chosen the same genus name for a genus of Cicadae from the Himalaya, Brauer replaced it by *Neurothemis* (cf. p. 98). It might be mentioned, that in Romanic languages, *e. g.* French, Italian and Portuguese, words derived from Greek neuron are spelt with a -v- instead of -u-, for instance in French névropathie (engl. neuropathy). So it is natural, that Rambur spelled his genus *Polynevra*, and Selys followed him in this respect also for other taxonomic names with that element, e.g. his ‘Legion Protonevra’. Selys stuck to the orthography *nevr–* until 1889; in 1891 he chose *neur–* instead for the first (and as far as I see last) time.

Austroargiolestes Kennedy, 1925: 294

L. *auster* (stem austro–) = south wind, south; for *Argio*– see above s.v. *Argia* + *Lestes* (see p. 95)

Kennedy explains his choice of name: “This genus was erected to include *Argiolestes icteromelas* Selys and those other Australian species in which Ac lies nearer antenodal two, petiolation ceases near the base of the quadrangle; the male superior appendages have a large inferior subapical tooth and there are usually 2-3 rows of cells in the Cu2 area.” (For *Argiolestes* Selys, 1862 see Fliedner 2021a: 100).

Burmagomphus Williamson, 1907: 275

modern L. *Burma* = Burma (today’s Myanmar); for *–gomphus* see *Ammogomphus* p. 19

Williamson comments on his type specimens (p. 298, footnote): “I have studied specimens from Burma only. These have been identified as *Gomphus vermiculatus* {misspelled for *G. vermicularis* Martin 1904} and from them the characters of the genus have been drawn.” The specimens however, on which he based his genus, did not pertain to the species, which he cited in his description, but to *Burmagomphus arboreus* [= pertaining to trees], which was described in 1940 by Lieftinck (1940: 111).

Chlorocypha Fraser, 1928: 684

Gr. χλωρός –ά –όν [chlōros] = greenish-yellow, pale green + *–cypha* as a reference to the genus *Rhinocypha* (see p. 103)

The name was established by Fraser to settle a problem in nomenclature: Selys (1840: 200) had cited *Calopteryx lineata* Burmeister as the first species of his new genus *Libellago* [≈ showing the characteristics of a *Libellula*, see Fliedner 2021a: 109]; on this very species Rambur (1842: 238) had based his new genus *Micromerus* [from Gr. μικρός [mikros] = small and μέρος [meros] = part, probably as a reference to ‘Abdomen notablement plus court que les ailes [Abdomen noticeably shorter than the wings]”, thus creating a junior synonym. Selys (1853: 65) however in his ‘Synopsis des Caloptérygines’ had adopted Rambur's classification and instead erroneously assigned *Libellula dispar* Palisot de Beauvois as the type of *Libellago* (1853: 57), which was not originally included in this genus. Thus he had created a homonym to *Libellago* 1840, which Fraser replaced with *Chlorocypha*. The first element of the name might refer to the striking yellow or greenish markings of the thorax found in nearly all the species of the new genus when it was named, and this feature is also present in nearly all of the species described since (the explanation in Fliedner 2023: 62 is erroneously based on Fraser’s key, which only refers to the abdomen of Indian species, and therefore cannot apply to a genus merely found in Africa).

Coeliccia Kirby, 1890: 128

This was Kirby’s replacement name for the preoccupied *Trichocnemis* (= with bristles at the tibiae) Selys, which he introduced in his catalog without any explanation. It might pertain to a distinctive feature, which Selys had given in a new description of the genus (1886: 114): “♀ Prothorax à bord postérieur échancré [♀ Prothorax at the rear margin scalloped].” So the name might be composed of Gr. κοῖλος –η –ον [koilos]= hollow, concave and the Italian suffix *–iccio –a* = somewhat, but this is a mere guess.

Coenagrion Kirby, 1890: 148

Gr. κοινός [koinos] = common, ordinary + obsolete genus name *Agrion* (see p. 19 *Allopodagrion*)

Fabricius (1775: 425) had established the genus *Agrion* to comprise all Zygoptera, and in the 19th century it was generally accepted as a genus name for all non-calopterygid damselflies which had not been transferred to different genera. But then the opinion arose that Latreille 1802 (p. 287), by naming *Agrion* (= *Calopteryx*) *virgo* as the only species of the Fabrician genus, had made it its type species. In this case *Calopteryx* Leach had to be a younger synonym. Kirby, following this conviction, in his 'Synonymic Catalogue of Neuroptera Odonata or Dragonflies' replaced the name *Agrion* in the previous sense by *Coenagrion*. After long controversies now it is common use to retain the name *Calopteryx* Leach, but to replace *Agrion* for non-Calopterygids by *Coenagrion* (see Hämäläinen & Fliedner 2022: 11-12). So now *Agrion* is only found as an element in compound names, meaning 'coenagrionid damselfly'.

Copera Kirby, 1890: 148

Southamerican Span. *copera* = waitress (derived from *copa* = cup)

This was Kirby's replacement name for *Psilocnemis* (≈ simple greave) Selys (1863: 168), in which platycnemidid genus the tibiae are scarcely widened, because that name was preoccupied by a beetle genus established by Burmeister in 1842. As usual Kirby did not explain why he chose that Spanish name, but certainly it is another allusion to charming femininity, like the first species names for damselflies, *virgo* or *puella* given by Linné.

Cora Selys, 1853: 71

Latinised from Gr. κόρη [korē] = girl, maiden

Selys does not explain his choice of name, but probably the name refers to Greek mythology, where Kore is another name for Persephone, the queen of the netherworld. She was the pretty daughter of the goddess Demeter, the patroness of agriculture. Hades, the god of the underworld, abducted her to his realm when his courtship had been rejected by mother and daughter. But Demeter, mourning for her daughter, prevented crops from growing. That also drew attention from the gods because they no longer received offerings. So Zeus had to establish a compromise: Persephone was allowed to stay with her mother for a part of the year, the rest of the year she reigned as queen in the underworld. This myth might reflect why crops do not grow at any time of the year.

Cordulia Leach, 1815: 136

The name is the Latinized feminine form of a Greek adjective derived from κορδύλη = club, cudgel.

Leach introduced this genus for the species *Libellula aenea* Linnaeus, in which the males have a clubbed abdomen; but in his definition he referred only to the shape of the hind wings.

Cratilla Kirby, 1900: 540

L. *cratis* = (among others) wickerwork; lattice; + feminine diminutive suffix *–illa*

Perhaps the "coarse reticulation" has led to this name.

Crenigomphus Selys, 1892: 97

late L. *crena* = indentation, notch, serration; for *–gomphus* see *Ammogomphus* p. 19

The name might refer to the "occiput droit, denticulé [occiput straight, indented]", which is the first characteristic named by Selys, or rather to the frons, which is described thus: "Front excavé en dessus, sa crête saillant en anvant [Front excavated above, its crest projecting forward]."

Crocothemis Brauer, 1868b: 367 & c: 736

Gr. κρόκος [krokos] = saffron; for *–themis* ≈ libellulid dragonfly see *Eusynthemis* p. 20

Brauer does not explain his choice of name, but it is evident that it refers to the large saffron coloured basal patches in the hindwings of all species included in this new genus when established by Brauer.

Dasythemis Karsch, 1889: 251

Gr. δασύς [dasys] = thick with, dense; for *–themis* ≈ libellulid dragonfly see *Eusynthemis* p. 20

Karsch does not explain his choice of name, but in his type species he points to its wings being "schmal und reich geadert [narrow and richly veined]."

Diphlebia Selys, 1869: 662

Gr. prefix δι– = two, double; for the element *–phlebia* = veined see *Pentaphlebia* p. 26

Selys (859: 450) had established a genus *Dineura* (= two veined) for a genus with this feature: "Les deux premières nervules costales prolongées dans l'espace sous-costal [The first two costal veins extend into the subcostal space]." Later he realized that the name was preoccupied. So he replaced the element *–neura* by *–phlebia* "Le nom de *Dinevra*, proposé pour désigner un sous-genre de l'*Amphipteryx*, étant déjà employé dans la famille des Tenthredinidae, je propose de la remplacer par celui de *Diphlebia* [The name of *Dinevra*, proposed to designate a subgenus of *Amphipteryx*, is already used in the family Tenthredinidae, I propose replacing it with that of *Diphlebia*]." (For Selys' orthography *–nevra* see *Atoconeura* p. 89).

Diplacodes Kirby, 1889: 308

Gr. δίπλαξ [diplax] see below + –ώδης = looking like, resembling

Charpentier (1840: 12) had created a libellulid genus *Diplax* (from Greek δίς (= twice, doubly) and πλάξ (= anything flat and broad, e.g. area) because of the shape of the prothorax being similar to the upper case letter B. But he was unaware that this name was a junior synonym of *Sympetrum* Newman, 1833, as were most odonatologists until McLachlan revived that name (see Hagen 1888, Fliedner 2021a: 117). Kirby instituted the genus *Diplacodes* (≈ like a Diplax) when revising the genus *Diplacina* [≈ related to *Diplax*] Brauer 1868a: 173, declaring: "This genus will include all the species placed in *Diplacina* by Brauer, except his type, *D. nana*, from the Philippines, which is clearly not congeneric with the others. Several species previously referred to *Diplax* will come better here …"

Disparoneura Selys, 1860: 443

L. *dispar* = unequal, disparate, unlike; for *–neura* see *Atoconeura* p. 89

The taxon is described as a subgenus of *Alloneura*. According to the first description it differs from the other subgenera by this feature: "Secteurs de l' arculus naissant sé-

parées [Sectors of the arculus arising separately].” For more about the difficulties with the Selysian genus *Alloneura* and its subgenera see *Prodasineura* (p. 102) and next entry.

Elattoneura Cowley, 1935: 14

Gr. ἐλάττων [elattōn = less, smaller; for *–neura* see *Atoconeura* p. 89

In his paper Cowley deals with the necessity to find a new genus name for *Disparoneura glauca* Selys 1860, which Selys 1886: 163 and Kirby 1890: 133 had mixed up with *Agrion* (= *Africallagma*) *glaucum* Burmeister (cf. p. 63 s.v. *alba*). Kirby (1890) had chosen *D. glauca* as type species of *Disparoneura*, while Selys in 1860 had based his genus on the species *Argia quadrimaculata* Rambur, which is not congeneric to *D. glauca*. Cowley explains his choice of name thus: “The new generic name is derived from ἐλάττων, smaller, with reference to the reduced condition of the vein A'.”

Erythrodiplax Brauer, 1868c: 722

Gr. ἐρυθρός [erythros] = red; for *–diplax* ≈ libellulid dragonfly see *Diplacodes* p. 92

As usual, Brauer does not give an explanation for his choice of name of his genus, which he classified by characters of wing venation. Of the nine species originally included in this new genus (two of which being junior synonyms) none is described as truly red, but for three, that means less than half of them, a reddish shade is mentioned in their first description, namely *fuscorufa* (= reddish brown) and two times *flavorufescens* (= reddish yellow), the other species are differently coloured.

Gomphidia Selys, 1854b: 86

For *Gomphus* see *Ammogomphus* p. 19; Gr. feminine form of the suffix –ίδιος [-idios] = pertaining to

Selys does not explain his choice of name. In 1854: 86 the taxon was established as a subgenus of *Ictinus* Rambur, in 1857a: 263 it was reclassified as subgenus of *Lindenia*, in which it differs from other subgenera by the lack of foliation at segments eight and nine. So the name may be thought to show, that in this respect it is more like the genus *Gomphus* itself.

Gomphoides Selys, 1854b: 73

For *Gomphus* see *Ammogomphus* p. 19; Latinized form of Gr. suffix –ειδής [–eidēs] = looking like a …, resembling

In 1854b: 73 Selys erected a genus and subgenus *Gomphoides* within a ‘Légion Gomphus’, but in 1857a: 263 he established a Légion *Gomphoides*, the members of which differed from the Légion Gomphus by divided or partly divided triangles. So the similarity of the taxa led to the name.

Gynacantha Rambur, 1842: 209

Gr. γυνή [gynē] = woman, female + ἄκανθα [akantha] = thorn, prickle

The name refers to spines beneath the tenth abdominal segment of the females, by which the author distinguished this taxon from *Anax* and *Aeshna*.

Heliocharis Selys, 1853: 55

Gr. ἥλιος [hēlios] = the sun + χάρις [charis] = grace, beauty / favour

The name might refer to the behavior of the sole species of the genus, which is described only by morphological features, as well in the first description as in Selys 1854: 187. But

it is known that Selys had notes from correspondence with H. W. Bates concerning more than 500 specimens of Odonata from South America he owed to him (see Seehausen 2022); so a reference to the impression the living damselflies give seems clearly possible.

Hemistigma Kirby, 1889: 295

Gr. prefix ἡμι– [hēmi–] = half + στίγμα [stigma] = tattoo-mark, mark, spot (in odonatological names mostly for pterostigma)

The name probably refers to the pterostigmata, about the divided coloration of which Kirby states: “pterostigma long, the basal third always pale.”

Hetaerina Hagen in Selys, 1853: 30

Gr. ἑταίρα [hetaira] = female companion, courtesan + feminine form of the adjectival suffix –ινος [–inos] = related to, like a...

Hagen does not explain the name, but it is clearly related to the numerous names for damselflies referring to charming womanliness, like Linné’s species names *virgo* or *puella*. To Linné’s choice of name may have contributed the fact that in France dragonflies are called demoiselles and in the Netherlands, where Linné had studied for some time, there are many vernacular names of Odonata ending in *juffer* (= maiden, virgin).

Hydrobasileus Kirby, 1889: 266

Gr. ὕδωρ (stem ὑδρο-) [hydōr / hydro-] = water + βασιλεύς [basileus]= king

Kirby does not explain his choice of name. The first description contains only morphological information; the size of the type species *H. vittatus* (abdominal length 47 millimetres, wingspan 76 millimetres) is not too impressive (wingspan of *H. brevistylus* (Brauer), which Kirby had not yet recognized to be congeneric, 100 mm).

Idiocnemis Selys, 1878c: 321

Gr. ἴδιος [idios]= one’s own; a peculiar kind of; for *–cnemis* see *Allocnemis* p. 88

This genus was established for two species from New Guinea, its wing venation being close to that of the African genus *Allocnemis*. Other features however differed enough to justify a new genus for these. So the name probably means ‘a peculiar kind of platycnemidid’

Indaeschna Fraser, 1926: 474

L. *Indus –a –um* = Indian; for *–aeschna* see *Dromaeschna* p. 20

Fraser separated this genus from *Amphiaeschna* Selys, giving as reason: “A study of the three species in this genus reveals the fact that two very different groups enter into its composition. So broad are these differences that the division of this genus seems called for … Group I is *Amphiaeschna*, Selys sens.str. with *A. ampla* (RAMB.) as the genotype. For Group II, I propose the name of *Indaeschna*. gen. nov., with *grubaueri* as genotype.” Fraser’s choice of Förster’s *I. grubaueri* from the Malayan peninsula as type species and his inclusion of its junior synonym of that species described by Martin from Javan specimens shows that the name India is used in a broad sense.

Indocnemis Laidlaw, 1917: 325

L. *Indus –a –um* = Indian; for *–cnemis* see *Allocnemis* p. 88

Laidlaw published this genus in a survey of Odonata from India within a key for the genera

of the Legion *Platycnemis*. He states: “The genus is to some extent intermediate between *Coeliccia* and *Calicnemis* (now *Calicnemia* Strand, 1928), and probably more primitive that either.” The type species of the new genus was a junior synonym of *I. orang* (Förster) from Assam.

Lathrecista Kirby, 1889: 291

Gr. λαθραῖος [lathraios] = clandestine, hidden + κίστη [kistē] = basket, urn.

The name might refer to the inconspicuous male secondary genitalia: “anal appendages as long as the eighth segment, the lower one hardly shorter than the others, those of the second segment not conspicuous.”

Leptogomphus Selys, 1878b: 442

Gr. λεπτός [leptos] = thin, fine, delicate; for *–gomphus* see *Ammogomphus* p. 19

For his choice of the name *Leptogomphus* Selys, as usual, gave no explanation in the first description, but for all three species included in his new genus he stated: “abdomen grêle [abdomen thin] (pp. 443, 445, 446).

Lestes Leach, 1815: 137

Gr. λῃστής [lēstēs] = robber; the Latinized form *Lestes* is accentuated on the first syllable

This is one of two new genera of damselflies created by Leach, but he does not explain why he chose this name. It does not give a diagnostic clue either because all Odonata are predators (for more see Hämäläinen & Fliedner 2023b).

Macrogomphus Selys, 1857a: 347

Gr. μακρός [makros] = long (in space or time) / tall; for *–gomphus* see *Ammogomphus* p. 19

Selys removed this genus from *Heterogomphus*. He included three rather large species about which he states (p. 348): “le système de la coloration, la grande taille de espèces connues et leur patrie (Asie tropicale et Java) rappellent les Heterogomphus, qui appartiennent au grand paragraphe des Gomphus [the coloring system, the large size of known species and their homeland (tropical Asia and Java) recall the *Heterogomphus*, which belong to the large section of *Gomphus*].“ But at the same time, another feature might have led to the name (p. 347-48): “Ce groupe est certainement l’un des plus singuliers de la Légion par le proportion énorme du 9e segment de la femelle et par celle en sens inverse du 10e qui est réduit à un anneau étroit [This group {*Heterogomphus* and *Macrogomphus*} is certainly one of the most unique in the Legion by the enormous proportion of the 9th segment of the female and by that in the opposite direction to the 10th which is reduced to a narrow ring].”

Macromia Rambur, 1842: 137

Gr. μακρός [makros]= long, extensive + feminine form of –ώμιος [–ōmios] = concerning the shoulder

The name refers to the humeral part of the wings: “Ailes ayant la partie humérale du bord costal au moins deux fois aussi longue que la partie cubitale jusqu’au pterostigma [Wings with the humeral part of the costal edge at least twice as long as the cubital as far as the pterostigma].” (For the misinterpretation of the name by Williamson (1899: 231, 307) see Endersby & Fliedner 2015: 174-175).

Matrona Selys, 1853: 17

Lat. *matrona* = married woman, wife, matron

In ancient Rome a freeborn woman became by marriage to a Roman citizen a matron, meaning: she became her husband's ward and protégé. Unlike Greek wives, she also accompanied her husband to receptions and banquets. Her duties were to supervise the household and to educate the children. But she had a freer position in society, compared to the women of other peoples, which was explained by the Romans by the fact that the abducted Sabine women at the time of Romulus had made peace between their relatives and their abductors, who had already won them over by treating them well. This was clearly one of the names in odonatology pertaining to the 'female theme' like Linné's species names *puella* and *virgo* (cf. Hämäläinen & Fliedner 2022: 32).

Metagrion Calvert, 1913: 261

Gr. μετά [meta] = among, between/after, next to/after, behind; for *–agrion* see *Allopodagrion* p. 19

Calvert gives no explanation of the name; but as he based it on some species of Selys' genus *Argiolestes* from the 'légion Podagrion' the name probably means 'genus among others of the legion Podagrion' (for the genus *Metagrion* see Kalkman & Theischinger 2013).

Micrathyria Kirby, 1889: 264 + 303

Gr. μικρος [mikros] = small + ἄθυρος [athyros] = without door + adjectival suffix –ιος –ια –ιον [–ios –ia –ion] = associated with, pertaining to

The first element of the name is probably a reference to the small size of the type species, which has "no supratriangular nervures" in fore and hind wings. A name referring to small cells, correctly would be: *Microthyria*.

Micromacromia Karsch, 1890: 137

Gr. μικρος –ά –όν [mikros] = small; for *Macromia* see p. 95

The species *M. camerunica*, on which Karsch based his genus, is relatively small. In his description of this libellulid genus Karsch does not mention *Macromia* at all; so it is difficult to guess, what made him choose this name. Perhaps the teeth of the claws in his new genus led to the name: "die Klauen unten nahe der Mitte mit deutlichem Zahn [the claws at the bottom near the middle with a distinct tooth]", as one of the characteristics given by Selys (1843: 3) was: "Les principaux caractères qui distinguent les Macromies des Cordulies sont d'avoir les onglets des tarses entièrement bifides" [The main characteristics that distinguish the Macromines from Cordulines are having the tarsal claws fully bifid]." This guess is based on the fact, that Hagen named his genus *Macrothemis* due to this feature in the genus *Macromia* (see Fliedner 2021a: 109).

Nannophlebia Selys, 1878c: 315

Gr. νᾶνος or νάννος [nanos / nannos] = dwarf; for the element *–phlebia* = veined see *Pentaphlebia* p. 26

In this name Selys combined elements from two existing taxa, from *Nannophya* Rambur and *Neophlebia* Selys; 1877, of which latter he did not yet know to be a junior synonym of *Tetrathemis*: "C'est une coupe nouvelle à constituer, pour placer ma Neophlebia Lorquini qui appartient au genre Nannophya de Rambur par la position du triangle dis-

coidal des ailes inférieures, don't le côté interne (basal) est dans le prolongement de l'arculus, l'espace hypertrigonal sans nervule et l'espace median des quatre ailes libre (excepté la nervule basale normale)." [It is a new division formed, to place my *Neophlebia lorquini* that belongs to the genus *Nannophya* of Rambur by the position of the discoidal triangle of the hindwings, of which the internal side (basal) is an extension of the arculus, the hypertrigonal space without nervule and the median space of the four wings free (except the normal basal vein).] Note that Selys described *Nannophlebia* as "sous-genre".

Nesciothemis Longfield 1955: 59 (fig. 27)

L. *nescio* = not to know, to be unacquainted with]; for *–themis* ≈ libellulid dragonfly see p. 20 s.v. *Eusynthemis*

The name is found in a paper in which Longfield endeavors to overcome the difficulties in identifying the different species of the genus *Orthetrum* that exhibit a large range of individual variation. She explains the creation of the new genus as follows (p. 14): "I have decided to place *O. farinosum* Forster in a new genus, to include also Pinhey's new species *O. fitzgeraldi*. In many ways farinosum is close to the genus *Hadrothemis*, where it has been included in the past, and in some ways *fitzgeraldi* is more like an *Oxythemis*. Neither of them fits into *Orthetrum* and both have sufficient characters in common to be included in the same genus." As an explanation of the etymology of the new name, she states (p. 59): "The new name is a pure invention, formed from the «themis» at the end of the names of the nearest generic relations, together with the verb *nescio* - «not to know». I designate *Orthetlrum farinosum* Forster as the type species of the genus." The name probably is intended to indicate the difficulty in recognizing this libellulid genus and distinguishing it from the closely related genera.

Fig. 27: *Nesciothemis farinosa* Foerster ♂, Zambia, Nsobe, 23. Feb. 2010. (© André Günther) The similarity of Longfields type species with taxa from the genera *Hadrothemis* or *Oxythemis*, which led to the name, is to be seen.

Nesoxenia Kirby, 1889: 260 + 291

Gr. νῆσος [nēsos] = island + feminine form of ξένιος [xenios] = pertaining to guests or hospitality

Kirby established this genus for a species from the Solomon Islands, which turned out to be junior synonym of the species *mysis* described by Selys 1878 from Misool (Raja Ampat Islands, Indonesia) in the genus *Agrionoptera*.

Neurobasis Selys, 1853: 17

Gr. νεῦρον [neuron] = sinew, tendon [in entomology: wing vein] + βάσις [basis] = base, foundation

The name refers to the presence of crossveins in the basal space in this genus, which in the genus *Calopteryx* is free.

Neurothemis Brauer, 1867: 127

Gr. νεῦρον [neuron] = sinew, tendon [in entomology: wing vein]; for *–themis* ≈ libellulid dragonfly see p. 20 s.v. *Eusynthemis*

Rambur (1842: 127) had named a genus *Polyneura* (≈ many veined) due to “les nervules plus nombreuses [the much more numerous veins]” in comparison with the genus *Libellula*. Brauer, seeing that that name was preoccupied replaced it with *Neurothemis* (see Fliedner 2020: 10).

Nososticta Hagen in Selys, 1860: 456

Gr. νόσος [nosos] = disease, mischief + female Latinised form of Gr. -στικτός [-stiktos] = marked, spotted, tattooed, which, in the Odonata, often refers to the pterostigma.

The taxon was described without any explanation as one of four ‘sous-genres’ in a genus *Alloneura* (≈ differently veined), which name was preoccupied and was later replaced with *Caconeura* by Kirby. In nearly all of the more than 20 genera in Odonatology with names ending in *–sticta* there is a special feature pertaining to the pterostigma or they are closely related to a genus with such a name. But in this taxon the pterostigma is not significantly different from those of the other three subgenera described in the same publication; so it can by no means be associated with disease or mischief. But one remarkable feature is explicitly mentioned in the description of the only species included under this name (p. 457): “NB. Distincte de toutes les Agrionines connus jusqu’ici par le secteur supérieur du triangle presque nul [NB. Distinguished from all Agrioninae so far known by the nearly nonexistent upper sector of the triangle].” So perhaps that characteristic might have been understood as a kind of defect caused by misfortune and the name might mean: "marked by pathological disfigurement". But it might as well be one of the names given by Hagen in that period which are not understood (see Fliedner & Endersby 2018: 8).

Notogomphus Selys, 1858: 379

Gr. νότος [notos] = south wind / south or south-west quarter; for *–gomphus* see *Ammogomphus* p. 19

Selys classified two African species in a group of its own: “Les deux espèces connues constituent notre 9^{e} groupe … et sont de l’Abyssinie. … Si elles etaient démembrées de Gomphus, on pourrait les nommer Notogomphus [The two known species constitute our 9th

group … and are from Abyssinia. … If they were separated from *Gomphus*, they could be called *Notogomphus*].” So the name points to the southern provenance seen from Europe.

Oligoaeschna Selys, 1889: 470

Gr. ὀλίγος [oligos] = little, small / few; for *-aeschna* see *Dromaeschna* p. 20

The name refers to the venation of the median space: “Ce groupe que je nomme Oligoæschna, me parait voisin des Austroæschna Selys … Il s’en distingue par le secteur sous-nodal non bifurqué et l’espace médian n’étant traverse par aucune autre nervule que la normale [This group that I call *Oligoæschna*, seems to me to be close to the *Austroæschna* Selys… It is distinguished by the non-bifurcated subnodal sector and the median space not being crossed by any other vein than the normal one].”

Onychothemis Brauer, 1868a: 170

Gr. ὄνυξ (stem ὀνυχ–) [onyx / onych-] = talon, claw; for *–themis* ≈ libellulid dragonfly see *Eusynthemis* p. 20

The claws in this libellulid genus lack a distinct tooth, by which feature they differ from related taxa (Brauer 1868b: 365).

Orientogomphus Chao & Xu, 1987: 260

L. *oriens* (stem orient-) = the rising sun / east; for *–gomphus* see *Ammogomphus* p. 19

The English summary does not give an explanation of the name; but the genus was based on a type species from Fuijan, China, and the species included were from Myanmar, Malaysia, Sumatra and Vietnam; later a species from the easternmost province of India was included into this genus, which has certainly an (south-) eastern distribution in Asia.

Orthetrum Newman, 1833: 511

Gr. ὀρθός [orthos] =straight + ἦτρον [ētron]= abdomen

In the first year of a new periodical Newman suggested the name Sym*p*etrum for libellulids with a laterally compressed abdomen. In the same publication he reports, that he had considered splitting three more genera from *Libellula* sensu Leach, but “that a dislike to name-giving induced me to relinquish them”. As one of these other planned taxa he mentioned “*Orthetrum*; abdomen laterally parallel” with *Libellula coerulescens* Fabricius or *L. cancellata* Linnaeus as examples. But by this he had already given a valid description of a new genus which however remained nearly unnoticed until about 1880 (see Hagen 1888).

Paragomphus Cowley, 1934x: 201

Gr. παρα– [para-] = alongside, beside; for *–gomphus* see *Ammogompgus* p. 19

For a new gomphid genus Förster had chosen the preoccupied name *Mesogomphus* (see p. 24). So Cowley replaced it with this name, which might be understood as ‘a gomphid genus beside others.’.

Periaeschna Martin, 1909b: 157

Gr. περι- [peri-] = around; for *-aeschna* see *Dromaeschna* p. 20

Martin does not explain his choice of name, but it might pertain to the second and third abdominal segments of his female type specimen: “Abdomen grossi ovalairement au 2e segment, peu reserré au 3e, ensuite cylindrique, noirâtre [Abdomen enlarged

oval in the 2nd segment, slightly tightened in the 3rd, then cylindrical, blackish].” One might also consider the name as a ‘genus about *Aeshna*’.

Phaon Selys, 1853: 22

Gr. Φάων [Phaōn] (≈ the shining one) in mythology: ferryman on Lesbos, beloved by Sappho

According to ancient mythology Phaon was a boatman, who goodheartedly having ferried Aphrodite, the goddess of love, disguised as an old woman, without charge was rewarded with an ointment, which made him the most beautiful of men. The famous Lesbian poetress Sappho was said to have fallen in passionate love with him, and when she was not heard from, threw herself desperately into the sea from a rock on the island of Leucas. *Phaon* is one of the names related to the Lesbian poetress employed by Selys in the calopterygids (see Hämäläinen & Fliedner 2022: 36).

Phyllomacromia Selys, 1878a:212 (fig. 28)

Gr. φύλλον [phyllon] = leaf; for *Macromia* see p. 95

The base of the name refers to the leaf-like dilatations in the males, by which the members of this genus differ from those of *Macromia*: “Le 8e segment du male campanulé, dilaté en feuilles latérales arrondies [The 8th segment of the male campanulate, dilated into rounded lateral leaves].”

Fig. 28: *Phyllomacromia monocerus* Foerster ♂, Zambia, Mutinondo Wilderness, 13. Dec. 2015. (© Jens Kipping). The leaf-like dilatations of the last abdominal segments, which led to the genus name, and the single dorsal process on the tenth segment, which prompted Förster to name the species, are clearly recognizable.

Platycypha Fraser, 1949: 10

Gr. πλατύς [platys] = wide, broad; for *–cypha* see below

Fraser split this taxon from his genus *Chlorocypha* (see p. 90) due to this feature of the males: “Rather large species with characters similar to the last and differing only in that the tibiae of the males are very broadly dilated, brilliant scarlet on the extensor surface and chalky white on the flexor:” Like in *Chlorocypha* the second element of the new name refers to the related genus *Rhinocypha* Rambur, 1842: 232) (from Gr. ῥίς (stem ῥιν– [rhin-]) = nose and κυφός [kyphos]= bent forwards, hunchbacked, a reference to the protruding clypeus of all its species: “épistome fortement renflé et saillant [epistome strongly bulging and protruding]”).

Platystigma Kennedy, 1920: 84

Gr. πλατύς [platys] = wide, broad; *–stigma* is a reference to the pterostigma

As usual Kennedy does not explain his choice of name except that he mentions: “Dense black part of stigma reduced to one cell in hind wing.” That means: if the breadth of the black part in the hind wing is reduced to one cell, the pterostigma in the forewing must be larger. Information about this can be gleened from Hagen’s description of the type species *P. jocaste* (1869: 260): “alis .. anticis pterostigmate angusto nigro (5 areolis), posticis … pterostigmate nullo [in the fore wings with a narrow pterostigma (5 cells wide), the hind wings without any pterostigma].” That there must be some variation in the pterostigmata of the hind wings is to be seen from the difference in the statements by Hagen and Kirby.

Podopteryx Selys, 1871a: 415

Gr. πούς (stem ποδ–) [pous / pod-] = leg + *-pteryx* as a reference to the genus *Amphipteryx* (see below)

The name is peculiar in that both elements of the name do not refer to features of the species *P. roseonotata*, on which the genus was based, but on similarities. The element *pod-* is chosen, because the new genus in most characters is close to the genus *Argiolestes*, which pertained to the ‘légion Podagrion’ (the genus name *Podagrion* was later replaced by ‘*Megapodagrion*’ in Selys 1885: cxlii, because it was preoccupied in Hymenoptera). The element *–pteryx* is a reference to a feature of wing venation which it has in common with the genus *Amphipteryx* [≈ wings on both sides, a reference to the two species included, the venation of one resembled more the coenagrionids, of the other one the lestids]

Polythore Calvert, 1917: 263

Gr. πολύς [polys] = many; for *Thore* see this lemma.

Calvert, seeing that the name *Thore*, under which Selys (1853: 68) had established a “legion”, a “genre” and a “sous-genre”, was preoccupied in Arachnida and had to be substituted: “I therefore propose the name *Polythore* for the Odonate genus in allusion to the denser venation of its members in comparison with other genera of the Selysian legion.” The name *Thore*, which by Selys is credited to Hagen, looks like a Greek female name, which would be in accord with several other names established in the ‘Synopsis des Calopterygines’ (e.g. *Cleis, Cora, Echo, Mnais*, or *Sapho*, but I could not find any trace of it in sources from antiquity (like for *Mnais*, see Hämäläinen & Fliedner 2022: 33).

So it probably is taken from some literary text of that period. That is all the more likely, as this very name had been established already in 1850 by the German arachnologist C.L. Koch for an American (sub)genus of spiders [for the improbability of other interpretations of the name see Fliedner 2021a: 105).

Procordulia Martin, 1907: 16

Gr. πρό = prior in rank or order; for *Cordulia* see p. 91

Martin does not explain his choice of name, but his statement: “Ce genre forme le passage du genre Hemicordulia au genre Somatochlora [This genus forms the connection between the genus *Hemicordulia* and the genus *Somatochlora*]” suggests, that he might have considered *Procordulia* to be a precursor to, or more primitive form of, the genus *Cordulia*.

Prodasineura Cowley, 1934a: 202

Selys (1860: 441 & 446) in his ‘légion Protonevra’ had named a “genre” and within that a “sous-genre” with the preoccupied name *Alloneura* (= differently veined) and had redefined it in 1886 (pp. 159; 176). To overcome the difficulties caused by the homonymy and the different replacement names already suggested (see Cowley 1934a: 202-204) Cowley replaced *Alloneura* Selys 1886 with the name *Prodasineura*. This replacement name is an anagram (a word formed by rearranging the letters) of another “sous-genre” of *Alloneura* 1860 named *Disparoneura*, with which (according to Selys 1886: 177) *Prodasineura* has a feature of the wing venation in common. The genus *Disparoneura* [= separately veined, from L. *disparo* = to separate + Gr. νεῦρον [neuron] = sinew, tendon, in entomology used for wing veins] got its name because of this: “Secteurs de l’arculus naissant séparés [Sectors of the arculus originating separately]” (Selys 1860: 443). (For Selys orthography *–nevra* see *Atoconeura* p. 89).

Proischnura Kennedy, 1920: 87

Gr. πρό = prior in rank or order + genus name *Ischnura* (see below)

Kennedy took the type species out of the genus *Enallagma* and he stated: “Penis intermediate between that of *Ischnura* and that of *Enallagma*”. So probably he assumed his new genus to be prior in evolution to both. Charpentier (1840: 20) had chosen the name *Ischnura* for two coenagrionid species he assessed to be quite slender: “Nomen e Graeco ἰσχνός et οὐρά compositum, ob abdominis eximiam tenuitatem. Signa distinctiva huius subgeneris sunt: abdomen, praecipue medium, valde attenuatum ... [The name is combined from Greek ἰσχνός {ischnos = slender, lean} and οὐρά {ura = tail; in entomology used for abdomen} because of the extraordinary slenderness of the abdomen. A distinctive characteristic of this subgenus is that the abdomen, especially the middle part, is very thin ...].”

Protallagma Kennedy, 1920: 86

Gr. πρωτ(ο)– [prot(o)–] = foremost, first; for *–allagma* see *Africallagma* p. 87

This is one of several new genera by Kennedy in the same publication the description of which begins with: “Characters as in *Enallagma*, …” In this case the distinctive character is: “except that the colors are largely red and the apex of segment 10 in the male is merely notched; i.e. without the two tubercles.” So probably Kennedy saw this as an archaic feature in evolution.

Protorthemis Kirby, 1889: 261, 290

Gr. πρωτ(ο)– [prot(o)–] = foremost, first + ὀρθός –ή –όν = straight; for *–themis* see *Eusynthemis* p. 20

Hagen (1861: 161) had established the genus *Orthemis* for a single species, in which the abdomen as in *Orthetrum* (Newman), was straight (see Fliedner 2020: 43). But soon more species from around the world were included in that genus (cf Brauer 1868e: 729). Of these Kirby transferred species from the Indonesian region to this new genus. He also established a new genus *Thermorthemis* (≈ warm *Orthemis*) for species from Madagascar and Africa, and so he restricted the genus *Orthemis* to the Americas. Kirby does not give an explanation for his choice of the first part of the name, but he may have deemed this genus to be older in an evolutionary sense than the other two.

Pseudagrion Selys, 1876b: 490 (fig. 29)

Gr. ψευδ– [pseud–] = false, pretending to be; for *–agrion* see *Allopodagrion* p. 19

There is no explanation of the name in the first description of the taxon, which Selys described as one of the many subgenera within his genus *Agrion* of those, in which the females lack a vulvar spine. For these he states (1876a: 1233): “Il est difficile de donner une analyse laconique des charactères principeaux des douze sous-genres que j’admets dans cette seconde partie du grand genre *Agrion* [It's difficult to give a succinct analysis of the basic characteristics of the twelve subgenera I've included in this second part of the large *Agrion* genus].” So the name might reflect the difficulty to distinguish this genus from other genera of this group.

Fig. 29: *Pseudagrion sjoestedti* ♂, Zambia, Livingstone, 09. Jan. 2009. (© Jens Kipping)

Rhinocypha Rambur, 1842: 232

Gr. ῥίς (stem ῥιν– [rhin-]) = nose + κυφός [kyphos]= bent forwards, hunchbacked,

The name refers to the protruding clypeus of all its species: “épistome fortement renflé et saillant [epistome strongly bulging and protruding].”

Somatochlora Selys, 1871: 279

Gr. σῶμα (stem σωματ- [sōmat-]) = body + χλωρός [chlōros]= (pale) green, greenish-yellow

Selys chose that name for a 'section' within a subgenus *Epitheca* of his genus *Cordulia* within a 'Légion Cordulia'. For this section he referred to a subgenus, that Charpentier, 1840:12 had established for *Libellula aenea* Linnaeus and *L. metallica* and *flavomaculata* Vander Linden, under the name *Chlorosoma*, which as a junior synonym of the genus *Cordulia* Leach and a homonym of a snake genus, could not be maintained. The genus *Somatochlora* was elevated in rank by Selys 1883: 108 (see also Walker 1925: 9).

Sympecma Burmeister, 1839: 823

This name is the result of a reading error. For his 'Handbuch' Burmeister had been lent the manuscript of Charpentier's work on dragonflies, to be published in 1840, in which the name *Sympycna* (Gr. σύμπυκνος [sympyknos] = pressed together, compressed, tight) had been scheduled for the lestid genus, which in rest keeps its wings tightly to the abdomen, while other *Lestes* species hold them apart, so that they make a figure like an inverted V. But Burmeister did not decipher that name correctly and published it in the nonsense form now in use, because it was released prior to Charpentier 1840.

Teinobasis Kirby, 1890: 157

Gr. τείνω [teinō] = to stretch out + βάσις [basis]= (among others:) base, pedestal (here a reference to Selys' subgenus *Telebasis* 1877:112, see below)

This name was Kirby's solution of a nomenclatural problem caused by Selys. In 1877 (112) he had established a taxon *Telebasis* as a subgenus of the genus *Telebasis*, Selys, 1865: 378 (from Gr. τηλε- [tēle-] = far, far apart) established for damselflies with a long petiolation of their wings, by which their bases are far from the point of attachment to the thorax. When elevated to generic rank the taxon became a homonym of the original genus. So Kirby replaced the first element of the name (philologically not correct) by *Teino-* in the sense of extended, remote.

Tetracanthagyna Selys, 1883: 744

Gr. prefix τετρα- [tetra-] = four + ἄκανθα [akantha] = thorn, prickle + γυνή [gynē] = woman, female

In his 'Synopsis des Aeschnines' Selys split the genus *Gynacantha* Rambur (see p. 93) according to the number of spines at the end of the abdomen of the females, of which this genus has four: "Le 10e segment de l'abdomen prolongé en dessous en une plaque procombante, terminée par quatre fortes épines assez longues, divergentes [The 10th segment of the abdomen extended below into a protruding plate, ending in four strong, fairly long, divergent spines]."

Tramea Hagen, 1861: 143

L. *trameare* = to pass through

Hagen (1849: 174) had foreshadowed, that he would establish a libellulid genus *Trapezostigma* ((Gr. τραπέζιον = trapezium + στίγμα = puncture, mark, in dragonfly names often used for pterostigma), but in 1861 he assigned the species, which he had foreshadowed as pertaining to the planned taxon, to the genus *Tramea* the characteristic of which was: "pterostigma small, trapezoidal." By this change he achieved two advantages: the new

name effected a pun with the Latin word, which fitted well for species with vagrant behavior and in addition, that the new name could be treated as feminine, whereas the former name would have been neuter and all the species transferred from the feminine genus *Libellula* would have had to undergo a change in gender.

Trithemis Brauer, 1868a: 176 (fig. 30)

Gr. τρι – (in compounds) = three; for *–themis* ≈ libellulid dragonfly see *Eusynthemis* p. 20

The name refers to the characteristic shape of the prothorax: “Hinterrand des Prothorax dreilappig, der Mittellappen, klein, ganz [Rear margin of the prothorax three-lobed, the median lobe being small, entire].”

Fig. 30: *Trithemis pluvialis* ♂, Zambia, Mwinilunga, 25. Feb. 2009. (© Jens Kipping) The three lobed rear margin of the prothorax, to which the genus name refers, on this photography is to be seen well.

Umma Kirby, 1890: 100

The name is derived from Arabic Ummah = an Islamic supra-national community with a common history. This was Kirby’s replacement for the preoccupied name *Cleis* Selys, 1853, which taxon then contained one species from Guinea, where Islam was and is the major religion, and one from Cameroon, where it is firmly established (see Hämäläinen & Fliedner 2022: 29 + 38).

Uracis Rambur, 1842: 31

Gr. οὐρά [ura] = tail (in entomology often for abdomen, sometimes for appendage) + ἀκίς [akis] = any pointed object, hence needle

The name refers to the pointed ovipositor of the females, which sticks out beyond the end of the abdomen: “bord vulvaire prolongé en une longue pointe canaliculée depas-

sant l'anus, accompagné d'un prolongement semblable du segment suivant, qui presente une petite careen pour s'engrener dedans [vulvar edge prolonged into a long canaliculate point extending beyond the anus, accompanied by a similar prolongation of the following segment, which has a small careen to fit into it]."

Zosteraeschna Peters & Theischinger, 2011: 241

Gr. ζωστήρ [zōstēr] = belt, girdle / anything that goes round like a girdle; for *–aeschna* see *Dromaeschna* p. 20

The given etymology reads: "The prefix "Zostera", proposed by K.-D.B. Dijkstra (in litt.), points to the ring-like ornamental ridge, crossing in both sexes abdominal tergum 2 in its middle."

Conclusions

Now that the meaning of Förster's scientific names for odonates has been explained as far as possible, it may be of interest to know what preferences he showed in his choice of names.

Of his 34 genus group names, of which only 16 (47.0 %) are valid, 13 (38. 2 %) pertain to appearance (morphology 6, similarity to other taxa 5, and one each refers to pattern and size), of the others, 5 (14.7 %) are eponyms, toponyms or refer to biotope and evolution respectively. The last one reflects behavior.

Of his 165 species-group names, including 73 synonyms and homonyms, most also refer to appearance 53 (32.3 %), including 21 (12.8 %) to coloration, 15 (9.0 %) to morphology, 5 (3.0 %) each to similarities and to beauty/ wonder, 4 (2.4 %) to pattern and 3 (1.8 %) to size; the next largest number references localities (48 = 29.1 %), 37 (22.4 %) directly, 9 (5.5 %) indirectly (see below) and twice (1.2 %) the geographic direction. Then come 43 (26.0 %) eponyms, 20 (12.1 %) of which are the collectors or donors of specimens, 16 (9.7 %) odonatologists or other scientists, 4 (2.4 %) friends or family members; of the others one is from antiquity, another is typological and the last an professional indication. Finally, there are 12 (7.3 %) related to biotope, one each to behavior and evolution, and there are five (3.0 %), which do not fit into these categories.

If we compare these results with those in the table in Fliedner 2021b (p. 42) for Brauer, Krüger and Ris and the data in Fliedner 2023 (p. 69) for Erich Schmidt, we get the following:

Reference to appearance in the nomenclature of Brauer (69.2 %), Ris (51.2 %) and Krüger (37.2 %) plays a major role, but within this category, compared to Förster's 9%, morphology is more important for Brauer (21 %), Schmidt (17 %) and Krüger (14 %), while for Förster, like for Ris, coloration is the most important feature.

That toponyms play a second role in Förster's nomenclature differs from the other four authors where they clearly take less importance [most in Krüger (16.3 %), least in Schmidt (11.9%)]. A specialty of Förster is his indirect method of pointing to the provenance of his material. Calvert in the Biologia Centrali-Americana had chosen names pointing to indigenous tribes like *azteca, maya, nahuana, tarascana* to indicate the type locality. Förster however uses endemic animals or plants for this purpose (see entries *nutrina*, *paradisea*, *petaurina*, *pseudochiri*, *ouvirandrae*).

Eponyms are in the third place in Förster's nomenclature, but their percentage is higher in Schmidt (50.5 %), Krüger (41.9 %) and Ris (36.2 %) including reference to collectors and donors. From antiquity there is only one name among Förster's, while all the others have more; for Ris they account for 14.9%. I see this as a result of the fact that Förster did not attend a humanistic, but a scientifically oriented secondary school.

Something peculiar in Förster's nomenclature are the names pertaining to biotope (8.3 %; Ris 3.2 %). His interest in this subject can be seen in his letter to Laidlaw of November 1903, where – responding to information on the probable habitat of Calopterygids in Laidlaw 1902a: 64 – he gives pertinent information on *Echo modesta* and *Mnais andersoni*. But he admits: "Biological notes on odonata are very rare in literature " and in his publications he does not address that subject in his descriptions. An exception is his name *fontinalis* (p. 69), where he obviously had more detailed information from the collector Fruhstorfer, which is not found in such detail in his publication about his collecting activities in Tonkin (Fruhstorfer 1902). Also in other cases Förster seems to have had more information from the collector. From New Guinea there are names like *thalassophila* (≈ loving the sea), *epinephela* (≈ above the clouds), *torrenticola* (≈ dweller of a rushing stream), *montivagans* (≈ wandering over mountains), names which certainly go back to information from the collector C. Wahnes, with whom he had a letter contact, as can be seen from his Williamson correspondence, or from L. Biró, whose statement on the coloration of living specimens of a new taxon is found in Förster 1903a: 528. Also, names like *huanacina*, which apparently are based upon indigenous languages, point to information from the collectors. About such cases more information might be found in the correspondence of Förster which is kept at the Generallandesarchiv at Karlsruhe.

It has already been mentioned, that of Förster's genus group names more than half and nearly half of his species group names are synonyms or homonyms, more than in any of the other important odonatological taxonomists (p. 18). Presumably, this demonstrates a lack of accuracy which is also evident from some of Förster's publications as shown below:

In 1900a: 105 he based his genus *Wahnesia* on two species (*kirbyi* p. 45 and *montivagans* p. 50), of which he did not give any description except in a key a feature of the wing venation, by which he separated his new genus from *Argiolestes*. A reliable description of the two species is not found until Lieftinck 1935. In 1906b: 312 he credits the synonym *ferrugaria* of Burmeister's *Crocothemis sanguinolenta* to Calvert, who had synonymized those taxa, not to the correct author Rambur, or in 1906b: 317 where he mentions Burmeister as author of *Orthetrum contractum*, which however is a junior synonym of Burmeister's *O. stemmale*, authored by Rambur. In one of his treaties (1914: 61) we find *Argas* as a genus name, whereas in the next line *Argia* Rambur is correctly mentioned. On the preceding page he describes "Cora terminalis Mac Lachlan Rasse bogotenois n. sbsp." with a French adjective, while the correct Latin form *bogotensis* is used as a nomen nudum on p. 64. His mistake with '*Gomphus vermiculatus* Martin' in his letters to Williamson found its way into the description of *Burmagomphus* (see p. 18).

But other factors may have contributed to the amount of synonyms in his work as well. One might be the small size of his collection at that time (46 items in 1895) and the difficulty visiting a major collection outside of his school holidays, which he instead preferred to spend differently. This factor was reinforced by his reluctance to seek advice from other odontologists

after Selys' death: As far as I can see, in his collaboration with Williamson, Laidlaw and Martin he always presented himself as the better informed one, and in his publications he also took a know-it-all attitude towards Ris (e.g. 1903a: 529, note; 1909a: 233; 1914a: 71 on *Urothemis*).

Another reason might be his endeavor to take into account even small differences in taxonomy. For this we must remember that Förster's mentor Selys had a complex system with the levels family, subfamily, legion, genus, division, subgenus, group, species, race and variety, whereby his subgenera were each classified as genera by Kirby in 1890, and 'race' corresponds most closely to the modern term subspecies. This complexity also influenced Förster's nomenclature, although he tried to clarify it in one of his first treatises (1897c: 209, in translation): "To avoid confusion between variable forms found in the same locality in the company of the type and forms showing a small constant variation in another region, I propose to call the former forms <variety>, the latter forms <subrace>; a subrace a little further from the type forming a good species and whose derivation from neighboring species is again clearly visible is a <race>." So Förster introduced a category 'Subrasse', an equivalent of which I did not find in the publications of Selys. It would be infrasubspecific if 'Rasse' would be understood as 'subspecies', but Förster's intention was just to distinguish subspecies in reference to their distribution. It must be mentioned, that some of Förster's 'subraces' now rank as good species (*Rhinocypha sumbana, Nososticta astrolabica, Tetrathemis biroi* and *Erythrodiplax hyalina*). Förster's own uncertainty in assessing the taxonomic rank is apparent, for example, in his statement concerning "*Libellago Hartmanni* n. sbsp." (1897d: 216), which in his text he states to be the "nächstverwandte Art oder Rasse [the closest related species or race]" to *Platycypha caligata* (de Selys) (both taxa were definitely synonymised by Ris 1908: 307).

Perhaps it can be argued that Förster had a typological view regarding genera and species. That Förster based new taxa on even small differences is shown from his taxon *Pseudorthemis* (see p. 29), which he separated from Kirby's genus *Prothorthemis* seeing that in his species *P. wahnesi* – a younger synonym of *P. coronata* (Brauer), of which Förster neither knew any specimen, nor tried to get access to – had a different position of its arculus in comparision to Kirby's type species *P. celebensis*. Ris (1910: 146) commented on Förster's taxonomic decision thus: "Es wäre möglich, für jede der 3 Arten {*Protorthemis celebensis* – *coronata* – *woodfordi*} ein eigenes Genus aufzustellen, wie Förster vorschlägt. Doch hat es mir richtiger geschienen, das Genus *Pseudorthemis* Förster für *coronata* nicht zu übernehmen, und auch *Nesocria* Kirby fallen zu lassen [It would be possible to create a separate genus for each of the 3 species, as suggested by Förster. However, it seemed more correct to me not to adopt the genus *Pseudorthemis* Foerster for *coronata*, and also to drop *Nesocria* Kirby {which the author had established for his species *woodfordi*}]." Similarly Ris (1911: 410) rejected Förster's genus *Pronomaja* (1909a: 225) separated from *Uracis* due to differently positioned discoidal cells in the forewings.

Ris obviously pursued a different course in his nomenclature, which he describes as follows (1909: 17, in translation, cf. Fliedner 2021a: 125): "All the features of wing venation in this group [the libellulines] are variable without any exception. It is essential to understand what is the centre line of consistency within this variability, and that such a recognition is possible in by far the most of cases … We have relied on the fact that the discerning users where they find discrepancies from our descriptions they by and by will learn to distinguish

easily the individual and unimportant [features] from the generic and relevant, just as it happened to the author."

A minor factor for the creation of synonyms was that in the first decades of the twentieth century still numerous undescribed species were detected; so it was inevitable that some of Förster's new taxa had been described immediately before, as had his species *protoe* (p. 78), *andinum* (p. 63) and *mimetica* (p. 73) from South America by Calvert.

In summary, my impression is as follows: Förster, as the first academic in his family, was very self-assured. He had the impression that his academic education enabled him to describe new genera and species in botany and zoology, not just in his special field of odonatology, in which he had familiarized himself, and also to work in other fields, such as archaeology or paleontology. From the outset, he also built up collections in all these areas, which subsequently reached a significant size. He developed an interest in the acclimatization of foreign plants and animals and at times maintained a kind of menagerie.

It may be that his teaching profession encouraged a tendency towards self-opinionatedness and a reluctance to seek support or advice from others. This may clearly also have to do with his desire to keep fame for himself alone.

His job and growing family certainly took up a lot of his time, but he made it possible to occupy himself with things that interested him, such as his archaeological treasure hunting, during his vacations. In contrast, he apparently rigorously refrained from answering scientific questions or working on the catalog of the Selys collection, which is also to be seen from the major intermissions in and finally the end of his correspondence with Williamson.

As he was suddenly torn from life by illness, he was unable to leave his research and affairs in an orderly state; nevertheless, no odonatological manuscripts or projects have been handed down. Eight or nine taxa were later described from his collection after his death, seven by Lieftinck (*Rhinocypha tincta dentiplaga, Drepanosticta dendrolagina, D. fontinalis, D. pytho, Rhyacocnemis leonorae, Teinobasis dolabrata, T. leonorae*], one or two by Borror (*Erythrodiplax acantha*, the type specimen of which had been collected by Bauer at Sao Paolo in 1905, as had some types of species described by Förster, and *E. avittata*).

Here I turn to what leading odonatologists thought of Förster's work and achievements:

During his life in letters to Ris, Morton mentioned in 1910 "his policy of keeping things exclusive to himself" (Seehausen et al. p. 34) and about the same time Muttkowski stated "Forster probably regrets that Linne ever lived, and that the world did not wait for him" (Seehausen et al. p. 37).

Confronted with Förster's collection at Ann Arbor in 1924 Kennedy, in his exploration of it (cf. fig. 31) commented with disappointment: "He had no system to his work but seems to have worked just as the mood struck him. Some obvious types have only a scanty locality label – no name label and no 'type' on them." Later he remarked: "he had never had any drill or training in doing his work in any manner of system. (…) I imagine he looked on himself as walking in de Selys shoes." (Seehausen et al. p. 20). Lieftinck's verdict on Förster's activities in his 1937 publication is similarly negative: "As is well known, many of Förster's descriptions are so defective that identification of the species has always been difficult, and in many cases, impossible. Förster re-used many of his envelopes [sic] and was exceedingly careless about scratching out the old labels. To indicate localities, he frequently wrote

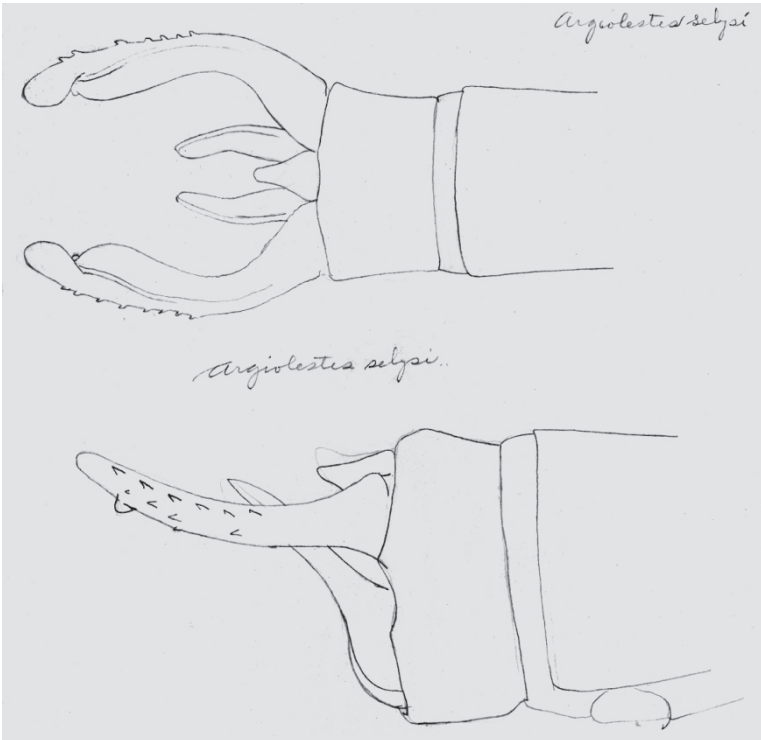


Fig. 31: Male appendages of *Argiolestes* (now: *Podopteryx*) *selysi*, drawn by C.H. Kennedy during his work on the Förster collection for its incorporation into the entomological collection of the University of Michigan Museum of Zoology (UMMZ).

down a few letters, often indecipherable, on the paper covers of his specimens, and in many cases he made severe errors in labeling the material." [Garrison et al. 2003: 2].

Thus, the following conclusion can be drawn about Förster's odonatological work: his collection and his taxonomic efforts are certainly a significant contribution to the knowledge of dragonflies; however, his publications and the condition in which his collection has been preserved left much to be desired and have burdened later scientists with a lot of work that one might have wished he had done himself. Thanks to their efforts, Förster's odonatological legacy has now been preserved for science sufficiently.

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I searched the internet for information about people and historical contexts from Wikipedia, accessed literature via zobodat and BHL and I used the internet portal ADDO (African Dragonflies and Damselflies Online) for access to literature and information on individual odonate species until it went offline in 2025. I also had the programme DeepL help me formulate the text of some sections.

I am most grateful for all this help I have received.

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Index of synonyms

It might be of interest, under which entries names of other authors are explained in the chapters Genera and Synonyms respectively (b is the second entry of the name in the synonyms chapter)

Acanthagrion	→ *Myagrion*
aenea	→ *turfosa*
affine	→ *ouvirandrae b*
albardae	→ *rivularis*
amazona	→ *cothurnata*
arteriosa	→ *sanguinolenta*
asiatica	→ *interposita*
australis	→ *paradisearum*
baueri	→ *cyanomelas*
binotata	→ *paulina*
biordinata	→ *leopardina*

Brachythemis → *Termitiphorba*
brevifrons → *maita*
brevistylus → *papuanus*
caligata → *hartmanni*
chelifera → *aratrix*
cognatus → *nguelicus*
corallina → *nutrina*
coronata → *wahnesi*
crocops → *semicolon*
cuneata → *adamantina*
decora → *paradisea*
Dicterias → *Neocharis*
difficilis → *machadina*
divisa → *ikutana*
donaldsoni → *erlangeri b*
orsale → *Hylaeagrion*
Dythemis → *Oreoxenia*
Enallagma → *Africallagma*
euphoeoides → *reinholdi*
eurybia → *biroi*
eurybia → *petaurina*
fastigiata → *machadina*
flavoterminata → *paradoxa*
forcipata → *severini*
genei → *bitarsatus*
glauca → *alba*
glaucum → *sikorae*
Gomphoides → *Ammogomphus*
haematodes → *subhyalina*
Heliaeschna → *Malayaeschna*
Heliocharis → *Neocharis*
hildebrandti → *ouvirandae*
hymenea → *huanacina*
hypodidyma → *protoe*
indicatrix → *dagnina*
intermedia → *septenrionis*
iridipennis → *occidentalis*
jaspidea → *pseudochiri*

karschii → *insignis*
lacustris → *rufina*
lansbergei → *semiteres*
lefebvrii → *unimacula*
Leptogomphus → *Malayogomphus*
luminans → *erlangeri*
maculosa → *friedericella*
microstigma → *angulata*
modesta → *bogotensis*
mysis → *puella*
natalensis → *komatina*
Neodythemis → *Oreoxenia*
nigra → *ptilorhina*
nigrifrons → *papuana*
octogesima → *albicauda*
ornata → *montana*
ovipositrix → *mimetica*
pallidus → *somalicus*
Paragomphus → *Mesogomphus*
paula → *bicornis*
Protorthemis → *Pseudorthemis*
pruinosum → *ceylanicum*
sanguinolenta → *pygmaea*
sieboldii → *kuchenbeiseri*
simillima → *mocsaryi*
stemmale → *nigrescens*
subfurcata → *schoana*
Tetracanthagyna → *Toaeschna*
titicacae → *andinum*
Uracis → *Pronomaia*
venosa → *macrostigma*
villosovittatum → *fenicheli*
waterhousei → *fontinalis*
Xiphiagrion → *Skiallagma*

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Swezey, O. & F. Williams, 1942. Dragonflies of Guam. Bernice P. Bishop Museum Bulletin 172: 3-6.
Tillyard, R., 1924. The dragonflies (Order Odonata) of Fiji, with special reference to a collection made by Mr. H.W. Simmonds, F.E.S., on the Island of Viti Levu. Transactions of the Entomological Society London 1923 III-IV: 305-346.

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