



Sawflies (Hymenoptera, Symphyta) from the region of Dinant, with new records for Belgium

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Abstract

A list of 43 species of sawflies collected in the region of Dinant (Belgium, Province of Namur; mid-June 2006) is given. Six species of Tenthredinidae (*Heterarthrus cuneifrons*, *Heterarthrus leucomela*, *Hinatara excisa*, *Hinatara recta*, *Pontania brevicornis* and *Pontania virilis*) seem not previously to have been recorded in Belgium.

Keywords: sawflies, Hymenoptera, Symphyta, new records, Belgium

Résumé

Nous donnons une liste de 43 espèces de Symphytes récoltés dans la région de Dinant (Belgique, Province de Namur; mi-Juin 2006). Six espèces de Tenthredinidae (*Heterarthrus cuneifrons*, *Heterarthrus leucomela*, *Hinatara excisa*, *Hinatara recta*, *Pontania brevicornis* et *Pontania virilis*) ne semblent pas avoir été notées auparavant en Belgique.

Introduction

The "Tenth International Workshop on Symphyta" took place in Yvoir, Province of Namur, Belgium, from 12th to 15th June, 2006. We list here the specimens collected mainly by four of the participants. After comparing our list with those of MAGIS (1994, 2001) and TAEGER *et al.* (2006) and other recent literature, we concluded that a number of species had been found for the first time in Belgium.

Material and Methods

Sawflies were collected in the following localities, with the local name of the landscape feature, coordinates, and date of collection placed in parentheses: Onhayé (sablière Clavia; 50°16'N, 4°51'E; 13.06.2006), Falmignoul (Colèbi; 50°13'N, 4°53'30"E; 13.06.2006), Dinant (Fonds de Læffe; 50°16'30"N, 4°55'

30"E; 14.06.2006), Yvoir (Tricointe; 50°20'N, 4°53'15"E; 14-15.06.2008). The sites in Falmignoul and Dinant are protected areas. Adults were swept from plants, whereas larvae and their mines or galls were collected by visual inspection of potential hosts. Specimens were identified by, and deposited in, the collection of the author who found it, or his institutional collection [material leg. AL is in SDEI; material leg. JLB is in IRSNB-KBIN, J.-L. Boevé collection]. The name initials of the corresponding author responsible for the record are given between square brackets.

Literature used for routine identification of sawflies varies from author to author, but all frequently use one or more of the following monographs as standard references: ENSLIN (1912-18), BENSON (1951-1958), ZHELOCHOVTSEV (1988, 1993). Identification of many sawfly species often however requires the use of more

specialized publications, which are too numerous to list here. Help in accessing this literature and interpreting the frequently very confusing (because so often changed) use of names, is provided by the electronic Catalog of World Sawflies, ECatSym (TAEGER & BLANK, 2008).

Results

In the following list, species not previously recorded for Belgium are marked with an asterisk. Date of collection is 12-15.06.2006 in all cases.

Argidae

Arge gracilicornis (Klug, 1814)

Yvoir, 2 ♀♀ [AL].

Sterictiphora angelicae (PANZER, 1799)

Dinant, 3 ♂♂ [BP], 2 ♀♀ [EJ].

A local species inhabiting warm and dry localities. Probably particularly endangered at isolated sites, such as this, on the northern and western edges of its European range. Hostplant of *S. angelicae* is *Prunus spinosa* (LORENZ & KRAUS, 1957; as *Sterictiphora* [sic!] *furcata* (VILLERS, 1789) var. *melanocephala* sensu PANZER, nec FABRICIUS). Before KOCH (1988) revised the European *Sterictiphora*, the name *furcata* had generally but wrongly been applied to *S. angelicae*.

Cephididae

Calameuta pallipes (KLUG, 1803)

Onhay, 1 ♂ [BP].

Tenthredinidae

Allantus cinctus (LINNÉ, 1758)

Dinant, 3 ♂♂ [BP].

Allantus didymus (KLUG, 1818)

Dinant, 2 ♂♂ [AL].

This species is restricted to open sites with calcium-rich soils. *A. didymus* was infrequently recorded in recent decades in Belgium (MAGIS, 1999) and has probably declined or suffered extinction at many of its increasingly isolated localities on the northern and western edges of its range. The larva is monophagous on *Sanguisorba minor*, not *Rosa* as frequently stated in earlier literature.

Athalia bicolor SERVILLE, 1823

Dinant, 1 ♀ [BP], 1 adult [HJJ].

Athalia cordata SERVILLE, 1823

Dinant, 1 ♀ [BP].

Athalia liberta (KLUG, 1815)

Onhay, 1 ♂ [BP].

Athalia rosae (LINNÉ, 1758)

Dinant, 1 adult [HJJ].

Dolerus bajulus SERVILLE, 1823

Onhay, 1 ♂ [BP], 1 adult [HJJ].

Dolerus ferrugatus SERVILLE, 1823

Onhay, 1 ♂ above *Equisetum* [BP].

(**Heterarthrus aceris* (KALTENBACH, 1856)

Yvoir, 3 empty mines on *Acer pseudoplatanus* [AL].

MAGIS (1994) lists *Heterarthrus aceris* MACCLACHLAN [sic!], 1867 as occurring in Belgium. *Phyllotoma aceris* MACCLACHLAN is a primary homonym of *P. aceris* KALTENBACH and is currently regarded as a synonym of *H. wuestneii* (KONOW, 1905): see BLANK *et al.* (2001) for current taxonomy and nomenclature of these species. Previous to the revision of European *Heterarthrus* on *Acer* by ALTENHOFER & ZOMBORI (1987) the name was misapplied by different authors to adults or mines of 5-7 Central European *Heterarthrus* species attached to maples.

**Heterarthrus cuneifrons* ALTENHOFER & ZOMBORI, 1987

Yvoir, 3 empty mines and 4 mines with larvae on *Acer pseudoplatanus* [AL].

The mine is easily distinguished from that of *H. aceris* and *H. leucomela* in that it starts in the leaf centre and the larva mines towards the margin. The cocoon-disc made by the mature larva is dehiscent, as in all European *Heterarthrus* on maples except *H. leucomela*. The position of leaf mines illustrated by ALTENHOFER (2003) for *H. cuneifrons* is entirely atypical (compare with illustrations in ALTENHOFER & ZOMBORI, 1987; LISTON & BLANK, 2006). Known distribution extends from south-central Europe (perhaps centred on the Alpine areas) to Belgium. It has also recently been recorded as an invasive species in south-east England (LISTON & BLANK, 2006).

**Heterarthrus leucomela* (KLUG, 1818)

Falmignoul, 2 mines with larvae on *Acer campestre* [AL].

The larvae were identified according to ALTENHOFER & ZOMBORI (1987). One formed a cocoon disc, which did not separate from the leaf. The larva died during the following winter. This seems to be one of the most north-westerly records of *H. leucomela* in Europe at present.

**Hinatarata excisa* (KONOW, 1885)

Yvoir, 1 empty mine on *Acer pseudoplatanus* [AL].

This is possibly the most north-westerly record in Europe of this species to-date (TAEGER *et al.*, 2006). Nearest previous records are from Germany (Bavaria, Thuringia, Saxony-Anhalt). *H. excisa* is probably monophagous on *A. pseudo-platanus* (ALTENHOFER & PSCHORN-WALCHER, 1998, but see comments in LISTON, 2007). It is a rather rarely recorded species which has not yet been observed to reach such high larval population levels as *H. recta*.

**Hinatarata recta* (THOMSON, 1871)

Dinant, 2 empty mines on *Acer platanoides*; Yvoir, 5 empty mines on *A. platanoides*. [AL].

This is the most widely distributed *Hinatarata* species in western Europe, as far as known monophagous on *A. platanoides*, occurring from the Alps north to southern Sweden and west to the Department L'Essonne in France (LACOURT & CHEVIN, 2002). Adults and leaf mines of *H. recta* may locally be very abundant (pers. obs. AL, Germany: Lower Saxony, Brandenburg).

Macrophya annulata (GEOFFROY, 1785)

Dinant, 1 ♀ [EJ]; Yvoir, 1 ♀ [BP].

Macrophya erythrocnema COSTA, 1859

Dinant, 1 adult [HJJ].

A local species, larvae of which feed on Dipsacaceae, an unusual hostplant specialisation amongst the sawflies.

Macrophya diversipes (SCHRANCK, 1782)

Falmignoul, 1 ♂ [EJ].

Macrophya militaris KLUG, 1817

Yvoir, 1 adult [HJJ], 1 ♀ [EJ].

Macrophya montana (SCOPOLI, 1763)

Falmignoul, 1 ♂ on flowers of *Daucus* [BP]; Dinant, 1 ♂ on flowers of *Daucus* [BP], 1 ♀ [EJ]; Yvoir, 1 ♀ on flowers of *Heracleum* [BP].

Macrophya punctumalbum (LINNÉ, 1767)

Falmignoul, 1 ♀ [BP]; Dinant, 1 ♀ [BP], 1 ♀ [EJ].

Monophadnus spinolae (KLUG, 1816)

Falmignoul, 1 ♂ [EJ], Dinant, 1 ♂ [JLB], 2 ♂♂ on *Clematis vitalba* [BP], 1 ♂ and 1 ♀ [EJ], 13 ♂♂ and 3 ♀♀ on *C. vitalba* [AL].

Nematus fuscomaculatus FÖRSTER, 1854

Yvoir, 1 ♀ [BP].

Nematus similator FÖRSTER, 1854

Dinant, 1 ♀ [BP].

Nesoselandria morio (FABRICIUS, 1781)

Onhaye, 1 ♀ [BP]; Dinant, 5 ♂♂ on *Alnus* [BP], 1 ♂ [EJ].

Pontania bridgmanii (CAMERON, 1883)

Onhaye, 3 galls on *Salix caprea* [AL].

KOPELKE (1999) is invaluable for identifying *Eumosa* and *Pontania* galls on *Salix*.

Pontania pedunculi (HARTIG, 1837)

Onhaye, 2 galls on *S. caprea* [AL].

See VIKBERG & ZINOVJEV (2006) on the taxonomy and hosts of this species. MAGIS (1997: 293) first recorded *P. pedunculi* from Belgium.

**Pontania brevicornis* (FÖRSTER, 1854)

Onhaye, 3 galls on *Salix cinerea* [AL].

See VIKBERG & ZINOVJEV (2006) on the taxonomy and hosts of this species.

Pontania proxima (SERVILLE, 1823)

Onhaye, 4 galls on *Salix alba* [AL].

**Pontania virilis* ZIRNGIEBL, 1955

Onhaye, 4 galls on *Salix purpurea* [AL].

Range of this species extends from the high Atlas of Morocco, through the mountains of southern and central Europe, reaching the North Sea coast in the Netherlands and possibly occurring as far north as Latvia. *P. virilis* has not yet been found in Fennoscandia or the British Isles.

Pristiphora armata (C. G. THOMSON, 1862)

Dinant, 1 ♂ [BP], 1 ♂ [EJ].

Rhogogaster genistae BENSON, 1947

Onhaye, 1 ♀ [EJ].

Tenthredo atra LINNÉ, 1758

Yvoir, 1 adult [HJJ].

Tenthredo colon KLUG, 1817

Yvoir, 1 ♀ [EJ].

Tenthredo distinguenda (STEIN, 1885)

Yvoir, 1 adult [HJJ].

Tenthredo (Elinora) koehleri (KLUG, 1817)

Yvoir, 3 ♂♂ [BP], 1 adult [HJJ], 1 ♂ [EJ], 12 ♀♀ and 7 ♂♂ mostly in vegetation dominated by *Alliaria petiolata* [AL].

The larva and details of the biology of this species were described for the first time by Benes (2008). It is locally the most abundant species among the Tenthredininae (that includes *Macrophya*, *Rhogogaster*, *Tenthredo*, *Tenthredopsis*) as can be concluded from the present work, and as observed by N. Magis (personal communication) in 2008 and 2009. Moreover, *T. koehleri* seems to be extending its range more

and more into areas at lower latitudes (N. Magis, personal communication).

Tenthredo livida LINNÉ, 1758

Yvoir, 1 adult [HJJ].

Tenthredo mesomela LINNÉ, 1758

Falmignoul, 1 ♂ [EJ]; Yvoir, 1 adult [HJJ], 1 ♀ [EJ].

Tenthredo temula SCOPOLI, 1763

Yvoir, 1 adult [HJJ].

Tenthredo zonula KLUG, 1817

Yvoir, 1 adult [HJJ], 4 larvae on *Hypericum perforatum* [JLB].

Tenthredopsis ornata SERVILLE, 1823

Yvoir, 1 adult [HJJ].

Xiphydriidae

Xiphydria camelus (LINNÉ, 1758)

Yvoir, 1 ♀ [EJ].

Discussion

MAGIS (1994) presented a checklist of sawflies of Belgium, mentioning 462 species. The Belgian sawfly fauna also inventoried TAEGER *et al.* (2006), based on a literature review of all known publications, including those which appeared after 1994, particularly several valuable contributions by MAGIS. TAEGER *et al.* (2006) list 465 species, but it is probable that the number of species known in this country will rise considerably, as in all parts of Europe, when the less conspicuous and taxonomically more difficult groups, such as the leaf-miners and Nematinae, are studied more intensively.

We were probably unlucky in the timing of our visit to this potentially species-rich area, in that the spring had been unusually warm and dry there, and adults of most sawflies were no longer present. The total number of species observed was accordingly small.

That 4 of the 7 species newly recorded in Belgium during the workshop are associated with a single plant genus (*Acer*), illustrates the value of search methods which concentrate on particular plant taxa. Such techniques are not only capable of quickly delivering new data on distribution, but have the advantage of enabling the observer to acquire a better knowledge of the biology of the sawflies which they are investigating. Reliable information on hostplant associations of many sawflies is still sadly lacking.

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References

- ALTENHOFER E., 2003. - Minierende Blattwespen (Hym.: Symphyta): ihre Minenformen, Wirtspflanzen, Ökologie und Biologie. Gredleriana 3: 5-24.
- ALTENHOFER E. & PSCHORN-WALCHER H., 1998. - Biologische Notizen über zwei Gattungen minierender Blattwespen: *Hinatara* Benson und *Parna* Benson (Hymenoptera: Tenthredinidae). Linzer biologische Beiträge 30(1): 439-445.
- ALTENHOFER E. & ZOMBORI L., 1987. - The species of *Heterarthrus* Stephens, 1835 feeding on maple (Hymenoptera, Tenthredinidae). Annales historico-naturales Musei Nationalis Hungarici 79: 185-197.
- BENES K., 2008. - Life history and larva of *Tenthredo (Elinora) koehleri* Klug, 1817 (Hymenoptera, Tenthredinidae). Beiträge zur Entomologie 58(2): 239-247.
- BENSON R.B., 1951-1958. - Hymenoptera, Symphyta. Handbooks for the Identification of British Insects 6(2a-c): 1-252, + 6pp. Suppl.
- BLANK S.M., DETERS S., DREES M., JÄNICKE M., JANSEN E., KRAUS M., LISTON A.D., RITZAU C. & TAEGER A., 2001. - Symphyta. In: DATHE H.H., TAEGER, A. & BLANK, S.M. (eds): Verzeichnis der Hautflügler Deutschlands. Fauna Germanica 4. Pp. 8-28.
- ENSLIN E., 1912-1918. - Die Tenthredinoidea Mitteleuropas. Deutsche entomologische Zeitschrift, Beihefte 1-7[1912-1917]: 1-790.
- KOCH F., 1988. - Die Gattung *Sterictiphora* Billberg (Insecta, Hymenoptera, Symphyta: Argidae). Entomologische Abhandlungen Staatliches Museum für Tierkunde Dresden 52(2): 29-61.
- KOPELKE J.-P., 1999. - Gallenerzeugende Blattwespen Europas - Taxonomische Grundlagen, Biologie und Ökologie (Tenthredinidae: Nematinae: *Euura*, *Phyllocolpa*, *Pontania*). Courier, Forschungsinstitut Senckenberg, Frankfurt/Main 212: 1-183.
- LACOURT J. & CHEVIN H., 2002. - Contribution à l'inventaire des Hyménoptères Symphyta du département de l'Essonne. Cahiers des Naturalistes 54[1998-1999](3-4): 73-86.
- LISTON A.D. & BLANK S.M., 2006. - New and little-known British Xyelidae and Tenthredinidae (Hymenoptera, Symphyta). Entomologist's Monthly Magazine 142: 219-227.

- LISTON A.D., 2007. - Notes on Palaearctic sawflies, with particular reference to the German fauna (Hymenoptera, Symphyta). *Nachrichtenblatt der Bayerischen Entomologen* 56(3/4): 82-97.
- LORENZ H. & KRAUS M., 1957. - Die Larvalsystematik der Blattwespen (Tenthredinoidea und Megalodontoidea). *Abhandlungen zur Larvalsystematik der Insekten* 1: 1-389.
- MAGIS N., 1994. - Répertoire des Mouches à sciè reconnues en Belgique et au Grand-Duché de Luxembourg (Hymenoptera: Symphyta). *Notes fauniques de Gembloux* 28: 3-52.
- MAGIS N., 1997. - Apports à la chorologie des Hyménoptères Symphytes de Belgique et du Grand-Duché de Luxembourg. XVIII. *Bulletin et Annales de la Société royale belge d'Entomologie* 133(2): 291-295.
- MAGIS N., 1999. - Les Allantini de la Belgique et des régions limitrophes (Hymenoptera Tenthredinidae Allantinae). *Belgian Journal of Entomology* 1(2): 275-310.
- MAGIS N., 2001. - Apports à la chorologie des Hyménoptères Symphytes de Belgique et du Grand-Duché de Luxembourg. XXIII. *Notes fauniques de Gembloux* 43: 39-46.
- TAEGER A. & BLANK S.M., 2008. - ECatSym - Electronic World Catalog of Symphyta (Insecta, Hymenoptera). Program version 3.9, data version 3.4 (05.09.2008). Digital Entomological Information, Münchenberg, http://www.zalf.de/home_zalf/institute/dei/php_e/ecatsym/ecatsym.php.
- TAEGER A., BLANK S.M. & LISTON A.D., 2006. - European Sawflies (Hymenoptera: Symphyta) - A Species Checklist for the Countries. Pp. 399-504. In: Blank S.M., Schmidt S. & Taeger A. (eds): *Recent Sawfly Research: Synthesis and Prospects*. - 704 pp., 16 pl. - Goecke & Evers, Keltern.
- VIKBERG V. & ZINOVJEV A., 2006. - On the taxonomy and the host plants of North European species of *Eupontania* (Hymenoptera: Tenthredinidae: Nematinae). *Beiträge zur Entomologie* 56 (2): 239-268.
- ZHELOCHOVTSEV A.N., 1988. - Pereponchatokrylye. *Shestaya chast*. In: Medvedev, G. C. (Ed.): *Opredelitel' nasekomykh evropeyskoy chasti SSSR*. Nauka, Leningrad 3(6): 3-237.
- ZHELOCHOVTSEV A.N., 1993. - 27. Order Hymenoptera. Suborder Symphyta (Chalastogastra). In: Medvedev, G. S. (Ed.): *Keys to the Insects of the European Part of the USSR*. Amerind Publ. Co. Pvt. Ltd., New Delhi 3(6): 1-387.

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Two records of the rare ant *Lasius bicornis* in Belgium

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Abstract

During the spring of 2008 and spring of 2009 aleate gynes of *Lasius bicornis* (FÖRSTER, 1850) were discovered in Awirs (Flémalle) and Elewijt (Zemst). Records of this species in Belgium and surrounding countries are very rare. We give comments on the habitat and ant communities at the sites where this species was actually rediscovered.

Keywords: Formicidae, *Lasius bicornis*, faunistics

Résumé

Au printemps 2008 et 2009 des gynes ailées de *Lasius bicornis* (FÖRSTER, 1850) étaient découvertes aux Awirs (Flémalle) et à Elewijt (Zemst). Les captures de cette espèce en Belgique et dans les pays avoisinants sont très rares. Nous donnons des indications sur l'habitat et les communautés de fourmis présentes sur les sites où cette espèce a, en fait, été redécouverte.