

Three new additions of Diptera to the Belgian fauna: *Salticella fasciata* Meigen, 1830 (Sciomyzidae), *Tephritis divisa* Rondani, 1871 (Tephritidae) and *Conops ceriaeformis* Meigen, 1824 (Conopidae)

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Abstract

The three dipteran species *Tephritis divisa* Rondani, 1871, *Conops ceriaeformis* Meigen, 1824 and *Salticella fasciata* Meigen, 1830 are reported for the first time from Belgium.

Keywords: Diptera, New Belgian species, *Conopidae*, *Sciomyzidae*, *Tephritidae*

Résumé

Trois espèces de diptères, *Tephritis divisa* Rondani 1871, *Conops ceriaeformis* Meigen, 1824 et *Salticella fasciata* Meigen 1830, sont signalées pour la première fois en Belgique.

Samenvatting

Drie soorten Diptera *Tephritis divisa* Rondani, 1871, *Conops ceriaeformis* Meigen, 1824 en *Salticella fasciata* Meigen 1830 worden voor het eerst gemeld voor België.

Introduction

In August, September and October 2010 three Diptera species were found new to the Belgian fauna: *Tephritis divisa* Rondani, 1871 (Tephritidae), *Conops ceriaeformis* Meigen 1824 (Conopidae) and *Salticella fasciata* Meigen 1830 (Sciomyzidae).

Detailed account of the findings

Tephritis divisa Rondani, 1871 (Tephritidae)

Oostende, achterhaven : (1) 4. IX. 2010, 2♀ and 1♂ host plant unknown, det., leg., coll. J. Mortelmans; (2) 5. IX. 2010, 15♂ and 12♀ on *Picris echioides*, det., leg., coll. J. Mortelmans; (3) 17. IX. 2010, 4♂ and 6♀ on *Picris echioides*, det., leg., coll. J. Mortelmans

Salticella fasciata Meigen, 1830 (Sciomyzidae)

(1) Oostende, duinen Raversijde, 22. IX. 2010, 1♂ on *Eryngium maritimum*, det., leg., coll. J. Mortelmans (2) Oostende, voorhaven, 22. IX. 2010, 1♂ on *Senecio inaequidens*, det., leg., coll. J. Mortelmans

Conops ceriaeformis Meigen, 1824 (Conopidae)

Belle Vue, near Virton, 22. VIII. 2010, 1♀ on a leaf of *Solidago canadensis*, det., leg., coll. J. Mortelmans

Discussion

Tephritis divisa is a species which can easily be confused with *T. separata* and *T. mutabilis*, but differs from these species by slight differences in the aculeus and wing marking (KUTUK, 2005 ; MERZ, 1994 ; SMIT, 2010). All specimens collected in this study were found whilst sweeping vegetation, dominated by *Picris echioides*. This plant is known to be the only host plant of *T. divisa* (SMIT, 2010). Although, not everywhere were *P. echioides* was present, *T. divisa* was found. *T. divisa* has a southern distribution, occurring in most south European countries (SMIT, 2010). From neighboring countries, it is only known from the UK (MAY & HODGE, 2006) and France (SMIT, 2010 ; FAUNA EUROPEA WEB SERVICE, 2004). The absence in central Europe can be due to the fact this species is overlooked, or that it is a true southern species heading north (V. Korneyev, pers. comm.).

Species were identified according to (SMIT, 2010; MERZ, 1994).

Females *Conops ceriaeformis* are easy recognizable, somewhat alike the common *C. quadrifasciatus* but unlike this species, *C. ceriaeformis* has a small, black theca and a striking habitus (CHVÁLA, 1961; VAN VEEN, 1984). This species has a circum-mediterranean distribution. Elsewhere in Europa, it is a rare and local species (KORMANN, 2002). From neighboring countries it is known from Germany, the UK and France (FAUNA EUROPAEA WEB SERVICE, 2004). Its occurrence in Belgium was to be expected (TOMASOVIC, 2000). The species was identified according to (CHVÁLA, 1961; VAN VEEN, 1984).

Salticella fasciata is a primitive member of the family Sciomyzidae (VALA *et al.*, 1999). This species has been tried as a biological control agent against snails such as *Theba pisana* (Müller, 1774) which have become pests in Australia. Although females lay eggs on their shell, and larvae will develop at the expense of the mollusk tissues (VALA *et al.*, 1999 ; KNUTSON *et al.*, 1970). *S. fasciata* is not capable in killing the snail (COUPLAND *et al.*, 1994). *S. fasciata* can easily be recognized by its characteristic habitus. In this study, *S. fasciata* was found at two, dry and warm locations near the coastline. Since *T. pisana* is a widespread species along the Belgian coastline it is plausible (DE WILDE *et al.*, 1986), that *S. fasciata* is much more widespread than now known. It has a south-eastern distribution in Europe (VALA *et al.*, 1999), from neighboring countries, it is only known from the UK and France (FAUNA EUROPAEA WEB SERVICE, 2004). Recently it has been found in Germany, in an inland salt habitat (J-H Stuke, pers. comm.). Specimens were identified with (REVIER & VAN DER GOOT, 1989 ; OOSTERBROEK, 2006), in which you end up with the family Sciomyzidae partim *Salticella*.

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