

Four new additions to the Belgian fauna (Diptera: Conopidae, Tabanidae, Sciomyzidae, Ulidiidae)

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Abstract

The four Diptera species: *Coremacera fabricii* Rozkosny, 1981, *Tetanops sintenisi* Becker, 1909, *Atylotus latistriatus* Brauer, 1880 and *Zodion kroeberi* Szilady, 1926 are reported for the first time from Belgium. General remarks on these species are given.

Keywords: Diptera, New Belgian species, *Anthomyiidae*, *Conopidae*, *Tabanidae*, *Sciomyzidae*, *Ulidiidae*.

Résumé

Quatre espèces de Diptères: *Coremacera fabricii* Rozkosny, 1981, *Tetanops sintenisi* Becker, 1909, *Atylotus latistriatus* Brauer, 1880 et *Zodion kroeberi* Szilady, 1926 sont rapportées pour la première fois de Belgique.

Samenvatting

Vier soorten Diptera: *Coremacera fabricii* Rozkosny, 1981, *Tetanops sintenisi* Becker, 1909, *Atylotus latistriatus* Brauer, 1880 en *Zodion kroeberi* Szilady, 1926 worden voor het eerst gemeld voor België. Opmerkingen over het voorkomen van deze vier soorten worden gegeven.

Introduction

During the year 2012, four Diptera species were found new to the Belgian fauna: *Coremacera fabricii* Rozkosny, 1981 (Diptera – Sciomyzidae), *Tetanops sintenisi* Becker, 1909 (Diptera – Ulidiidae), *Atylotus latistriatus* Brauer, 1880 (Diptera – Tabanidae) and *Zodion kroeberi* Szilady, 1926 (Diptera – Conopidae).

Zodion kroeberi Szilady, 1926 (Diptera – Conopidae)

Kalmthoutse heide, 9.IX.2012, 3♀, leg. det. coll. J. Mortelmans

The attractive family Conopidae is a well-studied family in Belgium thanks to the work of TOMASOVIC (2000) who revised nearly all Belgian material present. Still, new species to the Belgian fauna appear: *Conops ceriaeformis* Meigen, 1824 was recently found in 2010 (MORTELMANS, 2011), an arrival which might

be linked to global warming. The upcoming revision of *Thecophora* which will provide a key to male *Thecophora* (Stuke, pers. comm.) might reveal some other new Conopidae from the Belgian collections.

The genus *Zodion* was recently revisited by MEI & STUKE (2008), who also provide a key to all European *Zodion* species. The Belgian catalogue reports only *Zodion notatum* (Meigen, 1804) and *Zodion cinereum* (Fabricius, 1794) from Belgium (GROOTAERT *et al.*, 1991). MEI & STUKE (2008) have proposed a synonymy for these two species, since they appear to be only color forms with no clear characters for species identification. *Z. notatum* can therefore be removed from the catalogue.

Zodion kroeberi is an extremely rare species, with recent sightings only from eastern Germany and Spain (STUKE *et al.*, 2006, CARLES-TOLRÁ & LENCINA, 2010). Nevertheless, the Belgian observation did not come unexpected. In 2007



Fig 1. Copula of *Coremacera fabricii*, photograph: Jonas Mortelmans



Fig 2. Female of *Zodion kroeberi*, photograph: Jonas Mortelmans

the species was first seen in the southwestern part of the Netherlands (DE BREE & SMIT, 2012) and with the knowledge provided by de Bree & Smit, the first author found three females *Z. kroeberi* in the Kalmthoutse heide (prov. Antwerp) on 9.IX.2012. The three specimens were all spotted on the elevated, more sandy parts of the heathland. Unfortunately, no clear observations of possible host species were made. One of the collected specimens was photographed (fig. 2).

How long *Z. kroeberi* is really present at the Kalmthoutse heide is not clear, since it is unlikely that the species had been overlooked for so long in an area frequently visited by entomologists. Additional, observations of Dutch and German specimens indicate the species is active from the second half of August till end of September (STUKE *et al.*, 2006; BREE & SMIT, 2012), a period when heathland is at its best, and the number of visitors increases.

***Tetanops sintenisi* Becker, 1909
(Diptera – Ulidiidae)**

Turnhouts vennengebied, 10.VI.2012, 1♂, leg. J. Hendrix, det. J. Hendrix & V. Korneyev, coll. J. Hendrix.

The Dutch name for the family, ‘Prachtvliegen’ reveals only a tip of the beauty of this family. Many species have colored wings and are particular in behavior. *Tetanops*, in the contrary, has nearly no wing markings. Its shiny black abdomen and dull black thorax however, creates a stunning effect. In the west-Palaearctic region, the family Ulidiidae is a relatively species poor family with only 18 species occurring in Belgium (GROOTAERT *et al.* 1991). It appears that larvae of *Tetanops* live on both rotting and living plant material (GREVE, 1998), nevertheless, details on development of the

various *Tetanops* species are only poorly known (SMIT, 2005).

T. sintenisi has a northeast European distribution, occurring in Ukraine, Finland, Latvia and Russia (Fauna Europaea Web Service, 2004). Since 2000, more records were published from western Europe: Germany and Poland (KAMENEVA & GREVE-JENSEN, 2004; STUKE & MERZ, 2005; STUKE, 2008; STUKE, 2009) and the Netherlands (SMIT, 2005; VAN ERLEKENS, pers. comm.). On 10.VI.2012 one specimen was found in the Turnhouts vennengebied (prov. Antwerp). The phenology of the species in western Europe ranges from half of May till the end of June. The Belgian record fits the statement made by SMIT (2005), that the species is expanding to the west from eastern Europe.

The Turnhouts vennengebied is a high quality fen area with many open patches of sand. Remarkable for all Belgian and Dutch records, is the occurrence of high quality fen habitat nearby. It is however unlikely the species is linked to this type of habitat. More likely is the occurrence of the species in sandy areas as previously suggested (SMIT, 2005; STUKE, 2010). From Ukraine, Kameneva (cited in SMIT, 2005) mentions the species to occur on ruderal terrain in the neighborhood of towns and villages. More observations could provide exact information on habitat choice. It is likely, the species will show up in Belgium again very soon.

***Coremacera fabricii* Rozkosny, 1981
(Diptera – Sciomyzidae)**

Gros cron de Lahage, 19.VI.2012, 2♀, 2♂, leg. det. coll. J. Mortelmans.

Coremacera is easy recognizable by the black

tuft of hairs on the top of the third antennal segment (VALA & LECLERCQ, 1981). With the exception of *Coremacera marginata*, species identification is rather difficult and study of genitalia is necessary. Until now, only *C. marginata* was known from Belgium, a very widespread and common species which can be observed practically all year long. *C. fabricii* on the other hand, is mostly recorded from eastern Europe, but still it appears to be a rarely recorded species (VALA, 1989; ROSKOSNY, 1984). Larvae of *C. marginata*, but probably all *Coremacera* feed on various kinds of land snails (KNUTSON, 1973)

The area 'Gros cron de Lahage' is one of the finest tufa areas in Belgium, in a highly forested area. At this location, *Oxycera pygmaea* (FALLEN, 1817) was also present, a species of exceptional biological interest: it is a species typical for calcareous seepage. A copula of *C. fabricii* was photographed and collected at this location (fig. 1). Adults of *C. fabricii* can be seen from beginning of May till the end of June.

***Atylotus latistriatus* Brauer, 1880
(Diptera – Tabanidae)**

Doelpolder, 9.VII.2012, 1♀, leg. det. coll. E. de Bree; Doelpolder, 24.VII.2012, 1♀, leg. det. coll. J. Mortelmans

Amongst Tabanidae, the genus *Atylotus* is one of the more attractive genera. The adults have striking almost translucent yellow-green eyes and have specific demands on their choice of habitat (ZEEGERS & VAN HAAREN, 2000). *A. latistriatus* is a species closely associated with brackish marsh, a rare and very threatened habitat in Belgium. The adults can be found from mid-July till the end of August. Females frequently attack humans and can be very persistent in doing so (ZEEGERS & VAN HAAREN, 2000). An easy way to observe the species was discovered in 2009 by the second author. In mid-July, as the species emerges, sweeping waist-high vegetation very early in the morning resulted in many observations. The proximity of cattle near the site of research is required for optimal detection of this species.

Although populations in the Dutch part of the Westerschelde are known, *A. latistriatus* was only recently discovered in Belgium. The first specimen was collected in 2009 and until 2012 it was not realized it was the first record for the Belgian Fauna. The numbers of *A. latistriatus* in Doelpolder are very low and are probably

dispersing adults from the nearby area of Saeftinghe (NL) where big numbers can be found. Subsequent visits by the first author, the second author and Frank van de Meutter did not result in more observations in recent years than the two mentioned above.

Bibliography

- CARLES-TOLRÁ M. & LENCINA J.L., 2010. - Algunos dipteros capturados en la Region de Murcia y otras provincias Españolas, mediante trampas de interceptacion de vuelo (España) (Insecta: Diptera). *Boletín Sociedad Entomológica Aragonesa*, 46: 483-489.
- DE BREE E., SMIT J.T., 2012 - *Zodion kroeberi*, een nieuwe blaaskopvlieg voor Nederland (Diptera: Conopidae) *Nederlandse Faunistische Mededelingen*, 38: 55-61.
- FAUNA EUROPAEA WEB SERVICE, 2004. - Fauna Europaea version 2.2. (Internet address: <http://www.faunaeur.org>).
- GREVE L., 1998. - Family Otitidae. In: PAPP, L. & B. DARVAS (eds), Contributions to a manual of Palaearctic Diptera. Volume 3. Higher Brachycera. Science Herald, Budapest: 185-192.
- GROOTAERT P., DE BRUYN L. & DE MEYER M., 1991. - Catalogue of the Diptera of Belgium. *Studiedocumenten van het K.B.I.N.*, 70: 1-338.
- KAMENEVA P. & GREVE-JENSEN L., 2004. - Fauna Europaea: Ulidiidae. - In: PAPE T. (Coörd.): Fauna Europaea: Diptera Brachycera. Fauna Europaea version 1.5, <http://www.faunaeur.org>.
- KNUTSON L.V., 1973. - Biology and Immature Stages of *Coremacera marginata* F. a predator of Terrestrial Snails (Dipt. Sciomyzidae). *Insect Systematics & Evolution*, 4: 123-133.
- MEI M. & STUKE J.-H., 2008. - Remarks on *Zodion nigratarsis* (Strobl, 1902) and other European species of *Zodion* Latreille, 1796, with a revised key (Diptera, Conopidae). *Tijdschrift voor Entomologie*, 151: 3-10.
- MICHELSSEN V., 2009. - Revision of the willow catkin flies, genus *Egle* Robineau-Desvoidy (Diptera: Anthomyiidae), in Europe and neighboring areas. *Zootaxa*, 2043: 1-76.
- MORTELMANS J., 2011. - 3 new additions to the Belgian fauna: *Salticella fasciata* Meigen 1830 (Diptera - Sciomyzidae), *Tephritis divisa* Rondani 1871 (Diptera - Tephritidae) and *Conops ceriaeformis* Meigen 1824 (Diptera - Conopidae). *Bulletin de la Société royale belge d'Entomologie*, 147: 46-47.
- ROZKOŠNÝ R., 1984. - The Sciomyzidae (Diptera) of Fennoscandia and Denmark. *Fauna Entomologica Scandinavica*, 14, 1-224.
- SMIT J.T., 2005. - De prachtvlieg *Tetanops sintenisi* nieuw voor Nederland (Diptera: Ulidiidae). *Nederlandse Faunistische Mededelingen*, 22: 91-94.

- STUKE J.-H., 2008b. - Die Tephritoidea Niedersachsens und Bremens. *Abhandlungen herausgegeben vom Naturwissenschaftlichen Verein zu Bremen*, 46: 329-356.
- STUKE J.-H. & MERZ B., 2006. - Drei für Deutschland neu nachgewiesen acalyptrate Fliegen (Diptera: Lauxaniidae, Pallopteridae, Ulidiidae). *Studia Dipterologica*, 12: 242-254.
- STUKE J.-H., 2009. - Bemerkenswerte Zweiflügler aus Niedersachsen und Bremen (Insecta: Diptera) – Drittes Teil. *Drosera*, 1: 143-150.
- STUKE, J.-H., SAURE C. & JENTZSCH M., 2006. - Zum Vorkommen von *Zodion kroeberi* Szilády, 1926 in Deutschland. - *Entomofauna*, 27(9): 117-124.
- TOMASOVIC G., 2000. - Conopidae (Diptera: Brachycera) de Belgique et du Grand-Duché de Luxembourg. *Bulletin de la Société royale belge d'Entomologie*, 136: 91-123.
- VALA J.-C., 1989. - Diptères Sciomyzidae Euro-méditerranéens, France et Régions limitrophes. Faune de France N° 72. Paris: Féd. Franc. Soc. Sci. Nat. 300pp.
- VALA J.-C., LECLERCQ M., 1981. - Taxonomie et répartition géographique des espèces du genre *Coremacera* Rondani, 1856, Sciomyzidae (Diptera) paléarctiques. *Bulletin de l'Institut royal des Sciences naturelles de Belgique*, 53(10): 1-13.
- ZEEGERS T. & VAN HAAREN T., 2000. - Dazen en dazenlarven: inleiding tot en tabellen voor de Tabanidae (Diptera) van Nederland en België. *KNNV Uitgeverij*, 114 p.

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***Pelenomus velaris* (Gyllenhal, 1827) new to the Belgian fauna (Coleoptera: Curculionidae)**

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Abstract

Pelenomus velaris (Gyllenhal, 1827) (Coleoptera Curculionidae) is recorded for the first time in Belgium from Sint-Truiden. Comments on biology, identification and habitat preferences are discussed.

Keywords: Coleoptera, Curculionidae, Ceutorhynchinae, *Pelenomus velaris*, Belgium, record new species

Samenvatting

We vermelden hier de eerste waarneming van *Pelenomus velaris* (Gyllenhal, 1827) (Coleoptera Curculionidae) in België te Sint-Truiden. Verder bespreken we de habitat, biologie en identificatie van deze soort.

Résumé

Pelenomus velaris (Gyllenhal, 1827) (Coleoptera Curculionidae) est cité pour la première fois de Belgique à Saint-Trond (Limbourg). En outre, nous informons sur l'habitat, la biologie et l'identification de cette espèce.

Introduction

Our knowledge about Curculionidae in Belgium is steadily growing. Entomologists, specialising in weevils, exchange information and are getting more and better organised. Still, many species remain yet to be discovered to our fauna. Recent research on distribution patterns of Curculionidae in the Belgian province of Limburg, resulted in interesting records.

In May 2011 a male and female of *Pelenomus velaris* (Coleoptera, Curculionidae, Ceutorhynchinae) were found near Sint-Truiden (province Limburg, Flanders, Belgium). The online Curculionoidea catalogue of Belgium (DELBOL, 2011) lists this specimen as "yet to be found in Belgium" ("A découvrir en Belgique"). The discovery of a male and female specimen in Sint-Truiden (provincial Domain Nieuwenhoven) in the spring of 2011 can be considered