

The meaning of the scientific names of Seychelles dragonflies (Odonata)

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Abstract: The meaning of the scientific names of all Odonata species known from the Seychelles is explained in detail. The basis of many scientific names is ancient Greek or Latin describing characters of the insects or names of important researchers. Understanding the meaning of these names should offer an additional approach for being familiar with these insect species. Additionally, it is a good approach to understand research history of tropical insects - in which the Seychelles play an important role just from the beginning.

Keywords: Odonata, dragonflies, damselflies, scientific name, etymology, Seychelles

Introduction

In the beginning of tropical biology the Indian Ocean islands represented the best explored regions in the world and several species new for science were described from here. In the case of the damselflies and dragonflies (Odonata), the classic works are Drury (1770-1782), Desjardins (1835), Burmeister (1839) and Rambur (1842). Compared with other tropical regions the odonates of the Seychelles are well explored since long times. This knowledge bases mainly on the works of Selys (1869a, 1869b), Wright (1869), Calvert (1892, 1898a), Martin (1895, 1896), Laidlaw (1908), Campion (1913) and Blackman & Pinhey (1967).

The following paper focuses on the meaning of the scientific names of the odonate species known from Seychelles. Understanding the meaning of these names should offer an additional approach for being familiar with these insect species. Additionally, it is a good approach to understand research history - in which the Seychelles islands play an important role from the beginning.

The names and their meaning

The following list includes all species known from of the Seychelles and Aldabra (cf. Blackman & Pinhey 1967). In the transcription of Greek words \bar{e} is used for the letter η (\bar{e} ta; originally pronounced like -a- in 'rare'), \bar{o} for ω (\bar{o} mega; originally pronounced like -aw in 'law'). Accent-bearing vowels are indicated by underlining.

Zygoptera; Damselflies

Megapodagrionidae

Allolestes maclachlani (Selys, 1869); Seychelles Flatwing

Allolestes is a compound name based on *Lestes* (see below), as *Megalestes* - 'big *Lestes*', *Austrolestes* - 'southern *Lestes*', *Indolestes* - '*Lestes* from India') and others. Selys (1869a) chose the Greek morpheme *allos* - 'other, different' as the first part when

he was looking for a name for this endemic Seychelles genus.

Robert McLachlan (1837-1904) was a British biologist, who devoted himself to entomology and engaged himself in the Royal Entomological Society of London. Since 1864 he was the editor of the Entomologist's monthly Magazine. He was a pioneer of the world fauna of Trichoptera and neuropterans, also wrote some 70 odonatological papers. On his recommendation Edward Perceval Wright (see below) sent his odonates collected in the Seychelles islands in 1867 to the Belgian Baron Michel Edmond de Selys-Longchamps, who described several species of that collection.

Lestidae

***Lestes ochraceus* Selys, 1862; Ochre Spreadwing**

Blackman & Pinhey (1967) described *Lestes unicolor aldabrensis* as insular subspecies from Aldabra [Latin *unicolor* - monochromatic]. Following the revision of Pinhey (1980) this form belongs to *L. ochraceus*. *Lestes* [Latin pronunciation] is a Greek word for 'robber'. Why Leach (1815) chose this name he did not say. By many scientists *Lestes* erroneously was treated as feminine in gender, but that is not correct (Davis & Fliedner 1999). Latin *ochraceus* - 'ochre'; Selys (1862) describes the wings of his male specimen as showing a pale ochre tinge. This character is only known from some old males; usually the wings are hyaline (Pinhey 1980). There is no hint that the name refers to the body colour, which Selys describes as brown and yellowish.

Platycnemididae

***Leptocnemis cyanops* (Selys, 1869); Seychelles Featherleg**

Greek *leptos* - 'fine, small/ thin, fine, delicate'; *knēmis* - 'greave'; probably the name points to the fact, that in contrast to the typical Genus of the family, '*Platy-cnemis*' [Greek: 'broad greave'] (Fliedner 1997) in the genus *Leptocnemis* the tibiae are not widened. Greek *kyaneos* - 'dark blue'; *ōps* - 'eye/ face'; Selys (1886) emphasizes in the end of his description: "Notable par ... la face bleu ..." - 'remarkable by its blue face...'.

Coenagrionidae

***Agriocnemis pygmaea* (Rambur, 1842); Wandering Whisp**

Greek *agrimon* means 'living in the fields, wild'; by this genus name Fabricius (1775) comprised all members of the Zygoptera; later on this element was used in compound genus names to indicate that the new genus belongs to the Coenagrionidae (Fliedner 1997). Greek *knēmis* - 'greave' was used first in '*Platycnemis*' [Greek: 'broad greave', an allusion to the widened tibiae in that genus]. But in many names it only means 'Coenagrionid dragonfly'. Primarily, Selys intended the word to be an allusion to *Platycnemis* for genera he supposed to be closely related regardless of widened tibiae. Greek *pygmaios* means 'a fist (*pygmē*) long/ dwarfish'. In ancient Greek tradition the '*Pygmaioi*' were a mythical tribe of dwarfs on the upper Nile, said to have been attacked and destroyed by cranes. This tradition led to the denomination 'Pygmies' for the short people of the Congo basin. Rambur (1842) describes the species as '*minimum*' (Latin: the smallest).

***Ceriatrigon glabrum* (Burmeister, 1839); Common Orange**

Latin *cerinus* - ‘waxen, wax coloured’ is a hint on the yellowish colouration of most members of the genus and Greek *agrion* - ‘living in the fields, wild’ has been a genus name by Fabricius (1798) to comprise all damselflies (see above). Latin *glabrum* - ‘without hair, smooth’. In his first description Burmeister (1839) said that this species is very smooth.

***Ichnura senegalensis* (Rambur, 1842); Common Bluetail**

From Greek *ischnos* - ‘thin, lean’; *ura* - ‘tail, in insects: abdomen’; the name refers to a more general feature in damselflies (Fliedner 1997). Latin *senegalensis* - ‘from Senegal’ points to the origin of the specimen, from which the species was described. But already in the first description Rambur (1842) mentioned the Cape, India and Java as places where it can be found.

***Teinobasis alluaudi* (Martin, 1896); Seychelles Fineliner**

Greek *teinō* means ‘I stretch, I extend’. The genus name was created by Kirby (1890) to replace the genus name *Telebasis*, which Selys had given a second time (1877) to a genus different from *Telebasis* Selys, 1865. That name, composed from Greek *tēle-* ‘far off’ and *basis* - ‘base, pediment’, refers to the fact, that in this genus the wings are petioled and therefore the wingbases are far from the thorax.

Charles A. Alluaud (1861-1949) was a French explorer and entomologist (Lhoste 1987) who undertook a scientific expedition to Seychelles in 1892. The French odonatologist René Martin was engaged to publish the collection of odonates gathered by him. Alluaud was president of the Société entomologique de France in 1899 and 1914.

Anisoptera; Dragonflies

Aeshnidae

***Anax ephippiger* (Burmeister, 1839); Vagrant Emperor**

Greek *Anax* - ‘Lord of the House’. The genus might be named from the dominant behaviour of *A. imperator* at water. *Anax imperator* is widespread in Europe and Africa, occurring also on Mauritius and was the only known species when the genus was established. From Greek *ephippion* - ‘saddle’ and Latin *-ger* - ‘bearing’, pointing to a saddle-like blue mark on the second abdominal segment.

***Anax guttatus* Burmeister, 1839; Lesser Green Emperor, Pale-spotted Emperor**

Latin *gutta* - ‘drop’; *-atus* - ‘marked with’, because the abdominal segments bear a double dropshaped mark on both sides (Fliedner 2006).

***Anax tristis* Hagen, 1867; Black Emperor**

Latin *tristis* - ‘sad, mournful’ refers to the mainly black colour of the species as if it was clad for mourning. The description of Hagen (1867a) based on a female specimen with poorly preserved colouration and a darkened body (Fliedner in Suhling & Martens 2007).

***Gynacantha stylata* Martin, 1896; Seychelles Dusk-Hawker**

Greek *gynē* - ‘woman’; *akantha* - ‘thorn, prickle’. The name evokes the 2-4 spines on the ventral side of the 10th abdominal segment of females in this genus (Fliedner 2006). Greek *stylos* - ‘pillar, stile for writing’; l. *-atus* - ‘equipped with’; the name might point to the conspicuous anal appendages, that formerly also were called ‘*styli*’.

Corduliidae

***Hemicordulia similis* (Rambur, 1842); Madagascar Emerald**

The use of the Greek *hemi-* - ‘half’ is a hint on the relation to the Holarctic genus *Cordulia*. The latter name is based on an adjective derived from Greek *kordylē* - ‘club, cudgel’ and refers to the club-shape of the male’s abdomen. Latin *similis* means ‘similar’; by this name Rambur (1842) pointed on the similarity to *Hemicordulia australiae* described in the same publication on the page before. The animal is described from Mahé as *Hemicordulia delicata* Martin, 1896. Latin *delicatus* means ‘delicate; tender’; in his description Martin (1896) emphasizes the slender abdomen compared with *Hemicordulia similis*. Fraser (1949) placed *H. delicata* as synonym of *H. similis*, however there is some evidence that this very rare form could be a subspecies or species of its own (Dijkstra 2007).

Libellulidae

***Diplacodes lefebvrii* (Rambur, 1842); Black Percher**

Diplac-ōdes - ‘*Diplax* like’. *Diplax* is a synonym of *Sympetrum* long in use; the name is derived from Greek *dīplax* - ‘twofold, double’, referring to the bilobed prothorax’ and *-ōdes* - ‘like a ...’. Kirby (1889) does not refer to *Diplax* directly, but to the genus *Diplacina* Brauer, 1868 [latinized from Greek *dīplak-* (cf. above) and Latin *-inus* - ‘pertaining to ..., related to ...’] already named in reference to *Diplax*.

The species is dedicated to the French entomologist Alexandre Lefebvre (1779-1868), who collected four females of the new species during an expedition in Egypt in 1828-1829 (Fliedner 1997).

***Diplacodes luminans* (Karsch, 1893); Luminous Percher, Barbet Percher**

Latin *luminans* - ‘illuminating, lighting up’. Ferdinand Karsch (1893) reports many shining yellow parts to be on each of his three specimens. As he does not mention the conspicuous red first abdominal segments, his specimens most probably were teneral or in bad condition (Fliedner in Suhling & Martens 2007).

***Diplacodes trivialis* (Rambur, 1842); Blue Percher**

Latin *trivialis* - ‘common, trivial’; there is no explanation of the name in Rambur’s (1842) description. But the species is widespread and common at rice fields and ponds in India and South-East Asia.

***Orthetrum stemmale brachiale wrightii* (Selys, 1869); Strong Skimmer, Wright’s Skimmer**

Orthetrum [Greek *orthos* - ‘straight’; *ētron* - ‘abdomen’] got this name because the

abdomen being straight. Newman (1833) did not know species of different shape. *stemmale* [Greek and Latin *stemma* - ‘wreath, garland’; Latin *-alis* - ‘belonging to, concerning’] has a wreathlike marking on the head, which Calvert (1898b) describes thus: “the frons above the horizontal carina blackish . . . , and uniting with a narrow black stripe in front of the vertex and antennae, leaving a yellow spot on the superior surface of the frons surrounded by the black”. Latin *brachiale* means ‘bracelet’; the slightly inflated abdominal base may have induced the name, as if the animals were wearing something like a ring.

The subspecies name *wrightii* is a dedication to the Professor of Botany at Trinity College, Dublin Edward Perceval Wright (1834-1910), an Irish botanist, zoologist and ophthalmic surgeon, who collected the type specimens in Seychelles in 1867. Wright (1869) himself gave a report on his collecting activity, followed by the taxonomic work dealing with his odonate material (Selys 1869a). The taxonomic part was also published in French (Selys 1869b).

***Pantala flavescens* (Fabricius, 1798); Globe Skimmer**

The name *Pantala*, composed of Greek *pant-* - ‘all-’ and *alē* - ‘wandering or roaming without home or hope of rest’ describes the cosmopolitan distribution and vagrant behaviour. The Latin word *flavescens* - ‘becoming yellow, yellowish’ evokes the coloration of females and immature males which is pale orange.

***Rhythemis semihyalina* (Desjardins, 1832); Phantom Flutterer**

Greek *rhyēnai* - ‘having flown’; and *-themis* ‘law as established by custom’, also name of the Greek goddess of order. Probably Hagen (1867b) when choosing this name was inspired by geology: Rhyolite, whose description was published only a little earlier, is a magmatic stone interspersed with many other minerals, which thus shows many differently coloured irregular patterns. This is also true for the patterns most of the species of this genus show on their wings. The second part of the name is first used as an element in dragonfly names by Hagen (1861), since then it is in use mainly for ‘libellulid genus’. The name *semihyalina* is derived from Latin *semi-* ‘half’ and *hyalinus* - ‘glass, transparent’. Both sexes have the basal half of the hindwing dark with metallic sheen from violet to green, the other half is hyaline.

***Tholymis tillarga* (Fabricius, 1798); Twister**

The name *Tholymis* looks like a Greek word, but it is not. It might be composed of parts of Greek *thōrax*, *lygaios* - ‘shadowed, murky’ and *themis*, as Hagen (1867b) states that in the American species *T. citrina* [Greek: *kitrinos* - ‘of a citron yellow’] the thorax of adult males is dark coloured. The meaning of the name *tillarga* is unknown. All that can be said is that it must be a proper name, as in the first century of its use the word was spelt with a capital T.

***Tramea basilaris* (Palisot de Beauvois, 1817); Keyhole Glider**

Hagen (1849) announced a publication of the genus under the unwieldy denomination *Trapezostigma* [Greek *trapezion* - ‘trapezium’; *stigma* - ‘tattoo, mark’] as a hint to the

trapezoid pterostigma. But in the real description of the genus (Hagen 1861) he had shortened the name to *Tramea*, thus making it handier for use and adding a pun with Latin *trameare* - ‘pass through’ which suits these vagrant species well. Greek *b_αsis* - ‘base, pediment’; Latin *-aris* - ‘concerning...’; the name refers to an amber basal spot with a black mark in each hindwing.

***Tramea limbata* (Desjardins, 1832); Voyaging Glider**

Latin *limbus* - ‘braiding’ and *-atus* - ‘equipped with’ refers to the brown band at the base of the hindwings (Desjardins 1835).

***Zygonyx luctiferus* (Selys, 1869); Dark Cascader**

The genus name *Zygonyx* derives from Greek *zygon* - ‘(inter alia) pair’; *onyx* - ‘claw’. In this genus the claws have a tooth of equal seize to the claws, so that each leg seems to have a pair of claws, not a bifid one (Hagen 1867a). Latin *luctiferus* - ‘bringing about mourning, sad’. The body of the males in the Seychelles endemic species is totally dark (Selys 1869a), to which colour of mourning the scientific name refers.

***Zyxomma petiolatum* (Rambur, 1842); Olive Duskdarter, Digny Duskdarter**

The name *Zyxomma* is derived from Greek *zeuxis* - ‘yoking, bridging’ and *omma* - ‘eye’ and describes well that the head has conspicuous large, broadly contiguous eyes. This feature is characteristic for crepuscular dragonflies such as the genera *Tholymis* and *Gynacantha*. Latin *petiolus* - ‘little foot, little leg, stalk (e.g. of an apple)’ and *-atus* - ‘equipped with’, refers to the extremely slim median part of the abdomen of Rambur’s (1842) sole specimen, lacking the last five segments of the abdomen.

Accentuation of the scientific names

The language of scientific names is deemed to be Latin regardless from which language they actually are derived. Therefore the Latin rules of accentuation have to be followed. In the following list the accent-bearing vowels are underlined as already in the explanations. In Greek words the accentuation often differs from that to be used when they are latinized.

Allolestes maclachlani
Lestes ochraceus
Leptocnemis cyanops
Agriocnemis pygmaea
Ceriagrion glabrum
Ischnura senegalensis
Teinobasis alluaudi
Anax ephippiger
Anax guttatus
Anax tristis
Gynacantha stylata
Hemicordulia similitis

Diplacodes lefebvrii
Diplacodes luminans
Diplacodes trivialis
Orthetrum stemmale wrightii
Pantala flavescens
Rhythemis semihyalina
Tholymis tillarga
Tramea basilaris
Tramea limbata
Zygonyx luctiferus
Zyxomma petiolatum

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