Bull. Soc. Nat. luxemb. 106 (2006) p. 101-104

Hoverflies new to Luxembourg (Insecta, Diptera, Syrphidae)

by

Wouter van Steenis [1])

Abstract: Eight species of hoverflies (Insecta, Diptera, Syrphidae) are recorded for the first time from the Grand-Duchy of Luxembourg. The faunistic list now contains 178 species. New records for two rare Luxembourg species are provided.

Resumé: Huit espèces de syrphes (Insecta, Diptera, Syrphidae) sont signalées pour la première fois au grand-duché de Luxembourg. La liste faunistique comporte à présent 178 espèces. Des observations nouvelles de deux espèces rares sont données.

1. Introduction

In recent years, several studies of the hoverflies (Insecta, Diptera, Syrphidae) occurring in Luxembourg have been published, with a total number of 170 species reported (Carrières 2001a, b, 2003).

In July 1994 the Dutch Youth Organisation for Nature Study (NJN) organised summercamps near Diekirch. Some members of these camps extensively watched and collected hoverflies. At the same time the author made a collecting trip in the northern half of Luxembourg. Those collecting activities yielded eight species of syrphids which are new to Luxembourg and which are presented here. Additionally, new records of two rare species are provided. 178 species of syrphids are presently known to occur in Luxembourg.

2. Material and methods

Specific identifications were made by the author. All the specimens studied are preserved in the collection of the author unless otherwise stated.

The nomenclature follows Speight (2003), unless otherwise stated. The species are listed in alphabetical order. The collecting sites are followed by the geographic coordinates of the Gauss-Luxembourg System.

[1]) Vogelmelk 4, NL-3621 TP Breukelen, the Netherlands (w.vansteenis@andros.demon.nl).

3. Results

3.1. Species new to Luxembourg

Arctophila bombiformis (Fallén, 1810)

One male observed by W. & M. van Steenis: Luxembourg, Walsdorf, Tandelerbaach (78/79-109/110), 15-VII-1994. Not collected

A. bombiformis is a fairly common species occurring in moors and non forested brook valleys in Belgium (Verlinden 1991).

Arctophila superbiens (O.F. Müller, 1776)

One male observed by M. Reemer: Luxembourg; Galgebierg, NE of Diekirch (80-104). 25-VII-1994. Not collected

A fairly common species of moors in south-eastern Belgium (Verlinden 1991).

Chrysotoxum arcuatum (Linnaeus, 1758)

One female: Luxembourg, Canton Diekirch, Diekirch, Mëchelbaach (76-104), 8-VII-1994, leg M. + J. + W. van Steenis.

Following the International Commission of Zoological Nomenclature (Opinion 1982, Case 3090) the name of this species, which was first described as *Musca arcuata* Linnaeus, 1758, is conserved by the designation of a neotype. It is identical with *Chrysotoxum fasciatum* (O.F. Müller, 1764). *Chrysotoxum arcuatum* (L., 1758) sensu Carrières (2001a) is identical with *Chrysotoxum festivum* (Linnaeus, 1758).

C. arcuatum is a common species in the southeastern part of Belgium (Verlinden 1991).

Eristalis alpina (Panzer, 1798)

One male: Luxembourg, Canton Vianden, Walsdorf, Mt St Nicolas Tandelerbaach (79-110/112), alt 300-500 m, 16-VII-1994, leg M. & W. van Steenis. This specimen was seen flying back and forth inside a rather large blackberry shrub growing next to the Tandelerbaach.

Eristalis alpina is rare in northwestern Europe. In the Netherlands and Belgium the species has not been recorded during the last 40 years and is assumed to be (all but) extinct (Verlinden & Decleer 1997, NJN 1998). The nearest known populations are found in the Harz-area in Lower-Saxony, Germany (Barkemeijer 1994).

Eristalis similis (Fallén, 1817)

One female: Luxembourg, Canton Wiltz, Esch sûr Sure, on north bank of Sure (63-108), alt 300m. 5-VII-1994, leg W. van Steenis & L. Lankreijer.

This species, which is fairly common in Belgium and France (Verlinden 1991, Speight 1988), was expected to be found in Luxembourg.

Ferdinandea ruficornis (Fabricius, 1775)

One male: Luxembourg; Belvédère 1.5 km N of Diekirch (79-105). 26-VII 1994 leg. M. Reemer (col. M. Reemer, Amsterdam).

This species has a scattered distribution in Belgium (Verlinden 1991). It probably prefers mature deciduous forests. The larvae develop in decidious trees infected with the goat moth *Cossus cossus* (Linnaeus, 1758) (Speight 2003).

Myolepta dubia (Fabricius, 1815)

One female: Luxembourg, Canton Echternach, Echternach, Erelchen (97-97) alt. 220-250 m. 10-VII-1994. Leg W. & M. van Steenis. The specimen was caught in the middle of a very hot day (appr. 35°C), sitting on leaves at a forest edge.

Myolepta dubia is a rare species which, in Belgium and the Netherlands, was reported from xerophilous deciduous forest edges (Verlinden 1991, NJN 1998).

Orthonevra nobilis (Fallén, 1817)

One female: Luxembourg, Bamerdall 1 km N of Diekirch (78-104), 21-VII-1994, leg. B. Wakkie (col B. Wakkie, Bruxelles).

3.2. New records of rare species

Eupeodes nitens (Zetterstedt, 1843)

One female: Luxembourg, northern Sure valley (61-109) between Kaundorf and Esch-sur-Sure, 5-VII-1994, leg W. van Steenis & L. Lankreijer (identified by L. Mazánek, CZ-Oloumouc).

Platycheirus sticticus (Meigen, 1822*)*

One female: Luxembourg, Canton Vianden, Walsdorf, Tandelerbaach (79/80-109/110), alt 280-350m, 15-VII-1994, leg W. & M. van Steenis.

4. Acknowledgements

I am grateful to M. Reemer (Amsterdam) and B. Wakkie (Bruxelles), who kindly gave permission to study specimens from their collections. M. van Steenis (Ogmore by Sea, Wales, UK), L. Lankreijer (NL-The Hague) and J. van Steenis (NL-Amersfoort) were my companions on the collecting trips. L. Mazánek (CZ-Oloumouc) identified *Eupeodes nitens*. M. Speight (IRL-Dublin) and E. Carrières (F-Sponville) kindly commented on an early version of the manuscript.

5. References

Barkemeijer, W., 1994. - Untersuchung zum Vorkommen der Schwebfliegen in Niedersachsen und Bremen (Diptera: Syrphidae). - Naturschutz Landschaftspfl. Niedersachsens, Hannover, Heft 31, 514 pp.

Carrières, E., 2001a. - Note diptérologique: mise à jour de la liste faunistique des syrphes (Diptera, Syrphidae) du Luxembourg. - Bull. Soc. Nat. luxemb. 101: 99-110.

Carrières, E., 2001b. - Note diptérologique: premiers ajouts à la liste faunistique des syrphes (Diptera, Syrphidae) du Luxembourg. - Bull. Soc. Nat. luxemb. 102: 97-102.

Carrières, E., 2003. - Espèces nouvelles et remarquables de syrphes (Diptera, Syrphidae) au Luxembourg. - Bull. Soc. Nat. luxemb. 103: 79-82.

ICZN, 2001. - Opinion1982 (Case 3090): *Musca arcuata* Linnaeus, 1758 and *M. festiva* Linnaeus, 1758 (currently *Chrysotoxum arcuatum* and *C. festivum*) and *M. citrofasciata*

De Geer, 1776 (currently *Xanthogramma citrofasciatum*) (Insecta, Diptera): specific names conserved by the designation of neotypes for *M. arcuata* and *M. festiva*. - Bulletin of Zoological Nomenclature 58 (3): 241-242. London.

NJN 1998. - Voorlopige atlas van de Nederlandse zweefvliegen (Syrphidae). - EIS-Nederland, Leiden & NJN, ‘s Graveland, 182 pp.

Speight, M. C. D., 1988. - Syrphidae known from temperate Western Europe: potential additions to the fauna of Great Britain and Ireland and a provisional species list for N. France. - Dipterists Digest No. 1: 2-32.

Speight, M. C. D., 2000. - Species accounts of European Syrphidae (Diptera): species of the atlantic, continental and northern regions. - In M.C.D. Speight, E. Castella, P. Obrdlik and S. Ball (eds): Syrph The Net, the database of European Syrphidae, vol. 20, Syrph The Net Publications, Dublin, 254 pp.

Speight, M.C.D., 2003. Species accounts of European Syrphidae (Diptera), 2002. In M.C.D. Speight, E. Castella, P., Obrdlik and S. Ball, S. (eds.): Syrph the Net, the database of European Syrphidae, vol. 37, 213 pp., Syrph the Net publications, Dublin.

Verlinden, L., 1991. - Zweefvliegen (Syrphidae). - Fauna van België. Koninklijk Belgisch Instituut voor Natuurwetenschappen, Bruxelles. 298 pp.

Verlinden L. & K. Decleer 1987. - The hoverflies (Diptera, Syrphidae) of Belgium and their faunistics: frequency, distribution, phenology. - Documents de travail 39, Institut Royal des Sciences naturelles de Belgique, Bruxelles, 170 pp.