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Cover picture: *Pyrrhosoma elisabethae* ♂, 2 km Southeast of Sidari, Northern Corfu, 09.06.2017.

Schmidt dedicated this species from Greece to the sister of his mentor Friedrich Ris in gratitude for their material support after the Second World War.

Photographer: Jörg Arlt

The scientific names of Erich Schmidt's odonate taxa

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Abstract

This paper offers an explanation of the 113 scientific names for Odonata which were given by the German odonatologist Erich Walther Schmidt (1890-1969), as well as those given by other authors in which taxa named by him are now classified. Before that, the life and work of this scientist are described. After that there is an analysis of the types of names he preferred, a look at important character traits and an attempt to deduce his intentions in naming dragonflies.

Zusammenfassung

Die vorliegende Arbeit bietet eine Erläuterung der 113 wissenschaftlichen Namen für Libellen, die von dem deutschen Odonatologen Erich Walther Schmidt (1890-1969) vergeben wurden, sowie denen anderer Autoren, die heute für von ihm benannten Taxa gültig sind. Vor diesen Erklärungen werden das Leben und die Arbeit dieses Wissenschaftlers beschrieben. Danach folgt eine Analyse der von ihm bevorzugten Namens-typen, ein Blick auf wichtige Charaktereigenschaften und ein Versuch, seine Absichten bei der Benennung von Libellen zu erschließen.

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

Preface

Since Linnaeus, biological systematics has depended on a binary nomenclature by which each organism is unmistakably labelled by a specific species name and a genus name that it shares with related organisms. But although naming today is no longer based solely on Latin and Greek, this was still the case for a long time in the previous century. And scientists assumed that their intentions in naming were understood. But this is no longer granted, partly because of the decline in knowledge of the ancient languages. But since scientific names often provide information about relevant features such as appearance, morphology, similarities, geographical origin, biotope or about the author's personal relations, it is helpful to understand such references. That is why nowadays authors usually explain new names they give. However, this used to be the exception rather than the rule, and Erich Schmidt was not one of those authors where explanations can be found, except, when he dedicated a species to a person. This paper is meant to close this gap in understanding and at the same time to convey an impression of the author, as far as the sources allow.

Material and Methods

Schmidt's scientific names for Odonata have been extracted from Bridges (1994) and have been checked by means of Paulson & al (2022) 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 alphabetical order to facilitate how to find the respective explanations in their chapters. Schmidt's genus names have been treated first, then the species names, after that his species group names which are now considered to be synonyms, next the names of species misidentified by Schmidt, subsequently the actual genera, into which Schmidt's species now are sorted, as they are an essential part of the scientific names.

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



Fig. 1: Portrait of Erich Schmidt from his time at the Deutsches Entomologisches Institut at Berlin-Dahlem, © SDEI Münchenberg.

Life and work (Fig. 1)

For biographical information on Schmidt, the autobiography of the 65-year-old is probably particularly important, which is found in the obituary by Asahina & Heymer (1970). But the Festschrift on Schmidt's 75th birthday by Heymer & Schöttner (1967) and the obituary by C. Buchholtz (1969) also help to form a picture of the scientist. Unpublished material used are the 62 letters of Schmidt to Ris from the Senckenberg Museum Frankfurt (cf Seehausen & al. 2023), documents from the archives of the German Entomological Institute in Müncheberg, the denazification papers from the Bonn City Archives and excerpts from the correspondence of A. Schöttner & G. Jurzitza, which Martin Schorr pointed out to me.

It should be noted that Schmidt's life was not easy, firstly due to his personality, as he describes it in his autobiography (in translation): "In none of the positions I have held so far have I felt comfortable in the long run, as I was too constrained in my work goals by conflicting views. So, not only out of necessity, out of contrast, I tried to do entomological work with my own goals apart from my jobs. The best results so far have always come from grants where I could set the task." Another difficulty was the problems of German history in the 20th century: World War I with subsequent hyperinflation, Nazi dictatorship with World War II, towards the end of which he had to be rescued from the wreckage of his house with severe injuries. Finally after the war due to the "Iron Curtain" it was impossible to travel to areas east of it for collecting trips and rather difficult to have contact with scientists there.

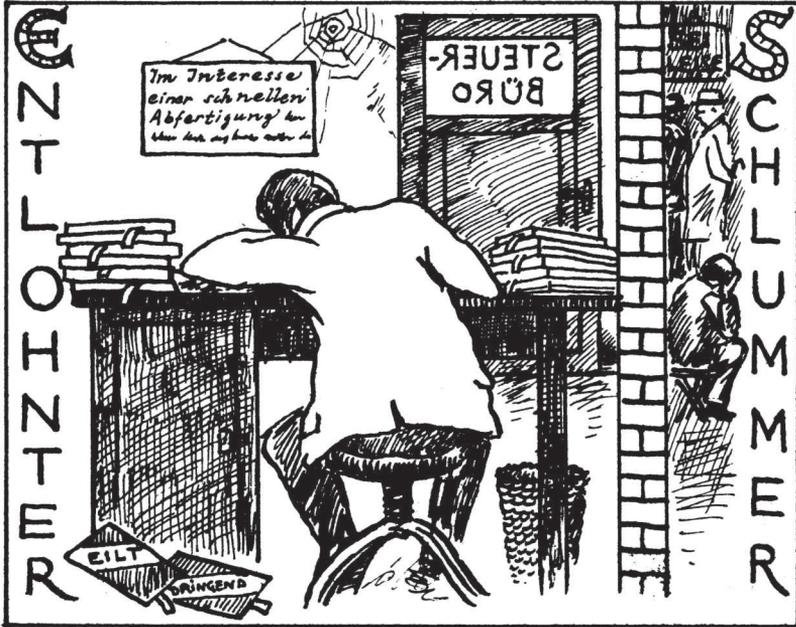
Erich Walther Schmidt was born on 15 July 1890, the son of Ernst Schmidt (1859-1947), a successful Elberfeld paper merchant, and his wife Maria, née Koch (1851-1932). Just how well off the family was can also be seen from the fact that in May 1907 Erich's sister Margarethe was accommodated in a boarding school in St. Blaise near Neuchâtel in Switzerland. The family lived in Bonn from 1912. In his autobiography Schmidt reports that his interest in entomology was aroused at an early age. In the spring of 1909, he passed the Abitur in his hometown, which entitled him to study at universities. He had originally considered studying medicine, but then came to the conclusion that he would be better off pursuing a career in the natural sciences. It fits in with this that he went on a 10-day collecting trip to Switzerland and Italy with his father between school and university. His studies took him to the universities of Bonn (2 semesters), Freiburg (2 semesters), Munich (1 semester) and back to Bonn, where he passed his doctoral examination in June 1914, shortly before the outbreak of the First World War. Like many German academics, Schmidt enlisted as a war volunteer and was initially deployed to East Prussia in an artillery unit; in August 1915, he was transferred to the Western Front in France, where he served with a two-month interruption in early 1917 until he was wounded by shrapnel in June 1918. After his discharge from military service following the armistice in November 1918, he re-enrolled at the University of Bonn in order to prepare for the state examination (passed in January 1921 with a qualification in botany, zoology, chemistry, mineralogy and physics for all classes), which was a prerequisite for admission to the teaching profession, by completing the required practical courses. After the preparatory service for the secondary teaching certificate, the required final examinations followed until March 1921. But he did not take up a school career, for securing which he had even briefly begun to study theology in the meantime: from 29.5.1921 to 31.1.1926 he was an assistant at the plant pathology station of the State Teaching and Research Institute for Viticulture, Fruit Growing and Hor-

ticulture in Geisenheim at the Rhine. He left there due to disagreements with the director, behind whose back he had conspired with the Prussian Ministry of Agriculture about the promotion of silk cultivation. He then had a five-month position as an adviser at the Cooperative for Silk Cultivation in Berlin, before he accepted the offer to write the Odonata section for the manual "Die Tierwelt Mitteleuropas" [Fauna of Central Europe], as the originally intended author, Eduard J.R. Scholz (1873-1926) had died in May. He did the preparatory work for this publication from Bonn. Probably to make useful contacts in this context in April 1927 he attended the second "Wanderversammlung Deutscher Entomologen [= German Entomologists' Migratory Assembly]" at Stettin, where he also met Ris (van Emden 1927; on the official congress photograph Ris and Schmidt stand next to each other). Maybe he also wanted to initiate an employment. From June 1927 to 15.1.1934 he then had an assistant position at the German Entomological Institute in Berlin-Dahlem under Walther Horn, where he left due to personal disagreements (see below).

It should be mentioned here that Schmidt joined the SA (Sturmabteilung ≈ Storm Detachment), a paramilitary Nazi organisation, during this time. The reason for this could be the following: the SA hunted down communists and social democrats in the period before and after Hitler's "seizure of power", especially in Berlin. In his denazification form, Schmidt reports that in February 1932 he was called a communist by an "old fighter" (i.e. someone who had already been a member of the Nazi party before Hitler's 1923 putsch). Thus he could have sought to secure himself by joining from November 1933. By the way, he ended his membership in May 1935, but joined the "Deutsche Arbeitsfront" (≈ German Labour Front, an institution to replace the banned trade unions and to influence and control the workforce) and the "NS-Volkswohlfahrt" (≈ National Socialist People's Welfare), probably also for political and social security. He did not join the NSDAP (Nazi Party) until 1937.

But in January 1934 his work at the 'Deutsches Entomologisches Institut' ended after a confrontation with its director, who at the same time banned him from the institute.

We learn the reasons for this from two confidential letters from Walther Horn to Alexander Koenig (27-i-1936; 31-i-1936): apart from insulting statements by Schmidt, these also included Horn's longer dissatisfaction with his work. For example, Schmidt had once simply stayed on holiday for 14 days longer than permitted during Horn's own absence and had then – in spite of being admonished – made no effort whatsoever to make up for the missed working time, or he had preferred a desk that could not be seen from the door and was often found there staring idly into the air, and had often completed a day's work that could have been done in less than three quarters of an hour. Schmidt had often said to colleagues that office sleep was the best (Schmidt's opinion of this kind is also to be seen from Enz 1971 (Fig. 2). This suggests that even then – as later in Bonn from 1936 onwards – Schmidt regarded his professional activity as a secondary matter that had to provide for his livelihood and did not impose any responsibility on him, while he gave absolute priority to his own scientific projects. There were other things that led to Horn's disapproval, e.g. that Schmidt used his position to gain advantages for himself by getting old contacts of the Institute to address offprints to himself, thus depriving the Institute's library of what it actually needed; or that Schmidt ensured that dragonflies for the Institute were also offered to him for his private collection; Horn had also received complaints from people to whom Schmidt had promised exchange specimens for dragonflies delivered to him that these had not materialised; finally, the urgent suspicion that Schmidt had appropriated the



**Steueramt, des Teufels Weide:
Namen die der Welt nichts sagen,
Zahlen, Mahnungen, Bescheide . . .
Welch ein Wust, hier platzt der Kragen,
kommt die Seele auf den Hund.
Da seufzt S. mit Wohlbehagen:
"Der Büroschlaf ist gesund !"
Leg dich ruhig auf die Seite;
denn dir droht ja keine Pleite.**

Fig. 2: Caricature of Schmidt sleeping in his office while at work in the Bonn tax department.

second specimen of a rare dragonfly sent to the Institute from China, which was untraceable after a short time. But Horn maintained silence about these incidents until the confidential answer to Koenig's question, so as not to cause lasting damage to Schmidt. Schmidt's situation made precarious by the dismissal was relieved in June 1934 by a scholarship for six months from the "Notgemeinschaft der deutschen Wissenschaft" (= Emergency Alliance of German Science), an association of professors and other scientists

who gave up part of their salary so that research work by unemployed scientists could be financed from it) to study the odonates of Madagascar and Chile (published 1951e and 1941d / 1966 respectively), which shows that his skills in the field of odonatology were sufficiently valued at that time. He then accepted an invitation to an assistant position at the Alexander Koenig Museum in Bonn, which had opened in May, to take charge of the entomological department. He held this position from December 1934 until June 1936, according to his information because of termination by mutual agreement (Schmidt's denazification file); but there must have been more going on, because the founder of the museum, who bequeathed his fortune in his will to the "Alexander Koenig Foundation" for the benefit of the financing of this research institution, decreed that this should be null and void if Schmidt (or a second dismissed member of staff) was ever employed at the museum again, because they had made a sound cooperation impossible by disturbing the social peace (Heyer 2002: 213). His resignation was followed by an alternation of unemployment with time-limited jobs for the Bonn tax department. This time of social uncertainty came to a temporary end with a three-year scholarship from the William G. Kerckhoff Foundation in Bad Nauheim from October 1941 to September 1944, which led to several publications (Schmidt 1943b/1952; 1944a; 1950b; 1951e/1966). This was followed by a grant from the Deutsche Forschungsgemeinschaft (German Research Foundation), which was to last until March 1945, but which did not reach the scholarship holder in the last few months.

This period of Nazi rule was not easy for Schmidt. In 1940 he became a block leader, i.e. someone who was assigned to control a block of houses for the ruling party. The fact that Schmidt was only called in for this during the war suggests that he was expected to pay particular attention to whether the blackout regulations were being observed because of the danger of allied air raids. But when he tried to be dispensed from this task in 1941 because it interfered with his entomological studies, he was conscripted from December 1942 to January 1944 to do night duty 115 times as a gunner in an air defence unit, a task that took up more time and energy than the one from which he had been relieved. In July 1944, he was again commissioned as a block leader and from October was even appointed deputy cell leader (a cell leader was responsible for 4-8 blocks). On 28.12.1944 he suffered a head injury when he was rescued from the rubble of his house which had been hit by bombs, necessitating a month's stay in hospital. On 9 March 1945, the city of Bonn was handed over to the invading US troops. Schmidt had not been able to reach the city centre the day before because of fighting (letter from H. Sachtleben 10-iv-1945). Whether he went to Ottowitz near Karlsbad (today Karlovy Vary, Czech Republic) on his own initiative or rather on the orders of the National Socialist authorities is not known. He might have fled there to his friend Alfred Schöttner (see p. 17) in the hope of greater safety; but from then until the end of the war (8. 5. 1945) he was deployed there in the Volkssturm (\approx "people's storm", a conscription of all men between 15 and 60 in the last year of the war) with patrol duty and entrenchment work. In June 1945 he had to undergo denazification in Bonn, but was apparently employed again at the Bonn tax office. From August 1949 to the end of March 1954 his scientific work was again supported by a scholarship, this time from the Notgemeinschaft der Deutschen Wissenschaft [\approx Emergency Association of German Science]. From August 1955 he then received his pension so that he could live his life as he wished. Details, especially about his collecting trips, mostly to countries on the Mediterranean, and about his stays in Brussels to rearrange the Selys collection, can be found in his autobiography

in Asahina & Heymer (1970: 2-4). Traces of his activity can also be found in the museums of Bamberg, Berlin, Bremen and Jena (Seehausen 2019). In 1967, he moved from Bonn to Kippenhohn (now incorporated in Königswinter). There he was visited by S. Asahina in August 1968 (his third visit to Schmidt; the earlier two took place in the 1950s); it was probably at this time that he initiated the transfer of his collection to the Japanese dragonfly researcher, which was received in Japan in February 1969. On 22. 8. 1969 Schmidt was killed in a car accident when he inattentively crossed a country road on his way to dragonfly sites in the area. He was laid to rest in the small Hessian town of Hungen, where his sister lived with her daughter and son-in-law.

Let us now turn to his work: in the course of his life he authored more than 90 publications, three quarters of them on Odonata. The first of these was his Bonn dissertation "Vergleichende Morphologie des zweiten und dritten Abdominalsegmentes bei männlichen Libellen [Comparative Morphology of the Second and Third Abdominal Segments in male Odonata]" (1915). This theme included researching as many families as possible around the world and considerations on their kinship and evolution. To accomplish this demanding task, in April 1913 he contacted the Swiss scientist Friedrich Ris requesting help and material, which was kindly granted to him. At the end of his request however, Schmidt in turn added an offer: he could provide Odonata larvae or exuviae, the knowledge of which Ris had shortly before (1911b: 36-41) described as desirable in a publication. By this we know that Schmidt was already thoroughly occupied with the rearing of Odonata at that time and accordingly also with the individual development of his research objects (Fig. 3, page 8). Of his later papers, a large part (11) will deal explicitly with dragonfly larvae or exuviae (1919; 1936a, b, d; 1944b; 1950d; 1951b, f; 1952c, d; 1965b).

Moreover, it can be concluded from the offer in the introductory letter that it was important for Schmidt, not to make a request for support without offering something in return. By this letter a professional exchange was established that lasted until Ris' death and led to Schmidt subsequently taking over the editing of Ris' almost completed work on the African *Pseudagrion* species (Ris & Schmidt 1936).

Before Schmidt had finished his dissertation, however, Professor Hubert Ludwig (1852-1913), who had accepted him as a doctoral student and recommended him to Ris, died. Since his successor had little understanding of the dissertation topic and saw it as a waste of time and effort, Schmidt later asked Ris for his judgement on the work, which restored his self-esteem by giving him a good evaluation (letter 28-ii-1916).

But first Schmidt was involved in World War I and had to prepare the printing of his dissertation in his free time during front duty. He also used his stationing in East Prussia and France to observe and collect dragonflies, focusing on registering and identifying local forms. For this purpose he also asked contacts in other parts of the German front. Resulting specimens he also offered to Ris (especially *Calopteryx splendens*, perhaps on special request by Ris, for also in the correspondence of other entomologists with Ris consignments of this species are mentioned), although it was difficult to send them abroad by post at that time.

After the First World War, except from one paper about the swimming of odonate larvae submitted before the end of the war (Schmidt 1919), it took Schmidt a while to return to odonatological topics. This was due to his employment at the Institute for Horticulture

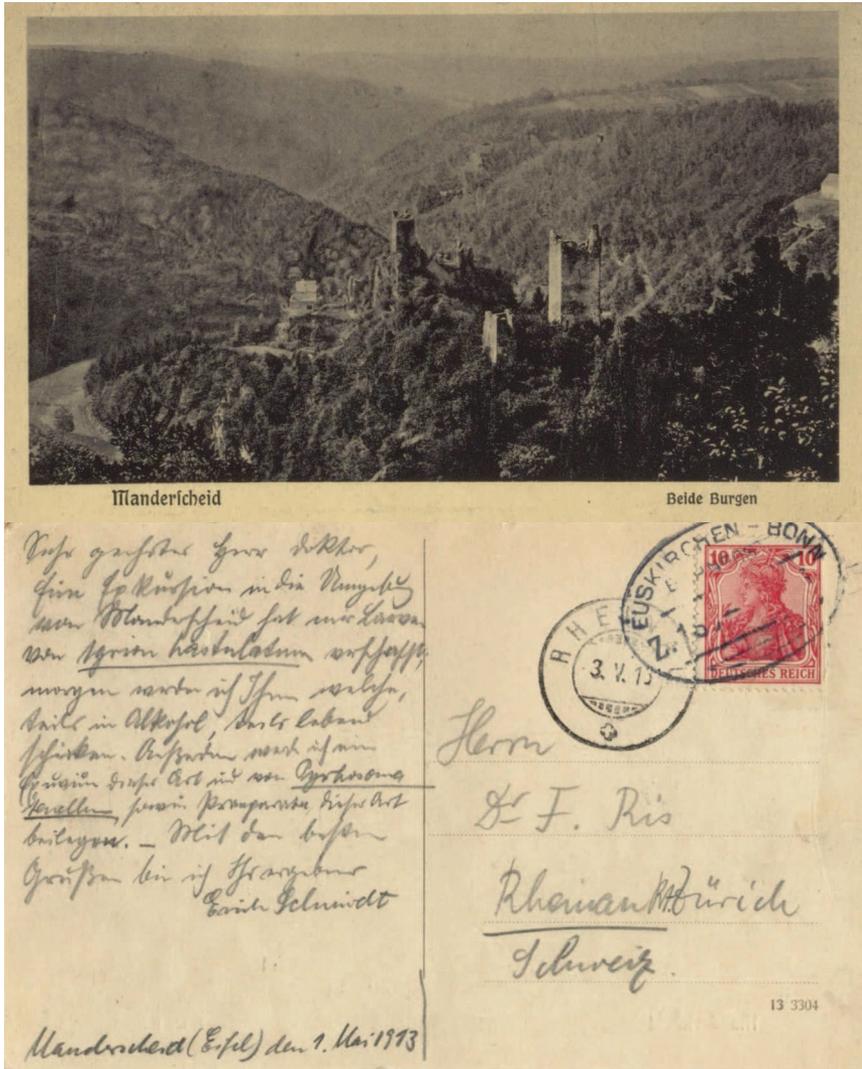


Fig. 3: Postcard from Schmidt to Ris 1-v-1913, announcing a shipment of freshly caught damselfly larvae:

„Sehr geehrter Herr Doktor, |

Eine Exkursion in die Umgebung | von Manderscheid hat mir Larven | von *Agriion hastulatum* verschafft, | morgen werde ich Ihnen welche, || teils in Alkohol, teils lebend | schicken. Außerdem werde ich ein | Exuvium dieser Art und von *Pyrrhosoma | tenellum*, sowie Präparate dieser Art | beilegen. – Mit den besten Grüßen || bin ich Ihr ergebener | Erich Schmidt | Manderscheid (Eifel) den 1. Mai 1913“.

Dear Doctor, |

An excursion to the vicinity of Manderscheid provided me with larvae of *Agrion hastulatum*, | Tomorrow I will send you some, || partly in alcohol, partly alive. |I will also send you an exuvium of this species and of *Pyrrhosoma [= Ceriagrion]tenellum*, as well as specimens of this species |enclosed. – With the best regards || I am your devoted |Erich Schmidt |Manderscheid (Eifel) 1 May 1913.

in Geisenheim (1921-1926), by which his publishing activities of the next five years were determined. In the entire decade up to 1930, only one paper deals with systematics, a treatise discussing the role of lestids (1928a), a topic he had already addressed in his correspondence with Ris in 1914 and later pursued further (1943a; 1958b). The others are focused on the odonate fauna of Central Europe, the first of these a study on behaviour (1926b), others faunistic surveys from the Rhineland, southern Germany or Brandenburg (1926a, c; 1927a, b; 1928b; cf. 1954b). In addition, attention is drawn to species newly detected in Germany (1927a+b, 1951b). These publications look like preparatory work for his fascicle "Libellen, Odonáta" in the "Tierwelt Mitteleuropas [Fauna of Central Europe]" (1929), the publication of which already falls within Schmidt's activity at the German Entomological Institute in Berlin (Fig. 4).

By this work Schmidt again gained international recognition. In the opinion of a leading Austrian



entomologist, this booklet was related to a similar work by Friedrich Ris (1909b), seminal in its time, "like an imago to a larva" (in translation) and, in the judgement of C.H. Kennedy, was "the best illustrated and best organized faunal paper on dragonflies that has been published" (from letters to Schmidt, quoted in the publisher's promotional leaflet from 1962).

Even though dragonflies with European occurrences continue to be the subject of a large part

Fig. 4: Schmidt with catching equipment in the garden of the German Entomological Institute in Berlin Dahlem © SDEI Münchenberg.

of Schmidt's later odonatological treatises (22 of 65), his Berlin period brings something new with it: Schmidt expands his previously Europe-centred collection to include exotic dragonflies. This focus, which was already laid out in his dissertation, had made a prelude in a review of a work on Egyptian dragonflies (1928c), followed by papers containing his first descriptions of new species: an essay on Chinese dragonflies (1931) and a treatise on the odonatological results of the German Limnological Sunda Expedition of 1928/29 (published in 1934a; some information on the scientists involved Hermann 2018). That Schmidt was entrusted with this task was certainly due to the fact that he had become an internationally recognised dragonfly specialist in Germany; on the other hand, it may have helped that he had been in closer contact with A. Thienemann (see p. 44), one of the leaders of the expedition, at least from October 1926.

In the meantime Schmidt had started a very extensive and demanding project, an odonatological bibliography, which in addition to his own excellent card box system, designed according to suggestions from Ris (see letter 31-xii-1918 p. 9), was probably also based on the possibilities of the Berlin Institute, where bibliographical work was among his responsibilities (denazification papers D29). From Schmidt's last letter to Ris (01-i-1931) we learn that he had just mailed older typewritten pages of the bibliography to him with three newly compiled ones. But only a first fascicle of 116 pages was ever printed by a Viennese publisher (1933a), due to lack of money, whereas four more issues were ready in manuscript (Heymer & Schöttner 1967: 258). That was most probably a consequence of the global economic crisis.

After that Schmidt returned to the subject of larvae or exuviae, first for those of European taxa (1936a, b, d; later again 1944b, 1950d, 1951f, 1952c, d, 1965b), then with systematic morphological questions (1933b, 1936c, 1939b, 1951b, 1953a), as already seen in his doctoral thesis (1915).

From the 1930s, a large part of his publications was always devoted to non-European odonates, whether on taxa from or on the fauna of individual regions [Oceania (1938a); Syria and Palestine (1938b), Mariana islands (1941a), Chile (1941c), Peru (1943; repr. 1952), New Britain (erroneously attributed to Eritrea, 1944a), China (1948b), Portuguese Guinea (1951a), Africa (1951 c, d), Madagascar (1951e), Middle East (1953b, 1954a), Iran (1954c), Siberia (1957c), Cameroon (1958a), Morocco (1960a), Afghanistan (1961), China (1963), Burma (today's Myanmar, 1964b), Darjeeling (1968)], and the revision of certain genera [*Zonophora* (1941c), *Microstigma* (1958c)].

Several publications were the result of own research field trips, some of which also led to the description of new taxa [Greece (1948a; 1967a), Corfu (1950c), Italy and Sicily (1952a), Middle East (1953b, 1954a)].

Some of Schmidt's papers deal with questions arising from the history of research, such as his considerations on '*Libellula intermedia*' Rudow (1934c), on the genus assignment of '*Libellula isoceles*' Müller (1950a), on the locality 'Kellemisch' in Turkey, where Loew had collected dragonflies shortly before the middle of the 19th century (1954a), the history and continued impact of the popular scientific work Tümpel (1901) through the thorough continuation by Jacobson & Bianchi (1905) (Schmidt 1957b), information on '*Agrion holdereri*' Förster (1963) and on the new discovery of the male of *Aeshna petalura* Martin (1968).

One topic that he found important over time was the distribution of individual genera or species, trying to trace the place of origin and of the development of subspecies according to size ratios and coloration characteristics [*Platycnemis* (1950b); *Libellula quadrimaculata* (1957a); *Coenagrion caerulelescens* (1959); *Coenagrion puella* (1960a); *Erythromma* (1960b); *Ischnura elegans* (1961, 1967a); *Coenagrion pulchellum* (1964a); *Boyeria* (1965a)]. Since he based his conclusions on Reinig's rule (see p. 70), these are obsolete and subspecies derived from it are no longer valid.

Schmidt also engaged in nomenclatural discussions, such as the retention of the name *Calopteryx* controversial at that time (1948c; 1949; 1952b) or whether it was necessary to change names such as *Thore* or *Petalia* because of preoccupation (1965c). In each of these, he pleaded for changes to be avoided.

It should be added here that the Second World War brought with it other difficulties in addition to those mentioned above (p. 3). Schmidt's treatise on the Odonata collected by an expedition to Peru (1943b) had to be reprinted in 1952, because only a few copies of the first edition had survived the bombing of Hamburg, and the copies of the publications on African platycnemidids (see 1951c: 217) and on the dragonflies of Madagascar (see 1966: 170), printed in January 1945, were burnt with the publisher's storehouse in Neubrandenburg when in April 1945 the Red Army took the place. The former of these was reprinted in a different journal in western Germany (1951c), the re-edition of the other treatise was arranged by C.F. Fraser (Schmidt 1951e), who had seen the pagination proofs of Schmidt's work, while writing a paper on Malagasy dragonflies soon after the war (Fraser 1949a+b): he translated the text into English and placed it in a Malagasy journal; however, he shortened Schmidt's work to the part presenting the dragonfly fauna, while omitting the chapters on sources, climatic zones, sites and



Fig. 5: *Nubiolestes diotima* ♂ Gabon, Monts de Chaillu 20.09.2012. © Jens Kipping. Through Fraser's usurpation of this taxon, Schmidt was alienated from the English odonatologist.

methodology. Contrary to earlier promises, Schmidt did not even get a galley proof of this version, and he received only two copies. In addition, he disliked some incorrect translations and smaller omissions. So he later arranged a German new edition based on the original pagination proofs and self-published it (1966; cf. Heymer 1967). A further disagreement with Fraser arose from the fact that the latter had not notified Schmidt, who was the real author, about the preoccupation of the name *Eolestes* (see p. 21), but had changed it by the misnomer *Nubiolestes*. [Fig. 5]

Schmidt published only in German except for a few publications in English (1938a, 1948c, 1949, 1951b, 1951e, 1951f), most of these in the *Entomological News*. In the epilogue to his German version of the Madagascar work (1966: 170), he regrets having given his approval to its English translation at that time (1951e) and sees the fact that it was not possible to reprint the German text then as foreign linguistic chauvinism. Obviously, he was not aware of how many justified resentments the Nazi regime, in which he had been involved, had aroused with its persecutions of dissenters, its wars and its mass murders. In this disregard for German injustice, he was like many of his German contemporaries.

In the following, Schmidt's odonatological network will be described.

The first to be mentioned here is the Swiss psychiatrist and odonatologist Friedrich Ris. What is known about their relation is found in the letters sent by Schmidt to Ris, a summary of which is given in Seehausen & al. (2023; s.v. Schmidt). In a first letter (08-iv-1913), Schmidt - recommended by his doctoral supervisor - asked the Swiss scientist for material of exotic dragonflies that he could not obtain commercially, and also for a review and additions to his literature list, but in turn offered self reared Odonata larvae, the knowledge of which Ris had described as desirable in a publication (1911b: 36-41). Since Ris responded kindly with advice and help, the letter established a scientific exchange that lasted, with breaks, until Ris' death. In this relationship, Ris assumed a mentoring function towards Schmidt by continuing to provide him with material and advising him on questions of scientific terminology or data collection. Schmidt, for his part, provided larvae or exuviae of European Odonata, sent specimens of *Calopteryx splendens* from various parts of Europe to which he came as a soldier during the first world war or made friends to send them (from Seehausen & al. 2023: 76 is to be seen, that Ris requested specimens of this species also from other contacts), outlined preliminary results of his reflections, made efforts for the return of material Ris had lent elsewhere, offered to draw figures for a publication by Ris or sought a publication opportunity for Ris' planned *Pseudagrion* publication, which he then completed himself after Ris' death. That Schmidt's efforts were appreciated by Ris is to be seen in the publication of the latter on lested larvae (Ris 1920: 4): "Einen großen und wichtigen Teil des Materials verdanke ich der Güte von Dr. Erich Schmidt in Bonn; er hat die Larven teils noch in Bonn gesammelt, teils während des Feldzugs in Nordfrankreich, als er versuchte, sich die furchtbare geistige Öde des Lebens im Krieg durch naturwissenschaftliche Beobachtungen ein wenig zu erhellen [I owe a large and important part of the material to the kindness of Dr. Erich Schmidt in Bonn; he collected the larvae partly while still in Bonn, partly during the campaign in northern France, when he tried to brighten up a little the terrible spiritual bleakness of life in the war by scientific observations]." Perhaps it should also be mentioned that in 1916 Schmidt asked Ris for stamps in which his father was interested as a collector, and that the latter responded to the request, so that until 1926 at the latest, expressions of gratitude for respective items can be found in the correspondence.

Schmidt and Ris met in person at least three times: In the first days of September 1913 Schmidt visited Ris at Rheinau, which led to extensive conversations; in April 1927 they met at an entomological congress at Stettin (see above p. 4), and in May 1930 Schmidt visited him in Rheinau on his journey to Algeria.

Already in his first letter to Ris, Schmidt pointed out that he owed the reference to Ris' interest in odonate larvae to Otto Le Roi (1878-1916), then assistant to Alexander Koenig, museum founder and professor in Bonn (see p. 6). Closer collaboration can be inferred from the fact that Le Roi mentioned to have used Schmidt's collection in his publication on Odonata from Equatorial Africa (1915: 319; 358; 360) and that Schmidt mentioned in other letters that he owed the knowledge of larval localities of rare species to Le Roi, or that he was familiar with almost everything in Le Roi's posthumous work on dragonflies of the Rhineland (1916) through his personal contact. In the 1920s, he traced a set of *Sapho* species, lent by Ris to Le Roi for the publication on Equatorial Africa, in the latter's remaining possessions (15-xii-1926). But this is part of his relationship with Ris.

The next connections to important odonatologists came through the dispatch of Schmidt's dissertation, which partly Ris arranged from neutral Switzerland because of the World War. Addressees were P.P. Calvert (1871-1961), H. Campion (1869-1924), F.F. Laidlaw (1876-1963), K.J. Morton (1858-1940), R.A. Muttkowski (1887-1943), J.G. Needham (1868-1957), R.J. Tillyard (1881-1937), E.M. Walker (1877-1967) and E.B. Williamson (1878-1933). Of these later contacts to Schmidt by Laidlaw (Schmidt 1934a: 317: support with material), Morton (Schmidt 1938b: 135, 1941c: 80), Tillyard, Walker and Williamson (from letters to Ris, Walker also Schmidt 1941d: 237) are known. In 1917, C.H. Kennedy (1879-1952) contacted Schmidt as he was working on a similar topic. F. Förster (1865-1918) was also one of the addressees of the dissertation, who returned the favour with some offprints.

From the letters to Ris we learn that he was in contact with the following scientists in preparation for his work on the odonates of Central Europe (Schmidt 1929) and also received collection specimens from some of them: A. Rosenbohm (1892-1968; on him: Titschack 1971), who had helped Ris by discovering *Aeshna subarctica* in Germany, the Baltic researcher W.E. Mierzejewski (1882-1959; on him Fliedner 1998: 28-30), the Hungarian S. Pongrácz (1888-1945; on him Fliedner 1998: 36) and the Finn K.J. Valle (1887-1956; on him Beolens 2018: 424-425; later correspondence with Schmidt is attested in Valle 1952: 19). The latter contacts reveal a special interest in the dragonfly fauna of the areas bordering Central Europe to the east. This is also indicated by Schmidt's own explorations in the Near East (1952, 1953, 1955) and in Yugoslavia and Greece (1939, 1963, 1964) (see Asahina & Heymer 1970: 3).

In the thirties, new contacts were made.

In the publication 1934a: 317 Schmidt points out having received valuable material not only from F.F. Laidlaw, but also from F.C. Fraser (1880-1963), after whom he named a subspecies (see p. 28). Another taxon, which was named by Schmidt after Fraser later, turned out to be a species already named by Fraser himself (p. 19). Fraser, for his part, named an *Onychogomphus* after Schmidt in 1937 (see p. 19 s.v. *fraseri*). During a stay in England in 1938, Schmidt met Fraser in person. Their acquaintance led to the English edition of Schmidt's work on the dragonflies of Madagascar, which had been destroyed during

the war (p. 11); but later irritations were caused by Fraser's substitution of Schmidt's genus *Eolestes* (see p. 21 and Schmidt 1958a).

Probably during his research on Friedrich Förster's descriptions of *Pseudagrion* he came into contact with L.K. Gloyd (fig. 6). She and her husband in 1937 even sponsored a ten-day research stay of Schmidt at the Brussels Museum of Natural History.

Two one-week trips to England in 1930 and 1938 to Tring and to London led to personal encounters with K. Jordan (1861-1959), D.C. Kimmins (1905-1985), G.J. Arrow (1873-1948), C. Longfield (1896-1991), E.P. Mumford (1902-1977) and F.C. Fraser.

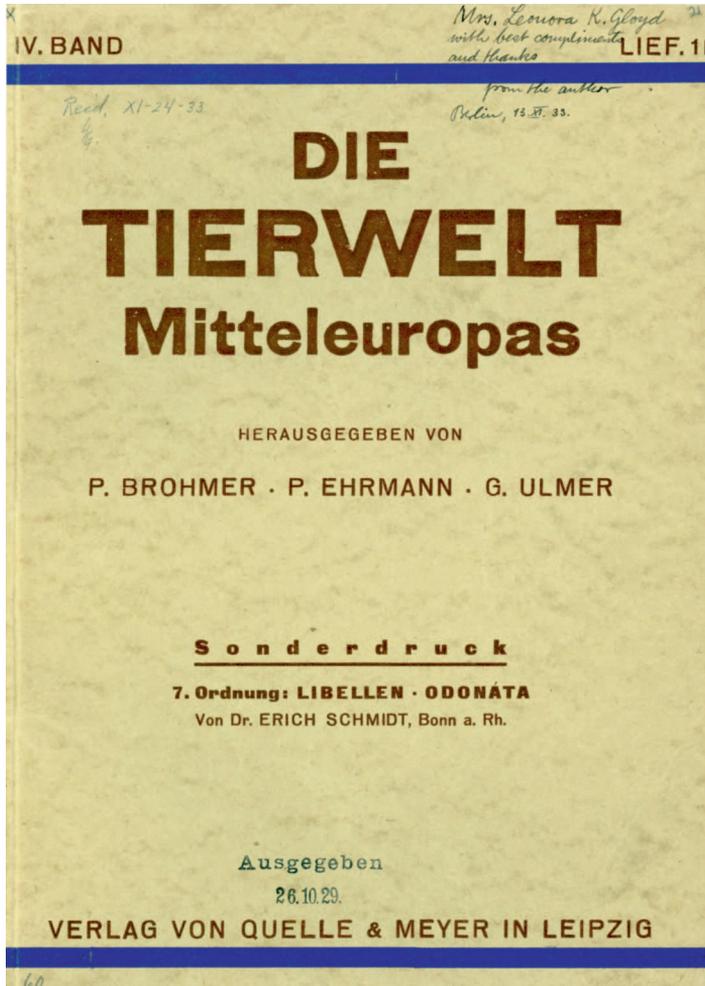


Fig. 6: Schmidt's dedication to L.K. Gloyd on the cover of his 1929 publication on the Odonata of Central Europe: "Mrs. Leonora K. Gloyd with best compliments and thanks from the author. Berlin 13.11.33."

But there is more to the first trip to England, as we know from a letter of Walther Horn to Alexander Koenig (27-i-1936): In his denazification paper Schmidt declared it as “Studienreise [research trip]” at the expense of Lord Walter Rothschild during which he met his lordship and the scientists mentioned above. But the matter was a little different: due to the World economic crisis the funds of the Deutsches Entomologisches Institut began to be sparse. Horn therefore asked Schmidt to look for a different post, as he was not sure whether he could longer afford to employ him. After a while Schmidt informed him he could not find any. So Horn asked his friend K. Jordan at the Tring Museum, whether he might give a position to Schmidt. Jordan however wanted to see the candidate before decision, for which introduction he provided the travel money. After the journey, Horn discovered that Schmidt had extended the presentation trip to the natural history museums in London and Brussels for his own purposes and had made contacts there. He had turned down the position in Tring because he would have had to contract for two years. So Horn had then continued to employ Schmidt in order not to abandon him penniless on the street. Schmidt's narrative in the denazification documents thus served to highlight an international standing, which had not yet been achieved at that time.

Whether Schmidt's naming of an *Ictinogomphus* (1934a: 363; cf. p. 15) and Lieftinck's naming of a *Pseudagrion* after Schmidt (Ris & Schmidt 1936: 122; cf. p. 19) were based on direct contact or on mutual respect due to the respective publications, I could not verify.

As early as 1938, the Swedish entomologist R. Malaise (1872-1972; on him see Vårdal & Taeger 2011) entrusted Schmidt with part of the dragonfly material he had collected in Burma (now Myanmar) in 1933-1935. The evaluation of this material, which led to the dedication of two species to the collector (see p. 34-36), was not published until the paper 1964b due to obstacles.

In that publication Schmidt dedicated a *Ceriagrion* species to the eminent Chinese Odonatologist Hsiu-Fu Chao (1917-2001; on him Zhu & Wilson 2004), who had placed at his disposition an English translation of the key in his publication on gomphids from China for the determination of the Burmese Odonata Schmidt had received before the second World War from René Malaise (p. 25).

Later contact between Malaise and Schmidt is attested in 1958c: 5.

From May to June 1939 Schmidt made a collecting trip via Italy to Greece, on which the Italian odonatologist C. Nielsen (1998-1984) accompanied him for a time. We learn of support by the Italian entomologist C. Conci (1920-2011) to Schmidt (1951a: 125). Subspecies dedicated by Schmidt to the former (p. 55) or to both (p. 50 s.v. *caesarum*) respectively are now considered synonyms of their nominate taxa. The mutual closeness might be seen from the fact, that Conci & Nielsen (1956: 58) named an infrasubspecific variety of *Calopteryx virgo* after Schmidt. So Schmidt's latter dedication might have been thought as a kind of reciprocation.

In 1939, correspondence began with the odonatologist S. Asahina (1913-2010, cf. p. 24), which led to three visits by the Japanese to Schmidt, the bequest of Schmidt's collection (Asahina & Heymer 1970: 4), and a visit to Schmidt's grave in September 1973 (Schöttner to Jurzitza 17-xii-1973).

It is perhaps not surprising that a closer collaboration with the German entomologist Eduard May (1905-1956), whose odonatological work is largely based on Ris' legacy (cf. Reinhardt

2008), cannot be verified. There is a reprint of May (1928), his first work on dragonflies, in the Senckenberg Museum in Frankfurt, which Schmidt received on 31.1.1928, and Schmidt (1934b) gives a critical review of May (1933), a publication on the dragonflies of Germany similar to that of Schmidt from 1929. That means: Schmidt may have seen the younger scientist more as an annoying competitor than as a possibly helpful professional colleague.

For the following era, we need to recall the situation in Europe after the Second World War: there was a cold war between the Soviet Union and the Western victorious powers and the 'Iron Curtain' separated the states under Soviet control from the rest of the world. The easternmost part of pre-war Germany was granted to Russia and Poland, the German inhabitants were expelled from there, the bordering part became the 'German Democratic Republic', which was strictly separated from the western 'Federal Republic of Germany'.

The first to join Schmidt's network after World War II was Karl-Friedrich Buchholz (1911-1967). This is evidenced by his first scientific publication in 1950 (p. 79), in which he described a Peruvian dragonfly species from Schmidt's collection, dedicating it to its owner (see p. 19).

Buchholz, who was born in the Potsdam area and graduated from school in Kassel, studied in Göttingen, Marburg and Bonn before completing his doctorate in Marburg in 1941 on the respiration of dragonfly larvae. After being discharged from army service, he enrolled again in 1942-45 in Marburg for medicine and dentistry. This was followed by voluntary work at the Alexander Koenig Museum in Bonn from 1946 to 1951, which led to permanent employment as a herpetologist. But Buchholz remained connected to odonatology (Roesler 1968). Of his 25 publications, 14 deal with dragonflies. Whether he already established a connection with Schmidt during his studies or not until the post-war period I could not find out. In any case, he also refers to Schmidt's collection in another publication (1955: 119). By this we can see that Schmidt gave access to his collection to others in whom he saw genuine interest. A use of the Buchholz Collection on his part is attested Schmidt 1958c: 4.

Also in the 1950s, Christiane Buchholtz, who had received her doctorate from the Technical University of Braunschweig in 1950 with a dissertation on the behaviour of *Calopteryx splendens* and *C. virgo*, sought contact with Schmidt. She accompanied him on at least one of his trips to the Middle East (1952, 1953 and 1955) and later became a professor of animal physiology at Marburg University, publishing further papers and films on dragonfly behaviour. Her closeness to Schmidt is shown by her obituary of him (Buchholtz 1969).

Other odonatologists who felt close to Schmidt can be seen in the fascicle of the journal 'Deutsche Entomologische Zeitschrift N.F. 14 (III/IV)', which was published somewhat belatedly in 1967 in honour of his 75th birthday. A. Heymer (*1937) was in charge, who published first on dragonflies 1958 when working at the Hamburg Zoological Museum, then transferred to France to the Institute for Marine Research in Banyuls-sur-Mer from 1959 and later to the Laboratoire d'Ecologie Générale in Brunoy in 1965. In 1977, he published an ethological dictionary, which was translated into several languages, and later he devoted himself to research on the pygmies of Central Africa.

Heymer had won the following scientists to contribute to the commemorative publication: N.N. Akramowski (*1907) and E.S. Schengelia, the former known for his survey of the dragonfly fauna of Armenia, the other for that of Georgia, Zivko.R. Adamovic (1923-1998), specialist for the dragonflies of Yugoslavia, who was specially invited by Heymer to Brunoy to complete his contribution for the Festschrift (cf. Andjus 1999; Schmidt had received speci-

mens from him in 1954, see Schmidt 1957a: 95), the Transylvanian Hans Plattner (1930-1997), then working at the Hermannstadt Natural History Museum, Romania, later, after moving to the Federal Republic of Germany in 1969 to Munich, no longer active in dragonfly studies (Schneider 2010), the Hungarian Henrik Steinmann (1932-2009, cf. Papp 2010), later known for his two-volume 'World Catalogue of Odonata'. These were authors who could meet Schmidt's interest in the dragonfly fauna in Eastern Europe and neighbouring areas, mentioned above (p. 13).

Other European contributors were the Frenchman Pierre Aguesse (*1929; cf. Beolens 2018: 5) and the Slovenian B. Kiauta (1937-2022), at that time already for some years a political refugee from Yugoslavia in the Netherlands during the Cold War, later known for his role in the formation of the SOCIETAS INTERNATIONALIS ODONATOLOGICA and its journal 'Odonatologica' (see Inoue 2017, Wasscher & al. 2022)

Participating from overseas were the American B.E. Montgomery (1899-1983), who had initiated the first International Colloquium on Odonatology in 1963 at Purdue University, West Lafayette, Indiana U.S.A., and then played an important role in the founding of the SIO in 1973 (see Fliedner & Endersby 2019: 56-57), and the Japanese S. Asahina (1913-2010, see p. 24), who had visited Schmidt in 1953 and 1957 and to whom Schmidt felt so close that he bequeathed his collection to him.

From (Western) Germany participated A. Bilek (1909-1974; cf. Jurzitza 1975), originally a pianist, known for his discovery of a relict occurrence of the Siberian species *Coenagrion hylas* in the foothills of the Alps, but who then worked as a taxidermist at the Staatssammlung Munich from 1957, G. Jurzitza (1929-2014; cf. Ebert & Heidemann 2014), who later became professor of botany at Karlsruhe and in the 1970s by his popular science publications contributed much to deepening the common knowledge of this order of insects, Eberhard Schmidt (1935-2018; cf. Rudolph 2019; Zessin 2019), who at that time taught didactics of biology at Kiel and subsequently acted as a professor of that discipline in Flensburg, Bonn and Essen. He was one of those who prepared the founding of the SIO in 1971 and in 1979 with others constituted the German dragonfly society GdO (Some remarks by him about Erich Schmidt can be found in Eb. Schmidt 1983). The youngest contributor was Heinrich Lohmann (*1945, cf. Fliedner 1998: 27), who later published on dragonfly systematics with evolutionary and zoogeographical aspects and engaged in founding the International Dragonfly Fund in 1996. Presently he is active in local politics in Lörrach, a town near the Swiss border.

This seems to be the place to have a look at Alfred Schöttner, who coauthored the biographical and bibliographical publication for Schmidt's 75th birthday. He was born in 1907 in the townlet Lichtenstadt (today's Hroznětín) near Karlsbad (today's Carlovy Vary) in Bohemia, then part of the Austro-Hungarian monarchy. After World War I the region became part of the Czechoslovakian Republic, in which the greatest minority (ca. 23 %) were Germans. Schöttner was employed as a teacher in Ottowitz (Otovice) and became a hobby entomologist. He contacted Schmidt in 1935, probably in preparation of his first paper on the Odonata of Bohemia (Schöttner 1937).

In September 1938 by the Munich Agreement the border region of Czechoslovakia was conceded to Hitler's Third Reich, of which thus Schöttner became a citizen.

In 1939 Schöttner's second odonatological paper was published, in which he mentions to have been supported by Schmidt (p. 186). There was a third odonatological publication in

1942. Schmidt and Schöttner met in person in 1941, probably during a journey of Schmidt in July for collecting odonata in the region Wittingau (today's Třeboň) not far from the border with Austria and for visiting the museum at Budweis (today's České Budějovice). This contact might have encouraged Schmidt in 1945 to go to Ottowitz, where he saw the end of the war (see above p. 6). After summer 1945 the Potsdam Conference had decreed that the annexed regions had to be restituted to Czechoslovakia, more that 2.9 million German inhabitants by the Beneš decrees were declared to be public enemies and expelled. So Schöttner had to leave the country with his family. They found refuge in a small village in western Hesse not far from Wetzlar in 1946. There he initially seems to have worked as a translator from Russian (see Schmidt 1954c: 225) before being allowed to return to teaching, which took place not before ca 1950; later he transferred to another village not far away in the same region. In 1952 he published some dragonfly observations made in his home region before the end of the war. Schmidt's bibliography in Heymer & Schöttner 1967 probably was compiled by him due to his familiarity with the scientist and his work.

In 1971 Schöttner published a paper on triple connections in mating odonates in 'Tombo', the first ever odonatological periodical, to supplement a publication by a Japanese author in the same journal a year before. By this we see that he was still looking out for news on Odonata on an international scale.

From letters to Jurzitza we know that Schöttner was also in contact with Schmidt's sister, who in 1970 informed him, that the young man, who had run down Schmidt with his car, claimed damages from her, and that at her invitation Schöttner in 1973 had met Asahina, when he came to show his esteem to the deceased by visiting his grave.

After Schöttner's death, his dragonfly collection he had brought together from Hesse, Baden-Württemberg and Bavaria was given to the Zoologische Staatssammlung at Munich by his family (cf. Seehausen 2018).

As Schöttner had been in letter contact with Schmidt until three weeks before the fatal accident, from his letters to Jurzitza (06-i-1970; 14-i-1970) we know, what the deceased had had in mind for the next time:

In December 1968 Schmidt had informed him that he planned a treatise on the two subspecies of *Coenagrion puella* on Crete, in a manner of speaking a supplement to Schmidt 1960a. Now we know that on Crete there is a rather variable *Coenagrion* species very similar to *C. puella*, classified as *Coenagrion intermedium* Lohmann, 1990 (see Jödicke 2005), which had seemed to Schmidt to be akin to his subspecies *C. puella kocheri* from the Maghreb.

Another project was to supplement Schmidt's synopsis of the Odonata of Central Europe (1929), which after nearly 40 years was desirable. First negotiations of the publishers with Schmidt seem not have come to an end, and after his death Schöttner had been asked to fill in, who – being occupied by other projects – had first asked Lieftinck to take that task, but the Dutch odonatologist declined due to own duties pointing out that there were enough young scientists for this. Next Schöttner asked Jurzitza, if he was not willing to tackle that task, possibly together with Bilek, Eberhard Schmidt or Heymer, who all had contributed to Schmidt's Festschrift three years before. He himself would not be able join in for two or three more years (that means: not until his retirement). But also that solution did not come about. For today's odonatology however, that no longer plays a role.

That Schmidt was valued by many scholars is shown by the eleven dragonfly taxa which were dedicated to him (including a synonym; not included the infrasubspecific form named in his honour by Conci & Nielsen, cf. p. 15), five of them by Asahina, four of these after Schmidt's death based on the collection bequeathed to him.

Here we will have a look at these dedications. They are listed in chronological order.

Philogenia schmidti Ris 1918:79

In his doctoral thesis Schmidt (1915: 91) had referred to a "*Philogenia* sp. (Rio Songo, Bolivia)" and illustrated its penis (tab. 1 fig.62). The respective specimen he had apparently received from Ris, who based his description of the species mainly on 11 ♂♂ and 4 ♀♀ from there. The taxon was dedicated [in translation] "to the meritorious author of that treatise".

Pseudagrion schmidtianum Lieftinck 1936: 122

Lieftinck's wording for the dedication of this *Pseudagrion* species from Timor (p. 124) is: "Herrn Dr. Erich Schmidt in Berlin-Steglitz zu Ehren benannt [named in honour of Dr. Erich Schmidt in Berlin-Steglitz]." But when the first description was published Schmidt had transferred to Bonn already and his time at the Museum Alexander Koenig nearly was over.

In his description Lieftinck points out that Schmidt's species *P. infracavum* is identical to his species *P. nigrofasciatum*. This latter, however, had been described using a discolored series and the basal tooth, which Schmidt had noted as a distinguishing feature of his taxon, had been overlooked. That means Lieftinck dedicated the new species, so to speak, as a consolation for the fact that Schmidt's species was revealed to be younger synonym of Lieftinck's *nigrofasciatum*.

Onychogomphus schmidti Fraser 1937: 163

Ris in his papers had made a note, that a teneral ♀ of *Onychogomphus* at the Vienna museum, collected by C. von Hügel (1796-1870) in India, did not pertain to the species *O. bistrigatus* (Hagen in Selys, 1854). After Ris' death Schmidt had made this note available to Fraser, who in his publication stated: "the teneral female of 1857 is a distinct species, which I now name *Onychogomphus schmidti* in honour of Dr. E. Schmidt, the eminent successor to Dr. Ris." The taxon is now placed in the genus *Scalmogomphus* Chao 1990.

Orthemis schmidti Buchholz 1950: 79

Buchholz had found the female specimen, from which he described the species, in Schmidt's collection. About the dedication he wrote: "Benannt zu Ehren des Entdeckers der Art, des bekannten deutschen Libellenforschers, Dr. ERICH SCHMIDT, Bonn [Named in honour of the discoverer of the species, the well-known German dragonfly researcher, Dr. ERICH SCHMIDT, Bonn]."

Shagomphus schmidti (Asahina, 1956: 155)

Asahina explains his choice of name in this way: "While corresponding with Dr. Erich Schmidt, Bonn a(m) Rh(ein), I learned that he possesses a specimen of new *Gomphus* sent from Manchuria. His specimen seems to be the same as my examples I am now intending to describe, and this was later, in the year 1953, ascertained when I visited him at Bonn.

The following description was thus made under the kind suggestion of Dr. Schmidt, to whom I wish to dedicate the specific name of this insect."

The name of the genus *Shaogomphus* Chao, 1984: 73 is explained thus (p. 72): "The word "Shao" is an abbreviate form of the word "Shaowu" which is a hsien (county) in the Fujian province where the insect (*S. lieftincki*) was collected."

Chlorocypha schmidt Pinhey, 1967: 183

In his treatise on dragonflies from Guinea Schmidt (1951a: 164) had misinterpreted this taxon as *Libellago dispar cordosa* Fraser (1947: 23, a synonym of *Chlorocypha cyanifrons* (Selys, 1973: 493), which got its name because of a blue square on the upper side of its frons [L. *cyanus* = lapis lazuli; *frons* = forehead]); this interpretation Pinhey (1962b: 32) had adopted in his summary of the dragonflies of Africa; but he corrected this error in 1967 (p. 183): "Schmidt recorded this species (under the name *cordosa*) from N.W. Tanganyika and its distribution thus extends from there into the Congo."

Schmidtiphaea Asahina 1978: 43

His dedication of the genus to Erich Schmidt is explained by Asahina thus: "While examining unidentified materials of Erich SCHMIDT Collection, I came across a curious slender Zygopteron with extremely long abdomen and narrow wings. I now believe that this is a species of the Euphaeidae, representing an unknown genus and species, although it looks to have some affinity to the Caliphaeinae, a group I recently treated", and on p. 44: "The generic name is dedicated to the late Dr. Erich SCHMIDT who first studied this specimen."

Neallogaster schmidt Asahina, 1982: 167

In his revision of the genus Asahina stated that Schmidt had mistakenly listed a pair of the new species from his own collection in his summary of a *Cordulegaster* taxon described by Morton in 1916: "In his record of Afghan Odonata, SCHMIDT (1961) included this pair with the other specimens (=? real *Cordulegaster* species) to be *Cordulegaster insignis coronatus*." However, his pair gives typical characteristics of *Neallogaster* now revised."

Coelliccia schmidt Asahina, 1984: 6

This taxon was described in a paper on *Coelliccia* species from Schmidt's collection. Asahina explains his choice of name (1984: 6-7): "Remarks: On the envelope of this species Dr. Schmidt has given a ms (?) name "*bimaculata*" [= two-spotted]. However, the same name has been given to another Assamese species by Laidlaw (1914), so I gave here a substitute name dedicating it to Dr. Schmidt." This statement is followed by a comparison of this species to the similar *C. bimaculata* Laidlaw, 1914.

Chlorogomphus schmidt Asahina, 1986: 23

In his publication on *Chlorogomphus* species from Nepal and Assam Asahina states (p. 11): "In this occasion an interesting lot in the Erich Schmidt Collection taken by Fernand Schmid in Assam was also investigated." The single ♀ specimen, on which the new species was based, was one from this lot.

Enallagma schmidt Steinmann, 1997: 259 [= *Pinheyagrion angolicum* (Pinhey, 1966: 9)]

This last dedication to Schmidt for the time being has a somewhat complicated history. In 1931 in his last publication, the famous Swiss odonatologist Friedrich Ris had named a zygopteran from Angola *Enallagma minutum*; since this name was considered preoccupied because of the species *Trichocnemis minuta* Selys, 1857, which Selys

himself later (1876: 499) tentatively had classified as an *Enallagma* (the species is now placed in the genus *Nehalennia*), Pinhey had renamed it *Enallagma risi* in 1962a: 135, but overlooked the fact that this was a homonym of *Enallagma risi* Schmidt, 1961 from Afghanistan, which had priority. He made up for this mistake by renaming the species *Enallagma angolicum* in 1966 (p. 9).

When the Hungarian scientist H. Steinmann, who had also contributed to the Festschrift for Erich Schmidt in 1967, compiled his 'World Catalogue of Odonata', he overlooked the fact that Pinhey himself had already made a correction in 1966 and named the species *Enallagma schmidti* (l: 1997: 259), thus creating only a younger synonym (cf. van Tol 2006). On p. 257 Steinmann listed *E. angolicum* Pinhey, 1966, citing Davies & Tobin 1984, as a synonym of *E. moremi* Balinski, 1967: 15 [another replacement name for *Enallagma risi* Pinhey, named after specimens collected in Moremi Game Reserve, Bechuanaland], although Pinhey's publication was earlier than Balinsky's, without recognising the connection to *E. angolicum* Pinhey. In 2002 May transferred *E. angolicum* to his new genus *Pinheyagrion* (for which see Fliedner 2021a: 114).

After this summary we will turn to the taxa which Schmidt himself named. It should be noted, that new species from Ris & Schmidt 1936 are always listed as Schmidt, 1936, as Ris had not named those, but only distinguished them by letters.

Schmidts genera

Schmidt was not lucky creating genera, the first of which was

Eolestes 1943a: 106 (homonym)

Gr. Gr. ἠώς [ēōs] = dawn, daybreak/ goddess of dawn; for *Lestes* see p. 65

The history of this taxon, as the author makes it known in a self-published account (Schmidt 1958a), shows that in this case things went unfavourably for him.

In a consignment from the Hamburg Zoological Museum for identification, Schmidt had discovered a male of a new species from Cameroon, that showed features in the wing venation that, in his opinion, placed it as archaic in the evolution (meaning from the dawn) of the Lestidae (today's Lestoidea). This taxon he described during World War II. But in 1938 during a visit to the British Museum of Natural history he already had informed C.F. Fraser about these findings and his publication plans by means of photos of the wing venation. Fraser asked for a copy of the photos, which he received. In 1944 Fraser in ignorance of the actual publication described the genus and species again from the copies of the photographs he had received adding the remark '(Schmidt MSS.)'.

A little later Fraser was informed by the American entomologist T.D.A. Cockerell that the name was preoccupied by *Eolestes* Cockerell, 1940 that he had given to a fossil damselfly from Eocene, which is now classified in the Synlestidae (see Simaika & al. 2020). So Fraser without any regard to Schmidt replaced it by *Nubiolestes* (see p. 66), which, given that the only species of this genus does not occur in Nubia but is restricted to Cameroon, is a misnomer.

Schmidt only learned of this nomenclatural development after the war, as international scientific exchange was very limited during war time. Attempts to object to it in a journal failed; so Schmidt tried to correct this in a private publication in 1958a by the name

Camerunolestes, which however, as Fraser's nomenclatural act was valid, only created a younger synonym.

Paralestes 1951e: 126 (synonym of *Lestes* Leach)

Gr. παρά [para] = beside, near by; for *Lestes* see p. 65

Schmidt separated this genus from *Lestes* due to a character of wing venation, which however is no longer considered sufficient to base a distinct genus on. Of the seven species included by Schmidt into his new taxon only one now is found in another genus than *Lestes*. The species *orientalis* from Sri Lanka is now placed in the genus *Sinhalestes* Fraser, 1951 (name referring to the Sinhalese people from Sri Lanka).

Oligolestes 1958b: 3

Gr. ὀλίγος –ή –ον [oligos] = little, small / few; for *Lestes* see p. 65

The name of this fossil genus refers to the geological era from which the type species dates: "Generotypus *Lestes grandis* Statz 1935, aus dem Mittel-Oligozän von Rott im Siebengebirge, Rheinland [Genotype *Lestes grandis* Statz 1935, from the Middle Oligocene of Rott in the Siebengebirge, Rhineland]". That era got its name when scientists were convinced that there were relatively few kinds of living creatures at that time.

Schmidt's species

() Parentheses around the year of the first description indicate that the (sub)species was described in another genus.

africana, *Nososticta* (1944a): 43 (Fig. 7)

L. *Africanus* –a –um = from Africa

Schmidt published the name in a paper titled: "Die erste afrikanische *Notoneura*-Art [the first African species of *Notoneura*]", the genus name being a younger synonym to *Nososticta*, after a single male specimen from the Berlin Zoological Museum, which according to its label had been collected in "Eritrea / Massawa / 29.12.07". But he already doubted the provenance of the taxon: "Die neue Art steht der von Neu-Guinea bis zu den Salomon-Inseln verbreiteten *N. salomonis* Selys außerordentlich nahe, sodaß Bedenken bezüglich des Fundortes berechtigt erscheinen [The new species is extraordinarily close to *N. salomonis* Selys, which is distributed from New Guinea to the Solomon Islands, so that doubts about the locality seem justified]." According to Theisinger & Richards 2015 (p. 158) Pinhey (1962a) contradicted an occurrence of the species in Africa; he suspected a confusion of Massua in the Solomon Islands with Massawa Erythraea on the label. The taxon currently is known from New Britain and the Solomons (cf. Gassmann 2015). (see addendum p. 92)

albotibialis, *Onychogomphus forcipatus* 1954a: 59

L. *albus* –a –um = bright, clear / white, pale + *tibialis* –is –e = pertaining to the shin-bone (tibia)

The taxon is described as "strukturell von mittel- und nordeuropäischen Stücken (Nominatform) verschiedenen Form mit hellen Streckseiten der Tibien [a structurally different form from central and northern European specimens (nominated form) with pale extensor sides of the tibiae]." However, the white extensor sides of the tibiae are not a reliable



Fig. 7: *Nesolestes africana*. Schmidt's doubts about a provenance of the species from Africa were later confirmed. Photographer: Mélanie Turiault, © MfN Berlin.

criterion for distinguishing the subspecies from the nominate form (see Dijkstra 2006: 200).

angydna, *Nesolestes* 1951e: 142

Schmidt's explanation for the name is (p. 144): "The name *angydna* is the native Madagascar name for « Libelluline »."

apicale, *Pseudagrion* 1951e: 257

L. *apicalis* –is –e = pertaining to the extreme end (*apex –icis* = point, top, summit, tip)

The feature, by which the male is distinguished from congeneric ones is (p. 217): "Superior appendages longer than segment 10, in side view pointed at apex and without a notch (fig. 79 a-c)".

approximatum, *Pseudagrion* 1951e: 230

L. approximatus –a –um = drawn near (this past participle is not quite correct linguistically)

The name pertains to the superior appendages of the males which are “viewed from the side slightly broadened distally, deeply and closely notched at the apex” (key p. 216). By this feature the species is distinguished from *P. divaricatum* (see p. 26).

asahinai, *Libellula quadrimaculata* 1957a: 83

The single female specimen, on which Schmidt based his taxon, had been collected by the eponym on Hokkaido. Schmidt states: “Diese japanische Form scheint in der Literatur noch nicht erwähnt zu sein, und ich schlage vor, sie zu Ehren des besten Kenners der ostasiatischen Libellen, Herrn Dr. Syoziro Asahina-Tokyo, zu nennen [This Japanese form does not seem to be mentioned in the literature yet, and I propose to name it in honour of the best specialist of East Asian Odonata, Dr. Syoziro Asahina-Tokyo].” Already in a postscriptum to his next publication however Schmidt (1957b: 214) stated, that Asahina had informed him that this taxon was a synonym of *Libellula quadrimaculata orientalis* Belyshev 1956 [*L. orientalis* –is –e = Eastern (in relation to *L. q. quadrimaculata* Linnaeus 1758)]. But in Schmidt (1961: 420) he re-establishes this subspecies, having noted a distinguishing feature not mentioned in Belyshev’s description. Asahina (1989) confirmed this view of the diversity of Schmidt’s subspecies *asahinai* from Belyshev’s *orientalis*; whereas “he didn’t agree all of the explanation of E. Schmidt, he acknowledged the subspecies *asahinai* as valid” (A. Sasamoto, in litt.).

Syôziro Asahina (1913-2010) was a distinguished Japanese odonatologist and specialist in cockroaches. It was he who initiated the Japanese Society of Odonatology in 1958 and founded its journal ‘Tombo’ (the world’s first periodical dedicated to odonata exclusively). 1981- 83 he served as President of the Societas Internationalis Odonatologica.

Already in his youth, he had made collecting trips to Hokkaido, southern Sakhalin and Taiwan (then under Japanese control) as a companion of his father. Having graduated from Tokyo University in 1938, he began a career in medical entomology, interrupted by service in Manchuria during the Second World War. Following a period of unemployment, in 1950 he was appointed to the Institute of National Health at Tokyo, becoming head of the Department of Medical Entomology in 1952. This post he held until his retirement in 1979. He had received his doctorate from Hokkaido University in 1953 with a thesis on *Epiophlebia superstes*. Of his nearly 1000 entomological publications, many are based on odonatological field studies in Japan and East or Southeast Asia. Schmidt not only named this taxon after him, but later also bequeathed his dragonfly collection to him [cf. Beolens 2018: 24-25].

boettcheri, *Coelicerca* 1951c: 202

The reason for the dedication was that the eponym had collected Schmidt’s material housed in the Zoological Museum Berlin: “Bina luan, Philippinen, 12 ♂♂ adult, davon 4 ohne Abdomenende, 1 ♀ juv., leg. G. Böttcher [Bina luan, Philippines, 12 ♂♂ adults, 4 without abdominal end, 1 ♀ juvenile, collected by G. Boettcher].”

Georg Boettcher (1890-1920), who was described in the obituary of a Berlin entomological society, of which he had been second of chair, as “one of our most capable and hard-working members”, had been sent to the Philippines, then a colony of the

US, shortly before World War I; so he could not return to Berlin before 1919. There he died soon after having been "involved in communist affairs" (cf. Weidner 1964: 158). His collections, which had been left behind in the Philippines as a surety for his travel expenses, were only released and brought to Europe with the help of Friedrich Ris (Beolens 2018: 52; Fliedner 1921a: 8).

celebensis, *Ictinogomphus* (1934a): 357

L. *Celebensis* –is –e = pertaining to Celebes (today's Sulawesi)

Schmidt (p. 356) remarks about the representatives of the genus *Ictinogomphus* in the Indo-Pacific region: "Auf Borneo (*acutus*), Philippinen (*tenax*) und Celebes (*celebensis*) verteilen sich die im ♂ Geschlecht strukturell verschiedenen Formen, die darum als Arten anerkannt sind [On Borneo (*acutus*), Philippines (*tenax*) and Celebes (*celebensis*) are distributed forms which structurally differ in ♂ sex and are therefore recognised as species]."

chaoi, *Ceriagrion* 1964b: 152

In the description of the species Schmidt does not give any reason for his dedication, but on p. 141-142 he mentions Chao's merits in the investigation of the Gomphids of China and a valuable key of those for him which Chao had placed at his disposal; about this key Schmidt continues: "von dem ... ich den imaginalen Teil ... hier mit geringen Änderungen ... wiedergebe in der Hoffnung, diesen höchst wertvollen Schlüssel der westlichen Welt zugänglich zu machen [of which ... I reproduce the imaginal part ... here with slight changes ... in the hope of making this most valuable key accessible to the Western world]." So Chao's assistance for Schmidt's publication has led to the naming of the new species.

The outstanding Chinese odonatologist Hsiufu Chao (Xiufu Zhao) (1917-2001), born in Fuzhou in Southeastern China, already in his youth used to collect insects. In 1935 he began studying biology at the Yenjing University at Beijing. First his main focus was on insect pests in fruit trees. But from one of his professors he received a copy of J.G. Needham's 'Manual of the dragonflies of China', which led him to odonatology and taxonomy as well. After some time of postgraduate studies at Quilu University at Qingdao in Northeastern China concerning vermin prevention in 1942 he taught at the Fukien Christian University at Shaowu, where also the odonatologist and collector Tsing-Chao Maa was a lecturer then. From 1948 to 1951 he went to the USA achieving a master's and a doctorate degree at the University of Massachusetts with major publications on Chinese Odonata. Back in China, which had in the meantime been taken over by the communists under Mao Zedong, his main focus at Fujian Agricultural University was again plant disease prevention and pest control according to the guidelines of the government. So most of his over 50 odonatological papers and publications were published after 1978. His importance for odonatology is shown by the fact that 15 dragonfly species have been dedicated to him (for more see Zhu & Wilson 2004; Beolens 2018: 77-78).

contraria, *Allocnemis* (1951d): 236

L. *contrarius* –a –um = opposed / opposite, contrary

In the first description it reads: "Trotz der Penisgleichheit mit *Chl(ocrocnemis) nigripes*

halten wir es für unwahrscheinlich, daß es sich um eine Ausfärbungsstufe handle, da die App. schwarz sind [Despite the likeness of the penis to *Chl.* (= *Allocnemis*) *nigripes*, we consider it unlikely that this is a coloration stage, as the app. are black.], that means: in contrast to that morphological likeness Schmidt (correctly) is convinced that his single male specimen pertains to a different, undescribed species.



Fig. 8: *Allocnemis contaria* ♂ Cameroon, Nkoelon 13.06.2008 © Jens Kipping. The black appendages, by which Schmidt distinguished the species from *Allocnemis nigripes*, are clearly visible.

diotima, *Nubiolestes* (1943a): 107 [see fig. 5, p. 11]

Diotima [Gr. Διοτίμα = honouring (or) honoured by Zeus] is a figure from literature introduced by Plato in his Symposium. She is said to be a priestess from Mantinea, a philosopher and a seer, who teaches about the character of love. Whether she was a real person or only a literary one is not possible to differentiate. A photograph of Schmidt's type specimen can be found in Henningsen & al. 2020 (fig. 2).

dispar, *Pseudagrion* 1951e: 247

L. *dispar* = unequal, unlike

At the end of the first description it reads (p. 250): "The name of the species is derived from the unequal character of the branches of the superior anal appendages". The species is already mentioned in Fraser 1949b: 31 (PSMD 3). Fraser (1949a: 7) listed specimens of this species as PSMD 3 from: Forêt de la Mandraka, 75 km., east of Tananarive.

divaricatum, *Pseudagrion* 1951e: 223

L. *divaricatus* –a –um = stretched apart, spread out

The name refers to the tips of the bifid superior appendages: "Superior appendages

viewed from the side distally broadly widened, with a broad shallow notch at apex." By this feature the species is distinguished from *P. approximatum* (see. p. 24).

ebneri, *Ischnura elegans* 1938b: 142

Schmidt's publication was largely based on specimens collected by the eponym (p. 135): "Von den vorliegenden vier Sammlungen aus Palästina enthält die im ganzen 58 Stücke zählende von Prof. Dr. Richard Ebner, Wien, die im Juli 1928 erbeutet wurde, auch solche aus Syrien vom August 1928 [Of the four collections from Palestine, the one by Prof. Dr. Richard Ebner, Vienna, with a total of 58 specimens, which had been captured in July 1928, also includes those from Syria from August 1928]."

The publication of the species "machte zu ihrer Kennzeichnung eine schon lange erwünschte Revision der *Ischnura elegans* - Gruppe notwendig, die anderwärts veröffentlicht wird [required a long-desired revision of the *Ischnura elegans* group for its identification, which will be published elsewhere]" (p. 142). That was an advance notice of Schmidt 1967b, one of his last papers

This taxon is widely regarded as a synonym of the nominal species (e.g. Schneider & al. 2018: 18, because it "cannot be accurately defined due to uncertain and unstable diagnostic characters"), but is provisionally accepted as Near Eastern subspecies in Onishko & Kosterin 2022: 582.

Richard Ebner [1885-1961] was an Austrian entomologist. After completing his studies in natural sciences, he taught at a secondary school in Vienna from 1919. Following his interest in Orthoptera, he undertook numerous research trips between 1910 and 1938, which took him not only to the Netherlands, Portugal and Norway, but also to almost all the countries around the Mediterranean, to Iran and Sudan. His large collection is now housed in the Natural History Museum in Vienna (Beier 1963).

elisabethae, *Pyrrhosoma* 1948a: 72 [see cover picture]

Schmidt explains the dedication of the species as follows (p. 69): "Die neue Art wird Fräulein Elisabeth Ris in Goldbach Küsnacht, Kt. Zürich, Schweiz, Schwester des bekannten, verstorbenen Altmeisters der Libellenforschung Herrn Dr. Fritz Ris, zu Ehren gewidmet in Anerkennung ihrer außerordentlichen Verdienste um die Linderung deutscher Nachkriegsnöte [The new species is dedicated in honour of Miss Elisabeth Ris in Goldbach Küsnacht, Canton of Zurich, Switzerland, sister of the well-known, deceased expert in dragonfly research, Dr. Fritz Ris, in recognition of her extraordinary services to the relief of German post-war hardships]."

Elisabeth Ris (1872-1959) was the younger sister of the Swiss psychiatrist and outstanding odonatologist Friedrich Ris. From 1898 until 1931 she lived with her mother in the mental home at Rheinau, where her brother was director, and she supported him with housekeeping, help in the clinic and with assistance in the management of his entomological collections. After his death, she took care of the distribution of his collections and the entomological library according to his will. She spent the following years of her life in a village in the canton of Zurich (see Wildermuth & Weibel 2018).

feuerborni, *Aciagrion* 1934a: 344

In the first description Schmidt 1934: 346 stated: "Die Art wurde zu Ehren von Herrn

Prof. Feuerborn-Münster, einem der Expeditionsteilnehmer, benannt [The species was named in honour of professor Feuerborn from Münster, who has participated in this expedition].” The expedition in question was the ‘Deutsche limnologischen Expedition’ to the Sunda Islands in 1928-29, for which Schmidt evaluated the odonatological results. In his acknowledgements on p. 316 Schmidt expressly thanks Feuerborn, that he (as well as expedition leader A.F. Thienemann, see p. 45) had paid special attention to dragonflies at his request and had provided him with the rich material and shown patience for delays in the evaluation. The eponym, the German zoologisch Heinrich Jacob Feuerborn (1883-1979), first devoted himself to limnology, later - in the hope of thereby obtaining a full professorship - he engaged himself in the Nazi party (more about him: Beolens 2018: 133, who erroneously places him for the years 1936-1945 at Munich, while he really was employed in Berlin).

***filosa*, *Ischnura* 1951e: 204**

L. filum = thread, string, filament + *-osus -a -um* = full of ... / provided with ..., spectacular by ...

The name refers to a process of the ♂ inferior appendages: “Inferior appendages short, rather pointed, with long cordlike, dorsally upright process standing at posterior border.”

***fraseri*, *Pseudagrion pruinosum*, 1934a: 348**

The subspecies is distinguished from the nominal species and the subspecies *ranauense* (see p. 40) by the shape of the yellow stripe in the temporal area near the eyes. Schmidt explained his choice of name thus: “Die Rasse wird Colonel Fraser zu Ehren benannt, der als erster auf solche Unterschiede bei dieser Art aufmerksam machte [The race is named in honour of Colonel Fraser, who was the first to draw attention to such differences in this species].” It might be noted that Fraser had assisted Schmidt with material for this publication on the Sundan region (1934a: 317).

A little later, Fraser (1937: 163) apostrophised Schmidt as “eminent successor to Dr Ris” when he named an *Onychogomphus* species (now according to Paulson & al. 2022 classified as *Scalmogomphus*) after him. Schmidt had made available to him a note by the late Ris about the hitherto incorrect assignment of a female in the Vienna Natural History Museum, which therefore had to be renamed.

After the war, Fraser ensured that Schmidt’s work on the dragonflies of Madagascar, the whole edition of which had been destroyed at the printer’s storehouse in April 1945, could be published by translating it into English (Schmidt 1951e). On the later irritation between the two, see p. 21 s.v. *Eolestes*, and Schmidt 1958a and 1966: 170.

Frederic Charles Fraser (1880-1963) was one of the most prolific odonata taxonomists, surpassed only by Selys and Lieftinck. After his medical training in England, he obtained his MD in Brussels in 1904. Two years later he joined the medical service in India, where he held various posts until 1933. Meanwhile, in addition to his professional activities, he devoted himself to researching the Indian dragonfly fauna. After that, he retired to private life to devote himself entirely to his interest in odonates from all over the world (for more see Beolens 2018: 141).

georgifreyi, *Ceriagrion* 1953b: 1

The dedication of the species is explained thus (p. 5): "Die neue Art wird benannt zu Ehren von Herrn Konsul Georg Frey in München, dem hochherzigen Förderer entomologisch taxonomischer Studien [The new species is named in honour of Consul Georg Frey in Munich, the generous promoter of entomological taxonomic studies]."

Georg Frey (1902-1976) was the heir and head of a Munich textile factory that profited from Aryanisation and government contracts during the Third Reich. He was an enthusiastic coleopterist who also became known for his taxonomic work. Through his own collections, sending others out on expeditions and through purchases, he amassed a beetle collection of roughly 3 million specimens, including about 20,000 type specimens. He made these available to the public in his own museum, for which he also created its own series of publications. After his death, his widow sold the collection, which was actually intended for the Munich State Collection, to the Basel Museum of Natural History, where it is today after long legal controversies (Scherer 1976; Dietschi 1995).

giganteum, *Pseudagrion* 1951e: 239

L. *giganteus* –a –um = giant, huge, enormous

Schmidt characterises his single female specimen: "The largest species of the Madagascarian *Pseudagrions*; it was not possible to find a male to match it which might belong to it."

gigas, *Pseudagrion* 1936: 33

L. *gigas* = giant (borrowed from Greek)

In the first description it reads: "In Größe und Habitus am nächsten *spernatum* und *natalense* [Closest in size and habitus to *spernatum* and *natalense*]." Schmidt's data for these species are (translated; in mm): sp. ♂ "abd. 30.5; hdw. 22" ♀ "abd.31 hdw. 25" / nat. "♂: abd. 33; hdw. 24. – ♀ 35; 26.5." But these measurements are not the largest in that publication; several larger species are recorded. So there probably is another explanation of the name. At the end of the description you will find the statement: "Von R. Martin 2 Exemplare erst *hemicolon* bezettelt und dann gestrichen und in *angolense* umgeändert. Es ist beides nicht. Am nächsten dürfte der Art, deren ♀ leider fehlt, bei *grande** (= *bicoerulans* Martin) stehen [By R. Martin 2 specimens first labelled *hemicolon* and then cancelled and changed to *angolense*. It is neither. The closest to the species, whose ♀ is unfortunately missing, is probably *grande** (= *bicoerulans* Martin)]." So probably Schmidt looked for a name semantically near to Sjoestedt's name *grande* (Lat. = large, great, grand) to emphasise the closeness of the species. [By the way: the measurements of a male of *bicoerulans* on p. 37 are given as abd. 39; hdw. 29) and Schmidt mentions that Ris did not know the name given by Martin in 1907, but only the younger synonym authored by Sjoestedt in 1909].

glaucoideum, *Pseudagrion* 1936: 66

Gr. γλαυκός –ή –όν = light blue, grey + med. L. *-oideus* –a –um = pertaining to, associated with

The name points to the similarity of the taxon with a species described by Selys sixty years before: "Die Art steht in Thoraxzeichnung, Beinen, Gestalt sehr nahe I (*glaucescens*), doch sind die App. sup. erheblich verschieden [The species is very close to I (Ris' pro-

visional identifier for the species {P.} *glaucescens* {L. = becoming grayish blue}) in thorax markings, legs, shape, but the superior appendages are considerably different].“

grigorievi, *Libellula quadrimaculata* 1961: 420

Schmidt described this taxon from male specimens collected in Afghanistan, most of which show a yellow moon-shaped border pattern also on segment 9. He gives as the reason for his choice of name (p. 420): “Grigoriev (1905 a, p. 217f.) beschreibt ein solches ♂ von Tar-dzhol am Unterlauf des Ili-Flusses in Semiretshie. Die Übereinstimmung verdient trotz der weiten Entfernung, aber innerhalb Zentralasiens, bei dem an sich knappen Material hervorgehoben zu werden, was am besten durch Benennung der Form geschieht, da wir einen genetischen Zusammenhang zwischen den Lokalitäten vermuten [Grigoriev (1905 a, p. 217f.) describes such a ♂ from Tar-dzhol on the lower reaches of the Ili River in Semiretshie. Despite the long distance, but within Central Asia, the correspondence deserves to be emphasised in the material, which is scarce in itself, and this is best done by naming the form, since we suspect a genetic connection between the localities]”.

According to Beolens (2018: 161) Boris Grigoriev († 1913) was an entomologist in Saint Petersburg who published about dragonflies around 1900.

hamulus, *Pseudagrion* 1951e: 220

L. *hamulus* = a small hook

The name refers to the males superior appendages which in the key are described thus (p. 214): “Superior appendages notched at the apex, the dorsal lobe hooked” and in the description of the species (p. 223): “Superior appendages black, shaped like the hamules of many Libellulines.”



Fig. 9: *Orthetrum hintzi* ♂ Gabon, Lekoni, Bateke Plateau 28.01.2012 © Jens Kipping. Schmidt owed about half of the material on which he based his publication on the dragonflies of Guinea-Bissau (Schmidt 1951a) to Eugen Hintz, who had collected it there in 1926-27. Thus his dedication to the new species is quite understandable.

hintzi, *Orthetrum* 1951a: 178 [fig. 9]

In the description of the species Schmidt states: "Benannt zu Ehren des Sammlers E. Hintz – Berlin [Named in honour of the collector E. Hintz – Berlin]."

Eugen Hintz (1868-1932) was born at Danzig. After his training as an engineer and some activity in this profession, he devoted himself to entomology, especially that of the curculionids and cerambycids, of which he described a number of species. He took part in several scientific expeditions that led him to various regions of Africa, but also to Melanesia, collecting natural history specimens and ethnological objects. He died in Berlin in 1932 from the late effects of a tropical disease. The specimens, on which Schmidt based the species, were collected in Guinea-Bissau (then a Portuguese colony) in 1926/27 (cf. Beolens 2018: 183).

javicus, *Burmagomphus williamsoni* 1934a: 368

L. javicus –a –um = from Java (Schmidt's own attempt of to form an adjective to the name of the Island)

The specimens from which Schmidt described this species were all from Java: a ♂ and a ♀ collected by Fruhstorfer, at the Zoological Museum Berlin, and a ♀ from Western Java, in the collection of M. Lieftinck at Buitenzorg.

kerckhoffae, *Protolestes* 1949: 14

The name is first introduced in Fraser 1949a (p. 14). Schmidt (1951e: 153) explains the choice of name as follows: "The species is named in honour of Mrs T. Louise E. Kerckhoff of Los Angeles, California, the generous founder of the William G. Kerckhoff Foundation in Bad-Nauheim".

Mrs Kerckhoff (1859-1946) was the widow of the American entrepreneur William G. Kerckhoff (1856-1929), who had made a fortune in the timber industry, shipbuilding and shipping, and the electricity industry in California. In the last years of his life, the couple had spent several spa stays in Bad Nauheim and after his death, in accordance with his last will, she had founded an institute for cardiac research and a foundation for the promotion of science (cf. Beolens 2018: 216). Several of Schmidt's publications up to 1951 were sponsored by this foundation.

klapperichi, *Cephalaeschna* 1961: 416

In his treatise on the dragonfly yield of three Afghanistan expeditions, Schmidt (1961: 399) describes Klapperich's as the most productive with 908 imagines from 43 species, 30 of which were absolutely new, the first of these being "*Cephalaeschna Klapperichi* n. sp., aus [from] Achmede Dewane in Nuristan."

Johann Friedrich Klapperich (1913-1987) was a German entomologist and preparator, specialising in coleopterology, who worked at the Museum Alexander Koenig in Bonn until 1952. Later he served the Food and Agriculture Organisation in Jordan and the German Wirtschaftshilfe in Iran. His extensive collecting activities, first on behalf of the museum, later on his own initiative, took him to many countries, also after his retirement in 1975. More than 1000 new species have been described from the material he collected by taxonomic specialists; more than a hundred coleopteran species are named after him. Part of his collected material is still at the Museum Alexander Koenig, another part was sold by him to scientists; the ca 200 000 specimens, which he had kept himself, were

acquired by the Stuttgart Natural History Museum after his death (Roer 1987, Baumann & Köhler without year).

klugi, *Zonophora calippus* 1941c: 81 [Fig. 10]

In his description Schmidt states (1941c: 86): "Die Unterart wurde zu Ehren des geschickten Sammlers Klug in Iquitos benannt [The subspecies was named in honour of the skilful collector Klug in Iquitos]." The species *Zonophora calippus* had been named by Selys (1869: 199) with a manuscript name by H.W. Bates (1825-1892), who had collected the type specimen in Brasilia. *Callippus* is the Latin version of Gr. Κάλλιππος [= Kállippos, a name meaning 'beautiful horse']. What made Bates suggest this name we do not know; perhaps it might have been a reference to the Greek astronomer Kallippos (c. 370-300 B.C.) from the circle around Plato and Aristotle.

Wilhelm G. Klug (later Guillermo Klug) (1875-1945) was a German naturalist, who moved to Peru in 1924, where he earned his living by collecting botanical and entomological material, which he sold to European and American scientists or collections. In the first years he worked for the geologist Harvey Bassler (1882-1950), who carried out explorations in southern Peru on behalf of Standard Oil Company, and later also for the Dresden-based insect sellers Staudinger & Bang-Haas (Lamas 1980: 28; Hoffmann 2009: 92). Records of his botanical explorations in southern Colombia are held at the Smithsonian and at New York Botanical Garden (cf. Morton 1931; <https://plants.jstor.org/stable/1-0.5555/al.ap.person.bm000034925>; the year of death there is not correct. That he is mentioned as a Peruvian mining engineer in Woodward 1941 might be due to his connection with H. Bassler). Schmidt himself in his collection held material collected by Klug (1943b passim). To him were dedicated odonate taxa by Kennedy, Cowley and Schmidt, but he is also eponym of butterflies and beetles from Peru and elsewhere as well as of some plants.



Fig. 10: *Zonophora calippus klugi* a ♂ Brazil, Rondonia Fazenda Rancho Grande © R.Garrison b Envelope of a typical specimen at the Senckenberg Museum Frankfurt © Malte Seehausen.

leonorae, *Protolestes* 1949

The species was first described in a key by Schmidt published in Fraser 1949a (p. 15). In Schmidt's final publication (1951e: 152) the eponym is presented thus: "The species is named after Mrs Leonora K. Gloyd of Ann Arbor, Michigan, U.S.A."

Leonora Katherine Gloyd (née Doll) (1902-1993) was an American odonatologist. She acquired a MSc in 1925 at the Kansas State Agricultural College and in the same year married the herpetologist H. K. Gloyd, whom she assisted in his work. In 1929 E.B. Williamson gave her a job as his assistant, when he moved to Ann Arbor passing on his collections and his library to the Museum of Zoology. By working with the index cards and comparing them with the collection specimens, she gained the thorough knowledge of species and taxonomy that marked her further work. After Williamson's death, she continued to look after the collection and even supplemented it with her own collecting activities, although family matters and her own professional activities moved her away from Michigan in 1936. She continued his project to classify the genus *Argia* until shortly before her death, but she could not complete it either. In 1977 the International Odonatological Society awarded her honorary membership on the occasion of her 75th birthday (van Brink & al. 1977; Fliedner & Endersby 2019: 40-41).

The first indication of a connection with her is the handwritten dedication from 13-xi-1933 to her on a copy of Schmidt (1929; see fig. 10 p. 14) 'with best compliments and thanks', presumably in response to her support mentioned in Ris & Schmidt (1936: 9): "Miss (sic) Leonora K. Gloyd in Ann Arbor, Michigan, USA, untersuchte auf des Herausgebers Bitte die Typen der beiden von Förster für Madagaskar beschriebenen Arten *Ps. allicorne* und *sikorae* [Mrs Leonora K. Gloyd in Ann Arbor, Michigan, USA, examined the types of the two species *Ps. allicorne* and *sikorae* described by Förster for Madagascar at the request of the editor]."

The dedication of the species was probably intended to show his gratitude for her help in the preparations of the paper with the comparison of *Protolestes* specimens sent by Schmidt (1951e: 148-49) with those from Förster's collection, who had established that genus, as well as for the previous loan of specimens from the Williamson collection for his work on the genus *Zonophora* (see Schmidt 1941c: 81) and for her support for his paper on the Odonata of Peru (1943b: 231, 235, 247, 248).

L.K. Gloyd and her husband also financed a 10-day study trip of Schmidt to the Brussels Museum in August 1937, which included a comparison with Selys' types (for the result see Garrison & Ellenrieder 2015: 18).

lieftincki, *Ictinogomphus australis* (1934a): 359 [see fig. 18 p. 64]

Schmidt (1934a: 363): "Herrn M. A. Lieftinck zu Ehren benannt [Named in honour of Mr M. A. Lieftinck]". On the page before he had explained: "Lieftinck (Revue Suisse Zool. 40, 1933, p. 434) nimmt an, daß in Neu-Guinea eine veränderte Form des *Ictinus australis* Selys vorkommt. Es ist möglich, daß die vorliegende Form dieselbe ist [Lieftinck (...) assumes that a modified form of *Ictinus australis* Selys occurs in New Guinea. It is possible that the present form is the same]".

Maurits Anne Lieftinck (1904-1985) was an outstanding Dutch odonatologist. After completing his school education and biology studies in his home town Amsterdam,

he accepted a position as an entomologist at the Buitenzorg Zoological Museum (since 1950 Bogor Zoology Museum) on Java (then part of the Dutch East Indies, like the whole of today's Indonesia). In 1939 he became head of that institution, which post he held until 1954. He suffered permanent damage to his health when he was interned by the Japanese during the Second World War (1942-1946). After having returned from Indonesia in 1954 he was appointed Curator at the Museum of Natural History in Leiden, where he became head of the so-called "neuropteroid" Department. There he reorganized the odonate collection, to which he added his own extensive collection from Southeast Asia, which also included many specimens from the rest of the world that he had obtained by exchanges with other specialists. Before that in 1925-26 he had already gained a reputation as the author of 'Odonata neerlandica'. He named more than 500 odonate species and 23 genera; by this he is second only to Selys himself (Endersby & Fliedner 2015: 76-78).

***longiventris*, *Proplatycnemis* (1951e): 194**

L. longiventris –is –e = an adjective, combined from *longus* –a –um = long + *venter* = belly, paunch (in entomology: abdomen)

In the first description of this Malagasy platycnemidid Schmidt gives as length of the abdomen of his single ♂ specimen 34 mm. So this is not especially long among the seven platycnemidid species from that island mentioned in the same paper, because three of them are longer. So probably the epithet is chosen in comparison to the measures of coenagrionid damselflies.

***lucidus*, *Pseudagrion* 1951e: 255**

L. lucidus –a –um = bright, shining, brilliant

The name refers to the metallic sheen of the abdomen in both sexes: "♂ Abdomen black dorsally for the greater part with a green metallic sheen" (p. 256) and: "♀ Abdomen broadly black on dorsum from segment 1 to the middle of 9 with dark green metallic reflex" (p. 257).

***malaisei*, *Ceriagrion* 1964b: 152 [fig. 11]**

The species is named after the collector, who had handed over odonatological material he had collected in Burma in 1934 to Schmidt for determination.

René Edmond Malaise (1892-1978) was a Swedish entomologist, explorer and collector, who spent the years from 1920 to 1930 – with an interruption from 1923 to 1924 in Japan and Sweden – collecting zoological material in Kamschatka, which is mainly kept in the Natural History Museum in Stockholm. From 1933 to 1935 he undertook a collecting expedition to Burma (now Myanmar) with his second wife, who supported him with a focus on collecting ethnological material. During this venture, Malaise most effectively collected over 100,000 specimens of insects with the light trap he had newly developed. He then handed these over from Stockholm to specialists for identification, a consignment of dragonflies to Schmidt (later others to Lieftinck, because he considered those handed over to Schmidt to have been lost in World War II, see Schmidt 1964b: 141). From 1935 he took up a permanent position at the Stockholm Museum, at which institution he had also previously worked. He held this position until his retirement in 1959. A planned expedition to Sri Lanka, southern India and the Himalayas, scheduled for 1939, did not materialise due to the outbreak of the Second World War (for more about his work and activities see Vårdal & Taeger 2011).



Fig. 11: *Ceriagrion malaisei* ♂, Thailand, Chaiyaphum Salaphron Forest Protection Unit © R. Garrison. The species was named after the Swedish scientist, who collected its type specimens; the coloration of the species clearly indicates that it belongs to the genus *Ceriagrion*.

***malaisei*, *Lestes* 1964b: 146**

For information on the eponym, who had collected the type material, see foregoing paragraph.

***malgassica*, *Proplatycnemis* (1951e): 180**

L. *Malgassicus* –a –um = Malagasy, Madagascar

All of Schmidt's specimens came from the Madagascar mainland or Nossi-Be, an island near the north western coast.

***malgassicum*, *Pseudagrion* 1951b: 250**

L. *Malgassicus* –a –um = Malagasy, Madagascar

The author states (p. 255): "This species appears to be the commonest Zygoptera in Madagascar and is represented by individuals in various Museum collections bearing the label «Madagascar»."

***marquardtii*, *Ischnura elegans* 1938b: 142**

The taxon was established in a key in Schmidt 1938b: 142 and a thorough publication was announced to follow soon, but it did not materialise for about thirty years

Carl Albert Marquardt (1864-1936) was employed at the naturalist trading firm Staudinger (& Bang Haas) at Dresden from 1887 to his death. His responsibility was the non-lepidopteran insects.

The dedication is explained in Schmidt 1967b (p. 213-4), where the first names of the eponym are not given correctly: "Die Form wurde benannt zu Ehren von Herrn O. Marquardt in Fa. Staudinger, der mir im Winter 1927-28 in Dresden-Blasewitz die Schätze der berühmten Insektenhandlung an Libellen vorführte. Nachdem nun schon eine Menge für mich damals feinsten Sachen gesehen und erworben war, zeigte mir Herr M. einen großen Kasten mit Glasdeckel, in dem sich etliche kleinere, offene Pappschachteln befanden, darin Massen einzelner Arten, sortiert und determiniert, darunter ein Kistchen als "*Ischnura elegans* Kaschgar" bezeichnet, in, wie ich glaube, Försters Hand, das

oben verzeichnete Material, in Salat-Form. Prima vista sah ich, daß dieses rein habituell durch eine hellere Färbung abwich von Berliner *I. elegans*, und bat Herrn M., mir alle zu geben, was für einen Spottpreis geschah. Herr M. lachte mich aus, als ich den vermeintlichen Dreck erbat, aber gab mir wunschgemäß alles. Leider ist Herr M. inzwischen verstorben, sodaß er jetzt nicht noch einmal lachen kann! [The taxon was named in honour of Mr. O. Marquardt at the Staudinger firm, who in the winter of 1927-28 in Dresden-Blasewitz demonstrated the famous insect shop's treasures of Odonata to me. ... After having seen and acquired a lot of the finest things for me at that time, Mr. M. showed me a large box with a glass lid, in which there were several smaller, open cardboard boxes, containing masses of individual species, sorted and determined, including a small box labelled "*Ischnura elegans* Kaschgar", in what I believe was Förster's hand, the material listed above, the specimens stashed higgledy-piggeldy. At first sight I saw that this one differed from the Berlin *I. elegans* just habitually by a lighter coloration, and asked Mr. M. to give me all of them, which was done for a ridiculous price. Mr. M. laughed at me when I asked for the supposed rubbish, but gave me everything as requested. Unfortunately, Mr. M. has passed away in the meantime, so he cannot laugh again now!]"

It must be added that Onishko & Kosterin 2022: 583 suggest an identity of Schmidt's taxon with *Ischnura ordosi* Bartenev 1912, which they classify as a subspecies of *Ischnura elegans*; their statement that in the first description the type locality Kaschgar of Schmidt's specimens is not mentioned is erroneous.

***martini*, *Nesolestes* 1951e: 138**

The species was dedicated to the outstanding French odonatologist René Martin (1846-1925), who had been a solicitor at Le Blanc from 1872 to 1907 and later moved to Paris. By worldwide exchanging specimens he amassed the most important collection of dragonflies in France. He was in contact with Selys, after whose death he compiled from the collection of Selys the catalogues of the aeshnids, corduliids and calopterygids, the last of which remained unprinted. Martin spent the last years of his life at his daughter's home in Chile. Most of his collections went to the Museum of Natural History in Paris (for more see Beolens 2018: 275; Fliedner & Endersby 2019: 53).

Schmidt described the taxon from material collected by Olsufyev (see *olsufieffi* p. 39) in the north-western part of Madagascar, completed by specimens from other collections. He identified it with *Nesolestes alboterminatus* var. mentioned by Martin 1902: 511, which identification was confirmed by museum specimens determined by Martin himself. Among the specimens he also mentioned (p. 138-139) "2 ♂ in Förster coll., labelled "*Nesolestes Martini* Förster, n. sp. Type ". Madagascar, labelled in Grünberg's hand as *Nesolestes alboterminata* Martin. No species named *N. Martini* described by FORSTER is known to me, but I have seen in the Selys collection the same species with the same name. Thus it is probable that FORSTER had seen still further examples with similar markings and had intended to honour Rene Martin in naming it, a name here retained." Förster's types had been compared with specimens sent by him by Mrs L.K. Gloyd at UMMZ (cf. p. 33 s.v. *leonorae*), that specimen determined by Grünberg probably was from the collection at the Berlin Museum of Natural History.

melli, *Libellula* 1948b: 119

The German naturalist Rudolf Emil Mell (1878-1970) was the collector of the type material, as stated by Schmidt at the beginning of his publication: "Beim Sichten der grossen Ausbeute chinesischer Libellen, die Dr. Rudolf Mell aus Kwangtung, Südchina, mitgebracht hat, fanden sich 2 ♂ einer *Libellula*, die zunächst für *L. depressa* gehalten und in die Sammlung des Berliner Zoologischen Museums dort eingereiht wurden. ... nähere Prüfung ergab die für eine vermeintlich gut bekannte Gattung erstaunliche Tatsache einer neuen Art. Diese wird dem Sammler zu Ehren benannt und hier beschrieben [While examining the large yield of Chinese dragonflies brought by Dr. Rudolf Mell from Kwangtung, South China, 2 ♂ of a *Libellula* were found, which were at first thought to be *L. depressa* and were placed in the collection of the Berlin Zoological Museum there. ... closer examination revealed the astonishing fact of a new species for a supposedly well known genus. This is named in honour of the collector and described here]."

The eponym in 1908 was sent to Canton, China as head of a new German-Chinese school. There he began to collect plants and animals with good effort. During the last years of World War I he suffered restrictions and was threatened with deportation, but in 1921 German diplomatic relations to China were reestablished. So he decided to leave for a vacation in Germany in Berlin. But due to hyperinflation and War Reparations the foreign office no longer could maintain the school at Canton. So Mell had to stay in Germany. Having never taken a university exam he could not get a learned job at a museum. In 1936 the Cantonese School Authorities offered Mell a post as Counsellor, but due to the Japanese war against China that did not eventuate. So Mell had to stay in Germany, where he lived in poverty up to old age (for more see Tillack 2018; Beolens 2018: 284).

mellisi, *Tatocnemis* 1951e: 156

Schmidt explains his choice of name as follows (p. 157): "The species is named in honour of the expert collector Mellis who brought to light the important material from the Sambirano." J.V. Mellis was a French anthropologist, who was active on Madagascar in the 1930ies. At the same time he also collected insects, as seen from this publication and from beetles at the British Museum of Natural History (see Beolens 2018: 284-28). Specimens collected by Mellis were also at the base of other new species named by Schmidt (see following paragraph)

mellisi, *Pseudagrion* 1951e: 231

Also this species is one of the four new ones (not named after Mellis: *Proplatycnemis longiventris* and *Pseudagrion digitatum*) described by Schmidt exclusively from material collected by the eponym (p. 233): "The species is named in honour of its collector Mellis" (cf. foregoing paragraph). To two other new species Mellis had contributed material (*Pseudagrion digitatum* and *Ps. malgassicum*).

merina, *Pseudagrion* 1951e: 244

Schmidt explains his choice of name (p. 247): "The species is named after the Tribe of the Merina from whose province it comes."

monardi, *Eleuthemis* 1951a: 186

The taxon, that was described as a subspecies of *E. büttikoferi* Ris (on that species see Fliedner 2021a: 30), was named after its collector (p. 186): “leg. A. Monard.” Already in his acknowledgements Schmidt (1951a: 128) stated: “Mein Dank gebührt besonders dem Sammler Dr. Albert Monard - La Chaux-de-Fonds, Schweiz, für Überlassung des Materials zu vorliegender Studie und für Vermittlung des Drucks [My special thanks are due to the collector Dr. Albert Monard - La Chaux-de-Fonds, Switzerland, for providing the material for this study and for arranging the printing].”

Albert Monard (1886-1952) was a Swiss naturalist. Having achieved a doctorate in science at the University of Neuchâtel he was a teacher at a secondary school at La Chaux-de-Fonds, where he also acted as Curator at the Natural History Museum. He undertook six expeditions to several parts of Africa, one of them – in winter 1937-38 – to Guinee-Bissau, which resulted in 20 species of odonates that were new for the country. (cf. Beolens 2018: 293).

monardi, *Orthetrum* 1951a: 179 [fig. 12]

Also this species was named after A. Monard (see foregoing entry), to whom Schmidt owed the type specimens from Corubal, Guinee Bissau.



Fig. 12: *Orthetrum monardi* ♂ Zambia, Ikelenge 28.02.2010 © J. Kipping. Schmidt received from A. Monard about half of his material for his publication on the dragonfly fauna of Guinea-Bissau, collected 1938-39.

mortoni, *Pseudagrion sublacteam* 1936: 55

Schmidt described this taxon from Palastine as species, which he dedicated to K.J. Morton (p. 56): “Es ist dem Herausgeber eine Ehre, die vorliegende Art dem verdienten Neuropterologen und Freunde von Ris widmen zu dürfen [It is an honour for the editor to dedicate the present species to the deserving neuropterologist and friend of Ris]”. We must remember that the publication in which the taxon was named was a reclassi-

fication of the African *Pseudagrion* species by Ris, edited by Schmidt after his death. Ris had not yet named the new taxa in it, but had given to many of them an identification letter, but not in this case; for Morton (1924: 34) had determined specimens as *Ps. aca-ciae* Förster, but had retreated from this designation in a publication (1929: 63) after an exchange of letters with Ris on this subject (see Ris & Schmidt 1936: 56), without giving a new designation. Schmidt (1951a: 143) already suspected that his taxon *mortoni* could be identical with *Ps. sublacteum* Karsch, but the final classification as a subspecies of it was finally made by Dumont (1973: 173-176), where also the history of research is discussed in more detail.

Kenneth John Morton (1858-1940) was a Scottish amateur entomologist of high renown with world wide connections. From 1874 to 1897 he worked for the British Linen Bank first in Glasgow, then in Edinburgh until his retirement in 1922. His main interest was the Neuroptera sensu Linné. His ca 50 publications on Odonata mainly concern the Palae-arctic, some also deal with the Near East, China, Australia and East Africa. His collections went to the Royal Scottish Museum at Edinburgh. (Fraser 1940; Endersby & Fliedner 2015: 70).

***nigripes*, *Pseudagrion* 1951e: 242**

L. *niger* –*gra* –*grum* = black + –*pes* = footed

This is a feature, which sets the males of this species apart from those of a group of other *Pseudagrion* species (key p. 216): “II ... C. Legs black, only the coxae pale ...”

***nigrolineatum*, *Ceriagrion*, 1951e: 271**

L. *niger* –*gra* –*grum* = black + *lineatus* –*a* –*um* = lined, marked with a line

The name is best understood from the description of the species in a key in Schmidt 1951a: 158: “Abdomen gelb mit schwarzer medianer Dorsalzeichnung [Abdomen yellow with black median dorsal marking].” The dorsal pattern is described in detail in the first description on pp. 271-272 and can be seen clearly on figure 86d there.

***oblongulum*, *Ceriagrion* 1951e: 268**

L. *oblongulus* –*a* –*um* = somewhat oblong (diminutive of *oblongus* –*a* –*um*)

The name refers to the slimmer shape than that of *C. glabrum* Burmeister (key p. 264): “Slenderer form, thorax, femora and abdomen especially slim.”

***olsufieffi*, *Tatocnemis* 1951e: 163**

Schmidt 1951e, 165: “The species is named in honour of its collector Olsufieff.”

Grigoriy Vasilievich Olsufyev (Gregor von Olsufieff) (1875-1957) was a Russian parasitologist, who published mainly on pests and parasites (Beolens 2018: 315). During scientific research in Madagascar in the 1930s, he also collected Odonata. By this he contributed significantly to Schmidt's publication on the damselflies there, for 21 of the new species were based exclusively on specimens collected by Olsufyev, and further specimens contributed to the description of 5 additional species.

***olsufieffi*, *Pseudagrion* 1951e: 223**

Schmidt 1951e, 223: “Named after its collector Gregor v. Olsufieff” (for more see fore-going entry).

peruanum, *Acanthagrion* 1943b: 236

L. *Peruanus* –a –um = from Peru

The first description is found in Schmidt's odonatological evaluation of an expedition to southern Peru. The species was found on the banks of the Rio Apurimac, the headwaters of the Amazon River.

pseudalatipes, *Proplatycnemis* (1951e): 186 [fig. 13]

Gr. ψευδ– = false, pretending to be + L. *alatus* –a –um = winged (especially in botanical scientific names referring to membranous dilatations of the petioles) + –pes = footed

The name refers to the similarity of this species with *P. alatipes* (McLachlan, 1872). Schmidt elaborates (p. 177): "I had at first thought that *P. pseudalatipes* mihi was this species but reconsideration from my knowledge of the Vienna Museum material, especially in relation to the breadth of the tibiae, showed that *P. pseudalatipes* did not sufficiently resemble the figure in McLachlan". The differences of the ♂ tibiae of both species are to be seen from Schmidt's figure 43a+b on p. 181. McLachlan (1872: 1) had explained his choice of name thus: "the tibiae of the intermediate and posterior pairs are enormously dilated, elongate-oval, resembling the septum remaining after the dispersal of the seeds of some cruciferous plants (e.g. *Lepidium sativum*)."

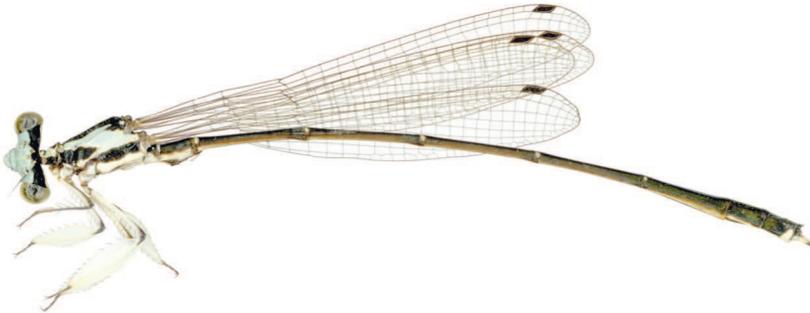


Fig. 13: *Proplatycnemis pseudalatipes* ♂, Madagascar, Fianarantsoa Ranomafana Nat. Park © R. Garrison. The width of the expanded tibiae is considerable, but clearly does not reach that of the species *P. alatipes* named by McLachlan (cf. Schmidt 1951e, fig. 43).

ranauense, *Pseudagrion pruinatum* 1934a: 348

L. *Ranauensis* –is –e = from Lake Ranau (a large volcanic crater lake in southern Sumatra)

The material for the description of this taxon was collected there in 1929.

ranavalona, *Nesolestes* 1951e: 136

Schmidt does not give an explanation for that name, but there were three sovereigns of this name in Madagascar in the 19th century. Ranavalona I (1814-1861) took power after the death of her husband, the powerful King Radama I (1793-1828), by wiping out his family. During her reign, she banished almost all Europeans from the island and tried to suppress the Christian movement. Ranavalona II (1829-1883) came to power in 1868. Her reign was marked by the pushback against France, which had gained great influence

on the island, and by the declaration of Christian Protestantism as the state religion. On her deathbed, she installed Ranavalona III (1861-1917) as ruler. Under her rule, war broke out against France, which gradually secured an ever greater share of power. After another war, Madagascar became a French protectorate in 1897 and the queen was exiled to Algiers, where she remained until her death. Hämäläinen & Orr (2017: 67) suggest that Ranavalona I was meant to be the eponym. In any case that name was chosen because of the cultural association to the terra typica.

***risi*, *Pseudagrion* 1936: 34**

The reason for the dedication of this species to the Swiss dragonfly expert Friedrich Ris is not stated either. But that was not necessary, for the name is found in a publication which the eponym had prepared on the classification of the *Pseudagrions* of continental Africa, without, however, giving names to the new taxa. Schmidt published this work after the death of the author, adding the new names. It is therefore not surprising that one of the new species is dedicated to Ris.

Friedrich Ris (1867-1931) was a Swiss doctor (surgeon and psychiatrist) who for over 30 years was director of the largest mental home in the canton of Zurich. He had been enthusiastic about entomology from his youth, and subsequently developed into a specialist in the dragonflies of all regions worldwide. Initially he was also encouraged by the 'father of odonatology', E. de Selys, who inspired him to develop a classification of libellulids, which he himself had never completed. Shortly before his hoped-for retirement, Ris was taken from life by a heart attack. His rank in odonatology may be judged by the fact that no scientist has had more odonate taxa dedicated to him (four of them by Schmidt, two of which subsequently turned out to be synonyms). For more about the eponym see Fliedner 2021a.

***risi*, *Enallagma cyathigerum* (1961): 409**

Schmidt informs us in his publication of the taxon, which he classified as a species: "Das Material gehört zu der zentralasiatischen Art, die Ris (1928e, p. 280f.) ohne Namen beschreibt [The material belongs to the Central Asian species that Ris ... describes without a name]." So the reason of the dedication seems clear. The taxon was ranked as subspecies of *E. cyathigerum* by Kosterin & Zaika 2010: 297.

For information about the eponym see foregoing paragraph.

***robinsoni*, *Tatocnemis* 1951e: 165**

The explanation for the choice of name is (p. 166): "The species is named in honour of Olsufieff's boy Pierre Robinson." That an indigenous collaborator of a European collector is honoured by eponymy is not common in the 20th century. How Schmidt knew about this servant of the collector is not said (For Olsufieff see p. 39).

***rubristigma*, *Africallagma* (1951e): 209**

L. ruber –*bra* –*brum* = red + Gr. στίγμα [stíigma] = tattoo-mark / mark, spot

Schmidt writes about this species, the pterostigma of which is according to the key p. 206: 2. "carmine red": "The species obviously bears the closest relationship to the S. African to Eritrea distributed *E. subfurcatum* Selys, differing but slightly by the colour of the pterostigma, the ♂ by the superior anal appendages and markings of the base and end

of abdomen. The leaflike lobes of the mesostigmal lamina are similiary fashioned but in rubristigma more depressed.”

sanguinipes, *Proplatycnemis* (1951e): 190

L. *sanguis* (stem sanguin-) = blood + -pes = footed

The name refers to the tibiae of adult males (p. 192): “The adult ♂ is easy to recognise by its blood-red legs and thereby to determine it from other Madagascar species.”

seyrigi, *Pseudagrion* 1951e: 260

Schmidt explains his choice of name (p. 262): “This species is named in honour of Ing. André Seyrig whom I have to thank for a large part of this material.”

André Seyrig (1897-1945) was a French mining engineer, who also was active as collector of botanical and zoological material, and as an amateur entomologist specialising in Ichneumonidae. Having served as a volunteer in the First World War, he was trained as a mining engineer in Nancy. After working in Spain for five years, he went to Madagascar, first as an inspector of the General Company of Madagascar. In this position he travelled throughout the country, but also made frequent trips to Europe, the USA, Canada, Africa and Syria. This travel activity also allowed him to continue working as a collector. Later, he became the director of the mica mines at Ampandrandava, where the specimens he provided to Schmidt came from. Towards the end of the Second World War, he was interned by the Vichy colonial administration on the basis of statements extorted through torture and was killed at the beginning of 1945, allegedly by a fellow prisoner who had gone mad. His extensive collections and documents are now in the Muséum National d'Histoire Naturelle, Paris. Several plant and animal species are named after him (Bocquet 2016; Beolens 2018: 381-82).

silvaticus, *Lestes* (1951e): 129

L. *silvaticus* –a –um = of or belonging to a wood or to trees

Schmidt's type material was collected at Anamalazaotra, a woodland area in Eastern Madagascar which now is a national wildlife reserve.

simile, *Pseudagrion* 1951e: 233

L. *similis* –is –e = similar, resembling

The description of the species begins: “♂. Similar to P. Mellisi but larger.”

sobrina, *Ischnura* 1943b: 237 [fig. 14]

L. *sobrina* = a cousin from the mother's side

The name most probably is chosen, because it is semantically near to that of the most similar species whose name also indicates a close kinship (p. 239): “Diese Gestaltung der App. dürfte als primitive Form der *Ischnura* - Anhänge, wie sie differenzierter bei den meisten Arten der Gattung vorkommen, anzusehen sein; sie sehen denen von *Ischnura nepos* (Calvert 1909, plate VI, fig. 121, 122) am ähnlichsten [This shape of the app. may be regarded as a primitive form of the *Ischnura* appendages, as they occur in a more differentiated manner in most species of the genus; they look most like those of *Ischnura nepos* (Calvert 1909, Plate VI, figs. 121, 122)]” (L. *nepos* is either a grandson or a nephew; Selys (1876: 1249) took the name for this very small species from a manuscript by

the explorer H.W. Bates; as in Selys' publication the next species *Agrion*? {now: *Calvertagrion*} *minutissimum* (L. = the tiniest) also bears a manuscript name from Bates and both species are classified in one group as its sole members, the name *nepos* probably goes back to that similarity in size. The classification of *I. sobrina* in the genus *Homeoura* Kennedy, 1920 by van Ellenrieder (2008: 102-103) is outdated by more recent findings. (R. Garrison, in litt.).



Fig. 14: *Ischnura sobrina*, juvenile ♀ © Holger Hunger. The species has not been observed in the field again after the description until the last 10 years.

statzi †, *Lestes* 1958b: 3

Schmidt describes how the type specimen of this fossil dragonfly became available to him: "Noch während des Krieges sandte mir Dr. Georg Statz einen Abzug der Photographie einer weiteren Zygoptere aus Rott (Abb. 3), bestehend aus Synthorax mit 4 ± beschädigten Flügeln, die noch unbeschrieben sein dürfte und die ich dem inzwischen verstorbenen, eifrigen und verdienstvollen Sammler widmen möchte.

Das Fossil selbst bekam ich durch die Freundlichkeit der Witwe des Sammlers inzwischen auch zu sehen. [During the war, Dr. Georg Statz sent me a print of a photograph of another Zygoptera from Rott {fossil site near Hennef, Rhineland in Germany}, consisting of a synthorax with 4 ± damaged wings, which is probably still undescribed and which I would like to dedicate to the now deceased, diligent and meritorious collector.

The fossil itself I got to see in the meantime through the kindness of the collector's widow]."

Georg Statz (1894-1945) was a German collector of fossils and entomologist, who described over 300 fossil arthropods.

After completing a pedagogical training, Statz first worked as a teacher in Cologne. During the holidays, he collected fossil plants, spiders and insects with his family, which he initially gave to others to describe. Then, however, from 1926 onwards, for five

years he completed a course of study in entomology in Cologne, in order to be able to do so himself according to scientific standards. Since his house in Cologne was destroyed by a bomb in 1944, the family had to move to Bavaria. Fortunately, he had been able to secure safe storage for his extensive collection in Cologne beforehand. Before the family could return to his hometown, he died shortly after the end of World War II. His collection was sold to the Natural History Museum of Los Angeles County in USA in 1955. But specimens collected by him are also in several German and European institutions.

superba, *Allocnemis* (1951d): 234

L. superbus –a –um = proud, superior, excellent, distinguished; splendid, magnificent, superb (also: haughty, proud, arrogant, insolent; these negative meanings prevail in antiquity)

About the genus *Chlorocnemis*, in which he placed this taxon, Schmidt (p. 229) says that its species, probably due to their habitats in forests, have a predominantly black body coloration with small yellow or blue markings. So the striking blue markings of his single type specimen, by which it is set apart from other species of the genus, probably have led to the name: "Das einzige ♂ ist vor allem durch die Thoraxzeichnung von allen bekannten *Chlorocnemis*- Arten ... verschieden [The single ♂ is different from all known *Chlorocnemis* species ... mainly by the thorax pattern]." In the key on p. 229 the blue markings are listed, which concern maxilla and frons, anterior and posterior lobes of prothorax, mesepisternum, a dorsal stripe on segm. 2, a basal spot on 3 and dorsum of 9 and 10, and of the legs the coxae, trochanters and flexor sides of legs. (On the closeness of the genera *Chlorocnemis*, *Isomecognemis* and *Allocnemis* see http://addo.adu.org.za/index.php?taxon_id=13300).

supratriangularis, *Zonophora* 1941c: 88

L. supratriangularis –is –e = concerning the supratriangular space

In his revision of the genus *Zonophora* Schmidt states (p. 77-78): "E. B. WILLIAMSON's Kennzeichnung der Gattung kann fast vollständig akzeptiert werden; im folgenden schlagen wir jedoch eine Art mit meist durchquerten Supratriangularräumen (ht) zur Aufnahme vor (*Z. supratriangularis* n. sp.), die sonst genügende Übereinstimmung mit den übrigen Arten zeigt. Durchquerte Supratriangularräume kommen aber auch bei anderen Arten von *Zonophora* gelegentlich vor [E. B. WILLIAMSON's characterisation of the genus can be accepted almost completely; in the following, however, we propose a species with mostly traversed supratriangular spaces (ht) for inclusion (*Z. supratriangularis* n. sp.), which otherwise shows sufficient agreement with the other species. Traversed supratriangular spaces, however, occasionally occur in other species of *Zonophora* as well]."

thienemanni, *Onychogomphus* 1934a: 369

On the naming of the species Schmidt states on p. 371: "Sie wurde zu Ehren von Herrn Professor Thienemann benannt [It was named in honour of Professor Tienemann]."

The reason for the dedication is evident from Schmidt's acknowledgments (1934: 316): "Allen Herrn Kollegen, die mich durch Material unterstützt haben, sei auch an dieser Stelle herzlich gedankt, ganz besonders Herrn Professor Thienemann-Plön

und Herrn Professor Feuerborn-Münster, die auf meine Bitte den Libellen während ihrer Fahrt besonderes Augenmerk zuwandten, für großzügige Überlassung der Riesensammlung, aber auch für die Geduld, die sie der aus anderen Gründen verzögerten Bearbeitung entgegenbrachten [I would like to take this opportunity to thank all those colleagues who supported me with material, especially Professor Thienemann - Plön and Professor Feuerborn - Münster, who at my request paid special attention to the dragonflies during their journey, for generously letting me have their gigantic collection, but also for the patience they showed during the processing, which was delayed for other reasons].

August Friedrich Thienemann (1882-1960) was a German zoologist and ecologist, who is considered the founder of limnology due to his early publications. In 1917, he was appointed head of the Hydrobiological Institute in Plön, a post he held until his retirement in 1957, along with a professorship at the University of Kiel. 1928-29 he was a participant in the German Limnological Sunda Expedition, for which Schmidt, who had been in closer contact to him at least since 1926 (see Schmidt's letter to Ris from 15-xi-1926) evaluated the odonatological results. Contrary to what is presented in Beolens 2018: 410, the species was not described from a specimen collected during the Sunda expedition, but from a specimen in the Berlin Zoological Museum that H. Fruhstorfer had collected earlier on Java.

***titschacki*, *Phyllocycla* (1943b): 253**

Schmidt (1942: 254) explains the dedication thus: "Benannt zu Ehren von Professor Dr. Erich Titschack in Hamburg, dem ich das Studium dieses Materials zu verdanken habe [Named in honour of Professor Dr. Erich Titschack in Hamburg, to whom I owe the study of this material]."

Erich Hans Woldemar Titschack (1892-1978) was a German Zoologist.

His study of Biology, Geology and Chemistry at the Universities of Jena, Berlin and Bonn was interrupted by his participation as a volunteer in the First World War. When he was no longer fit for military service due to an injury, he resumed his studies. After obtaining his doctorate in Bonn in 1919, he moved to the chemical industry, where he developed the first agent against clothes moths. In 1924 he was appointed head of the entomological department of the Hamburg Zoological Museum. In 1934, he was awarded the title of professor for his special achievements, including the redesign of the display collections. He led collecting trips to the Canary Islands (1931), France (1934) and Peru (1936). The evaluation of the latter's results was assigned to appropriate specialists, that of dragonflies to Erich Schmidt. After the bombing of the Zoological Museum in 1943, Titschack tried with considerable success to quickly replenish the destroyed parts of the entomological collection; but after his house had also been destroyed in 1944, he moved to a research position at the German-occupied University of Posen (today's Poznan), which was relocated first to Thuringia, then to southern Germany, due to the advance of the Red Army. In 1951 he returned to Hamburg, where he became Custodian of the Natural History Department at the Altona Museum. After his retirement in 1957 he worked on Thysanoptera (Beolens 2018: 413-14).

***trigonale*, *Pseudagrion* 1951e: 241**

L. trigonalis –s –e = triangular

The name refers to the triangular process of the prothorax (key p. 219): "Prothoracic horns as broad as long at the base, triangular, depressed (fig. 73 a, b)."

***truncatidens*, *Rhipidolestes* 1931:181**

L. *truncatus* –a –um = cut off / maimed + dens = tooth

The taxon is set apart from another species of that genus by the following feature (key p. 180): "Dorn auf Segm.9 abgestutzt [Spine on segm.9 truncated]" (cf. *bidens* p. 49).

***ubadschii*, *Stylurus* (1953): 6**

Schmidt explains the choice of name as follows (p. 8-9): "Die Art ... wird benannt zu Ehren von Herrn Hamdi Oubaji, Ingénieur agricole, dem Begründer und mehrjährigen Direktor der staatlichen Landwirtschaftsschule in der Ghuta östl. Damascus, der uns durch seinen hartnäckigen persönlichen Einsatz wesentlich zu einem arabischen Begleitbrief verhalf, ohne den wir das Land nicht hätten ungehindert durchstreifen können (The species ... is named in honour of Mr. Hamdi Oubaji, agricultural engineer, the founder and director for several years of the State Agricultural School in the Ghuta east of Damascus, who through his persistent personal efforts helped us considerably to obtain an Arabic accompanying letter, without which we would not have been able to roam the country unhindered)." The statement in Beolens (2018: 317) that Oubaji collected the type specimen is therefore erroneous.

***velox*, *Ictinogomphus celebensis* (1934a): 361 (not in WOL)**

L. *velox* = swift, quick, rapid, speedy

When describing *Ictinogomphus celebensis* Schmidt introduced two subspecies. The name *velox*, with which he named this taxon, does not help to distinguish it from other members of the genus, as they all are swift flyers. The epithet is probably chosen because there are more species named in Latin adjectives in –x, like the first two species described by Rambur in 1842, *I. ferox* (L. = wild) and *I. rapax* (L. = rapacious).

***wucherpfenigi*, *Zonophora* 1941c: 94**

Schmidt explains the dedication thus (p. 96): "Die vorliegende Art hat Herr F. Wucherpfenig aus Dingelstädt (Eichsfeld), jetzt Sao Paulo, offenbar als einziger bisher gesammelt; sie sei ihm zu Ehren für seine erfolgreiche Sammeltätigkeit, die er auch auf andere Insektengruppen ausdehnte, benannt [The present species was presumably collected so far only by Mr. F. Wucherpfenig from Dingelstädt (Eichsfeld, a region in Northern Germany), now Sao Paulo; it is named in his honour for his successful collecting activities, which he also extended to other insect groups].

Ferdinand Wucherpfenig (1878-1958) was a German born entomological collector in Brazil; his main focus was butterflies.

The region where he was born is correctly mentioned by Schmidt, but not the place itself. After finishing secondary school, he qualified as a master weaver. In 1921 he moved to the Netherlands and from there to Brazil in 1923. There he worked in his profession for a while, but then from 1927 he undertook seven fruitful entomological collecting expeditions to the Amazon jungle, the last in 1940; other collecting areas were on the Rio Paraná and in the region around Sao Paulo, where he had settled. He continued his collecting activities until shortly before his death (Marx 1960; Beolens 2018: 452).

zernyi, *Erythromma lindenii* (1938b): 143

Schmidt (p.144) states about this subspecies, which is confined to Lebanon, Syria and Palestine: "Die neue Subspecies wurde zu Ehren von Herrn Kustos Dr. Hans Z e r n y vom Naturhistorischen Museum in Wien benannt [The new subspecies was named in honour of the Custodian Dr. Hans Zerny of the Natural History Museum in Vienna]." The validity of this subspecies is, however, disputed (see Wildermuth & Martens 2019: 23).

Hans Zerny (1887-1945) studied natural sciences with a focus on zoology in his hometown of Vienna. In 1912 he began working at the Natural History Museum in Vienna, where he was initially in charge of the odonatic, neuropter and dipter collections, to which was added responsibility for the lepidopterological department, his real field of expertise, in 1933. Zerny undertook numerous collecting trips, many to the Mediterranean, his largest to Brazil (1927) and to East Africa (1935/36). He is said to have been most helpful to colleagues and to entomologists who wanted help (Pittioni 1948; cf. Beolens 2018: 458).

Schmidt had been acquainted with Zerny since July 1928 at the latest, when he visited the Natural History Museum in Vienna and they undertook a joint collecting trip in Austria. A subspecies of *Orthemtrum hintzi* dedicated to Zerny after his death by Schmidt (see p. 58) is now synonymised with the nominate form.

Synonyms

albopictum, *Microstigma maculatum* 1958a: 33 = **M. maculatum** Hagen in Selys, 1860a: 17

L. *albus* –a –um = white + *pictus* –a –um = adorned, decorated (past participle of *pingo* = to adorn, paint).

Schmidt described this taxon as a subspecies of *M. maculatum* Hagen, explaining his choice of name: "Diese Unterart basiert auf der Färbung der ♀ ♀ [This subspecies is based on the coloration of the ♀ ♀]", having mentioned before that the ♀ ♀ "von Obidos und vom Rio Branco mit in allen Flügeln weissen Spitzenflecken, die nicht durch Ausbleichung in den Vorderflügeln weiss geworden sein können, weil das einzige juvenile ♀ aus Obidos ebenso wie alle adulten gleichgefärbte weisse Spitzenflecke hat ["♀ ♀ from Obidos and Rio Branco with white tip spots in all wings, which cannot have become white by bleaching in the forewings, because the only juvenile ♀ from Obidos has white tip spots of the same colour as all adults]." But this subspecies is no longer maintained. What made Hagen choose the name *maculatum* [= spotted] is not clear from the first description. It might be a feature used by Schmidt (1958a: 29) to distinguish *M. maculatum* from the other *Microstigma* species (in translation): "Metasternum besides the regular intercoxal black spot with a less sharply defined, unpaired, elongate, dark median spot caudal to it at the end of the median furrow (Plate VI, Figs. 8, 9)." But that is not sure, as in the first description it reads differently (also translated): "black median line on the underside of the thorax ."

amseli, *Gomphus* 1961: 411 = **G. schneiderii** Selys, 1850: 292

In the preface of his paper (p. 400) Schmidt mentions, that one of the collectors of his

material was Dr. H.G. Amsel from Karlsruhe: "Er brachte 195 Stücke in 22 Arten aus 7 Fundorten mit, ... darunter die zweite absolut neue Art (unsere Nr. 22): *Gomphus Amseli* n. sp. [He brought 195 specimens in 22 species from 7 localities, ... including the second absolutely new species (our no. 22): *Gomphus Amseli* n. sp.]."

Hans Georg Amsel (1905-1999) was a German Entomologist, specialising on Microlepidoptera, well known as initiator and first editor of the series 'Microlepidoptera palae- arctica'.

After completing his school education in 1923, he first started an apprenticeship as a bookseller, then as a banker, but eventually began studying zoology in Berlin, which study he completed in 1933 with a dissertation on the small butterflies of Palestine. After a period as a volunteer at the Zoological Museum in Berlin, he was appointed curator at the Überseemuseum in Bremen in 1934, a position he held until he was called up for military service, which led directly to his participation in the Second World War. It was not until 1955 that he was again given a professional position in Karlsruhe, where he had to set up an entomological department at the Natural History Museum. He held this position until his retirement, but continued to work there on a voluntary basis until his last years. In 1956/57 and 1966 he undertook collecting trips to Afghanistan. He handed over the dragonfly material from the first one to Erich Schmidt for description. As much as his professional achievements are generally acknowledged, other publications by him in right-wing extremist and revanchist journals are questionable (Ebert 2001).

Schmidt did not recognise that his specimens really pertained to the species *Gomphus schneiderii* which he assessed to be similar to his taxon (p. 412). Selys explains his choice of name thus (1850: 294): "J'ai dédié cette espèce à M. le docteur Schneider, savant entomologiste de Breslau, qui a mis obligeamment à notre disposition les types de la collection de feu M. de Charpentier, et qui fait connaître les libellules de l'Asie mineure dans une notice don't mes descriptions sont en grande partie traduites [I have dedicated this species to Dr. Schneider, the learned entomologist of Breslau, who has kindly placed at our disposal the types of the collection of the late M. de Charpentier, and who makes known the dragonflies of Asia Minor in a notice from which my descriptions are largely translated]." Wilhelm Gottlieb Schneider (1814-1889) was a German entomologist, who lived at Breslau (Silesia; today's Wrocław). Son of a well to do merchant, after his doctorate on Raphidioptera, he lived as a private scholar in his home town. He struggled in vain to classify the Trichoptera (which later Mc Lachlan accomplished); for, following Fabricius' example, he tried to achieve this on the basis of the mouthparts, which was doomed to failure in view of the fact that many caddisflies do not feed as adults and thus their mouthparts are atrophied. He acquired Charpentier's dragonfly collection after his death and, at Hagen's suggestion, made the types from this collection available to Selys. The last years of his life were overshadowed by economic worries and illness, so that he had to sell the collection, which Hagen acquired for the MCZ (Dittrich 1889; unpublished letters by Schneider to Hagen).

antehumeralis, *Aeshna isocoles* 1950a: 13 = *Aeshna isocoles* (Müller, 1767): 125
L. *ante-* = before (temporally or locally) + *humeralis* *-is* *-e* = pertaining to the shoulder (*humerus*)

At the base of the subspecific name is this feature: "Die gelben Thoraxbinden sind breiter als bei der Nominatform, insbesondere ist eine durchgehende Antehumeralbinde von etwa 1/5 der Breite des Mesepisternums entwickelt [The yellow thoracic bands are wider than in the nominate form, in particular a continuous antehumeral band of about 1/5 the width of the mesepisternum is developed]". According to Kalkman 2006: 11, note 12 this feature seems to be a result of the warmer climate, where this form occurs and it therefore is synonymic to the nominate species. Müller's species name *isoceles* [Gr. ἰσοσκελής –ής –ές = with equal legs, equilateral] refers to (translated) "the yellow triangle" at the base of the abdomen.

basicornu, *Pseudagrion* 1936: 62 = ***Pseudagrion glaucum*** (Sjöstedt, 1900: 61)

L. basis = base (borrowed from Greek) + *cornu* = horn

Schmidt's choice of name is to be seen from the key for the ♂♂ (p. 14): "+. App. sup. mit kräftigem basalen Fortsatz [App. sup. with a strong basal process]."

Sjöstedt's name [*L. glaucus* –a –um = bluish green, bluish grey (borrowed from Greek)] of the taxon refers to the partially bluish green or bluish coloration of his male specimens (♀ were not known then): parts of the head, especially around the eyes including the basal segments of the antennae, main colour of the thorax, the first two abdominal segments and segments eight and nine.

berlandi, *Teinobasis alluaudi* 1951e: 274 = ***Teinobasis alluaudi*** (Martin, 1896): 110

The subspecific taxon, which is not maintained now, is introduced by Schmidt thus (p. 273-274): "Campion first named the species from Madagascar, from a ♀ in the British Museum, which Martin had given to that institution in 1889. I have seen similar specimens, ♂ and ♀, labeled with "Madagascar", in the Museum National d'Histoire Naturelle, Paris, in 1942, and am under obligation to M. Lucien Berland for the cession of a ♀ from Madagascar and 2 ♂♂ from the Seychelles. It was not until later that, in 1944, it was noticed that the Madagascar form differed from the nominal form from the Seychelles, as follows ..."

Lucien Berland (1888-1962) was an important French entomologist and arachnologist, who was employed at the Muséum national d'histoire naturelle at Paris. More than 20 spider taxa are named after him (for more see Beolens 2018: 44).

The nominal taxon was named after Charles A. Alluaud (1861-1949), who was a French entomologist and explorer. From 1887 to 1930 he undertook numerous expeditions to various parts of Africa, the Canary islands, to Madagascar, the Mascarenes, the Seychelles. His collected material went to the Muséum national d'histoire naturelle in Paris (for more see Beolens 2018: 10). Animals from various orders are named after him (Bivalvia, Odonata, Hemiptera, Hymenoptera, Lepidoptera, Coleoptera, Pisces, Amphibia, Reptilia).

bidens, *Rhipidolestes* 1931: 180 = ***R. nectans*** (Needham, 1928): XI/XII

L. bidens = having two teeth

The name refers to the spine on the 9th segment: "Dorn auf Segm. 9 zweispitzig [spine on segm. 9 two-pointed]."

Asahina (1956b: 207-213) saw, that Schmidt had created a younger synonym of a spe-

cies, which Needham had named *nectans* (= the connecting one), because the new genus *Taolestes* (a younger synonym of *Rhipidolestes*), which he had created for the new species, that in his opinion was “most nearly allied to *Ortholestes* 8a younger synonym of *Hypolestes* Gundlach⁹ of tropical America.”

caesarum, *Coenagrion caerulecens* (1959): 13 = *Coenagrion caerulecens*
(Fonscolombe 1838): 569

Schmidt explains his choice of name as follows: “Der Name wurde zu Ehren der beiden italienischen Autoren vorgeschlagen, die zufällig beide denselben Vornamen tragen, Dott. Cesare Nielsen-Bologna, und Professor Cesare Conci, früher Genua, jetzt Mailand [The name was proposed in honour of the two Italian authors, who coincidentally both share the same first name, Dott. Cesare Nielsen-Bologna, and Professor Cesare Conci, formerly Genoa, now Milan].”

In 1956 Conci and Nielsen had coauthored a profound work on the Italian Odonata, on the information from which Schmidt had largely based his new Italian subspecies. In this book (p. 58) they had dedicated a variety of their *Calopteryx virgo padana* to Schmidt; as this form is infrasubspecific, it is irrelevant in zoological nomenclature, but it shows that the Italian authors and Schmidt were close. So Schmidt's dedication of this taxon to them may have been intended as a kind of reciprocation.

The Italian entomologist Cesare Conci (1920-2011) graduated from the University of Bologna in 1942. Already during his scientific training he was in contact with scientific museums, for example in his hometown Rovereto, in Genoa and in Trento. His first speciality was mallophages; he also attended to bio-splaeology and then to odonates after coming into contact with C. Nielsen during the war. In 1957 he was appointed curator of entomology at the Museo civico di Storia naturale in Milan, and from 1964 to 1981 he acted as its director. His odonatological collection was donated to the Milan Museum in 1983 (Cagnolari & al. 2012; Beolens 2018: 89 has a wrong year of death, due to an error in Fliedner 1997: 50, which was already corrected in Fliedner 1998: 14).

Cesare Nielsen (1898-1984) came from a Danish family that had migrated to Italy towards the end of the 19th century. After his studies in Bern and Geneva and an additional degree in Bologna, he worked there as a dentist and surgeon. He published works on Italian and African dragonflies, but was best known as the (co-)author of the then standard work on Italian dragonflies, to which he particularly contributed the section on the early stages of development. After his death, his odonatological collection went to the Milan Museum of Natural History (Bucciarelli 1973, Mellini 1985; cf. Fliedner 1998: 33)

The nominate form got its name [*L. caerulecens* = becoming blue, bluish – a meaning arising from the idea as if the process of becoming blue was stopped in the middle] due to the blue bases of the abdominal segments of the males (Fonscolombe 1838: 569): “abdomine fusco-aeneo, segmentis basi caeruleis [with a dark bronze abdomen, its segments blue at the base].”

confluens, *Chalopteryx rutilans* 1943b: 245 = *Chalopteryx rutilans* (Rambur, 1842: 233)

L. confluens = flowing together (present participle)

This is another subspecies introduced by Schmidt, which is no longer maintained. It

is said to differ from the nominal taxon this way: "Beim ♂ der antehumerale Streif noch breiter und ventral bis etwa zur Mitte oder noch weiter dorsalwärts mit dem humeralen Streif verschmolzen [In the ♂ the antehumeral stripe even wider and fused ventrally to about the middle or even further dorsally with the humeral stripe]."

Rambur's name *rutilans* [= having a reddish glow] of the nominal taxon refers to this feature of the hind wings: "les inférieures ... d'une couleur d'or très-brillante en dessus, avec des nuances couleur de feu, ... dessous d'une couleur de feu rutilante et dorée, ayant quelques marques bleues vers les bords [the lower ones ... of a very bright golden colour above, with shades of fire colour, ... below of a gleaming golden fire colour, having some blue markings towards the edges]."

cypricus, *Onychogomphus forcipatus* 1954a: 85 = **O. f. albotibialis** Schmidt, 1954a: 59)

L. *Cypricus* –a –um = from *Cyprus*

In connection with the description of the subspecies *Onychogomphus forcipatus albotibialis* (see p. 22) Schmidt states, that there is a "strukturell gleiche, also offenbar verwandte Form, aber ohne die hellen Tibienstreifen, auf Cypern [structurally identical, thus obviously related form, but without the light tibial stripes, on Cyprus] which he calls "Cypern-Form (forma *cypricus* nov.)." As the white stripes of the tibiae are not a reliable criterion for the identification of the subspecies, also the Cypriot *Onychogomphus forcipatus* are classified as belonging to the subspecies *albotibialis* (Sparrow & al. p. 109).

The Linnean species name *forcipatus* means 'equipped with pincers', referring to the males appendages.

escherichi, *Platycnemis* 1951d: 224 = ***Copera rufipes*** (Selys, 1886): 139

Schmidt explains his choice of name thus (p. 227): "Die Art wurde dem Sammler, Herrn Geheimrat Escherich in München gewidmet [The species was dedicated to the collector, Privy Councillor Escherich in Munich]."

Georg Escherich (1870-1941) was a German forester and politician. In 1913-14 he led a forestry expedition to Cameroon. After World War I, he was the founder and leader of several anti-republican and anti-Semitic paramilitary organisations in Bavaria; but since he represented a Bavarian monarchist direction, he no longer played a major role after the Nazis seized power. By the way, he was not a 'Geheimrat' as Schmidt erroneously wrote, but had the regular official title 'Forstrat' (= 'forestry administrator') and had died nearly 10 years before the taxon was named (see Zorn 1959).

Selys' name of the taxon refers to reddish feet (p. 140): "Pieds orangé-rougeâtre ainsi que les cils (7) aux tibias postérieurs) [Reddish-orange feet as well as bristles (7) on the hind tibiae]."

fassli, *Microstigma maculatum* 1958c: 33 = ***Microstigma maculatum*** Hagen in Selys, 1860a: 17

This is a second no longer recognised subspecies of *Microstigma maculatum* which Schmidt created in the same publication: "Benannt zu Ehren des verdienstvollen Sammler A. H. Fassel aus Teplitz [Named in honour of the deserving collector A. H. Fassel from Teplice]."
Fassel is eponym of species named by Ris and by Belle. [fig. 15]

Anton Heinrich Hermann Fassel (1876-1922) was a German professional collector main-



Fig. 15: *Microstigma maculatum fassli* ♂, typical specimen at the Senckenberg Museum Frankfurt with its envelope © Malte Seehausen.

ly specialising in Lepidoptera and Coleoptera. He collected in several regions of South America (see Beolens 2018: 131).

For *M. maculatum* see entry *albopictum* (p. 47).

filiforme, *Pseudagrion* 1936: 45 = *Pseudagrion melanicterum* Selys, 1876b: 492
L. filiformis –is –e = threadlike.

The name is found in Schmidt's treatment of *Ps. melanicterum* Selys. It is not a scientific name suggested by Schmidt, but a collection name from the Stockholm museum, given by the Swedish entomologist Johan Wilhelm Dalman (1787-1828) to two ♂♂ from Sierra Leone, collected by Adam Afzelius (1750-1837) in 1792. Schmidt describes these specimens as "sehr alt, nicht gut erhalten, klein, aber wie es scheint zugehörig (nicht ! ...) [very old, not well preserved, small, but as it seems belonging {to *Ps. melanicterum*} (not ! {= Ris' provisional term for the species *Ps. angolense*, adult ♂})]."

Schmidt's classification of the Stockholm ♂♂ as *Ps. melanicterum* later was assessed to be an error by Davis & Tobin 1984: 87 and they were assigned to the species *Ps. angolense*, which Schmidt had ruled out explicitly. But that cannot be true, as according to http://addo.adu.org.za/index.php?taxon_id=31500 that species is endemic to Angola; so those specimens from Sierra Leone cannot pertain to that species, for which Selys (1876b: 494) stated: "L'espèce est certainement très-voisine de *melanicterum* de Sierra Leone, mais ce dernier est beaucoup plus petit [The species is certainly closely related to *melanicterum* from Sierra Leone, but the latter is much smaller]."

The name of the Selysian species *melan-icterum* is combined from the Greek words μέλας [*melas* = black, dark] and ἰκτερός [*ikteros* = a bird of a yellowish-green colour; jaundice] and refers to the overall appearance which is described thus: "Noirâtre bronze, marqué de jaune verdâtre [Blackish bronze, marked with greenish yellow]".

fraseri, *Libellago dispar* 1951a: 161 = *Chlorocypha pyriformosa* Fraser, 1947: 23

In his description Schmidt refers to a publication of Fraser (1947), in which he classifies what he thinks to be local forms of *Chlorocypha dispar* into subspecies and postulates a hypothetical form, to which the pattern of that species might develop: "Unsere lange Serie aus Boé, die anscheinend zu einer noch unbeschriebenen Form gehört, die recht

nahe an die von Fraser vorausgesagte hypothetische Form (tfig. I h bei Fraser) herankommt, gibt uns folgende Aufschlüsse [Our long series from Boé, which apparently belongs to a still undescribed form that comes quite close to the hypothetical form predicted by Fraser (tfig. I h in Fraser), gives us the following information...].”

Later it was seen, that Fraser's subspecies *Chlorocypha dispar pyriformosa* [a name combined from Gr. πῦρ (pyr) = fire + L. *formosus* –a –um = finely formed, perhaps after the pattern of the second and third segments, which roughly might be seen to resemble a flame in Fraser's figure] indeed was a species in its own right, of which the taxon *ovoluta* described at the same time was a synonym as was Schmidt's taxon *fraseri* (Dijkstra 2003).

(For the eponym Frederic Charles Fraser (1880-1963) see p. 28)

imitans, *Orthetrum microstigma* 1951a: 181 = ***Orthetrum microstigma*** Ris, 1911a: 128
L. *imitans* = imitating, copying

The name refers to the similarity of the taxon with the nominate species (p. 182): “Mit der Nominatform in der Struktur der Hamuli und der V.v. übereinstimmend, aber durch die hellen Anq. in sc und durch schwächer Thoraxzeichnung verschieden [Consistent with the nominate form in the structure of the hamuli and the v(alvulae) v(ulvae), but differing by the pale antenodal crossveins in the subcosta and by weaker thoracic markings].“ The nominate form got its name, derived from the Greek words μικρός –ᾶ –όν [mikros] = small + στίγμα [stigma] = mark, spot, because of its small pterostigmata in both sexes.

infracavum, *Pseudagrion* 1934a: 350 = ***Pseudagrion nigrofasciatum*** Lieftinck, 1934: 6
L. *infra* = beneath + *cavus*-a –um = hollow, excavated, concave

Schmidt thought his specimens to differ from *Ps. nigrofasciatum* [L. *niger* –gra –grum = black + *fasciatus* –a –um = marked with a band, because of a “broad transverse black fascia across the ocelli connecting the eyes”], with which it shared the following feature: “Ventrale Seite der App. sup. mit einer Einbuchtung [Ventral side of app. sup. with an indentation]”, by a medial tooth at the base of the upper appendages. The identity of Schmidt's taxon with his was stated by Lieftinck (1936: 124 note 1), who admitted, that his typical series had been somewhat discoloured, and that he had overlooked the basal tooth, by which Schmidt had been induced to make a species difference. In the same context he described *Pseudagrion schmidtianum* in honor of the German scientist.

klugi, *Hetaerina* 1943b: 252 = ***Hetaerina laesa*** Hagen in Selys, 1853: 36

The eponym, Wilhelm G. Klug (later Guillermo Klug) (1875-1945), had collected the type specimen: “Benannt zu Ehren des treffiichen Sammlers Klug in Iquitos, dem viel auch hier erwähntes Material zu verdanken ist [Named in honour of the excellent collector Klug in Iquitos, to whom is owed much of the material mentioned here]” (About the eponym see p. 32).

Hagen's name *laesa* [L. = the wounded] most probably refers to the variable sized reddish coloured spots at base and at tip of male wings (see Hämäläinen & Fliedner 2022: 93).

kocheri, *Coenagrion puella* (1960a:124) = ***Coenagrion puella*** (Linnaeus, 1758: 546)

Schmidt comments on the naming thus: “Die neu zu benennende Form wird Herrn

L. Kocher, jetzigem Chef der Abteilung Entomologie des «Institut scientifique chérifien» in Rabat (Marokko) gewidmet, der mir in hochherziger Weise die Wege zu ihrer Beschaffung ebnete [The new form to be named is dedicated to Mr. L. Kocher, present head of the Department of Entomology of the "Institut Scientifique Chérifien" in Rabat (Morocco), who in a generous way paved the way for me to obtain it]. "

According to Beolens (2018: 225) Colonel Louis F.J. Kocher (1894-1972) was a soldier in the French Foreign Legion, who during his occupation in Mediterranean countries began to work in entomology. After resigning in 1949 for two decades he attained the position mentioned by Schmidt as well as that of the Secretary General of the Society of Natural & Physical Science of Morocco. His main interest was Coleoptera.

In Jaquemin & Boudot (1999: 71) is stated, that Schmidt's form *kocheri*, which is distinguished from the nominate taxon just by darker coloration on segment 8 of the males, which feature is also found in specimens on the Iberian Peninsula intermingled with those of the common European pattern, should not be maintained as a subspecies.



Fig. 16: *Onychogomphus forcipatus lucidostriatus*, typical specimen at the Senckenberg Museum Frankfurt. The yellow backs of the tibiae led to the name. © Malte Seehausen.

lucidostriatus, *Onychogomphus forcipatus* 1954c: 249 = *Onychogomphus forcipatus albotibialis* Schmidt 1954a: 59[fig. 16a +b]

L. *lucidus* –a –um = bright, shining + *striatus* –a –um = {true meaning:} wrinkled, furrowed, but in scientific nomenclature mostly used for coloured stripes on the surface

Schmidt gives the following explanation for the establishment of the new subspecies: "Beide vorliegenden ♂♂ zusammengehörig, strukturell ist der Typus von mittel- und nordeuropäischen ♂♂ *forcipatus* nicht verschieden, aber ausgezeichnet sind beide Stücke durch die hellgelben Streckseiten aller Schienen [Both present ♂♂ belonging together, structurally the type is not different from central and northern European ♂♂ *forcipatus*, but distinguished both pieces by the light yellow back of all tibiae]." Boudot & al. 1990: 97) recognised that the criteria of coloration used by Schmidt are not reliable

and that morphological characters are necessary to distinguish the subspecies of this genus. In Schneider & al. 2018: 1, Schmidt's subspecies are synonymised.

mortoni, *Ischnura elegans* 1938b: 142 = ***Ischnura elegans*** (Vander Linden 1820: 6)
The name refers to the odonatologist K. J. Morton (1858-1940) (see p. 38).

It was published in a key of *Ischnura elegans* subspecies in a publication on odonates from Syria and Palestine (1938b: 142) without further explanations of the choice of the name; but in the preface of the publication is mentioned that not only Morton's treatise on the same subject from 1924 had been of great value for Schmidt's investigations, but also that Morton had revised some of Schmidt's classifications, for which the author expressed his heartfelt thanks (p. 135). But in Schmidt's final treatment of the *Ischnura elegans* complex (1967b: 211) he abolishes the taxon: "Die 1939 kurz von mir gekennzeichnete Form *I. e. Mortoni* aus Nordostspanien möchte ich vor Allem aus geographischen Gründen nicht mehr aufrecht erhalten [I no longer wish to maintain the form *I. e. Mortoni* from north-eastern Spain, which I briefly identified in 1939, primarily for geographical reasons]."

nielseni, *Ceriagrion tenellum* 1953b: 6 = ***Ceriagrion tenellum*** (De Villers 1789: 15)

Schmidt (p.5) states: "die Unterart {wird benannt} zu Ehren meines einstigen Reisekameraden, Herrn Dott. Cesare Nielsen in Bologna [the subspecies {is named} in honour of my former travelling companion, Dott. Cesare Nielsen in Bologna]". Schmidt informs us that the types of his taxon, based on its size and the coloration of the tip of the abdomen of the females, are from Eastern Sicily; so to honour an Italian scientist by eponymy might have been natural (for the eponym see entry *caesarum* p. 50). The species *C. tenellum* [L. = tender, delicate] was the smallest known European dragonfly when it was described.

orientale, *Erythromma viridulum* 1960b: 23 = ***Erythromma viridulum*** (Charpentier, 1840: 149)

L. *orientalis* –is –e = eastern, oriental

Schmidt described this subspecies, which he said to be found in Asia Minor, Syria and Iran, from specimens in his collection, which were from Syria, stating that they had a lighter coloration than the nominal taxon. That subspecies is not maintained any longer. *E. viridulum* [L. the small greenish one]

orientis, *Pseudagrion torridum* 1951a: 155 = ***Pseudagrion torridum*** Selys, 1876b: 500

L. *orientis* (gen.sg.) = of the East

Schmidt chose this name for a subspecies he based on specimens from Nubia and Egypt, a region in the eastern part of Africa, which differed in his opinion by their coloration from the nominate form which had been described from Senegal. This subspecies is not maintained any longer. Selys named the species *torridum* (L. dried up, torrid, hot), because the region between the tropics, where the type locality (Dakar, Senegal) is situated, is called 'zone torride' in French.

pontica, *Ischnura elegans* 1938b: 142 = ***Ischnura elegans*** (Vander Linden, 1820: 6)

L. *Ponticus* –a –um = pertaining to the Black Sea (L. Pontus)

Schmidt described the range of his taxon: "Vom Neusiedler See und Kärnten durch Ungarn und den nördlichen Balkan bis mindestens Kaspisch Persien [From Lake Neu-

siedl and Carinthia through Hungary and the Northern Balkans to at least Caspian Persia]", which would include the region of the Black Sea. But Schneider & al. (2018: 18) state: "The subspecies *Crocothemis erythraea chaldaeorum* (Morton, 1920), *Ischnura elegans ebneri* (Schmidt, 1938) and *I. e. pontica* (Schmidt, 1938) were rejected because they cannot be accurately defined due to uncertain and unstable diagnostic characters".

pseuderythromma, *Aciagrion* (1936: 67) = ***Aciagrion africanum*** Martin, 1908: 659
Gr. Gr. ψευδ(ο)- [pseud(o)-] = false, pretended, sham + Genus name *Erythromma* (Gr. = redeye, because of the eye colour of the males classified into that genus then)

Schmidt does not explain his choice of the name he gave to a single ♂ specimen from the Stockholm museum; neither the key nor the description give any clue, but there is some similarity of the appendages shown in fig. 38 on p. 67 with the drawings of the male appendages of the *Erythromma* species in Lehmann & Nüß 2015: 55.

Already in Schmidt 1951a: 139 this taxon is identified with *Aciagrion africanum* Martin, which was described from specimens from "Guinée portugaise" in the evaluation of a research expedition to West Africa.

risi, *Disparoneura delia* 1934: 338 = *D. delia* (Karsch 1891: 243) ≈ ***Prodasineura verticalis*** (Selys 1860b: 453) (see below).

Schmidt remarks about his choice of name (p. 339): "Dem Andenken des viel zu früh verstorbenen Meisters, Dr. F. Ris, gewidmet [Dedicated to the memory of the great Dr. F. Ris, who passed away much too early]" (about the eponym and Schmidt's relation to him see p. 12). His taxon he described partly from specimens in the Ris collection as a subspecies of *Disparoneura delia* Karsch, which had got its name because of the provenance of the type specimens from the province Deli in Northeast Sumatra (unlike Ris' *Macrothemis delia* from Suriname which got its name from classical antiquity, see Fliedner 2021a: 37). Now Karsch's taxon is regarded either as subspecies or as synonym of *Prodasineura verticalis* Selys; its real status has to be cleared (see Turiault 2018: 5). In Selys' name the Latin adjective *verticalis* is not used in the prevailing meaning 'perpendicular', but as 'concerning the vertex' as to be seen from this clause in the description: "Une bande rouge au vertex, traversant l'ocelle antérieur [A red band at the vertex, crossing the fore ocellus]."

risi, *Calopteryx orientalis* 1954c: 241 = ***Calopteryx splendens orientalis*** Selys, 1887: 40 (cf. below)

This is another dedication to Friedrich Ris (1868-1931) (see foregoing entry).

Schmidt (1954c: 224) explained that Ris in a paper on the concept of species had, somewhat hiddenly, pointed out "auf eine Unterart hin, die ihm offenbar v. B o d e m e y e r in Anzahl mitgebracht hatte (Nr. 26). welche wir hier nach ihm benennen [to a subspecies from which v. Bodemeyer {a German explorer, coleopterist and insect trader (1883-1929)} had apparently brought him specimens in numbers ... which we name after him here]." *Calopteryx orientalis* is now to be classified as a subspecies of *Calopteryx splendens* (see Hämäläinen & Fliedner 2022: 3), so there cannot be a sub-subspecies. Selys chose his name *orientalis* [L. =Eastern] in an analysis, where which 'races' of *Calopteryx splendens* are found, for specimens from the eastern coast of the Caspian Sea; he was not certain whether they represented a separate species or a subspecies. This question

probably has to be answered in favour of the latter possibility (see Hämäläinen & Fliedner 2022: 3).

sjoestedti, *Microstigma anomalum* 1958b: 37 = ***Microstigma anomalum*** Rambur, 1842: 289

The subspecies is named after the Swedish entomologist B. Y. Sjöstedt (see below). As reason for the dedication is given: "Die Form ist zuerst durch Prof. Yngve Sjöstedt gekennzeichnet worden, dem zu Ehren sie hier benannt wird [The form was first identified by Prof. Yngve Sjöstedt, in whose honour it is named here]." The identification Schmidt mentions here was given in a publication on the odonatological results of an expedition to Amazonas (Sjöstedt 1918: 34). Rambur's species name *M. anomalum* is the Latinised neuter form of the Greek adjective ἀνώμαλος [anōmalos] = uneven, irregular, anomalous. The irregularity referring to the wings (p. 289): "pterostigmate nullo vel subnullo [without or nearly without pterostigma]."

Bror Yngve Sjöstedt (1866-1948), after graduating in zoology from Uppsala University, led a Swedish expedition to Cameroon and in 1905-1906 another very successful one to Tanzania (then German East Africa), during which over 4000 species were collected, a third of them new to science. With his publication on the birds collected during the former expedition, he earned a doctorate and the rank of licentiate in 1896. From 1897 he was employed at the Natural History Museum in Stockholm, from 1902 as curator of the entomological department, from 1922 presiding over its board until the end of his professional career in 1933. Also in 1897 he was appointed to an institute for plant protection against insect pests. In this capacity he visited the USA and Canada to gain expertise which he later used successfully. From 1927 to 1933 he was also vice president of the Vassijaure Institute of Natural Science responsible for the entomology department. From this engagement resulted a three volume publication of the insect fauna of the Abisko Natural Park in Northern Sweden.

Most of his more than 120 publications, written in Swedish, German, English or French, focus on entomology, especially Isoptera, Orthoptera and Odonata. In addition to his own expeditions, he also published about the odonatological results of others, for example from Australia, Madagascar, South America, China and Kamchatka (see Endersby & Fliedner 2015: 72-73; Beolens 2018: 389).

theryi, *Coenagrion caerulescens* 1959: 13 = ***Coenagrion caerulescens*** (Fonscolombe, 1838: 568)

Schmidt (1959: 13) states: "Benannt zu Ehren von M. A. Théry, Buprestiden-Spezialist in Rabat, Marokko [Named in honour of M. A. Théry, buprestid specialist in Rabat, Morocco]".

André Théry (1864-1947) was a French zoologist, who had specialized on the insects of North African where he spent many years. He had founded two natural history societies, one in Algiers (1909), the other in Morocco (1920). After his return to France, he served as president of the entomological society of France (1939). From 1942, he was associated with the Paris Museum of Natural History, where his collections and records are now housed. He was a collector of some specimens from the museum in Rabat, on which Schmidt based this taxon (for more see Beolens 2018: 410).

(for *Coenagrion caerulescens* see entry *caesarum* p. 50)

vicinum, *Microstigma anomalum* 1958b: 36 = *Microstigma anomalum* Rambur, 1842: 289

L. *vicinus* –a –um = near, neighboring / nearly resembling

Schmidt explains, that for him it had been difficult to distinguish this taxon from the other subspecies of *M. anomalum* described in that paper. So it seems clear what made him choose this name for it.

(for *M. anomalum* see entry *sjoestedti* p. 57)

zernyi, *Orthetrum hintzi* 1951a: 178 = *Orthetrum hintzi*, 1951a: 178

The subspecies, which is now synonymised with the nominal species described immediately before (see p. 31), was named after the collector of the type specimen from Tanzania: “Benannt zu Ehren des inzwischen verstorbenen Sammlers Herrn Dr. Hans Zerny aus Wien [Named in honour of the late collector Dr. Hans Zerny from Vienna]” (for the eponym see the entry *zernyi* p. 47)

Misidentifications

fickei, *Protolestes* Schmidt 1951e: 148 (≠ *P. fickei* Förster 1899: 188) = *Protolestes proselytus* Lieftinck, 1965: 246

In his publication on the Odonata of Madagascar Schmidt erroneously identified two ♀ ♀ from Ambodirafia with Förster's species *P. fickei*, which also was described from two ♀ ♀ from Northern Madagascar, which Förster had received for determination from the city councillor Hugo Ficke (1840-1912) at Freiburg (More about him see Schnetter 1966: 395-396. https://www.freiburg.de/pb/site/Freiburg/node/1583000/dr_h.c._hugo_ficke.html). But Schmidt's error was corrected by M. A. Lieftinck (1965: 246) on the basis of new material: “This is the species described and figured by Schmidt as *fickei*, which, as stated before, is a closely allied but distinct species. ... Schmidt sent two females from Ambodirafia and a male from Diego-Suarez to Mrs. Gloyd at Ann Arbor for comparison with Förster's types; the specimens were found to agree moderately well, but the male was later recognized as a distinct species and named *P. leonorae* Schmidt. With both sexes of the true *fickei* having now been collected together in the typical locality by Dr. Keiser {curator at the Naturhistorisches Museum at Basel}, the *fickei* of Schmidt also turns out to be specifically distinct. It is here renamed *proselytus* sp. n.”

L. *proselytus* = sojourner, stranger (borrowed from Greek where it is literally ‘someone who has come to somebody or somewhere’, also used for converts), which in this context might be understood as ‘additional species’.

nigradorsum, *Enallagma* Schmidt 1951a: 134 (≠ *Azuragrion nigradorsum* (Selys, 1876a: 531)) = *Azuragrion vansomereni* (Pinhey, 1955: 26)

L. *niger*, –gra –grum = black, dark + *dorsum* = back

In his publication Schmidt gave a description with figures of a male from the Vienna Museum, collected 1869 in St. Louis, Senegal, which he took for *Enallagma nigradorsum* Selys, which had got its name due to the dark coloration dorsally, described as “noir bronzé [black tan]” in head, prothorax and thorax and as “une bande dorsale bronzée [a tan

dorsal band]” for the abdomen of the male, the female being similarly coloured. But his identification was erroneous: the species in question was described by Pinhey four years later as *E. vansomereni*, explaining his choice of name: “A series was taken by Dr V.G.L. van Someren and Mr. T.H.E. Jackson on Pachua dam at Paimal in the Acholi region of Northern Uganda.” The eponym Victor Gurner Logan van Someren (1886-1976) was an Australian-born British physician, dentist and naturalist – specialized in Lepidoptero-logy and Ornithology – who spent 40 years in colonial service in East Africa (for more see Benson 1977; Beolens 2018: 427). That the specimen described by Schmidt belongs to the latter species was published by Pinhey (1962b: 27) following a suggestion by R.M. Gambles.

For the misidentification of *Libellago dispar cordosa* Fraser, 1947 that led to *Chlorocypha schmidti* Pinhey, 1967 see p. 20)

Actual Genera

Acanthagrion Selys, 1876a: 304

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

In his *Systema Naturae* (1775: 424-25) Fabricius had split off from Linné's genus *Libellula*, which comprised all Odonata, the genera *Aeshna* for the larger Anisoptera (see below) and *Agrion* (from Gr. ἄγριος [agrius] = living in the field / wild, probably because they rather do not live in a domestic environment) for the Zygoptera. Since controversies arose later as to whether *Agrion* really meant the Calopterygidae or the other Zygoptera not classified in other genera, it has since become standard practice to retain the name *Calopteryx* and to replace *Agrion* in the second meaning by *Coenagrion* Kirby (see Hämäläinen & Fliedner 2022: 11-12). *Agrion* is thus no longer used, but it is an element in many compound genus names of damselflies.

The genus *Acanthagrion* was described as 'sous-genre' with seven other ones (currently all considered genera, except for two that have been synonymised with *Ischnura*), the common feature of which 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). So *Acanthagrion*, according to Selys, would have been suitable to designate this whole group, in which *Oxyagrion* [= pointed *Agrion*] and *Xiphiagrion* [sword *Agrion*] are also named for this feature.

Aciagrion Selys, 1891: 509

Gr. ἀκίς [akis] = pointed object, hence needle + *-agrion* see foregoing entry

Apparently, this feature led to the name: “Abdomen long, excessivement grêle [Abdomen long, exceedingly slender]”.

Aeshna Fabricius 1775: 424

In 1775 Fabricius had split off from Linné's genus *Libellula*, which comprised all Odonata, the genera *Agrion* (see entry *Acanthagrion*) for the Zygoptera and *Aeshna* for the larger Anisoptera. The etymology of this name is unclear; but for some time it was emended to *Aeschna* (with c) for a Greek origin of the name was surmised, where a letter combination sh is impossible. But in 1958 the ICZN in opinion 34 decided, that *Aeshna* had to be

maintained, as Fabricius, who adhered to the spelling without c until his death, had not explained his name in any way and an orthographical slip therefore could not be proven. But in compound names given in the 19th century, while the emended spelling was in use, the c is to be retained (for instance *Cephalaescha*, see below).

Africallagma Kennedy, 1920: 87

Combination of L. *Africa* with *Enallagma* (see below p. 63)

Kennedy gave as definition for this genus of Sub-Saharan species: "Generic characters as in *Enallagma*, except apex of segment 10 in male is elevated into an apical keel, notched at apex. Includes *nigridorsum*, *obliteratum* and *schultzei* as described in Ris, "Od. Sudafrika" [= Ris 1908]."

Allocnemis Selys, 1863: 173 [fig. 17]

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

The taxon was described by Selys as a 'sous-genre' in the publication in which he established his 'légion Platycnemis', which was intended to cover the taxa closely related to the genus *Platycnemis*. As character of this new subgenus he explains: "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]" (p. 174) So the name means: "Another platycnemidid taxon". But later Selys recognised, that not all genera, to which he had given names ending in *-cnemis*, pertained to the Platycnemididae, so that the morpheme *-cnemis* may just mean 'Coenagrionid damselfly'.



Fig. 17: *Allocnemis contraria* ♂ Cameroon, South West P Lake Ebib © R.Garrison. Selys separated the genus from *Platycnemis* partly because of the long petiolation of the wings.

Azuragrion May, 2002: 404

Engl. *azure* = light blue goes back to a grammatical error: mediev. *L. lazurum* = Lapis-lazuli in romanic languages was misunderstood to be combined from the article 'l' and *azurum* and therefore came into French as *azure* (similar forms are found in other languages); for *Agrion* see *Acanthagrion* p. 59.

The given etymology reads: "Named for the azure blue colour of males of most species."

Burmagomphus Williamson, 1907: 275

modern *L. Burma* = Burma (today's Myanmar) + *Gomphus* (see p. 64)

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." It must be added, that the specimens, 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).

Calopteryx Leach, 1815: 137

Gr. κάλος -ή -όν [kalos] = beautiful + πτέρυξ [pteryx] = wing

In the first description of the taxon it reads: "This genus comprehends those Agrionida with coloured wings." As its name Leach chose *Calepteryx*, as if he had transcribed the two separate words into Latin, the first morpheme being an adjective adapted in gender to *pteryx* (feminine); but as compounds are formed differently it was later emended to *Calopteryx*.

Cephalaeschna Selys, 1883: 739

Gr. κεφαλή [kephalē] = head + *Aeshna* (see p. 59)

The name of the taxon, originally described as a subspecies, refers to a special feature of the head: to the bulging, high frons of the only species included then, which is characterised as 'extraordinaire' in the description: "Le front vu en dessus s'élève et s'élargit fortement à son bord antérieur, de manière à être presque aussi large que les yeux. Vu de face, il est très élevé, arrondi au sommet, formant avec le nasus et le rhinarium un cercle presque régulier don't le diamètre transversal le plus large est au niveau de la suture supérieur du nasus [The forehead seen from above rises and widens strongly at its anterior edge, so as to be almost as wide as the eyes. Seen from the front, it is very high, rounded at the top, forming with the nasal bridge and the rhinarium an almost regular circle whose widest transverse diameter is at the level of the upper suture of the nasal bridge]."

Ceriagrion Selys, 1876b: 525

L. cerinus = waxcoloured + *Agrion* (see *Acanthagrion* p. 59)

The genus was based on four species, for which Selys states in the description of the genus: "Coloration générale jaunâtre orangée sans taches [General colouring yellowish-orange without spots]." The first species Selys placed in his new genus was Brauer's species *C. cerinorubellum* [= waxy-reddish] the name of which also refers to wax (for the formation of the name cf. *Onychogomphus* p. 66).

Chalcopteryx Selys, 1853: 68

Gr. χαλκός [chalkos]= copper; anything made of metal + –πτερυξ = –winged

In the first description it reads: “Ailes ... inférieurs opaques, métalliques dans les deux sexes [Hind wings opaque, metallic in both sexes].”

Chlorocypha Fraser, 1928: 684

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

Fraser (1928: 683) had seen that Selys (1840: 200) establishing his new genus *Libellago* [= showing the characteristics of a *Libellula*, see Fliedner 2021a: 109] had cited *Calopteryx lineata* Burmeister as the first species of it, and that Rambur (1842: 238) based his new genus *Micromerus* [from Gr. μικρός [mikros] = small and μέρος [meros] = part probably as a reference to ‘Abdomen notably plus court que les ailes [Abdomen noticeably shorter than the wings]’ on this very species. Thus he had created a synonym. But Selys in his ‘Synopsis des Caloptérygines’ had adopted Rambur’s classification (1853: 65) and instead assigned *Libellula dispar* Palisot de Beauvais as the type of *Libellago* (p. 57), which was not classified in the genus when it was established; so the genus in the new description was not valid being a homonym of *Libellago* Selys, 1840. Therefore *Micromerus* Rambur had to be replaced by *Libellago* and a new name had to be found for that name in the second sense, which means for the species found in Africa. For this Fraser chose *Chlorocypha*, the first part of the name being a reference to those species, which were characterised in his key by ‘Abdomen marked with bright citron yellow or greenish’ against those marked ‘with bright orange or brick red’. The former feature however is by far not found in all members of this genus. The second element of the new name was taken from 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 reflé et saillant [epistome strongly bulging and protruding]”).

Coeliccia Kirby, 1890: 128

Kirby had seen that the name *Trichocnemis* (= with bristles at the tibiae) Selys, 1857 was preoccupied by a genus of beetles described by Le Conte in 1851. So he replaced it by *Coeliccia* in his Synopsis without any explanation. That name might reflect a distinctive feature of the taxon, which Selys had given in a new description of the genus (1886: 114): “♀ Prothorax à bord postérieur échancré (♀ Prothorax at the rear margin scalloped).” If so, the name might be composed of Gr. κοῖλος –ή –όν [koilos]= hollow, concave and the Italian suffix –*iccio* –*a* = somewhat. But that is entirely guesswork.

Coenagrion Kirby 1890: 148

Gr. κοινός –ή –όν [koinos] = common, ordinary + *Agriion* (see *Acanthagrion* p. 59)

In the 19th century *Agriion* 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 *Agriion* (= *Calopteryx*)

virgo as the only species of the Fabrician genus, had made it its type species and thus rendered *Calopteryx* Leach a younger synonym. So Kirby in his 'Synonymic Catalogue of Neurotera Odonata or Dragonflies' introduced the name *Coenagrion* as a replacement for *Agrion* in the previous sense. After long controversies later it became 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: 25

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

Selys (1863: 168), in establishing his platycnemidid genus *Psilocnemis* (≈ simple greave), in which the tibiae are scarcely widened, had overlooked the fact that this name had already been used by Burmeister in 1842 for a beetle genus. So Kirby replaced it by *Copera* without any indication, why he chose this name; but certainly it is another allusion to charming femininity, like the first species names for damselflies, *virgo* or *puella* given by Linné.

Eleuthemis Ris 1910: 382

Gr. Gr. ἐλευθερος –α –ον [eleutheros]= free + + θέμις [themis]= = law as established by custom / the goddess of order

Ris (1909a: 25) had planned the name *Eleutho* (a name from Greek mythology, either an alternative name of Eileithya, the goddess of obstetrics, or an epithet of the goddess Demeter at Eleusis). But when he had been informed by Mutkowsky, that that name was preoccupied in Cerambycidae, he replaced it by *Eleuthemis*, the first part of the name probably being a reference that in this genus "Alle t, ti im Vorderflügel und ht frei [All t(riangles), the ti (intern triangle = subtriangle) in the fore wing and the ht (supertriangular space) are free]" (etymologically *Eleutho* and *eleutheros* are not related, but Ris seems to have thought so).

The second element *Themis*, which was never a dragonfly name by its own, was introduced to nomenclature by Hagen (1861), who needed new generic names for several North American dragonflies. He formed these names after the model of the names in –*etrum*, given to libellulid genera by Newman (1833: 511; e.g. *Orthetrum* see p. 67). However, to avoid adjectival species names being changed to the neuter due to generic names on –*etrum* if they had to be transferred from the genus *Libellula*, he chose the feminine element –*themis* instead (see Hagen 1888), just meaning 'libellulid dragonfly'. In his choice he probably was inspired by names of divine beings in nomenclature like *Nehalennia* or *Cora*, and the Greek goddess of order certainly makes a good patroness of taxonomy. Hagen's model was followed by many other odonatologists; so there are more than sixty genera of dragonflies whose names end in –*themis*; but this element is no longer restricted to libellulid dragonflies, but is also found for corduliids and synthemistids.

Enallagma Charpentier, 1840: 21

Gr. ἐνάλλαγμα [enallagma] = change.

Charpentier (1840: 21) had considered a subgenus *Enallagma* (from Gr. ἐνάλλαγμα, meant as 'giving the possibility of confusion') for all the similar coeangrionids in which the males are mainly blue with black markings: "Omnes species permagnam, quod ad colorem et picturam attinet, inter se habent similitudinem (– qua de causa prius hoc subgenus "Enallagma" vocavi –) et utriusque sexus segmenta abdominis, imprimis priora, thoraci propiora, accurate sunt examinanda, quia eorum pictura diversa optime illae species distingui et secerni poterunt [All species bear a very great resemblance to each other concerning color and pattern (– therefore previously I called this subgenus "Enallagma" –) and the abdominal segments, especially the first ones which are nearer to the thorax, of both sexes are to be examined accurately, because by their differing markings the species may be distinguished and separated best]." This taxon was firmly established in its present sense by Selys 1876a: 496.

Erythromma Charpentier 1840: 20

Charpentier explains his choice of name in this way: "E Graecis vocabulis ἐρυθρός and ὄμμα nomen est compositum, cum mares, dum vivunt, oculorum habeant colorem mire rubrum [The name is composed of the Greek words ἐρυθρός {erythros = red} and ὄμμα {omma = eye}, as the males have an amazing red eye colour as long as they live]."

Gomphus Leach 1815: 137

Gr. γόμφος [gomphos] = bolt for shipbuilding

The genus name was introduced for the species showing this feature: "Abdomen clavate in both sexes". The Gomphidae now form one of the largest dragonfly families of all with more than 1000 species. It contains many genera whose names contain the element –*gom-**phus*, e.g. *Burmagomphus*, *Onychogomphus* and others.

Hetaerina Hagen in Selys, 1853: 30

Latinised from Gr. ἑταίρα [hetaira] = companion, courtesan + suffix –ινός –ινή –ινόν[–inos] = related to, like a ...

Hagen does not give a reason, why he chose this name; but it blends in with the other names in odonatological nomenclature that allude to charming femininity, the first of which were Linnaeus' species names *virgo* (= maiden) and *puella* (= girl), probably inspired by vernacular names for dragonflies like French 'demoiselles' (that word is also at the base of the English term 'damselflies').

Fig. 18: *Ictinogomphus australis lieftincki* ♂, Papua New Guinea, Madang Oxbow pond © R. Garrison. The taxon named by Schmidt after the famous Dutch colleague is now considered a subspecies of *Ictinogomphus australis*.



Ictinogomphus Cowley, 1934b: 274 [fig. 18]

Gr. ἴκτινος = kite (a bird of prey); for *-gomphus* see p. 64

Rambur (1842: 171) had established a gomphid genus *Ictinus*; but Cowley saw that the name was preoccupied by a genus of beetle named eight years earlier. So in his replacement name he combined the original name with that of the genus after which this whole anisopteran family is named.

Ischnura Charpentier, 1840: 20

Charpentier proposed this taxon 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 ...].”

Lestes Leach, 1815: 137

Gr. ληστής [lēstēs] = robber, pirate; the Latinised form *Lestes* is accentuated on the first syllable

This is one of two new genera of damselflies created by Leach; in its description we find: “Abdomen of the male armed with a forceps-like appendage”; that means: the male appendages were mistaken for weapons, and such armament would fit well to a pirate (for more see Hämäläinen & Fliedner 2023). In the meantime, there are also many compound genus names that end in *-lestes*, but by far not all of them belong to the lestids, but they may pertain to the superfamilies Lestoidea or Calopterygidoidea (see Dijkstra & al. 2014, Bybee & al. 2021).

Libellula Linnaeus, 1758: 543

L. libellula = diminutive of *libella* = (among others) archipendulum (see below).

The archipendulum was a tool of building craftsmen in antiquity and the Middle Ages in the shape of an inverted T. The French naturalist Guillaume Rondelet (1505-1566) had chosen the name *libella marina* (= *libella* from the sea) for the hammerheaded shark because of similarity to that instrument and later transferred it to zygopterous larvae (*libella fluviatilis* = *libella* belonging to the rivers). Since the 17th century, the name *Libella* has also been used scientifically for odonate imagines. Linnaeus chose the diminutive as genus name for all Odonata (see Fliedner 1997: 24; Fliedner 2012; Fliedner & Endersby 2019: 175).

Microstigma Rambur, 1842: 288

Gr. μικρός –ή –όν [mikros] = small + στίγμα [stigma] = tattoo mark, spot

Rambur characterises his new genus: “Mêmes caractères que le genre *Megaloprepus*, mais ayant un ptérostigma presque nul et le sommet des ailes un peu blanchâtre [Same characteristics as the genus *Megaloprepus*, but with almost no pterostigma and slightly whitish wing tips...]”

Nesolestes Selys, 1891: CCCXCIX

Gr. νῆσος [nēsos] = island; for *-lestes* see above

Selys established this genus for a species from Madagascar, which certainly is an island. He classified it in his 'légion Podagrion', in which he had given several genus names, ending in *-lestes*, stating a special similarity to the West African genus *Neurolestes* [= vein *Lestes*, because of a special feature of wing venation]. Now both genera are placed in Argiolestidae (see Kalkman & Theischinger 2013: 44).

Nososticta Hagen in Selys, 1860b: 456

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

An explanation what the name should mean is neither given in the original description for the genus nor in that for the species *N. solida* on which it was based. Now there are more than 20 genera with a name ending in *-sticta*, of which nearly all describe a special feature of the pterostigma or indicate the close relation to a genus with such a name. But the pterostigma in this taxon is not significantly different from those in the other 'sous-genres' of the 'genus *Alloneura*' Selys established in the same publication; so by no means could this part of the wings be associated with disease or mischief. But there is one feature of the only species of the new taxon that is explicitly mentioned (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]." Very hesitantly, therefore, I give the following explanation: This characteristic has been presented as a kind of defect caused by misfortune and the name might say: "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).

Nubiolestes Fraser 1945: 9

L. *Nubia* = Nubia (region south of the First Nile Cataract); for *-lestes* see p. 65

Nubiolestes is Fraser's replacement name for the preoccupied *Eolestes* Schmidt 1944 (see p. 21). As the only species in this genus ranges in West Africa from south-eastern Nigeria to southern Gabon, Fraser's genus name certainly is a misnomer. For a long time, the genus was thought to be the only representative of the Old World pertaining to the American family Perilestidae, but it has since been recognised as belonging to the Synlestidae as the sister group of southern African *Chlorolestes* (Dijkstra & al. 2014: 4-5).

Onychogomphus Selys 1854:30

Gr. ὄνυξ (stem ὀνυχ-) [onyx/ onych] = anything like a claw, e.g. talon, claw, fingernail, hoof; for *-gomphus* see p. 66

Whereas the name is a reference to the claw like male appendages in the genus, the wording of the first description does not show that relation. To understand that compound name better we must consider its place in nomenclature. In his work on the Gomphidae Selys (1854) saw that many new genera were to be established. Thus he resorted to compounds with *-gomphus* in order to emphasise the relationship already in the name. There are toponyms like *Austrogomphus* (Selys 1854: 63) as a reference to the occurrence in Australia, allusions to morphological features like leaf-like extensions on the last abdominal segments in *Phyllogomphus* (leaf *Gomphus*, p. 43), or species names transformed from Latin into Greek like *Ophiogomphus* (snake *Gomphus*, p. 39) after *Libellula serpentina* (snake libellula) Charpentier [a younger synonym of *L. cecilia* Fourcroy] or

– in this case – *Aeschna unguiculata* (equipped with little claws) Vander Linden [a younger synonym of *L. forcipata* Linnaeus], which in Selys 1840: 80 is found as the first species listed in the genus *Gomphus*. Also the name *Ceriagrion* (see p. 61) might originally have been intended as a reference to *Agrion cerinum* [wax *Agrion*] Rambur [a younger synonym of *A. coromandelianum* Fabricius] rather than to *A. cerinorubellum* Brauer.

Orthetrum Newman, 1833: 511

Gr. ὀρθός = straight + ἦτρον = abdomen.

In his publication of the genus *Sympetrum* for libellulids with a laterally compressed abdomen Newman 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 coeruleascens* Fabricius or *L. cancellata* Linnaeus as examples. By this explanation however he had given a valid description. But it should be noted, that this genus remained nearly unnoticed until about 1880 (see Hagen 1888).

Phyllocycla Calvert, 1948: 62

Gr. φύλλον = leaf + κύκλος = anything circular.

By this anagram Calvert replaced the preoccupied Selysian name *Cyclophylla* (see Selys 1854, 76: “σ 8e segment dilaté en feuilles plissées, souvent un vestige analogue en 9e,” [σ 8th segment expanded into folded leaves, often an analogous rudiment in the 9th]).

Prodasineura Cowley, 1934a: 202

Cowley had recognised, that difficulties had arisen from the fact, that Selys (1860b: 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 (for the taxonomical difficulties see Cowley 1934a: 202-204). So he replaced *Alloneura* Selys 1886: 176 by 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 = in entomology used for wing veins) got its name because of this: “Secteurs de l’arcus naissant séparés [Sectors of the arcus originating separately]” (Selys 1860b: 443).

Proplatycnemis Kennedy, 1920: 85

Gr. prefix προ– [pro–] = prior in rank or order + *Platycnemis* (see *Allocnemis* p. 60)

Kennedy probably chose this name for the taxon, which he separated this from *Platycnemis* by features of wing venation, because he regarded it as more archaic than the original genus.

Protolestes Förster, 1899: 187

Gr. πρωτο– [proto–] = foremost, first; for *–lestes* see p. 65

Förster gives no direct explanation for his choice of name for the new taxon, which he places in the ‘Legion Podagrion’ Selys; but since he differentiates it from its other Malagasy genera in the key 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]]", it can be assumed that he considered it to be more archaic than these.

Pseudagrion Selys, 1876b: 490

Gr. ψευδ- [pseud-] = false, pretending to be + *-agrion* see *Aciagrion* p. 59

There is no explanation of the name in the first description, but most probably the name reflects the difficulty to distinguish this genus from other coenagrionid genera.

Pyrrhosoma Charpentier 1840: 19

Charpentier introduces this taxon, which comprises just two European species, as a subgenus: "Nomen e Graeco πυρρός et σῶμα compositum, propter coccineum specierum huius subgeneris colorem [The name is composed of Greek πυρρός (pyrrhos = flame-coloured, yellowish-red) and σῶμα (sōma = body) because of the scarlet colour of this subgenus]."

Rhipidolestes Ris 1912: 57-58

Gr. ῥιπίς [rhipis] = fan; for *-lestes* see p. 65

This genus, now placed in the Calopterygoidea (Dijkstra & al. 2014: fig.1), has its name from a feature of its wing venation: "Die regelmäßige Disposition der Schaltsektoren und der strahlenförmig divergente Verlauf aller Hauptsektoren gibt der Aderung ... eine eigenartig regelmäßige Fächerform [The even divergence of the principal sectors like rays and the even disposition of the intermediate sectors between them is why the venation forms the specific regular feature of a fan." (translation by D.A.L. Davies in Davies & Fliedner 1999)]".

Stylurus Needham 1897: 166

Gr. στῦλος [stylos]= pillar [≠ L. *stylus* as in other names] + *-ουρος* *-ος* *-ον* [*-urus* (in compounds) *-tailed* [from οὐρά [ura]= tail; in entomology used for abdomen].

In the larvae of this genus, unlike in those of other gomphid genera, the ninth abdominal segment is elongate (p.168): "Ninth abdominal segment one half longer than the 8th, its lateral margins nearly parallel".

Tatocnemis Kirby, 1889: 300

Gr. τατός *-ή* *-όν* [tatōs] = stretched; for *-cnemis* see *Allocnemis* p. 60

When Kirby described this genus, he thought it to pertain to the Platycnemididae, as to be seen from its name and the position of the taxon in Kirby 1890: 128. Presently it is placed in the Calopterygoidea (Bybee & al. 2021: 8). On the first look the name might refer to two features, mentioned in the description: "Wings long and narrow, petiolated to the level of the arculus..."(p. 300) or: "Abdomen long and slender ..." (p. 301). But a closer look allows a decision. At the end of the description, Kirby points to a difference of the taxon from two closely related genera from Southeast Asia: "It differs abundantly from both in the extremely petiolated wings..." (p. 302)

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)

In 1865: 378 Selys had established a genus *Telebasis* (from Gr. τηλε- [tēle-] = far, far apart), in reference to the long petiolation of the wings, by which their bases are far from the point of attachment to the thorax, and in 1877 he had incorporated a subgenus of the same name into it. However, since this was later given the status of a genus, it needed a new name, as its name thus had become a homonym that was pre-occupied by the original genus. Kirby solved this problem, not quite philologically correct, by replacing the name element *Tele-* with *Teino-* in the sense of extended, remote.

Zonophora Selys 1854: 80

Gr. ζώνη [zōnē] = belt, girdle + -φόρος [-phóros] = bearing a ..., wearing a ...

The name refers to an abdominal pattern of *Zonophora campanulata* (Burmeister), the sole species included into the genus, when it was established: "Abdomen brun. Un anneau jaune, interrompue en dessus à la base de 7me segment [Abdomen brown. A yellow ring, interrupted above, at the base of the 7th segment]."

Conclusions

Now that Schmidt's dragonfly names have been explained, it is time to see which types of names are foremost in his mind. For this synonyms are included because they show his preferences as well.

Of the four genus group names suggested by him two refer to evolution, one to similitude and the last one is geographic.

Of his 109 species-group names half (55 = 50.5 %) are eponyms. Of these most names (28 = 25.7 %) are those of collectors of the specimens in question, 23 (21.1%) refer to scientists, not all of them odonatologists, but for some part people who were in charge of entomological departments in museums, three (2.8%) name people who could be called Schmidt's benefactors, Mrs. Louise Kerckhoff, whose foundation had secured his livelihood in the years 1941 to 1944 (p. 31), Elisabeth Ris, whose support had made his life easier after the Second World War (p. 27 s.v. *elisabethae*) and Hamdi Oubaji, who by vigorous efforts had enabled him to collect in Syria (p. 46 s.v. *ubadschii*), finally there is one (0.9 %) name from antiquity (*diotima* p. 26) and from history (*ranavolana* p. 40) respectively, from which the latter also is related to geographical occurrence of the species.

Of the other names 27 (= 24.8 %) refer to appearance, of these 19 (=17.4 %) reflect morphology, 8 (= 7.3 %) similarity to other taxa, 6 (=5.5 %) pattern, 2 (= 1.8 %) size, one coloration and another one beauty (= 0.9 %); 13 (11.9 %) are related to the provenance of his specimens, two of them indirectly, one by naming the tribe, from whose territory the observation was (*merina* p. 37), the other one by choosing the indigeneous word for dragonfly (*angydna* p. 23). Furthermore there is one reference to environment (*silvaticus* p. 42) and one would seem to reflect behaviour (*velox* p. 46), but as Schmidt never saw a living one, it will have been chosen just because of the similarity of word formation to other taxa in the respective genus.

It might be of interest to see what the priorities were in nomenclature by other odonatologists: in Fliedner 2021b: 42 in Table 1 the figures for other scientists (Brauer's 105, Ris' 281, Krüger's 43 names) are summarised. The proportion of eponyms is highest in Krüger (41.9 %), but not as high as in Schmidt; in Brauer they are not very important (9.6 %), in Ris they form 36.2 % of his names. Of these a large part are the collectors (13.2 %), but

there is an even larger number of names from antiquity or literature (14.9 %), which are negligible in Brauer, Krüger and Schmidt.

The second category in Schmidt is appearance (24.8 %), while in Brauer and Ris it forms the most important category with over half of the names in each case (for Brauer even 69.2 %). But also within this category there are obvious differences: in it most of Schmidt's names reflect morphology, as they do in Brauer (21 %) and Krüger (14 %), but in Ris most refer to coloration (23.1 %), which Schmidt incorporated for just one species, while it is second in this respect in Brauer (15.2 %) and Krüger (11.2 %). Schmidt's rate of toponyms almost equals those of Brauer (12.4 %) and Ris (12.8 %), but is surpassed by Krüger's (16.3 %).

The fact that Schmidt relies so heavily on eponyms and dedicates taxa primarily to those persons to whom he owes specimens may be due on the one hand to Ris' example, but also to the fact that he felt particularly indebted to these people. In contrast to Ris' custom, however, there are considerably more multiple dedications to the same person: while there are only 3 cases of that in Ris, there are 9 in Schmidt, including as many as four taxa dedicated to Ris, his mentor. Compared to the other three, it is remarkable that coloration plays such a minor role in Schmidt's choice of names, whereas in his keys it is among the relevant features. However, it is indisputable that morphology and pattern are more important criteria in taxonomy.

It is noteworthy that among the 109 species-group names given by Schmidt, 34 (= 31.2 %) pertain to subspecies, of which, as far as I can see, only *Eleuthemis monardi* has risen to full species rank (in van Tol (1992: 192) also *Pseudagrion ranauense* is treated as full species), while most of the others are now considered synonymous with their nominate taxon.

In a letter from 19-xi-1929, quoted in the publisher's promotional leaflet from 1962 for Schmidt 1929, Ris had commented on that publication (translated): "So I find the rich presentation of the varieties excellent, especially with the simultaneous renunciation of all names for such varieties. We simply have to start by keeping silent about these things, which make a mockery of all the deeper meaning of zoological nomenclature, otherwise they will proliferate to excess, as the lepidoptera horribly reveal as a dilettante's playground." However, it cannot be denied that Schmidt later abandoned this caution. This was probably prompted by his endeavour to deduce the evolution of European species from the differences in appearance and to identify their respective places of origin. Corresponding questions are successfully pursued today with gene-analytical methods, which were not yet available at that time. However, Schmidt saw a suitable tool for this in 'Reinig's Rule' published in 1938/39, a hypothesis that the animals of a species are largest at its place of origin and decrease in size with distance from there. To this end, Schmidt collected large series of specimens at various locations, which he measured precisely and evaluated statistically. But since this hypothesis does not apply to dragonflies (for details see Schröter & al. 2015: 324), Schmidt's conclusions based on it are also null and void. A second reason why subspecies suggested by Schmidt are no longer accepted is that some of them are based on "uncertain and unstable diagnostic characters" (Schneider & al. 2018: 18). For example Schmidt (1961: 420) stated for his subspecies of *Libellula quadrimaculata*, that they are constituted by changes in abdominal markings, which, without additional morphological criteria, would rather no longer be considered sufficient to justify a subspecies. Besides Schmidt himself later (1967b: 211) retracted his subspecies *Ischnura elegans mortoni* (Schmidt 1938b: 142).

Let us now turn to Schmidt's personality.

Obviously, he was open to technical progress: From 1926 onwards, he used a typewriter for most of his letters to Ris and stated in an undated letter from early 1927 that he now typed copies from scientific literature or notes on it, which gave him the opportunity to pass the carbon copies on to others.

In the same letter, he discussed androchromy in female Odonata, and in particular, the dense blue pruinosity on the thorax and abdominal base of a *Lestes sponsa* female. The reason for this phenomenon might probably be clarified with a chromosomal examination. He would ask Professor (W. J. J.) Schmidt (1884-1974) in Gießen, who had previously been an assistant at the Zoological department in Bonn, to entrust a doctoral student with this task. This idea of a genetical examination, which is common today, was certainly modern at that time.

It might be worthwhile to look at some aspects that shed light on Schmidt's self-perception and his understanding of his orientation in life.

One event that was so important to him that he included it in his autobiography, and which is also mentioned in Buchholtz 1970: 266, was that in 1920 he accompanied a singer on the piano twice at a public concert in a health resort in the Black Forest (his fondness for playing the piano can also be seen in Enz 1970; see p. 73 below for more on this {Karl Enz = anagram and pseudonym for (W.) Kanzler}).

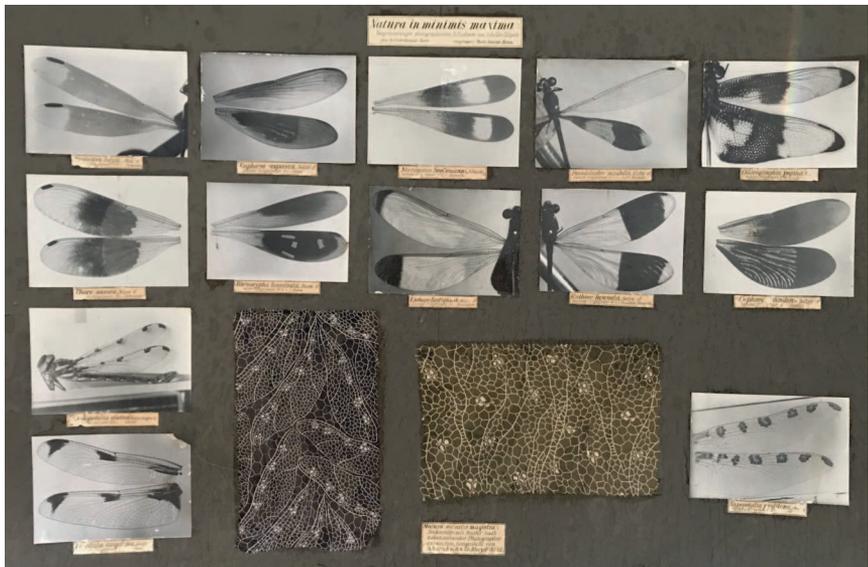


Fig. 19: Poster designed by Schmidt with enlarged photos of dragonfly wings in the Museum Alexander Koenig, Bonn. In the middle of the bottom row are silk fabric samples with the following inscription (in translation): "Nature is the teacher of art: silk fabrics with patterns designed according to the adjoining photography." Then the Rhineland company that offered these fabrics is named. Photographer: André Koch.

Another reference to Schmidt and the fine arts is found in his contribution to an entomological congress (1939a: 1501). There he describes with illustrations that his photos of dragonfly wings led, at a silk factory in the Rhineland, to the creation of a fabric pattern based on them. He also displayed this fact in a kind of poster for the Museum Koenig, which is still preserved there today as a reminder of his employment in the 1930s [fig. 19].

An interview from a local newspaper (Si- 1951) reports that Schmidt is clearly saddened by the Iron Curtain, but not for political reasons, which interest him little, but because he would like to look for dragonflies in Western Siberia.

Part of Schmidt's attitude to life was obviously that he felt he had to work under unfair conditions. In a 1956 essay, for example, he pointed out that, statistically, entomology should be the most important of all zoological disciplines in terms of the number of species, i.e. additional positions should be created for its representatives, and that the concentration on lepidoptero-logy and coleopterology led to the neglect of the approximately 20 other insect orders.

Similar thoughts can be found in the concluding paragraph of his autobiography in Asahina & Schöttner (1970: 4), in which he presents his life as exemplary, but led under impairing conditions (here only in translation from German): "The path of specialisation outlined here is common in systematic entomology because it can lead to productive work. The prerequisite, however, is financial security. The publication of entomological work is not remunerated at all, or at most very modestly – unlike the work of other academics and the actual production of entomologists usually begins in old age (after retirement), often after many years of preparation."

One of Schmidt's peculiarities was his attitude towards marriage. He remained unmarried throughout his life, justifying this in an essay entitled "May Entomologists Marry?" (1955) that a wife, in her and the family's interest, would take up his time, relegate the collections to an unheated basement room or attic and inflict further restrictions. In view of many married entomologists, these excuses were probably only self-assurance for his own lack of marriage.

What do we know about Schmidt's personal relations? Above, Alexander Koenig's reaction to his experiences with Schmidt had already been referred to (p. 6) and we also know that he had left the Institute in Geisenheim (p. 4) and the German Entomological Institute in Berlin-Dahlem (p. 4) due to personal differences. Buchholtz (1969: 267) also emphasises his "außerordentlich starken Eigenwilligkeit und Streben nach Ungebundenheit [extraordinarily strong self-will and striving for independence]". How was it therefore possible to get along well with him?

That this must have been possible is suggested by Heymer's statement in the obituary (Asahina & Heymer 1970): "War er doch wohl einer der besten Libellenkenner der ganzen Welt und wurde von allen seinen Kollegen geachtet und geschätzt [He was probably one of the best dragonfly experts in the world and was respected and appreciated by all his colleagues]." A clue as to how this was possible might be found in his correspondence with Ris: On 16-i-1928 he ends a long typewritten letter: "Nun muss ich schließen, sonst schimpft meine Wirtin wegen nächtlicher Ruhestörung [Now I have to close, otherwise my landlady will grumble at me for disturbing the peace at night]." And in his next postcard on 24-i-1928 there is a passage: "Meine Wirtin, eine ziemlich junge Majorswitwe, hat am nächsten Tage wirklich geschimpft. Die 3 Töchter wollten Revolution machen, da war der Brief gerade

fertig. Alles habe ich aber wieder besänftigt, was mir im allgemeinen nicht schwerfällt [My landlady, a rather young major's widow, really grumbled the next day. The three daughters wanted to make a revolution, by which time the letter was just finished. But I calmed everything down again, which generally is not difficult for me.]” That means: Schmidt could be charming when it was important for him to achieve something. And certainly fascicle 3/4 of the ‘Entomologische Zeitschrift’ in 1967 shows, that he had a group of young German entomologists enthused for odonatology. But it must not have been easy to get along with him, as he seems to have been self-opinionated and resentful. So Jurzitza informed Schöttner in a letter from 18-xi-1961: “Leider war es mir nicht möglich, von Herrn Dr. Schmidt Material [*Aeschna subarctica*] zu bekommen, er ist mir böse, da ich mir gestattet habe, in Nomenklatur Fragen anderer Auffassung zu sein als er, und das fasst er wohl als persönlichen Angriff auf. Nun, ich weiss wohl, dass ich nicht der Einzige bin, dem es so geht, und weiss mein Schicksal mit Würde zu tragen [Unfortunately I was not able to get material [*Aeschna subarctica*] from Dr. Schmidt, he is angry with me because I allowed myself to disagree with him on nomenclatural questions, and he probably takes that as a personal attack. Well, I know that I am not the only one who has this problem, and I know how to bear my fate with dignity].” It took a considerable amount of time for this disgruntlement to be overcome (letter from 22-iv-1965): “Herr Dr. Erich Schmidt, dem ich letzthin mal einen Schwung Separate gesandt habe, scheint mir nicht mehr so sehr zu grollen, er sandte mir kürzlich einen dicken Umschlag mit Neudrucken seiner Arbeiten [Dr. Erich Schmidt, to whom I recently sent a batch of separates, no longer seems to hold a grudge; he recently sent me a thick envelope with reprints of his papers].”

Concerning Schmidt's character the experiences of H.J. Dumont (2021: 61-62) might also be indicative. As a teenager he developed an interest in dragonflies and found Georges Demoulin (1919-1994), responsible for insects at the Royal Museum of Natural History in Brussels, as his mentor. As the latter was not specialised in dragonflies, he advised him to contact Erich Schmidt with his questions. After some time, Dumont received a postcard that was "not very nice": Schmidt informed him "that he could not afford the time to reply to beginners' requests" and that he only "made an exception because of Dr Demoulin's recommendation", providing "short and dry answers to most of my questions". But at his next visit to Brussels Schmidt left a set of reprints of his papers at the museum for Dumont.

Apart from his endeavour to use his time primarily in his own interest, as can be seen from his large interruptions in correspondence with Ris at times when he was not concerned with dragonflies (see Seehausen & al. 2023 p. 43), this shows his extreme thriftiness: a postcard, especially one sent abroad, required less paper and postage than a letter. This habit is also caricatured in Enz (1961), a funny sequence of pictures from Schmidt's life designed by a friend from his Berlin days, Walther Kanzler (1900-1984), as a gift for his 70th birthday, revealing a good acquaintance of many years. Kanzler, who came from Berlin, published in 1954 and 1959 on 'Märkische Libellen [Brandenburg odonata]', i.e. an area that then belonged to the German Democratic Republic beyond the Iron Curtain, using among others data provided by Schmidt. However, his own data do not go beyond 1944 and in 1954 he was resident near Ulm and described himself as a Rektor a.D. [= out of service]. A 'Rektor' is a headmaster of a primary school, and at 54 it is actually too early to retire; so there may have been reasons for it in activities during the 'Third Reich'. Later he lived in other places in Baden-Württemberg, but is still described as out of service. His continuing interest in

dragonflies is shown in Jurzitza 1961, where Kanzler is one of his confirmers for the occurrence of the species *Onychogomphus forcipatus* and *O. uncatus* at the Upper Rhine.

In his congratulatory booklet for Schmidt's 70th birthday Kanzler humorously demonstrates the thriftiness that resulted from the low income and the desire to manage collecting trips abroad as well, using the example of water that is used to boil potatoes, shave and wash feet [fig. 20], or a type of cheese as a staple food, the boxes of which are then used to store



Fig. 20: Enz 1971: 30. Schmidt's thriftiness: The vertical writing 'Eisernes Sparen' means "extreme austerity"; it is exemplified in the text with water used successively for boiling potatoes, shaving and washing feet, if necessary also in a different order.

**Noch ist der Trick nicht patentiert:
Man kocht Kartoffeln in den Schalen,
mit gleichem Wasser wird rasiert,
auch wäscht man darin die Pedalen.
Die Reihenfolge ist egal,
gespart wird hier auf jeden Fall !**

exuviae. Another matter that is caricatured is Schmidt's breeding of bluebottles to feed his dragonfly larvae, which had aroused displeasure. Also Schmidt's tendency for office nap is illustrated (cf. above p. 5). The only information about other identifiable persons in this booklet concerns the entomologist Friedrich Peus (1904-1978) in connection with an accident during a joint excursion to the Harz Mountains, which probably took place during Schmidt's Berlin period. Peus later headed the Diptera Department of the Zoological Museum Berlin after World War II and eventually even directed the museum for some time from 1959 onwards. Contact with him is also reported in the correspondence with Ris in connection with *Aeshna subarctica*.

The Festschrift can be studied in its entirety in facsimile in IDF Report 2(2) (Schorr 1999): https://www.dragonflyfund.org/images/reports/IDF_Report_02_2_komplett.pdf.

In a final assessment of Schmidt's contribution to odonatology, the following may be stated: Certainly, from about 1935 onwards, he was the best expert on the worldwide dragonfly fauna in Germany and recognised beyond the borders of his home country. This can also be seen from the fact that in 1957-58 he was entrusted with the reassembly of the Selys collection in Brussels.

His research has contributed significantly to the knowledge of odonates, even if many of his subspecies are no longer considered valid today. This is most likely because his main interest was not in the systematic delimitation of taxa, but rather in deducing the evolution not only of the entire order, but especially of individual species and their dispersal from their places of origin on the basis of their varieties. This seems to be evident from the fact that - for example in his last major work on the *Ischnura elegans* group (Schmidt 1967b) - he uses the terms 'form', which is now used infrasubspecifically, and 'subspecies' interchangeably, since he wants to emphasise the gradual differences between local populations from which he derives his conclusions. However, since these are based on an inaccurate theory, these results are no longer up-to-date. Nowadays, such questions are answered on the basis of genetic factors. A declaration from Armin Heymer's obituary (Asahina & Heymer 1970) may show what was felt, when the death of Schmidt became known (translated): "All of us, friends, colleagues and students, will appreciate his life's work and always remember him."

Authors' note

In my last publications, the accented syllable in the scientific names was marked by underlining. As this is quite cumbersome for the layout, this habit has been discontinued in the present work, except in the chapter "Actual Genera".

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I searched the internet for information about people and historical contexts from Wikipedia, used zobodat, BHL and ADDO to access literature and had the programme DeepL help me formulate the text of some sections.

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Addendum to p. 22: *Nososticta africana*

Dirk Gassmann kindly pointed out that in the respective paragraph the results of his investigations have not been represented correctly: *Nososticta africana* has not been found on the Solomon Islands, there are only records from the Bismarck Archipelago (New Britain, New Ireland and Lihir) and one from the mainland of Papua New Guinea (see Theischinger & al. 2013: 115). The type locality probably was Massua at the south coast of New Britain.

Additional reference:

Theischinger, G., A. Mitchell, S.J. Richards & D.A. Polhemus 2023: Systematics of the *Nososticta salomonis* complex (Odonata: Zygoptera: Platycnemididae): Zootaxa 5296(2): 101–146.

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