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Nomenclatural and Taxonomic Notes on Dolichopodidae Genus-Group Names (Insecta: Diptera)

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Abstract. *Ceratopos* Vaillant is proposed as a junior synonym of *Syntormon* Loew, 1857, **syn. nov**.; *Hydrochus longicornis* Fallén, 1823 (Dolichopodidae) is designated as type species of *Hydrochus* Fallén, 1823, making it a junior synonym of *Rhaphium* Meigen, 1803, **syn. nov**. *Leptopus wiedemanni* Fallén, 1823 is designated as type species of *Leptopus* Fallén, 1823, keeping it as a junior synonym of *Sciapus* Zeller, 1842. The dolichopodid genus *Thinophilus* is found to date from Wahlberg (1844). The genus *Wangia* Hong, 2002 (Dolichopodidae) is preoccupied and *Fushuniregis* Evenhuis **nom. nov**. is proposed to replace it.

INTRODUCTION

In maintaining and updating the *Systema Dipterorum* (Evenhuis & Pape 2021) by the first author, a number of dolichopodid genera were noted to need nomenclatural attention. Coincidentally with the idea of doing this list, manuscript notes on Palaearctic Dolichopodidae made by the late C.E. "Peter" Dyte became available. Since his notes are 25 years old, many problems he noted have already been rectified elsewhere in subsequent publications. We here deal with some of the remaining, crediting Dyte where we follow his suggestions, as well as some more recent situations that have come to our attention.

[Cachonopus] Vaillant, 1953

Cachonopus Vaillant, 1953: 277.

Dyte (MS notes) noticed that the nominal genus *Cachonopus* Vaillant, 1953 was proposed with two included species but without a type designation, and he intended to propose one. However, because *Cachonopus* was proposed after 1930 without a type designation it is an unavailable name (Code Art. 67.4.1). Evenhuis *et al*. (2008) dealt with this name in their list of genera proposed after 1930 without type designations. Their remarks are repeated here.

Vaillant (1953) proposed *Cachonopus* based on two newly described species (*C. aereus* Vaillant and *C. limosorum* Vaillant) without designating a type. Negrobov (1991) listed both species (incorrectly giving "*Conchopus*" as the original genus for *limosorum*) but failed to list the genus-group name. Yang *et al*. (2006) apparently did not examine the original description and simply repeated Negrobov's errors in their world catalog. *Cachonopus aereus* is currently treated in the genus *Chrysotimus* Loew, 1857; *C. limosorum* is currently treated in the genus *Micromorphus* Mik, 1878. Negrobov *et al*. (2007) realized that *Cachonopus* did not have a type species and designated *C. limosorum*, placed the genus in synonymy with *Micromorphus*, and ironically claimed that it was Yang *et al*. (2006) who had made a "misprint" in treating *limosorum* as originally in "*Conchopus*"! However, because Negrobov *et al.* (2007) treated *Cachonopus* as a junior synonym and failed to denote the genus *Cachonopus* as "new" [required by ICZN (1999) Article 16.1], *Cachonopus* remains a ***nomen nudum*.**

***Ceratopos* Vaillant** [C.E. Dyte's notes]

Ceratopos Vaillant, 1952: 36. Type species: *Ceratopos seguyi* Vaillant, 1953, by monotypy.

The following are Dyte's words from his MS notes (clarifications are in square brackets [ ]), which we follow but give Dyte credit.

"Vaillant (1952) erected *Ceratopos* for a single species, *C. seguyi* Vaillant, from Algeria, which is described from material of both sexes in the same paper. He stated that the genus was related to *Syntormon* Loew but differed in having the eyes contiguous on the face in the male, a lamella at the apex of the male arista, and the hind crossvein meeting vein 5 at an angle of less than 60 degrees compared to over 80 degrees in *Syntormon*. None of these characters justify a distinct genus. A narrow face occurs in the males of for example *S. bicolorellum*, and several species from the Afrotropical region, e.g., *S. longipes* Parent, are described as having the male eyes contiguous on the face. A lamella, or rather two lamellae. occur on the male arista of *S. boninense* Bickel and an inclined hind crossvein is present in *S. luteicorne* Par[ent]. Indeed, it is quite possible that Vaillant's species *C. seguyi* is identical with *S. luteicorne*. This last species is known only in the female sex, as recent reports of males have been shown to arise from misidentified specimens of *Syntormon bicolorellum* (Zett[erstedt]) (Speight, *et al*. 1995).

Ceratopos Vaillant, 1952 is therefore considered to be a junior subjective synonym of *Syntormon* Loew, 1857, **syn. nov**.

***Hydrochus* Fallén**

Hydrochus Fallén, 1823a: 5. Type species: *Hydrochus longicornis* Fallén, 1823, by **present designation**.

Hydrochus was proposed by Fallén (1823: 5) based on four originally included species: *Hydrochus laticornis* Fallén, 1823, *H. longicornis* Fallén, 1823, *H. nasutus* Fallén, 1823, and *H. tarsatus* Fallén, 1823; but without a type designation. To settle the typification of the genus (currently unplaced), we here designate *Hydrochus longicornis* Fallén, 1823 as type species. Currently, *Hydrochus longicornis* is treated in the genus *Rhaphium* Meigen,

1803 [*teste* Grichanov, 2017], which makes *Hydrochus* Fallén, 1823 a junior synonym of *Rhaphium* Meigen, 1803, **syn. nov**. The name is preoccupied by Leach, 1817 (in Coleoptera). The current fixation of a type species here avoids a new replacement name being unnecessarily proposed by any future worker.

***Lasiargyra* Mik**

Lasiargyra Mik, 1878: 5. Type species: *Musca diaphana* Fabricius, 1775, by subsequent designation (Coquillett, 1910: 557).

As Dyte (MS notes) noted, this name was incorrectly listed the Palaearctic Catalog (Negrobov, 1991) as unavailable; and Dyte intended to select what he he thought was the first included species as type species. Yang *et al.* (2006) omitted the name from their world catalog and Sinclair *et al*. (2008), no doubt following Negrobov (1991), incorrectly listed it as unavailable. *Lasiargyra* was proposed by Mik (1878) with characters to differentiate it but without included species. Kowarz (1882) was the first to include two species (*Musca diaphana* Fabricius, 1775 and *Argyra loewii* Kowarz, 1879). Coquillett (1910: 557) chose *Musca diaphana* Fabricius, 1775 as the type species. Germann *et al.* (2011) did a molecular analysis of *Argyra* species and were equivocal as to the placement of *A. diaphana* (Fabricius, 1775), showing that it is most likely to be to be placed outside of *Argyra* s. str. They suggested a broader species sample to better ascertain its status. Until then, we keep *Lasiargyra* Mik, 1878 as a junior synonym of *Argyra* Macquart, 1834.

***Leptopus* Fallén**

Leptopus Fallén, 1823b: 23. Type species: *Leptopus wiedemanni* Fallén,1823, by **present designation**.

Leptopus was proposed by Fallén (1823: 23) for two originally included species: *Leptopus wiedemanni* Fallén, 1823 and *L. longulus* Fallén, 1823; without a type designation. As *Leptopus* is preoccupied by *Leptopus* Latreille, 1809, it would need a substitute name if found to represent a separate genus. However, both included species have been treated for many years within *Sciapus* Zeller, 1842, so a type species has been ignored. To settle the typification of the genus and keep the synonymy with *Sciapus*, we propose *Leptopus wiedemanni* Fallén, 1823 as type species. *Leptopus wiedemanni* is currently treated as a valid species in *Sciapus* Zeller, 1842 [*teste* Grichanov (2017: 465)].

***Leptopus* Haliday**

Leptopus Haliday, 1832: 358 (as subgenus of *Medetera* Fischer von Waldheim). Type species: *Medeterus ornatus* Haliday, 1832, by subsequent designation (Coquillett 1910: 560).

Dyte listed this genus among his notes because it was omitted from the Palearctic catalogue (Negrobov 1991) and he thought a type species was needed for it, but that was in error. Coquillett (1910) had designated a type species for it.

Haliday (1832: 358) proposed *Leptopus* as a subgenus of *Medetera* Fisher von Waldheim and included two species: *Dolichopus tenellus* Wiedemann, 1817 and

Medeterus ornatus Haliday, 1832. *Leptopus* Haliday, 1832 is preoccupied by *Leptopus* Latreille, 1809 and *Leptopus* Fallén, 1823; thus, if found to represent a separate genus, would need a new replacement name. No type designation was designated in the original work, and Coquillett (1910: 560) subsequently designated *Medeterus ornatus* Haliday, 1832. The latter is currently treated as a valid species in *Xanthochlorus* Loew, 1857 [*teste* Grichanov (2017: 469)], which keeps *Leptopus* Haliday, 1832 as a junior synonym of *Xanthochlorus* Loew, 1857 [*teste* Grichanov (2017: 32)] and precludes the need for a new replacement name.

***Thinophilus* Wahlberg**

Thinophilus Wahlberg, 1844: 37. Type species: *Rhaphium flavipalpe* Zetterstedt, 1843, by monotypy.
Thinophilus: Wahlberg *in* Schiødte, 1844: 44 (subsequent usage).

Two publications in 1844 are involved in the proposal of the new genus *Thinophilus*. One in the Swedish journal *Öfversigt af Kongliga Vetenskaps Akademiens Forhandlingar* (Wahlberg 1844) and the other in Schiødte (1844). Bibliographic research was conducted here to determine which of the two has priority.

Swedish dipterist Pehr Fredrik Wahlberg (1800–1877) made observations on a distinctive dolichopodid fly and proposed the name *Thinophilus* for it. He presented his notes to Schiødte's Danish natural history society at the meeting of 28 May 1843 and the following year submitted his notes at the 20 March 1844 meeting of the Swedish Science Academy.

Schiødte was secretary of his society and editor of its journal and in 1844 he published the minutes of the 1843 meetings that included Wahlberg's observations and descriptions of *Thinophilus*. Schiødte (1844) has been found in this study to date at least from 21 August 1844[1] and probably much earlier.

The Swedish journal was issued in 9–10 parts per year. Its dates of issuance were researched and it was found that each issue came out roughly two months after the date of the meeting (which was printed on the first page of each issue). The issue in which *Thinophilus* appeared was thus most probably issued in May 1844, which is before the issuance of Schiødte (1844) and thus takes priority over it.

Although moot, since Wahlberg (1844) takes priority, we also researched the authorship on the Schiødte work in case it would have had priority over the Swedish journal. As Schiødte was clearly recording the presented notes of Wahlberg, the authorship of the genus-group name in Schiødte (1844) is Wahlberg. The fact the descriptive characters in Schiødte's article are in Swedish (Wahlberg's language) and not Danish (Schiødte's language) provides further support that Wahlberg is the author of *Thinophilus* in Schiødte's (1844) article.

1. Dated from a local (Danish) school program that recorded donations to their library. The date of the school program (21 August) is the date of the first day of the program when it was handed out to guests and participants.

Wangia Hong

Wangia Hong, 2002: 354. Type species: *Septocellula trichopoda* Hong, 1981 by original designation.

Hong (2002), in his book on the Eocene amber insects of Fushun, China, described the dolichopodid genus *Wangia* for *Septocellula trichopoda* Hong, 1981. Unfortunately, *Wangia* is preoccupied by *Wangia* Fowler, 1954 (in Pisces). *Fushuniregis* Evenhuis, **nom. nov**. (gender: masculine) is proposed here to honor You-chong Hong (1929–019) for both his taxonomic and conservation work on the Fushun amber.

SUMMARY OF NOMENCLATURAL DECISIONS PRESENTED HERE

[Cachonopus] Vaillant, 1953: 277. ***Nomen nudum*.**

Fushuniregis Evenhuis, **nom. nov**. (new replacement name for *Wangia* Hong, 2002). Type species: *Septocellula trichopoda* Hong, 1981, automatic.
lsid: zoobank.org:act:0D6CC4C8-9C9C-4698-AF44-7F0C3C089A73

Wangia Hong, 2002: 354. Type species: *Septocellula trichopoda* Hong, 1981 by original designation. [Preocc. Fowler, 1954], **syn. nov**.

Rhaphium Meigen, 1803: 272. Type species: *Rhaphium macrocerum* Meigen, 1803, by subsequent designation (Curtis, 1835: pl. 568).

Hydrochus Fallén, 1823a: 5. Type species: *Hydrochus longicornis* Fallén, 1823, by **present designation**, **syn. nov**.

Psilopus Meigen, 1824: 35. Type species: *Dolichopus platypterus* Fabricius, 1805, by subsequent designation (Westwood, 1840: 134). [Preocc. Poli, 1795.]

Sciapus Zeller, 1842: 831. Type species: *Dolichopus platypterus* Fabricius, 1805,automatic.

Leptopus Fallén, 1823b: 23. Type species: *Leptopus wiedemanni* Fallén,1823, by **present designation**.

Syntormon Loew, 1857: 35. Type species: *Rhaphium metathesis* Loew, 1850, by subsequent designation (Coquillett, 1910: 611).

Ceratopos Vaillant, 1952: 36. Type species: *Ceratopos seguyi* Vaillant, 1953, by monotypy, **syn. nov**.

Thinophilus Wahlberg, 1844: 37. Type species: *Rhaphium flavipalpe* Zetterstedt, 1843, by monotypy.

Thinophilus: Wahlberg *in* Schiødte, 1844: 44 (subsequent usage).

Xanthochlorus Loew, 1857: 42. Type species: *Medeterus ornatus* Haliday, 1932, by subsequent designation (Coquillett, 1910: 620).

Leptopus Haliday, 1832: 358 (as subgenus of *Medetera* Fischer von Waldheim). Type species: *Medeterus ornatus* Haliday, 1832, by subsequent designation (Coquillett 1910: 560).

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