

# Sawflies of Belső-Somogy (Hymenoptera: Symphyta)

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HARIS, A.: *Sawflies of Belső-Somogy (Hymenoptera: Symphyta)*.

**Abstract:** 130 sawfly species are recorded from Belső-Somogy. *Cladius (Priophorus) nubilus* (Konow, 1897) is recorded firstly in the Carpathian Basin and *Heptamelus ochroleucus* (Stephens, 1835) is first record for Hungary.

**Keywords:** Belső-Somogy, Hymenoptera, Symphyta, sawflies, new records

## Introduction

One of the largest forest-covered area of Hungary is located in the South Western part of Somogy County (South West Hungary). The total investigated area is about 48 000 hectare ranging from Inke, Vése, Iharosberény in the North to Bélavár, Háromfa in the South and from Berzence, Csurgó in the West to Segesd, Somogyszob and Nagyatád in the East (Fig. 1). In total 447.5 hectare is nature conservation area (Baláta Lake and its surrounding).

The sandhills covered surface of the central Western part of Somogy county is originated from the glacial periods. It's altitude varies between 130 and 160 m above the sea level. These sand-dunes consist of acidic sand which is poor in lime. This kind of sand can only be found in Hungary here and in the Nyírség (North Eastern edge of Hungary). In some spots, these sand dunes are covered by clay. In deeper areas, where this clay is accumulated between the dunes, it prevents the infiltration of the water to the deeper layers and supports wetlands and moors like Lake Baláta, the largest wetland of Belső-Somogy.

The sand dunes are dominantly covered with Hornbeam, Turkey oak and Sessile oak forests (*Querceto robori-cerris carpinetosum* and *Quercetum robori-cerris pteridietosum*) in the wet areas, the Alder vegetation is dominant. Extensive Scots pine and Black pine plantations take also place on the area with spots of Birch vegetation. Ferns are the dominant underbrush of the dry areas, which consists mainly *Pteridium aquilinum* (Bracken), *Athyrium filix-femina* (Lady fern) and *Dryopteris filix-mas* (Male Fern).

Belső-Somogy belongs to the relatively dry areas of the country. The yearly mean moisture varies between 500 and 600 mm and the yearly mean temperature is 10.0-10.5 °C. The annual sunshine exceeds 2100 hours.

In the Neogene period, the area was flooded by sea accumulating 100-400 m deposit layer. During the middle Miocene, the Southern part of Belső-Somogy elevated, but in the second period of Middle Miocene (Sarmata period in Hungary) the territory started

to be sunken and covered again by the sea forming about 100 m thick sedimentary layer. In the Pliocene period, the sea is separated and formed a freshwater internal lake. In the upper Pliocene, the area elevated again and rivers piled up their sediments in 300 m thick layer in the Pleistocene. Finally, during the last glacial period (würm glacial) drift sand covered the surface which holds the present vegetation.

Although, the vertebrata fauna is well investigated and a monograph was published by the local museum (KASZA and MARIÁN 2001), we have poor knowledge on the insect fauna of Belső Somogy. JÓZAN published the Aculeata fauna and BÉRCES the Carabida fauna of the Lake Baláta (JÓZAN 1996, BÉRCES 2002). ÁBRAHÁM and PAPP (1991) recorded an interesting ant-lion species: *Myrmeleon bore* (Tjeder, 1941) firstly in Hungary from this region.

The first published sawfly species from Belső-Somogy is *Dolerus niger* (Linné, 1767) recorded from Nagyatád and published in 1907 by MÓCZÁR and HENTER (1907). Till now, we have only few and sporadic sawfly records from Belső Somogy, (30 species from 5 town and villages) they were published in HARIS (1998, 2001) and in ROLLER and HARIS (2008).

## Material and methods

The studied material comprises approximately 500 specimens of 123 species collected in 25 days in 2012. This part of the collection is deposited in the entomological collection of Somogy County Museum. The list of collected sawflies were augmented with 7 other species collected previously by other entomologists and deposited in the Hungarian Natural History Museum, Budapest. I had no possibility to collect in August, in the second largest flight period, therefore few common species are missing from the list.

For identification, Zhelochovtsev's work on the sawflies of the European part of the former USSR (ZHELOCHOVTSEV 1988) was consulted, together with the Fauna Hungariae series (MÓCZÁR and ZOMBORI 1973, ZOMBORI 1982, 1990). We also used some recent revisions to make the identifications even more precise (BLANK and RITZAU 1998, HARIS 2006, VIKBERG and LISTON 2009, ACHTERBERG and AARTSEN 1986 and KOCH 1988).

For the discussion of the distribution of sawflies, we consulted the book of ROLLER and HARIS (2008) titled Sawflies of the Carpathian Basin, History and Current Research and also the most recent European checklists of species (ACHTERBERG, 2004, TAEGER et al., 2006). The higher classification of sawflies, follows the Hymenoptera part of Fauna Europaea (ACHTENBERG 2004). Our references for biological data of sawflies are SCHEDL (1991), TAEGER et. al. (1998), and LISTON (1995).

### List of localities

1. Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest), Western side of Filagoria (Fig. 5 and 7). Between 46°11'45.33"N, 17°13'56.51"E and 46°11'49.19"N, 17°13'45.97"E.
2. Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest), North of Filagoria, 400 m, left, around 46°11'57.16"N, 17°13'49.79"E.
3. Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest): Southern side Filagoria (Fig. 5), between 46°11'44.64"N, 17°13'59.04"E and 46°11'35.56"N, 17°14'5.50"E.
4. Bolhás: end of the village towards the Szentá Forest, between 46°15'52.27"N, 17°15'30.55"E and 46°15'57.61"N, 17°15'21.19"E.
5. Bolhás: Felső Filagória, between 46°14'56.68"N, 17°14'10.12"E and 46°14'59.16"N, 17°14'22.18"E.
6. Bolhás: Hókamalom: Fishing pond, between 46°13'24.20"N, 17°16'52.59"E and 46°13'17.34"N, 17°16'51.48"E.

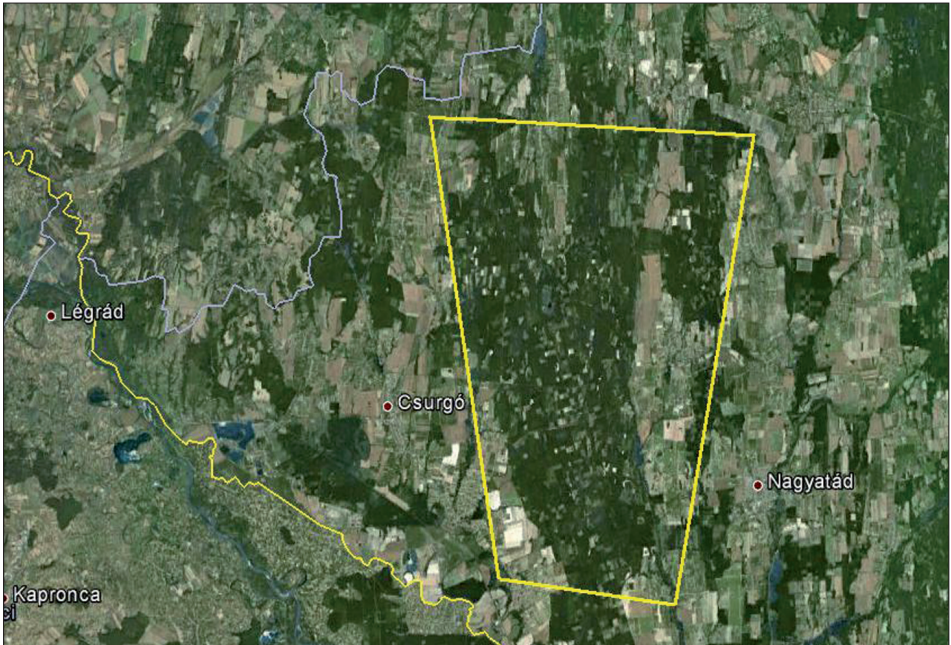


Fig. 1: The investigated area in Belső-Somogy

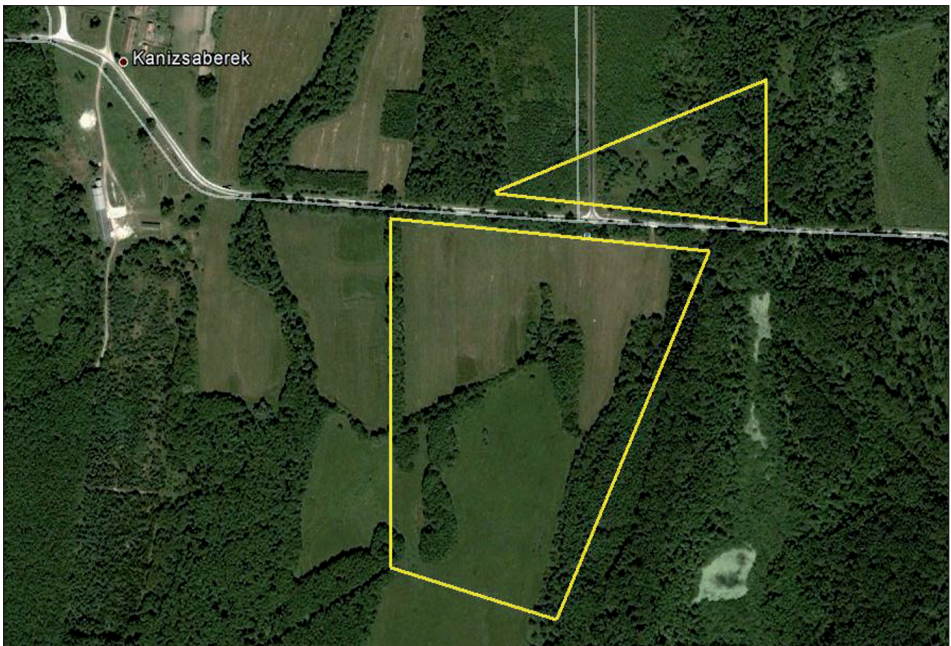
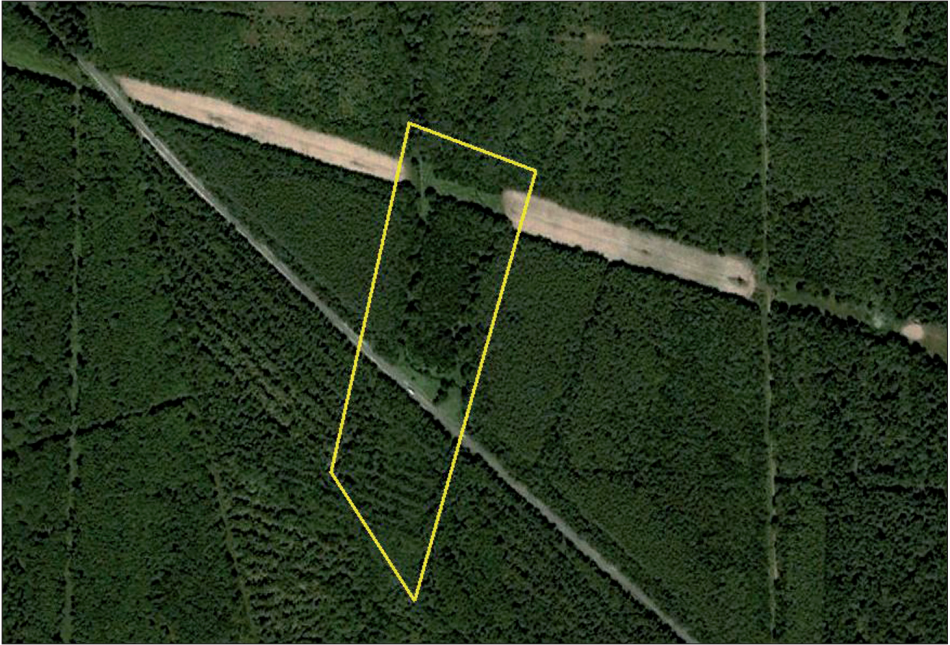
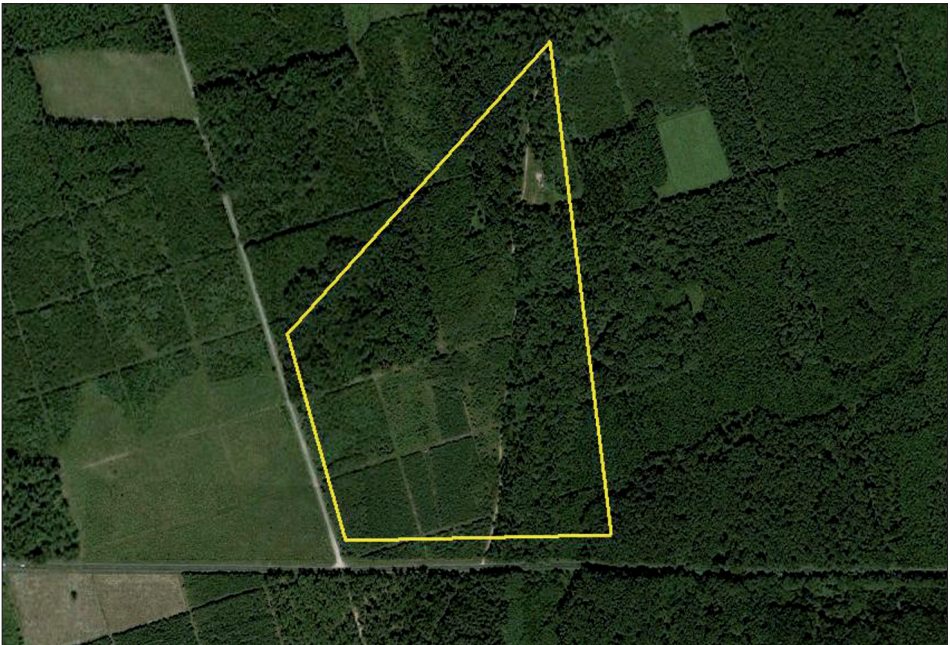


Fig. 2: Kaszó: Kanizsaberek, Southern and Northern parts



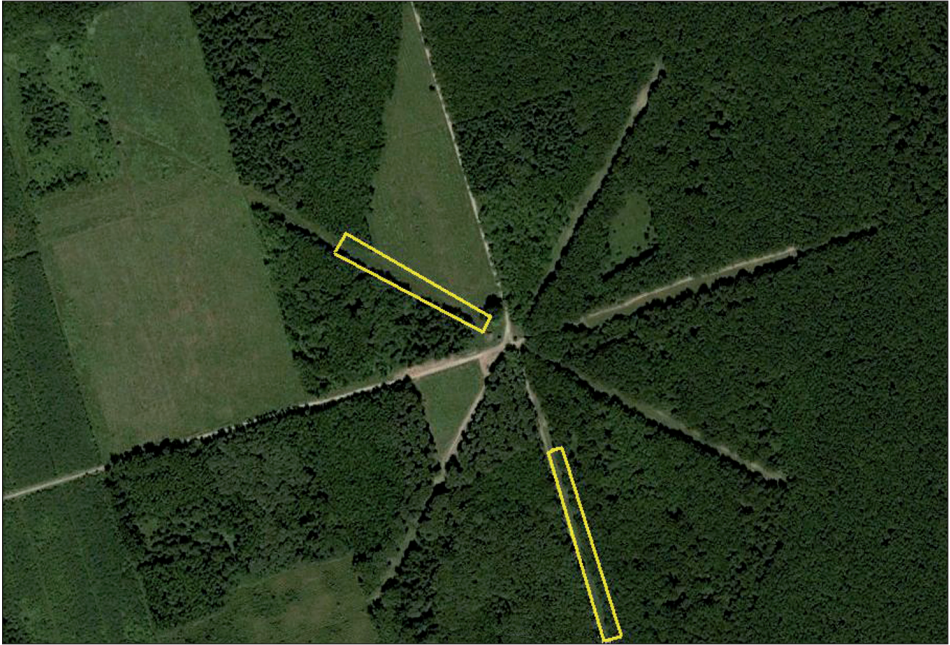


**Fig. 3: Kaszó: Bükki forest**



**Fig. 4: Szentágotfalva: Felső-Gyóta forest**





**Fig. 5: Berzence: Filagoria Western and Southern parts**



**Fig. 6: Vése: Csöpröndi road**





**Fig. 7: Berzence: Filagoria**



**Fig. 8: Kaszó: Kanizsaberek, Southern part**



7. Iharos: Alsó-erdő (Alsó forest), between 46°20'57.65"N, 17°10'17.85"E and 46°20'50.46"N, 17°10'11.37"E.
8. Inke: Darvasi road. Between 46°21'48.25"N, 17°11'54.02"E and 46°21'57.72"N, 17°11'55.01"E.
9. Kaszó: Bükki erdő (Bükki forest), patakpart (bank of brook and its surroundings) (Fig. 3), between 46°18'37.81"N, 17°14'0.55"E and 46°18'45.77"N, 17°13'58.54"E.
10. Kaszó: Kanizsaberrek North (Fig. 2), between 46°19'42.33"N, 17°11'54.91"E and 46°19'46.80"N, 17°12'6.18"E.
11. Kaszó: Kanizsaberrek South (Fig. 2 and 8), between 46°19'41.41"N, 17°12'3.69"E and 46°19'24.72"N, 17°11'47.51" E.
12. Segesd: Alsó Segesdi erdő (Alsó Segesdi forest), forest edges, between 46°19'8.14"N, 17°19'35.23"E and 46°19'5.94"N, 17°19'37.10"E.
13. Segesd: Alsó Segesdi erdő (Alsó Segesdi forest), between 46°19'0.44"N, 17°19'26.66"E and 46°19'6.34"N, 17°19'29.76"E.
14. Segesd: Lászlómajor, (actually close to Lászlómajor, but not exactly in Lászlómajor), 46°22'10.15"N, 17°21'22.63"E and 46°22'11.15"N, 17°21'28.59" E.
15. Somogyszob: Bükki erdő (Bükki forest), between 46°17'47.69"N, 17°15'32.44"E and 46°17'49.29"N, 17°15'38.78"E.
16. Somogyszob: Bükki erdő, entrance of the Kaszó forest, between 46°17'40.67"N, 17°16'8.68"E and 46°17'39.41"N, 17°16'0.03"E.
17. Somogyszob: meadow at Segesd side of the village, between 46°17'58.70"N, 17°17'28.07"E and 46°18'3.10"N, 17°17'29.19"E.
18. Somogyszob: Töröktanya, between 46°15'48.29"N, 17°18'58.00"E and 46°15'54.59"N, 17°19'11.33"E.
19. Szentá: Felső-Gyóta erdő (Felső-Gyóta forest) (Fig. 4), between 46°13'29.72"N, 17°15'5.23"E and 46°13'7.96"N, 17°15'3.13"E.
20. Szentá: Tibor König's grave. 26. 05. 2012. Between 46°18'7.86"N, 17°10'31.86"E and 46°18'10.22"N, 17°10'41.92"E.
21. Tarany: Nagy-erdő, between 46°10'9.41"N, 17°14'46.86"E and 46°10'11.50"N, 17°14'55.37"E.
22. Tarany: Nagy-erdő, Southern part, around 46° 6'58.22"N, 17°16'16.36"E.
23. Vése, Csöpröndi út (Csöpröndi road) (Fig. 6), between 46°24'31.88"N, 17°18'55.08"E and 46°24'29.74"N, 17°18'40.02"E.
24. Vízvár: Komorica forest, around 46° 8'10.04"N, 17°15'49.63"E.

## Results

### List of species

#### *Pamphiliidae*

*Neurotoma nemoralis* (Linné, 1758): Berzence: Alsó-Gyóta forest, Filagoria: Western side, 26. 04. 2012, 1 male. Known hostplants: *Prunus mahaleb*, *P. armeniaca*, *P. spinosa* and *P. cerasus*. Locally frequent pest.

*Pamphilius hortorum* (Klug, 1808): Somogyszob: Töröktanya, 26. 04. 2012, 1 female. Sporadic in the Carpathian Basin, rather rare in Hungary. Larva on *Rubus idaeus*.

*Pamphilius jucundus* (Eversmann, 1847): Vése: Csöpröndi road, 27. 04. 2012, 1 female. Rare in the Carpathian Basin.

*Pamphilius sylvaticus* (Linné, 1758): Bolhás: Felső Filagória, 19. 04. 2012, 1 female, Kaszó: Kanizsaberrek North, 23. 04. 2012, 1 female, Tarany: Nagy-erdő (Nagy forest), South, 10. 05. 2012, 1 female. One of the commonest sawfly species. Hostplants: *Sorbus aucupariae*, *Malus* spp., *Prunus* spp. and *Crataegus* spp.

*Pamphilius vafer* (Linné, 1767): Tarany: Nagy forest, South, 06. 05. 2012. 05. 14, 1 female. Sporadic. Known hostplants: *Alnus glutinosa*, *Alnus incana*, *Alnus fruticosa*, *Betula pendula* and *Betula pubescens*.

**Cimbicidae**

*Abia nitens* (Linné, 1758): Somogyszob (ROLLER and HARIS 2008). Sporadic. Hostplant: *Scabiosa columbaria*.

*Corynis crassicornis* (Rossi, 1790): Szentá (in ROLLER and HARIS 2008). Sporadic. Hostplants: *Sedum acre* and *Sedum album*. Imagoes frequently visits flowers of *Ranunculus* spp.

*Trichiosoma lucorum* (Linné, 1758): Kaszó: Kanizsaberek North, 19. 04. 2012, 1 female. Rare in Hungary, known from Budapest: Némétvölgy, Budapest: Csepel, Kalocsa, Kőszegi mountains, Budapest: Újpest and Pócsmegyer. Known hostplants: *Betula pubescens*, *Betula pendula*, *Salix aurita* and *Salix fragilis* and probably *Padus avium*.

**Diprionidae**

*Gilpinia hercyniae* (Hartig, 1837): Vése: Csöpröndi road, 27. 05. 2012, 1 female. Sporadic in Hungary. Larva on *Picea abies*, rarely on *Abies alba*.

**Blasticotomidae**

*Blasticotoma filiceti* Klug, 1834: Szentá: Felső-Gyóta erdő (Felső-Gyóta forest), 06. 05. 2012, 1 female, Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest) (Alsó-Gyóta forest): Filagoria Southern side, 06. 05. 2012, 1 female. Rare.

**Argidae**

*Aproceros leucopoda* Takeuchi, 1939: Kaszó: Kanizsaberek South, 23. 04. 2012, 1 female. Frequent. Larva on *Ulmus* spp. Recently invaded Europe, known from Hungary, Poland, Slovakia, Austria, Romania, Ukraine and the Russian Far East (BLANK et al. 2010, CSÓKA et al. 2010).

*Arge cyanocrocea* (Forster, 1771): Segesd: Alsó Segesdi forest, 05. 05. 2012, 1 female, 06. 05. 2012, 1 female, Szentá: Felső-Gyóta forest, 06. 05. 2012, 1 female, 05. 05. 2012, 1 male, Berzence: Alsó-Gyóta forest: Filagoria: Western side, 26. 04. 2012, 2 males, 05. 05. 2012, 1 male, 06. 05. 2012, 1 male, 10. 05. 2012, 1 male, Somogyszob: Segesdi road, meadow, 05. 05. 2012, 1 male, Vése: Csöpröndi road, 26. 05. 2012, 1 female. Common species. Known hostplants: *Rubus idaeus* and *Sanguisorba officinalis*.

*Arge melanochra* (Gmelin, 1790): Vése: Csöpröndi road, 26. 05. 2012, 1 female, 27. 05. 2012, 2 males. Common species. Hostplant: *Crataegus oxycantha*.

*Arge pagana pagana* (Panzer, 1798): Szentá: Felső-Gyóta forest, 10. 05. 2012, 1 female, 20. 05. 2012, 1 female. Frequent. Hostplants: *Rosa* spp.

*Arge ustulata* (Linnaeus, 1758): Somogyszob (ROLLER and HARIS 2008). Sporadic. Larva on *Salix alba vitellina*, *Salix alba*, *Salix aurita*, *Salix fragilis*, *Salix caprea*, *Betula pendula*, *Betula pubescens* and *Crataegus* spp.

**Cephiidae**

*Calameuta (Calameuta) filiformis* (Eversmann, 1847): Somogyszob: edges of Bükkiforest, 05. 05. 2012, 1 female. Generally common species. Larva lives in stems of *Arrhenaterum elatius*, *Phalaris arundinacea*, *Calamagrostis epigeios*, *Elytrigia repens* and *Phragmites communis*.

*Calameuta (Calameuta) haemorrhoidalis* (Fabricius, 1781): Segesd: Lászlómajor, 27. 04. 2012, 1 female, 28. 04. 2012, 1 male. Segesd: Alsó Segesdi forest, forest edges, 28. 04. 2012, 1 female, Segesd: Alsó Segesdi forest, forest edges, 27. 04. 2012, 1 male, Somogyszob: Segesdi road, meadow, 27. 04. 2012, 1 male. Frequent species. Hostplant unknown.



*Calameuta (Calameuta) pallipes* (Klug, 1803): Segesd: Alsó Segesdi forest, forest edges, 27. 04. 2012, 1 male, 28. 04. 2012, 1 male, 1 female, 05. 05. 2012, 1 female, Berzence: Alsó-Gyóta forest: Filagoria: Western side, 06. 05. 2012, 1 male, Tarany: Nagy-erdő (Nagy forest), 06. 05. 2012, 1 female. Frequent species. Hostplants: diverse *Poaceae*.

*Calameuta (Calameuta) punctata* (Klug, 1803): Segesd: Lászlómajor, 26. 04. 2012, 1 female, Somogyszob: Segesdi road, meadow, 28. 04. 2012, 1 female. Sporadic in Hungary.

*Cephus nigrinus* C. G. Thomson, 1871: Segesd: Alsó Segesdi forest, edges of forest, 27. 04. 2012, 1 female, Somogyszob: out of the village, towards Segesd, 23. 04. 2012, 1 male, Kaszó: Bükki erdő (Bükki forest), brook, 27. 04. 2012, 1 male. Frequent species. Hostplants: *Milium effusum* and *Poa pratensis*.

*Cephus pygmeus* (Linné, 1767): Segesd: Lászlómajor, 28. 04. 2012, 1 female, 1 male, 10. 05. 2012, 1 male, 27. 04. 2012, 1 female, Tarany: Nagy-erdő (Nagy forest), 06. 05. 2012, 1 male, Kaszó: Kanizsaberek South, 27. 04. 2012, 1 female, Somogyszob: Segesdi road, meadow, 05. 05. 2012, 1 female, 19. 05. 2012, 1 female, Somogyszob: edges of Bükki-forest, 11. 05. 2012, 1 female, Szentá: Felső-Gyóta forest, 10. 05. 2012, 1 female, Vése: Csöpröndi road, 27. 05. 2012, 3 females. Common. Insect pest of cereals and *Graminae*.

*Cephus spinipes* (Panzer, 1800) (syn. *Cephus cultratus* Eversmann, 1847): Segesd: Alsó Segesdi forest, 06. 05. 2012, 1 male, Szentá: Tibor König's grave. 26. 05. 2012, 1 male. Frequent species. Known hostplant: *Phleum pratense*.

*Janus compressus* (Fabricius, 1793): Szentá: Felső-Gyóta forest, 05. 05. 2012, 1 male. Frequent insect pest in orchards but imagoes were sporadically collected. Larvae in shoots of *Pyrus* and *Malus* spp.

## **Tenthredinidae**

### **Dolerinae**

*Dolerus (Achaetoprion) madidus* (Klug, 1818): Inke, 31. 03. 2012, 3 females. Sporadic. Larva on *Juncus effusus*.

*Dolerus (Achaetoprion) triplicatus* (Klug, 1818): Kaszó: Bükki erdő (Bükki forest), 21. 04. 2012, 1 male, Berzence: Alsó-Gyóta forest, Filagoria: Western side, 26. 04. 2012, 1 male, 06. 05. 2012, 1 female, 10. 05. 2012, 2 females, 11. 05. 2012, 1 female, Szentá: Felső-Gyóta forest, 11. 05. 2012, 1 female. Sporadic. Larva on *Juncus filiformis* and *J. effusus*.

*Dolerus (Dicrodolerus) vestigialis* (Klug, 1818): Kaszó: Kanizsaberek South, 27. 04. 2012, 1 female, Kaszó: Kanizsaberek North, 27. 04. 2012, 1 male, Somogyszob: Bükki forest, forest edge, 28. 04. 2012, 1 female, Tarany: Nagy-erdő (Nagy forest), 05. 05. 2012, 1 female, Segesd: Lászlómajor, 26. 04. 2012, 1 male. Common. Hostplants: *Equisetum palustre*, *E. sylvaticum*, *E. arvense* and *E. pratense*.

*Dolerus (Dolerus) germanicus* (Fabricius, 1775): Segesd: Lászlómajor, 15. 04. 2012, 1 male, 19. 04. 2012, 1 female, 28. 04. 2012, 1 female, Szentá: Tibor König's grave. 26. 05. 2012, 1 male, Kaszó: Kanizsaberek North, 26. 05. 2012, 1 male. Common. Larva on *Equisetum arvense* and *E. palustre*.

*Dolerus (Oncodolerus) eversmanni* W. F. Kirby, 1882: Kaszó: Kanizsaberek North, 27. 04. 2012, 1 female, Segesd: Lászlómajor, 05. 05. 2012, 1 male. Frequent. Larva on *Equisetum arvense* and *E. palustre*.

*Dolerus (Poodolerus) aeneus* Hartig, 1837: Szentá: Felső-Gyóta forest, 19. 04. 2012, 1 female, 06. 05. 2012, 1 female, Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest): Filagoria: Southern side, 06. 05. 2012, 1 female. Sporadic. Hostplants: *Graminae*.

*Dolerus (Poodolerus) gonager* (Fabricius, 1781): Kaszó: Kanizsaberek North, 31. 03. 2012, 1 female, 21. 04. 2012, 1 male, Somogyszob: Segesdi road, meadow, 15. 04. 2012, 1 female, Segesd: Alsó Segesdi forest, 15. 04. 2012, 1 female. Common. Larva on *Graminae*.

*Dolerus (Poodolerus) niger* (Linné, 1767): Tarany: Nagy-erdő (Nagy forest), 05. 05. 2012, 1 female, Szentá: Felső-Gyóta forest, 11. 05. 2012, 1 female, Berzence: Alsó-Gyóta forest, Filagoria: Western side, 19. 05. 012, 1 female, 26. 05. 2012, 1 female. Sporadic. Larva on *Graminae*.

*Dolerus (Poodolerus) nigratus* (O. F. Müller, 1776): Kanizsaberek North, 31. 03. 2012, 1 female, 19. 04. 2012, 1 male, Kanizsaberek South, 31. 03. 2012, 1 female, 1 male, Somogyszob: Segesdi road, meadow, 27. 04. 2012, 1 female, 28. 04. 2012, 1 female, 05. 05. 2012, 1 female, 15. 04. 2012, 2 males, 19. 04. 2012, 1 male, Szentá: Felső-Gyóta forest, 05. 05. 2012, 1 female, 19. 04. 2012, 1 male, Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest): Filagoria Southern side, 05. 05. 2012, 1 female, 06. 05. 2012, 1 female, 10. 05. 2012, 1 female, Berzence: Alsó-Gyóta forest: Filagoria: Western side, 06. 05. 2012, 1 female, 10. 05. 2012, 1 female, 11. 05. 012, 1 female, 19. 05. 012, 1 female, 26. 04. 2012, 1 male, Segesd: Lászlómajor, 14. 04. 2012, 1 male, Tarany: Nagy-erdő (Nagy forest), 06. 05. 2012, 1 male. Common. Larva on *Graminae* including cereals.

*Dolerus (Poodolerus) picipes* (Klug, 1818): Kaszó: Kanizsaberek South, 10. 05. 2012, 2 females, Kaszó: Kanizsaberek North, 21. 04. 2012, 1 male, 23. 04. 2012, 1 male, Bolhás: Felső Filagória, 19. 04. 2012, 1 male, Tarany: Nagy-erdő (Nagy forest), 05. 05. 2012, 1 male. Frequent. Larva on *Graminae*.

*Dolerus (Poodolerus) puncticollis* C. G. Thomson, 1871: Vése, Csöpröndi road, 27. 04. 2012, 1 female, Kaszó: Kanizsaberek North, 31. 03. 2012, 1 male, Kaszó: Kanizsaberek South, 19. 04. 2012, 1 male. Common. Larva on *Graminae* including cereals.

*Dolerus (Poodolerus) sanguinicollis* (Klug, 1818): Bolhás: Hókamalom: Fishing pond, 10. 05. 2012, 1 female. Sporadic.

*Dolerus (Poodolerus) stygius* Förster, 1860 (syn. *D. megapterus* Cameron, 1881) : Kaszó: Kanizsaberek North, 19. 04. 2012, 1 male. Rare.

### **Selandrinae**

*Aneugmenus coronatus* (Klug, 1818): Szentá: Felső-Gyóta forest, 05. 05. 2012, 1 female, 06. 05. 2012, 1 female, 19. 05. 2012, 1 female. Rare. Larva on *Dryopteris filix-mas*, *Aspidium* sp., *Athyrium filix-femina* and *Pteridium aquilinum*.

*Aneugmenus padi* (Linnaeus, 1761): Segesd: edges of Alsó Segesdi forest, 10. 05. 2012, 1 female. Hostplants: *Asplenium* sp. and *Pteridium aquilinum*. Sporadic in the Carpathian Basin, but rare in Hungary. Known from Szeged, Szulok, the Mecsek mountains and Fenyőfő.

*Heptamelus ochroleucus* (Stephens, 1835): Szentá: Felső-Gyóta forest, 19. 05. 2012, 1 female. Rare. New record for Hungary.

*Nesoselandria morio* (Fabricius, 1781): Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest), Filagoria Southern side, 26. 05. 2012, 1 male. Frequent. Hostplants: *Brachytecium reflexum*, *Ceratodon purpureus*, *Chenopodium album*, *Dicranum scoparium*, *Fragaria vesca*, *Hedwigia ciliata*, *Myosotis arvensis*, *Plagiomnium cuspidatum*, *Plagiothecium denticulatum*, *Polygonum aviculare*, *Polytrichum commune*, *Pseudobryum cinclidiodes*, *Sanionia uncinata*, *Stellaria media*, *Veronica chamaedrys* and *V. officinalis*.

*Selandria serva* (Fabricius, 1793): Szentá: Felső-Gyóta erdő (Felső-Gyóta forest), 26. 04. 2012, 1 male, 05. 05. 2012, 1 male, 27. 05. 2012, 1 female. Frequent. Host plants: *Poaceae*, *Carex* spp. and *Juncus* spp.



*Stromboceros delicatulus* (Fallén, 1808): Szentá: Felső-Gyóta forest, 05. 05. 2012, 1 male, 06. 05. 2012, 3 males, 26. 05. 2012, 1 male. Rare. Larva on *Pteridium aquilium*, *Athyrium filix-femina*, *Onoclea struthiopteridis* and *Polypodium vulgare*.

*Strongylogaster multifasciata* (Geoffroy, 1985): Szentá: Felső-Gyóta erdő (Felső-Gyóta forest), 06. 05. 2012, 1 female, 19. 04. 2012, 1 female, 26. 04. 2012, 1 female, Somogyszob: Bükki erdő (Bükki forest), 28. 04. 2012, 1 female. Frequent. Hostplants: *Dryopteris* sp., *Matteuccia struthiopteris*, *Aspidium* sp., *Polystichum* sp. and *Pteridium aquilinum*.

### *Allantinae*

*Allantus (Emphytus) calceatus* (Klug, 1818): Kaszó: Kanizsaberek South, 14. 04. 2012, 1 male. Sporadic. Hostplants: *Rubus*, *Sanguisorba*, *Rosa*, *Filipendula*, *Fragaria* and *Alchemilla* spp.

*Allantus (Emphytus) cinctus* (Linné, 1758): Kaszó: Bükki forest, 21. 04. 2012, 1 female. Frequent. Hostplants: *Rosa* spp.

*Allantus (Emphytus) melanarius* (Klug, 1818): Vése, Csöpröndi road, 27. 04. 2012, 1 female. Frequent. Hostplant: *Cornus sanguinea*.

*Ametastegia (Ametastegia) equiseti* (Fallén, 1808): Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest): Filagoria Southern side, 06. 05. 2012, 1 male, Szentá: Felső-Gyóta erdő (Felső-Gyóta forest), 19. 05. 2012, 1 male, 20. 05. 2012, 1 male. Frequent. Larva on *Chenopodium album*, *Lythrum salicaria*, *Polygonum persicaria* and *Rumex acetosella*.

*Ametastegia (Ametastegia) glabrata* (Fallén, 1808): Inke: Road to Darvas, 15. 04. 2012, 1 male. Frequent. Hostplants: *Rumex acetosella*, *Rumex crispus*, *Rumex longifolius*, *Bidens* sp., *Chenopodium* sp., *Lythrum salicaria*, *Plantago* sp., *Rheum rhabarbarum*, *Ribes* sp., *Salix* sp., *Solanum dulcamara*, *Viola* sp., *Epilobium* sp., *Fagopyrum* sp., *Solanum tuberosum*, *Vicia* sp. and *Polygonum aviculare*.

*Athalia bicolor* Serville, 1823: Berzence: Alsó-Gyóta forest: Filagoria South, 06. 05. 2012, 1 female, Tarany: Nagy-erdő (Nagy forest), South, 10. 05. 2012, 1 female, Kaszó: Kanizsaberek South, 10. 05. 2012, 1 female. Frequent. Hostplant unknown.

*Athalia circularis* (Klug, 1815): Segesd: Lászlómajor, 28. 04. 2012, 1 female, Somogyszob: meadow at Segesd side of the village, 26. 04. 2012, 1 female, Szentá: Felső-Gyóta forest, 11. 05. 2012, 1 female, 1 male, 19. 05. 2012, 1 female, 26. 05. 2012, 2 males, Bolhás: Hókamalom: Fishing pond, 10. 05. 2012, 1 female, 19. 05. 2012, 1 male, Kaszó: Kanizsaberek South, 26. 05. 2012, 1 female. Frequent. Hostplants: *Arctium lappa*, *Ajuga reptans*, *Veronica beccabunga*, *V. longifolia*, *V. officinalis*, *Alliaria petiolata*, *Glechoma hederacea*, *Melampyrum*, *Capsella* and *Lycopus* spp.

*Athalia cordata* Serville, 1823: Segesd: edges of Alsó Segesdi forest, 23. 04. 2012, 1 female, Segesd: Lászlómajor, 26. 04. 2012, 1 female, 27. 04. 2012, 1 male, Kaszó: Iharosi út road, 1.7 km from Kanizsaberek, 21. 04. 2012, 1 female, Somogyszob: entrance of Bükki-forest, 05. 05. 2012, 1 female, Szentá: Felső-Gyóta forest, 11. 05. 2012, 1 female, Inke: Darvasi road, 27. 04. 2012, 1 male, Tarany: Nagy-erdő (Nagy forest), 05. 05. 2012, 1 male, Vízvár: Komoricai forest, 06. 05. 2012, 1 male. Common. Larva on *Misopates orontinum*, *Antirrhinum majus*, *Ajuga reptans*, *Teucrium scorodonia* and *Plantago* spp.

*Athalia liberta* (Klug, 1815): Segesd: Alsó Segesdi forest, 23. 04. 2012, 1 male, Szentá: Felső-Gyóta forest, 19. 05. 2012, 1 male. Frequent. Feeding on *Alliaria petiolata*, *Arabidopsis thaliana*, *Cardamine hirsuta* and *Sisymbrium officinale*.

*Athalia lugens* (Klug, 1815): Segesd: Lászlómajor, 05. 05. 2012, 1 male, Berzence: Alsó-Gyóta forest, Filagoria West, 10. 05. 2012, 1 male, Szentá: Felső-Gyóta forest, 20. 05. 2012, 1 male. Sporadic. Feeding on various *Cruciferae*.

*Athalia rosae* (Linné, 1758): Segesd: Lászlómajor, 28. 04. 2012, 4 females, Inke: Darvasi road, 27. 04. 2012, 4 females, 3 males, Vése: Csöpröndi road, 20. 05. 2012, 1 female. Common pest. Hostplants: *Raphanus sativus*, *R. raphanistrum*, *Sinapis arvensis*, *Sisymbrium officinale*, *Armoracia rusticana*, *Barbarea* sp., *Brassica napus*, *B. juncea*, *B. rapa*, *B. oleracea*, *Tropaeolum majus*, *Sinapis arvensis*, *Alliaria petiolata* and *Cardamine* spp.

*Empria liturata* (Gmelin, 1790): Inke: Darvasi road, 15. 04. 2012, 2 females, 27. 04. 2012, 1 female, Szentá: Felső-Gyóta forest: Filagoria, Western side, 19. 04. 2012, 1 male, Segesd: edges of Alsó Segesdi forest, 21. 04. 2012, 1 male, Somogyszob: Töröktanya, 26. 04. 2012, 1 male. Frequent. Hostplants: *Fragaria* and *Geum* spp.

*Empria sexpunctata* (Serville, 1823) (syn.: *Empria klugii* (Stephens, 1835)): Segesd: edges of Alsó Segesdi forest, 23. 04. 2012, 1 female, 27. 04. 2012, 1 male, Szentá: Felső-Gyóta forest, 06. 05. 2012, 1 female, Vízvár: Komoricai forest, 06. 05. 2012, 1 female, Kaszó: Bükki forest, brook (patakpart), 27. 04. 2012, 1 male. Frequent. Larva on *Geum* spp.

*Empria tridens* (Konow, 1896): Szentá: Felső-Gyóta erdő (Felső-Gyóta forest), Filagoria: Western side, 19. 04. 2012, 1 female. Frequent. Hostplants: *Geum* spp. and *Rubus idaeus*.

*Eriocampa ovata* (Linné, 1761): Szentá: Felső-Gyóta forest, 20. 05. 2012, 1 female, 26. 05. 2012, 1 female. Frequent on *Alnus glutinosa* and *A. incana*.

*Eriocampa umbratica* (Klug, 1816): Kaszó: Bükki forest, 14. 04. 2012, 1 male, Kaszó: Kanizsaberek South, 15. 04. 2012, 1 male, 27. 04. 2012, 1 male, Kaszó: Kanizsaberek North, 21. 04. 2012, 2 males, 23. 04. 2012, 2 females, Segesd: edges of Alsó Segesdi forest, 23. 04. 2012, 1 male, 26. 04. 2012, 1 male, Berzence: Alsó-Gyóta forest, Filagoria: Western side, 26. 04. 2012, 1 male, Bolhás: Szentá Forest, 28. 04. 2012, 2 males, Somogyszob: Bükki forest, 28. 04. 2012, 1 male, Kaszó: Bükki forest, 21. 04. 2012, 1 female, Vése, Csöpröndi road, 21. 04. 2012, 1 female, Szentá: Felső-Gyóta erdő (Felső-Gyóta forest), 26. 04. 2012, 1 female, Bolhás: Hókamalom: Fishing pond, 10. 05. 2012, 1 female. Frequent on *Alnus glutinosa* and *A. incana*.

*Taxonus agrorum* (Fallén, 1808): Bolhás: Felső Filagória, 19. 04. 2012, 1 female, Segesd: edges of Alsó Segesdi forest, 27. 04. 2012, 1 female, Somogyszob: Töröktanya 28. 04. 2012, 1 female, Somogyszob: Bükki forest, 28. 04. 2012, 1 female, Szentá: Felső-Gyóta erdő (Felső-Gyóta forest), Filagoria: Western side, 19. 04. 2012, 1 male, 05. 05. 2012, 1 male, Bolhás: Szentá Forest, 28. 04. 2012, 1 male.

### **Heterarthrinae**

*Caliroa varipes* (Klug, 1816): Segesd: Alsó Segesdi forest, 21. 04. 2012, 1 male, Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest), Filagoria Southern side, 26. 05. 2012, 1 male. Sporadic. Larva on *Quercus robur*.

*Endelomya aethiops* (Fabricius, 1781): Segesd: Alsó Segesdi forest, 19. 04. 2012, 1 female, Kaszó: Kanizsaberek South, 27. 04. 2012, 1 female. Sporadic. Larva on *Rosa* spp.

*Heterarthrus vagans* (Fallén, 1808): Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest), Filagoria: Western side, 19. 05. 2012, 1 female. Sporadic. Hostplants: *Alnus* spp.

*Profenusa pygmaea* (Klug, 1816): Vése, Csöpröndi road, 05. 05. 2012, 1 female. Sporadic. Hostplants: *Quercus* spp.

### **Blennocampinae**

*Blennocampa phyllocolpa* Viitasaari & Vikberg, 1985 (= *Blennocampa pusilla* (Klug, 1816)): Tarany: Nagy-erdő (Nagy forest), South, 10. 05. 2012, approximately 50 leaf-rolls on one *Rosa* sp. bush. Frequent. Larva rolls the leaves of *Rosa* spp.

*Claremontia alternipes* (Klug, 1816): Segesd: Alsó Segesdi forest, 19. 04. 2012, 1 female, 27. 04. 2012, 1 female, 23. 04. 2012, 1 male, Segesd: Alsó Segesdi forest, forest edges, 26. 04. 2012, 3 females, Kaszó: Bükki forest, 21. 04. 2012, 1 female, 27. 04. 2012, 1 female, Kaszó: Kanizsaberek North, 27. 04. 2012, 1 female. Sporadic. Hostplant: *Rubus idaeus*.

*Claremontia brevicornis* (Brischke, 1883): Kaszó: Kanizsaberek North, 31. 03. 2012, 1 female, Inke: Darvasi road, 31. 03. 2012, 1 female, Segesd: Alsó Segesdi forest, edges of forest, 23. 04. 2012, 1 female, Kaszó: Bükki forest, 23. 04. 2012, 1 male. Sporadic. Hostplants: *Fragaria* spp., *Sanguisorba* spp. and *Potentilla reptans*.

*Claremontia waldheimii* (Gimmerthal, 1847): Segesd: Alsó Segesdi forest, 21. 04. 2012, 1 male, Vése, Csöpröndi road, 21. 04. 2012, 1 male. Frequent. Hostplant: *Geum urbanum*.

*Eutomostethus ephippium* (Panzer, 1798): Somogyszob: meadow at Segesd side of the village, 26. 04. 2012, 2 males, 27. 04. 2012, 1 male, 28. 04. 2012, 1 male, Somogyszob: Töröktanya, 28. 04. 2012, 1 female, Segesd: Alsó Segesdi forest, edge of forest, 26. 04. 2012, 2 males, Kaszó: Kanizsaberek South, 23. 04. 2012, 1 male, 27. 04. 2012, 3 males, 1 female, 10. 05. 2012, 1 male, 20. 05. 2012, 1 male, 26. 05. 2012, 1 male, Iharos: Alsó-erdő (Alsó forest), 21. 04. 2012, 1 male, Kaszó: Iharosi road, 21. 04. 2012, 1 male, Kaszó: Bükki forest, 27. 04. 2012, 1 male, 1 female, Inke: Darvasi road, 27. 04. 2012, 1 male, Somogyszob: Töröktanya, 28. 04. 2012, 1 male, Szentá: Felső-Gyóta forest, 05. 05. 2012, 1 male, 26. 05. 2012, 1 male, 27. 05. 2012, 1 male, 1 female, 10. 05. 2012, 1 female, 11. 05. 2012, 1 female, 19. 05. 2012, 2 females, 20. 05. 2012, 2 females, Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest): Filagoria: Western side, 05. 05. 2012, 1 male, 19. 05. 2012, 1 female, Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest): Filagoria Southern side, 05. 05. 2012, 2 males, 06. 05. 2012, 1 male, 10. 05. 2012, 1 male, 26. 05. 2012, 1 male, Berzence: Alsó-Gyóta forest, North of Filagoria, 20. 05. 2012, 1 male. Common species. Larva on *Graminae*.

*Eutomostethus gagathinus* (Klug, 1816): Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest), Filagoria: Western side, 20. 05. 2012, 1 female, Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest): Filagoria Southern side, 05. 05. 2012, 2 males, 10. 05. 2012, 1 male, Vése: Csöpröndi road, 26. 05. 2012, 1 female. Sporadic.

*Eutomostethus luteiventris* (Klug, 1816): Somogyszob: Segesdi road, meadow, 15. 04. 2012, 1 female, 19. 04. 2012, 3 females, 23. 04. 2012, 1 female, 26. 04. 2012, 1 female, 27. 04. 2012, 1 female, Kaszó: Bükki forest, 15. 04. 2012, 1 female, Kaszó: Kanizsaberek South, 15. 04. 2012, 1 female, 27. 04. 2012, 3 females, Szentá: Felső-Gyóta forest, 2 females, 26. 04. 2012, 2 females, 10. 05. 2012, 1 female, 11. 05. 2012, 2 females, 05. 05. 2012, 2 females, Inke, 19. 04. 2012, 1 female, 26. 04. 2012, 1 female, Vése, Csöpröndi road, 21. 04. 2012, 2 females, 27. 04. 2012, 1 female, Berzence: Alsó-Gyóta forest, Filagoria: Western side, 26. 04. 2012, 1 female, 05. 05. 2012, 3 females, 06. 05. 2012, 6 females, 10. 05. 2012, 6 females, 11. 05. 2012, 1 female, Berzence: Alsó-Gyóta forest: Filagoria Southern side, 05. 05. 2012, 2 females, Somogyszob: edge of Bükki forest, 28. 04. 2012, 1 female, Tarany: Nagy forest, 06. 05. 2012, females. Locally frequent, one of the dominant species of Belső Somogy. Larva on *Juncus effusus*.

*Eutomostethus punctatus* (Konow, 1887): Szentá: Felső-Gyóta forest, 11. 05. 2012, 3 females, 19. 05. 2012, 1 female, 05. 05. 2012, 1 male, 19. 05. 2012, 1 male, Berzence: Alsó-Gyóta forest: Filagoria Southern side, 10. 05. 2012, 1 female, 05. 05. 2012, 1 male, 06. 05. 2012, 1 male, Kaszó: Kanizsaberek South, 20. 05. 2012, 2 females, Vízvár: Komoricai forest, 06. 05. 2012, 1 male. Sporadic species, relatively frequent in Belső Somogy. Hostplant: *Carex paniculata*.



*Halidamia affinis* (Fallén, 1807): Kaszó: Bükki forest, 27. 04. 2012, 1 female, Somogyiszob: Töröktanya, 26. 04. 2012, 2 females, 19. 04. 2012, 1 female. Frequent. Hostplants: *Galium aparine* and *G. molugo*.

*Monophadnoides ruficruris* (Brulle, 1832): Kaszó: Kanizsaberek North, 14. 04. 2012, 1 female, 31. 03. 2012, 1 male, 21. 04. 2012, 1 male, Segesd: Alsó Segesdi forest, 15. 04. 2012, 1 female. Sporadic. Hostplant: *Rubus idaeus*.

*Monophadnus pallescens* (Gmelin, 1790): Vése, Csöpröndi road, 21. 04. 2012, 2 females, Segesd: Alsó Segesdi forest, forest edges, 28. 04. 2012, 1 female, Kaszó: Kanizsaberek South, 23. 04. 2012, 1 female, Kaszó: Bükki forest, 23. 04. 2012, 1 male. Common. Hostplants: *Ranunculus acris*, *R. repens*, *R. lanuginosus* and *Anemone nemorosa*.

*Phymatocera aterrima* (Klug, 1816): Szentá: Felső-Gyóta forest, 05. 05. 2012, 1 female. Frequent. Hostplants: *Polygonatum* spp.

*Rhadinoceraea (Rhadinoceraea) micans* (Klug, 1816): Kaszó: Bükki forest, 15. 04. 2012, 1 female. Sporadic species but rare in Hungary. Reported only from Kőszeg, Simontornya, Budapest and Nadap. Larva on *Iris laevigatus*, *Iris pseudacorus* and *Iris spuria*.

*Stethomostus fuliginosus* (Schrank, 1781): Kaszó: Bükki forest, 21. 04. 2012, 1 male, Kaszó: Kanizsaberek South, 27. 04. 2012, 1 male, 20. 05. 2012, 1 male, Inke: Darvasi road, 27. 04. 2012, 2 males. Frequent. Larva on *Ranunculus acris*, *R. repens* and *R. sceleratus*.

*Tomostethus nigrinus* (Fabricius, 1804): Kaszó: Kanizsaberek North, 19. 04. 2012, 1 male. Sporadic. Hostplant: *Fraxinus excelsior*.

### ***Tenthredininae***

*Aglao stigma (Astochus) aucupariae* (Klug, 1817): Segesd: Alsó Segesdi forest, 06. 04. 2012, 1 male, 23. 04. 2012, 1 female, Vése, Csöpröndi road, 21. 04. 2012, 1 male, Kaszó: Bükki forest, 21. 04. 2012, 1 female, 27. 04. 2012, 1 female, Vizvár: Komorica forest, 06. 05. 2012, 1 female. Common. Larva on *Galium mollugo* and *G. boreale*.

*Aglao stigma (Astochus) fulvipes* (Scopoli, 1763): Segesd: Alsó Segesdi forest, 15. 04. 2012, 1 male, 19. 04. 2012, 1 male, 23. 04. 2012, 2 males, Segesd: edges of Alsó Segesdi forest, 21. 04. 2012, 1 male, 28. 04. 2012, 1 female, 05. 05. 2012, 1 male, Kaszó: Bükki forest, 15. 04. 2012, 1 male, 21. 04. 2012, 2 males, 26. 04. 2012, 1 male, Szentá: Felső-Gyóta forest, 26. 04. 2012, 1 male, Somogyiszob: Segesdi road: meadow, 19. 04. 2012, 1 female, 27. 04. 2012, 1 female, Kaszó: Kanizsaberek North, 27. 04. 2012, 1 female, Somogyiszob: Töröktanya, 28. 04. 2012, 1 female. Common. Larva on *Galium mollugo* and *G. verum*.

*Macrophya (Macrophya) albicincta* (Schrank, 1776): Somogyiszob: Töröktanya, 19. 04. 2012, 1 female, 26. 04. 2012, 7 females, 1 male, 28. 04. 2012, 1 female, Somogyiszob: entrance of Bükki-forest, 05. 05. 2012, 1 male, 1 female, Somogyiszob: Bükki erdő (Bükki forest), 28. 04. 2012, 2 females, Segesd: edges of Alsó Segesdi forest, 23. 04. 2012, 1 female, 27. 04. 2012, 4 females, 21. 04. 2012, 1 female, 06. 05. 2012, 2 females, 1 male, 10. 05. 2012, 1 female, 05. 05. 2012, 1 female, 28. 04. 2012, 1 female, Segesd: Alsó Segesdi forest, 23. 04. 2012, 1 female, 19. 04. 2012, 1 male, 05. 05. 2012, 1 female, Segesd: Lászlómajor, 28. 04. 2012, 1 female, Somogyiszob: Segesdi road, meadow, 05. 05. 2012, 1 female, 23. 04. 2012, 1 female, Szentá: Felső-Gyóta forest, 06. 05. . 2012, 1 female, Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest), Filagoria: Western side, 26. 05. 2012, 1 female, 20. 05. 2012, 1 female, 19. 05. 2012, 2 females, 10. 05. 2012, 2 females, 06. 05. 2012, 1 male. Common. Hostplants: *Sambucus ebulus*, *S. nigra*, *S. racemosa*, *Valeriana officinalis* and *Viburnum opalus*.

*Macrophya (Macrophya) annulata* (Geoffroy, 1785): Szentá: Felső-Gyóta forest, 19. 05. 2012, 1 female, Berzence: Alsó-Gyóta forest, Filagoria: Western side, 26. 05. 2012, 1 female, 20. 05. 2012, 1 male, Bolhás: Hókamalom: Fishing pond, 10. 05. 2012, 1 male. Larva on *Potentilla reptans*, *Origanum vulgare*, *Euphorbia*, *Rosa*, *Rubus* and *Sambucus* spp.

*Macrophya (Macrophya) blanda* (Fabricius, 1775): Bolhás: Hókamalom: Fishing pond, 20. 05. 2012, 1 female, 27. 05. 2012, 1 female, 19. 05. 2012, 1 male, Segesd: edges of Alsó Segesdi forest, 05. 05. 2012, 1 male, Vízvár: Komoricai forest, 06. 05. 2012, 1 male, Szentá: Tibor König's grave. 26. 05. 2012, 1 male. Frequent. Hostplant unknown.

*Macrophya (Macrophya) duodecimpunctata* (Linné, 1758): Somogyszob: Segesdi road: meadow, 05. 05. 2012, 1 female, Szentá: Felső-Gyóta forest, 20. 05. 2012, 2 females, 10. 05. 2012, 1 female, 11. 05. 2012, 1 female, 26. 05. 2012, 1 female, Kaszó: Kanizsaberek South, 10. 05. 2012, 2 females, Kaszó: Kanizsaberek North, 26. 05. 2012, 1 male, Berzence: Alsó-Gyóta forest: Filagoria Southern part, 05. 05. 2012, 1 male. Common. Hostplants: *Graminae*, *Cyperaceae* and *Carex* spp.

*Macrophya (Macrophya) militaris* (Klug, 1817): Szentá: Felső-Gyóta forest, 26. 05. 2012, 1 female. Sporadic. Hostplant: *Rubus caesius*.

*Macrophya (Macrophya) montana* (Scopoli, 1763): Berzence: Alsó-Gyóta forest: Filagoria, Western part, 06. 05. 2012, 1 female, 2 males, 10. 05. 2012, 2 males, 19. 05. 2012, 1 female, 1 male, Berzence: Alsó-Gyóta forest, Filagoria: Southern part, 26. 05. 2012, 1 male, Berzence: Alsó-Gyóta forest, North of Filagoria, 20. 05. 2012, 2 males, edges of Segesd: Alsó Segesdi forest, 10. 05. 2012, 2 females, Szentá: Felső-Gyóta forest, 26. 05. 2012, 1 female, 10. 05. 2012, 1 male, Tarany: Nagy-erdő (Nagy forest), 05. 05. 2012, 1 male, Vése: Csöpröndi road, 27. 05. 2012, 4 females, 2 males, Bolhás: Hókamalom: Fishing pond, 27. 05. 2012, 2 females, 11. 05. 2012, 1 male. Common. Hostplant: *Rubus caesius*.

*Macrophya (Macrophya) postica* (Brullé, 1832): Vése: Csöpröndi road, 20. 05. 2012, 1 male. Frequent. Hostplant unknown.

*Macrophya (Macrophya) recognata* Zombori, 1979: Bolhás: Hókamalom: Fishing pond, 10. 05. 2012, 2 females, 1 male, 06. 05. 2012, 1 male, 11. 05. 2012, 1 female. Frequent. Hostplant unknown.

*Macrophya (Macrophya) ribis* (Schrank, 1781): Bolhás: Hókamalom: Fishing pond, 19. 05. 2012, 1 female, 27. 05. 2012, 1 female. Frequent. Larva on *Sambucus nigra*.

*Pachyprotasis rapae* (Linné, 1767): Kaszó: Kanizsaberek North, 23. 04. 2012, 1 female, Somogyszob: Segesdi road, 27. 04. 2012, 1 female, Berzence: Alsó-Gyóta forest: Filagoria: Western side, 05. 05. 2012, 1 female, 06. 05. 2012, 1 female, Szentá: Felső-Gyóta forest, 20. 05. 2012, 1 female, 26. 05. 2012, 1 female, 26. 04. 2012, 1 male, 05. 05. 2012, 1 male, 06. 05. 2012, 3 males, 26. 05. 2012, 1 male, Berzence: Alsó-Gyóta forest: Filagoria Southern side, 06. 05. 2012, 1 male, Vízvár: Komoricai forest, 06. 05. 2012, 2 males. Common. Hostplants: *Solanum tuberosum*, *Pedicularis palustris*, *Angelica sylvestris*, *Veronica beccabunga*, *Betonica officinalis*, *Corylus avellana*, *Salix caprea*, *Fraxinus excelsior*, *Tussilago farfara*, *Symphoricarpos albus*, *Scrophularia*, *Solidago*, *Verbascum*, *Origanum*, *Atropa*, *Sarothamnus*, *Senecio*, *Polygonum*, *Aspidium*, *Epilobium*, *Hypericum*, *Galeopsis*, *Mentha*, *Polystichum*, *Plantago*, *Quercus* and *Stachys* spp.

*Perineura rubi* (Panzer, 1805): Kaszó: Bükki forest, 15. 04. 2012, 1 male, 21. 04. 2012, 1 male, Kaszó: Kanizsaberek South, 23. 04. 2012, 1 female. Sporadic. Hostplant unknown.

*Sciapteryx consobrina* (Klug, 1816): Szentá: Felső-Gyóta forest, 26. 04. 2012, 1 female. Generally common but not typical for Belső-Somogy. Larval hosts: *Adoxa* spp., *Anemone* spp. and *Ranunculus ficaria*.

*Tenthredo* (*Cephaledo*) *bifasciata* ssp. *violacea* (Ed. André, 1881): Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest), Filagoria: Western side, 10. 05. 2012, 1 female. Frequent. Hostplant unknown.

*Tenthredo* (*Endotethryx*) *campestris* Linné, 1758: Szentá: Felső-Gyóta forest, 11. 05. 2012, 1 male. Frequent. Hostplant: *Aegopodium podagraria*.

*Tenthredo* (*Eurogaster*) *mesomela* Linné, 1758: Bolhás: Hókamalom: Fishing pond, 10. 05. 2012, 1 female, Szentá: Felső-Gyóta forest, 10. 05. 2012, 1 male. Frequent. Larval hosts: *Polygonum persicaria*, *Arctium lappa*, *Heracleum* spp., *Ranunculus* spp., *Epilobium* spp., *Rumex* spp., *Salix* spp., *Veronica* sp., *Tussilago* spp., *Petasites* sp., *Senecio* sp., *Solidago* sp., and *Stachys* spp.

*Tenthredo* (*Temuledo*) *temula* Scopoli, 1763: Somogyszob: Segesdi road, 05. 05. 2012, 1 male, Somogyszob: edges of Bükki-forest, 05. 05. 2012, 1 female, Somogyszob: entrance of Bükki-forest, 05. 05. 2012, 5 males, Szentá: Felső-Gyóta forest, 10. 05. 2012, 1 male, Berzence: Alsó-Gyóta forest, Filagoria: Western side, 19. 05. 2012, 1 female. Common. Larva on *Ligustrum* and *Origanum* spp.

*Tenthredo* (*Tenthredella*) *atra* Linné, 1758: Somogyszob: Segesdi road, 28. 04. 2012, 1 male, Berzence: Alsó-Gyóta forest: Filagoria: Western side, 05. 05. 2012, 1 female, Szentá: Felső-Gyóta forest, 06. 05. 2012, 1 female, 10. 05. 2012, 1 female, Tarany: Nagy-erdő (Nagy forest), South, 10. 05. 2012, 1 female. Frequent. Larval hosts: *Lamium*, *Mentha*, *Plantago*, *Vicia*, *Ranunculus*, *Scabiosa*, *Brassica* and *Solanum* spp.

*Tenthredo* (*Tenthredella*) *livida* Linné, 1758: Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest), Filagoria: Western side, 26. 05. 2012, 2 females, 2 males. Sporadic, locally frequent. Larva on *Salix* sp., *Corylus avellana*, *Epilobium* sp., *Lonicera* sp., *Pteridium aquilinum*, *Rosa* sp., *Sorbus aucuparia*, *Symphoricarpos albus*, *Viburnum opulus*, *Arctium lappa* and *Athyrium filix-femina*.

*Tenthredo* (*Tenthredella*) *solitaria* Scopoli, 1763: Somogyszob: Segesdi road, 27. 04. 2012, 1 female, Vése: Csöpröndi road, 26. 05. 2012, 2 males. Sporadic in Hungary. Larva on *Euphorbia cyparissius*.

*Tenthredo* (*Zonuledo*) *distinguenda* (Stein, 1885): Tarany: Nagy-erdő (Nagy forest), 06. 05. 2012, 1 male, 05. 05. 2012, 1 male, Vése: Csöpröndi road, 27. 05. 2012, 1 female. Sporadic. Hostplant unknown.

*Tenthredo* (*Zonuledo*) *zonula* Klug, 1817: Tarany: Nagy-erdő (Nagy forest), 06. 05. 2012, 2 females. Frequent. Hostplant: *Hypericum perforatum*.

*Tenthredo thompsoni* (Curtis, 1839): Iharosberény (ROLLER and HARIS 2008). Frequent. Hostplant unknown.

*Tenthredopsis lactiflua* (Klug, 1817): Szentá, 15. 05. 1938, 2 females. Sporadic. Hostplant unknown.

*Tenthredopsis litterata* (Geoffroy, 1785): Somogyszob: edges of the Bükki-forest, 11. 05. 2012, 1 male, Szentá: Felső-Gyóta erdő (Felső-Gyóta forest), 19. 05. 2012, 1 male, Vése: Csöpröndi road, 20. 05. 2012, 1 male. Frequent. Larva on *Agrostis*, *Dactylis* and *Calamagrostis* spp.

*Tenthredopsis ornata* (Serville, 1823) (syn. *Tenthredopsis excisa* (C. G. Thomson, 1870)): Kaszó: Kanizsaberek South, 26. 04. 2012, 1 male, Berzence: Alsó-Gyóta forest: Filagoria, Southern side, 06. 05. 2012, 1 male, Szentá: Felső-Gyóta forest, 26. 04. 2012, 1 female. Frequent. Larva on *Brachypodium sylvaticum*.

*Tenthredopsis sordida* (Klug, 1817): Bolhás: Hókamalom: Fishing pond, 06. 05. 2012, 1 female, Berzence: Alsó-Gyóta forest: Filagoria: Western side, 06. 05. 2012, 1 female,



10. 05. 2012, 1 male, Vése, Csöpröndi road, 27. 04. 2012, 1 male, Somogyszob: meadow at Segesdi road, 28. 04. 2012, 1 male, Szentá: Felső-Gyóta forest, 26. 05. 2012, 1 male. Frequent. Larva on *Arrhenatherum elatius*, *Lolium perene*, *Carex* spp., *Calamagrostis* sp. and *Dactylis glomerata*.

*Tenthredopsis stigma* (Fabricius, 1798): Vése: Csöpröndi road, 26. 05. 2012, 1 female. Generally frequent but not typical for Belső Somogy. Hostplant: *Triticum intermedium*.

*Tenthredopsis tessellata* (Klug, 1817): Kaszó: Kanizsaberek North, 27. 04. 2012, 1 male, Szentá, 15. 05. 1938, 1 female. Sporadic. Larva on *Deschampsia*, *Dactylis*, *Aira* and *Lolium* spp.

### *Nematinae*

*Cladius (Priophorus) compressicornis* (Fabricius, 1804) (syn. *Priophorus pallipes* (Serville, 1823)): Kaszó: Kanizsaberek North, 19. 04. 2012, 1 female, Szentá: Felső-Gyóta forest, 26. 05. 2012, 1 male. Frequent pest. Hostplants: *Betula*, *Cotoneaster*, *Prunus*, *Rubus*, *Sorbus*, *Fragaria*, *Crataegus*, *Corylus* and *Rosa* spp.

*Cladius (Priophorus) nubilus* (Konow, 1897): Szentá: Felső-Gyóta forest, 20. 05. 2012, 1 male. New record for the Carpathian Basin.

*Euura (Gemmura) mucronata* (Hartig, 1837): Somogyszob: meadow at Segesdi road, 23. 04. 2012, 1 female, 26. 04. 2012, 1 male. Induces galls in the buds of over 30 willow species across the Holarctic region (NYMAN 2002). Sporadic in Hungary.

*Hoplocampa chrysorrhoea* (Klug, 1816): Kaszó: Kanizsaberek South, 14. 04. 2012, 1 female. Sporadic, locally frequent. Hostplants: *Prunus* spp., particularly *Prunus spinosa* and *P. avium*.

*Hoplocampa crataegi* (Klug, 1816): Szentá: Felső-Gyóta erdő (Felső-Gyóta forest), 26. 04. 2012, 1 female. Frequent. Hostplants: *Crataegus* spp.

*Mesoneura opaca* (Fabricius, 1775): Berzence: Alsó-Gyóta forest: Filagoria, Western side, 26. 04. 2012, 1 female. Sporadic. Hostplant: *Quercus robur*.

*Nematinus steini* Blank, 1998: Kaszó: Kanizsaberek South, 10. 05. 2012, 1 female. Sporadic. Larva on *Alnus* spp.

*Nematus (Pteronidea) melanaspis* Hartig, 1840: Szentá, 15. 05. 1938, 1 male. Sporadic. Hostplants: *Populus tremula*, *Salix aurita*, *Salix caprea*, *Salix purpurea*, *Salix daphnoides*, *Salix cinerea*, *Salix fragilis* and *Betula* spp.

*Nematus (Pteronidea) myosotidis* (Fabricius, 1804): Berzence: Alsó-Gyóta forest, Filagoria, Western side, 10. 05. 2012, 1 female, Iharos: Alsó-erdő (Alsó forest), 11. 05. 2012, 1 female, Segesd: Lászlómajor, 26. 04. 2012, 1 male, 27. 04. 2012, 1 male. Common. Larval hosts: *Onobrychis* and *Trifolium* spp.

*Nematus (Pteronidea) oligospilus* Förster, 1854: Bolhás, end of the village towards the Szentá Forest, 28. 04. 2012, 1 female. Frequent. Hostplants: *Salix* spp.

*Nematus (Pteronidea) tibialis* Newman, 1837: Szentá: Felső-Gyóta forest, 06. 05. 2012, 1 female. Frequent. Larva on *Robinia pseudacacia*.

*Pachynematus (Pachynematus) fallax* (Serville, 1823) (syn.: *Pachynematus xanthocarpus* (Hartig, 1840)): Vése, Csöpröndi út, 27. 04. 2012, 1 male, Kaszó: Kanizsaberek South, 10. 05. 2012, 1 male. Frequent. Larva on *Graminae*.

*Pachynematus (Pachynematus) vagus* (Fabricius, 1781): Kaszó: Bükki forest, 14. 04. 2012, 1 female, 27. 04. 2012, 1 female, Kaszó: Kanizsaberek South, 23. 04. 2012, 1 female, Berzence: Alsó-Gyóta erdő (Alsó-Gyóta forest), Filagoria, Southern side, 26. 05. 2012, 1 female. Sporadic. Larva on *Carex* spp.

*Phyllocolpa leucaspis* (Tischbein, 1846): Somogyszob: meadow at Segesdi road, 26. 04. 2012, 1 female. Frequent. Larval hosts: *Salix phylicifolia*, *S. aurita*, *S. caprea* and *S. cinerea*.

*Phyllocolpa leucosticta* (Hartig, 1837): Kaszó: Kanizsaberek North, 21. 04. 2012, 1 female. Frequent. *Salix aurita*, *S. caprea*, *S. atrocinerea* and *S. cinerea*.

*Pontania (Pontania) proxima* (Serville, 1823): Somogyszob: edges of Bükki-forest, 11. 05. 2012, 10 pcs. galls. Frequent, larva on *Salix fragilis* and *S. alba*.

*Pristiphora (Lygaeonematus) compressa* (Hartig, 1837): Vése, Csöpröndi út, 27. 04. 2012, 1 female. Sporadic. Larva on *Picea* spp.

*Pristiphora (Lygaeotus) pallidiventris* (Fallén, 1808): Kaszó: Kanizsaberek South, 19. 04. 2012, 1 female, 27. 04. 2012, 1 female. Frequent. Larva on *Geum*, *Potentilla*, *Rubus* and *Filipendula* spp.

*Pristiphora (Miconematus) monogyniae* (Hartig, 1840): Iharos: Alsó-erdő (Alsó forest), 21. 04. 2012, 1 male. Sporadic. Hostplant: *Prunus spinosa* occasionally *P. domestica*.

*Pristiphora (Oligonematus) laricis* (Hartig, 1837): Böhönye (ROLLER and HARIS 2008). Sporadic. Hostplants: *Larix decidua*, *Larix kaempferi (Larix leptolepis)* and *Larix sibirica*.

*Pristiphora (Pristiphora) armata* (C. G. Thomson, 1863): Segesd: edges of Alsó Segesdi forest, 06. 05. 2012, 1 females, 5 males, Kaszó: Kanizsaberek South, 20. 05. 2012, 1 female. Frequent. Larva on *Crataegus* spp.

The recorded 130 species makes a good foundation for further research but it is far to assess the real species richness of the region. These collected 130 species represent 22% of the Hungarian sawfly fauna (600 species in total) and 17% of that of the Carpathian Basin (785 species in total).

*Eutomostethus ephippium* (Panzer, 1798), *Macrophya albicincta* (Schrank, 1776) and *Eutomostethus luteiventris* (Klug, 1816) are the dominant species of the region. Other common species are: *Dolerus nigratus* (O. F. Müller, 1776), *Pachyprotasis rapae* (Linné, 1767), *Aglaostigma fulvipes* (Scopoli, 1763) and *Eriocampa umbratica* (Klug, 1816). *Athalia rosae* (Linné, 1758) is only locally common here.

The 7 rarest species are discussed below.

### Rare species

*Pamphilius jucundus* (Eversmann, 1847): Widely distributed species, known from Austria, Belsium, Bulgaria, Czech Republic, Germany, Denmark, Estonia, Finland, Italy, Latvia, Romania, Russia, Slovakia and Ukraine (TAEGER et al., 2006, LISTON 1995). Rare in the Carpathian Basin, known from Trencsén, Budapest, Nagykovácsi, Kecskemét, Lillafüred Boksánbánya, Retyezát (MOCSÁRY 1900, ZILÁHI KISS 1915, MÓCZÁR and ZOMBORI 1973). Hostplant: *Fragaria vesca* and cultivated strawberries.

*Blasticotoma filiceti* Klug, 1834: Known from the Carpathian Basin in Körmöci hegység (Körmöci Mountains), Királyhágó, Fenyőfő: Kisszépalma, Uglya: Kvasznij patak, Tiszaborkút (ROLLER and HARIS 2008, ROLLER 2000, ZOMBORI 1973, ZOMBORI and ERMOLLENKO 1999). Host ferns are *Athyrium filix-femina*, *Matteuccia struthiopteris*, *Dryopteris* spp., *Polystichium* sp., *Pteridium aquilinum* (SCHERBAKOV 2006). Known from Austria, Switzerland, Czech Republic, Germany, Denmark, Finland, France, Great Britain, The Netherlands, Poland, Russia, Sweden, Slovakia and Ukraine (TAEGER et al., 2006, LISTON 1995, SCHEDL 1973).

*Dolerus (Poodolerus) stygius* Förster, 1860 (syn. *D. megapterus* Cameron, 1881) : Widely distributed rare European species. In the Carpathian Basin, it is known from Nickelsdorf, Rábatamási, Dinnyés, Simontornya, Fót, Veresegyháza, Kis Balaton: Zala part, Szigetbecse, Balatonszentgyörgy, Kassa, Peér Felsőtömös, Csalló Mountains, Horaita and Subcarpathia (HARIS 2002, PODOLEANU 1977, FRANZ 1982, IONESCU 1974,

ERMOLENKO 1975, ROLLER and HARIS 2008).

*Cladius (Priophorus) nubilus* (Konow, 1897): First record for the Carpathian Basin. Known distribution: Russia and Czech Republic. Hostplant unknown. (TAEGER and BLANK 2011)

*Stromboceros delicatulus* (Fallén, 1808): From the present territory of Hungary was known only from the Mátra Mountains: Pisztrángos tó (Lake Pisztrángos), Cserénfa and Zselickisfalud (HARIS 2009). Widely distributed in the mountaneous area of the Carpathian Basin: Trencsén, Balázsvágás, Limpak, Szentistvánkút, Istvánkirályfalva, Jávori hágó, Deménvölgy, Lukó, Feketevág, Tusnádfürdő, Rétbánya, Sztranzska, Szent Anna-tó, Fekete Tisza, Apsinec, Berlebán, Kvasznij patak, Pop Iván, Alsóláz, Brebenyeszkul, Mencsil, Trebusafejérpatak, Körmöcbánya, Szacsva, Bélai Táttra: Hátsó Rézagnák, Magas Táttra: Hátsó Jávör völgy, Tajó, Kirujfürdő: Tolvajos patak, Zeteváralja: Szencsed patak, Resinár and Uglya (MOCSÁRY 1900, ROLLER 1999a, ROLLER et. al., 2006, ROLLER and HARIS 2008, ZOMBORI 1982, ZOMBORI and ERMELENKO 1999). The specimens were collected on *Athyrium filix-femina*.

*Aneugmenus coronatus* (Klug, 1818): In the Carpathian Basin, it is known from Herencsvölgy, Balázsvágás, Limpak, Mosóc, Istvánkirályfalva, Kőrishegy Kőszeg, Darány, Resinár, Nagy Égett Kő, Nagyszeben, Magura, Apsinec, Berlebán, Alsóláz, NE Croatia, Székelyfalva, Rahó and Uglya (MOCSÁRY 1900, ROLLER 1993, 1999a, ZOMBORI 1979a, 1982a, ZOMBORI and ERMOLENKO 1999, SCOBIOLA-PALADE 1967, PEROVIC and LEINER 1996).

*Heptamelus ochroleucus* (Stephens, 1835): First record for Hungary. Recently separated from the closely related *Heptamelus dahlbomi* (Thomson, 1870) (VIKBERG and LISTON 2009). Their hostplants are *Athyrium filix-femina*, *Blechnum spicant*, *Dryopteris dilatata*, *Matteucia struthiopteris* and *Polypodium vulgare*. Known from Belgium, England, Finland, France, Germany, Ireland, Italy, Norway, Poland, Scotland, Sweden, Switzerland and Wales (VIKBERG and LISTON 2009). Also known from the Czech Republic (Radhost), Slovakia and Ukraine (ROLLER and HARIS 2008). In the Carpathian Basin, we have record from Malacka and Rahó (ROLLER 1996, 1999a).

## References

- ÁBRAHÁM, L. AND PAPP, Z. 1991: Myrmeleon bore (Tjeder, 1941) in Hungary (Planipennia, Myrmeleontidae). - *Neuroptera International* 6 (3): 137-139.
- ACHTERBERG, C. VAN 2004: Hymenoptera. - *Fauna Europaea* version 1.1, <http://www.faunaeur.org> (last check: 11. 08. 2012).
- ACHTERBERG, C. VAN AND AARTSEN, B. VAN 1986: The European Pamphiliidae (Hymenoptera: Symphyta), with special reference to the Netherlands. - *Zoologische Verhandelingen, Leiden* 234: 1-98.
- BÉRCES, S. 2001: Adatok a Baláta-tói Természetvédelmi Terület futóbogárfaunájához (Coleoptera: Carabidae). - *Somogyi Múzeumok Közleményei* 15. 123-128.
- BLANK, S. M., RITZAU, C. 1998: Die Tenthredopsini Deutschlands (Hymenoptera: Tenthredinidae) pp. 227-246. - In: TAEGER, A., BLANK, S.M. (ed): *Pflanzenwespen Deutschlands (Hymenoptera, Symphyta)*. - Kommentierte Bestandsaufnahme. *Deutsches Entomologisches Institut, Verlag Goecke & Evers, Keltern*.
- BLANK, S. M.; HARA, H.; MIKULÁS, J.; CSÓKA, G.; CIORNEI, C.; CONSTANTINEANU, R.; CONSTANTINEANU, I.; ROLLER, L.; ALTENHOFER, E.; HUFLEJT AND T.; VÉTEK, G. 2010: *Aproceros leucopoda* (Hymenoptera, Argidae): An East Asian pest of elms (*Ulmus* spp.) invading Europe. - *European Journal of Entomology, České Budejovice* 107: 357-367.



- CSÓKA, G.; MIKULÁS, J.; BLANK, S. M.; VÉTEK, G. 2010: A kanyargós szilvelődarázs (*Aproceros leucopoda* Takeuchi, 1939) megjelenése Magyarországon. [First occurrence of the zigzag elm sawfly (*Aproceros leucopoda* Takeuchi, 1939) in Hungary.] - : 1. In: KÖMÍVES, T.; HALTRICH, A.; MOLNAR, J. 56. Növényvédelmi Tudományos Napok. 2010. február 23-24. Budapest: i-xiv, A-D, 1-86.
- ERMOLENKO, V. M. 1975: Rogochvosty i pililsciki, Tenthredoobraznye pililsciki (Argidae, Diprionidae, Tenthredinidae: Selandrinae, Dolerinae). - In: Fauna Ukrajiny, Tom. 10., vip. 3, Naukova dumka, Kiev, 377 p.
- FRANZ, H. 1982: Die Hymenopteren des Nordostalpengebietes und seines Vorlandes I. 1. vyd., - Österreichische Akademie der Wissenschaften, Wien. 378 pp.
- HARIS, A. 1998: A Somogy Megyei Múzeum levéldarázs-gyűjteménye (Hymenoptera, Symphyta). - Somogyi Múzeumok Közleményei 13: 275-285.
- HARIS, A. 2001: Revisional list of the Hungarian Nematinae with the description of three new species (Hymenoptera: Tenthredinidae). - Folia entomologica hungarica 62: 95-114.
- IONESCU, V. 1974: Catalogul Symphytelor (Hymenoptera-Phytophaga) conservate in colectiile entomologice de la Muzeul de Stiinte Naturale Piatra Neamt. - Revista Studii si cercetari (seria botanica-zoologie) a Muzeului de Stiinte Naturale Piatra Neamt 2: 293-327.
- JÓZAN, ZS. 1996: A Baláta környék fullánkös hártványászárnyú faunájának (Hym. Aculeata) alapvetése. - Somogyi Múzeumok Közleményei 12: 271-297.
- KASZA, F., MARIÁN, M. 2001: A Baláta-láp és gerinces állatvilága, különös tekintettel a madarakra. - Natura Somogyiensis 2: 1-96.
- KOCH, F. 1988: Die Gattung *Sterictiphora* Billberg (Insecta, Hymenoptera, Symphyta: Argidae). - Entomologische Abhandlungen. Staatliches Museum für Tierkunde in Dresden, Leipzig 52(2): 29-61.
- LISTON, A. 1995: Compendium of European Sawflies. - Chalastos Forestry, Gottfrieding, Germany. 190. pp.
- MÓCZÁR, L., ZOMBORI, L. 1973: Tenthredinoidea - Levéldarázs-alkatúak I. - In: Fauna Hungariae, Akadémiai Kiadó, Budapest, 111, 11(2), 128 p.
- MÓCZÁR, M., HENTER, P. 1907: Újabb adatok Magyarország Hymenoptera-faunájához. - Rovantani Lapok 14: 200-210.
- MOCZÁRY, S. 1900: Ordo Hymenoptera. p. 7-113. - In: PASZLAVSKY, J. (ed.): Fauna Regni Hungariae, Regia Societas Scientiarum Naturalium Hungarica, Budapest.
- NYMAN, T. 2002: The willow bud galler *Euura mucronata* Hartig (Hymenoptera: Tenthredinidae): one polyphage or many monophages? - Heredity (2002) 88, 288-295
- PEROVIC, F., LEINER, S. 1996: Index of the sawflies sensu lato (Hymenoptera, Symphyta) of Croatia. - Natura Croatica 5(4): 359-381.
- PODOLEANU, C. 1977: Contributii la cuonaterea subord. Symphyta (Hym. Phytophaga) din zona Montana Cuprinsa intre Bistrita si Ozana Jud. Neamt. - Anuarul Muzeului de Stiinte Natural Piatra Neamt seria Botanica-Zoologie 3. 191-197.
- ROLLER L., BENES K., BLANK S. M., HOLUSA J., JANSEN E., JANICKE M., KALUZA S., KEHL A., KEHR I., KRAUS M., LISTON A. D., NYMAN T., NIE H., SAVINA H., TAEGER A., WEI M., 2006: Contribution to the knowledge of sawfly fauna (Hymenoptera, Symphyta) of the Low Tatras National Park in Central Slovakia. - Naturae Tutela 10: 57-72.
- ROLLER, L. 1993: New records of sawflies (Hymenoptera: Symphyta) from Slovakia. - Entomological Problems 24(2): 81-84.
- ROLLER, L. 1996: New records of sawflies (Hymenoptera, Tenthredinidae) in Slovakia. - Biologia, Bratislava 51(1): 549-550.
- ROLLER, L. 1999a: Spoločnosť hrubopásych (Hymenoptera: Symphyta) vybraných zoogeografických regiónov Slovenska. - PhD thesis, Ústav zoológie, Slovenská akadémia vied, Bratislava, 180 pp.
- ROLLER, L., 2000: First records of Blasticotomidae, Tenthredinidae, Pamphiliidae (Hymenoptera) from Slovakia. - Biologia, Bratislava 55(5): 561-562.
- ROLLER, L., HARIS, A. 2008: Sawflies of the Carpathian Basin, history and current research. - Natura Somogyiensis 11: 1-259.
- SCHEDL, W. 1973: Erster Nachweis der Farnblattwespe *Blasticotoma filiceti* Klug, 1834, in Österreich (Hymenoptera: Blasticotomidae). - Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen, Wien 25 (3-4): 114-117.
- SCHEDL, W. 1991: Hymenoptera, Unterordnung Symphyta, Pflanzenwespen. - In: Handbuch der Zoologie, Eine Naturgeschichte der Stamme des Tierreiches (M. FISCHER, ed.). Band IV: Arthropoda: Insecta, Teilband 31. Berlin: Walter de Gruyter.

- SCOBIOLA-PALADE, X. 1967: Catalogue of the collection of Hymenoptera (Tenthredinidae, Sphecidae and Pompiloidea) of the Brukenthal Museum (Department of Natural Sciences) in Sibiu, Rumania. (Monography). - Travaux du Museum d'Histoire Naturelle Grigore Antipa Bucharest 64 pp.
- SHCHERBAKOV, D. E. 2006: Fern sawfly larvae *Blasticotoma filiceti* Klug, 1834 (Hymenoptera: Blasticotomidae) are visited by ants: a new kind of trophobiosis. - Russian Entomological Journal, Moscow 15(1): 67-72.
- TAEGER, A., BLANK, S. M. 2011: ECatSym - Electronic World Catalog of Symphyta (Insecta, Hymenoptera). Program version 3.10, data version 38 (07.12.2011). - Digital Entomological Information, Münchenberg
- TAEGER, A., ALTENHOFER, E., BLANK S. M., JAMSEN E., KRAUS M., PSCHORN-WALCHER, H. AND RITZAU, C. 1998: Kommentare zur Biologie, Verbreitung und Gefährdung der Pflanzenwespen Deutschlands.
- 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.) 2006: Recent Sawfly Research: Synthesis and Prospects. - Goecke & Evers, Keltern: 704 pp.
- VIKBERG, V. AND LISTON, A. D. 2009: Taxonomy and biology of European Heptamelini (Hymenoptera, Tenthredinidae, Selandriinae). - Zootaxa, Auckland 2112: 1-24.
- ZHELOCHOVTSEV, A. N. 1988: Otryad Hymenoptera – Pereponchatokrylye, Podotryad Symphyta – Sidyachebryukhie, 7-234. In: MEDVEDEV, K.H. (ed.) Opredelitel nasekomykh evropeiskoi chasti SSSR, Vol. 3 Hymenoptera, Part 6, Nauka, Leningrad.
- ZILAH-KISS, E. 1915: Újab adatok Magyarországi Hymenoptera faunájához. - Rovartani Lapok 1915(22): 19-33.
- ZOMBORI, L. 1973: A Bakonyi Természettudományi Múzeum levéldarázs-gyűjteménye (Hymenoptera: Symphyta) I. - A Veszprém megyei múzeumok közleményei 12: 467-475.
- ZOMBORI, L. 1979: A Bakonyi Természettudományi Múzeum levéldarázs-gyűjteménye (Hymenoptera: Symphyta) II. - A Veszprém megyei múzeumok közleményei 14: 211-220.
- ZOMBORI, L. 1982: Tenthredinoidea - Levéldarázs-alkatúak II. - In: Fauna Hungariae, Akadémiai Kiadó, Budapest, 153, 11(3/A), 144 p.
- ZOMBORI, L. 1990: Tenthredinoidea - Levéldarázs-alkatúak III. - In: Fauna Hungariae, Akadémiai Kiadó, Budapest, 165, 11(3/B), 81 pp.
- ZOMBORI, L., ERMOLENKO, V. 1999: The history of the Symphyta fauna of the Carpathian Basin (Hymenoptera): Part III/1. - Folia entomologica hungarica 60: 239-250.

