Sawflies (Hymenoptera: Symphyta) of Cerová vrchovina Upland (South Slovakia)

ATTILA BALÁZS¹ & ATTILA HARIS²

¹Department of Zoology, Fisheries, Hydrobiology and Apiculture Mendel University in Brno,
CZ-613 00 Brno, Žemědělska 1, Czech Republic, e-mail: balazsacko@gmail.com

²H-1076 Budapest, Garay street 19 2/20, Hungary, e-mail: attilaharis@yahoo.com

BALÁZS, A. & HARIS, A.: Sawflies (Hymenoptera: Symphyta) of Cerová vrchovina Upland (South Slovakia).

Abstract: 189 specimens of 75 species of sawflies were collected at Cerová vrchovina Upland (South Slovakia). *Pseudocephaleia praeteritorum* (Semenov, 1934), *Aprosthem a austriacum* (Konow, 1892) and *Euura calcicola* (Benson, 1948) are new records for the Slovak fauna. Rare species are: *Pseudocephaleia praeteritorum* (Semenov, 1934), *Aprosthem a austriacum* (Konow, 1892), *Euura calcicola* (Benson, 1948) and *Fenusella glaucopis* (Konow, 1907).

Keywords: Hymenoptera, Symphyta, Cerová vrchovina Upland, Slovakia, new records

Introduction

Territory of Cerová vrchovina Upland takes 16 771 ha in the south of Central Slovakia, in the border of the former Nógrád and Gömör counties (Fig. 1). The area belongs to the Inner Western Carpathians and to the Matricum subarea from geobotanic point of view (BOLFÍK et al. 1990). Cerová vrchovina Upland belongs to the Bukovinka, Filákovo and Lučenec formations with varied clays, sands, gravels, rhyodacite tuffs, claystones, sandstones and gray calcareous siltstones formed with alkali basalts and basanites (BIELY et al. 2002). The highest peak is Karancs (728 m), the highest volcano is Medves (575 m) and the lowest altitude is at Janice water reservoir (167 m) (HORVÁTH & GAÁLOVÁ 2007). Karancs Mts. are covered by continuous forests, settlements occurs on the margins only, whilst the woodlands at the Medves Mts. are fragmented and villages are distributed evenly within the area. The most common vegetation associations in the studied area are *Prunetum fruticosae*, *Alnetum glutinosae*, *Carpinion betuli*, *Quercu robori*–*Carpinetum*, *Carici pilosae*–*Carpinetum*, *Mercuriali*–*Tilietum*, *Melittio*–*Fagetum*, *Quercetum petraea*–*cerris* (Figs. 2, 3 and 4) (CSIKY 2004). This unit is poor in wetlands and even the major watercourses have a low water discharge. The area is divided by a watershed between the rivers Danube and Tisza. Cerová Upland is situated in warm zone which has continental characteristics; warm, extremely dry district with moderate winter and warm, moderately dry district with cold winter (HORVÁTH & GAÁLOVÁ 2007).

From the region, 24 species were published from Gemerček (Kisgömöri) (the most interesting species are: *Athalia rufoscutellata* Mocsáry, 1879 and *Tenthredo vespiformis*

(Schränk, 1781)) and further 12 species from Petrovce (Gömörpéterfala) (the most interesting species are *Hoplocampa pectoralis* C. G. Thomson, 1871 and *Dolerus ferrugatus* Serville, 1823) in the monograph titled *Sawflies of the Carpathian Basin, History and Current Research* (ROLLER & HARIS 2008).

Material and methods

The research of sawflies started in 2018 and continued in 2019. The first author with Jan Bezděk and Vladimír Hemala spent 18 days on field, 6 days in April, 8 days in May and 2 days in June 2019 and 2 days in 2018. Most of the specimens was captured with sweeping net and mounted afterwards; the rest of the specimens were caught by Malaise trap and conserved in 80 % alcohol. The material is maintained at the first author personal collection, some rare species was deposited in Rippl-Rónai Museum, Kaposvár.

For identification, Zhelochovtsev's work on the sawflies of the European part of the former USSR (ZHELOCHOVTSEV, 1988) was consulted. We also used some recent revisions and works to make the identifications even more precise (ACHTERBERG & AARTSEN 1986, BLANK & RITZAU 1998, HARIS 2001, 2006, KOCH 1988, ZOMBORI 2016).

For the discussion of the distribution of sawflies, we consulted the book of Roller and Haris titled *Sawflies of the Carpathian Basin, History and Current Research* (ROLLER & HARIS 2008), the most recent European checklist of species (TAEGER et al. 2006) augmented by other faunistic records from the Carpathian Basin (ROLLER 1993, 1994, 1996, 1998, 1999a, b, c, d, e, 2000a, b, c, 2001, 2004, 2005, 2006a, b, 2010, ROLLER & LUKÁŠ 1999, ROLLER et al. 2006, ROLLER & MACEK 2017, ROLLER & OLŠOVSKÝ 2012, HARIS 2009, 2010, 2011, 2012, 2018a,b, HARIS & GYURKOVICS 2012).

The higher classification of sawflies applied in this work follows the Hymenoptera part of *Fauna Europaea* (ACHTERBERG 2013).

List of sites

Abbreviations:

AB – Attila Balázs, VH – Vladimír Hemala, JB – Jan Bezděk

Čamovce (Csomatelke): Bodoszó, around 48°14'40.790"N, 19°53'2.158"E - AB.

Čamovce (Csomatelke): Isten-hegye, around 48°14' 19.758"N 19°53' 23.016"E - AB.

Čamovce (Csomatelke): László hegy, around 48°15' 34.383"N 19°52' 59.166"E - AB.

Čamovce (Csomatelke): Rákos, between 48°13'54.585"N, 19°52'36.976"E and 48°13' 54.675"N 19°52' 39.082"E - AB.

Čamovce (Csomatelke): Szentfali, around 48°15'4.852"N, 19°51'55.398"E - AB.

Čamovce (Csomatelke): Vidosza, around 48°13' 50.565"N 19°53' 26.521"E - AB.

Chrámec (Harmac): Farkas-völgy, 48°16'17.529"N, 20°10'39.640"E - AB.

Gemerské Dechtáre (Détér): Nagymál-Bérc, 24. 05. 2019, around 48°14' 33.983"N 20°01' 34.050"E - AB, VH.

Hajnácska (Ajnácskő), Tillic Hill, 48°12'41.683"N, 19°56'40.393"E - AB.

Hajnácska (Ajnácskő): Sás Bikk 21. 04. 2019, around 48°13' 45.548"N 19°58' 12.482"E - AB.

Jestice (Jeszte), Nagy-Somos, 48°12'47.603"N, 20°2'49.250"E - AB, JB, VH.

Jestice (Jeszte): Várhegy, around 48°12'53.516"N, 20°4'4.808"E - JB, AB.

Petrovce (Gömörpéterfala): Fenek, 48°11'54.319"N, 20°2'52.882"E - AB.

Petrovce (Gömörpéterfala): Malaise trap, 48°11'52.568"N, 20°2'57.767"E - AB.

Petrovce (Gömörpéterfala): Pap-berki, around 48°10' 55.038"N 20°00' 42.468"E - AB.

Stará Bašta (Óbást), Nagy-mocsaras, $48^{\circ}11'29.441''\text{N}$, $19^{\circ}57'9.728''\text{E}$ - AB.

Šurice (Sőreg), below the Pogány castle, $48^{\circ}13'21.338''\text{N}$, $19^{\circ}55'3.747''\text{E}$ - AB.

Tachty (Tajti) valley of Gortva stream, around $48^{\circ}09'03.359''\text{N}$ $19^{\circ}55'36.626''\text{E}$ - JB.

Tachty (Tajti) valley of Meleg-hill, around $48^{\circ}9'0.627''\text{N}$, $19^{\circ}55'48.136''\text{E}$ - AB.

Fig. 1: Position of Cеровá vrchovina Upland in Slovakia

Fig. 2: Mesoxerophilous subcontinental meadowsteppes at Jestice (Jeszte), around Várhegy

Fig. 3: Thermophilous scrub on sunny, stony slopes (*Pruno spinosae-Crataegum*) at Gemerské Dechtáre (Détér): Nagymál-Bérc

Fig. 4: Thermophilous woodlands with deciduous oaks of eastern sub-Mediterranean regions, Šurice (Sőreg), view from Pohansky castle

Results

Xyelidae

Xyela (Xyela) graeca J.P.E.F. Stein, 1876: Čamovce (Csomatelke): Rákos, 20. 04. 2019, 6 females, 5 males. Sporadic. Larva on *Pinus nigra*.

Pamphiliidae

Pseudocephaleia praeteritorium (Semenov, 1934): Jestice (Jeszte): Nagy-Somos 03. 05. 2019, female. Rare, new record for Slovakia. Hostplant unknown.

Neurotoma nemoralis (Linné, 1758): Šurice (Sőreg): Bagoly-vár, 21. 04. 2019, 1 female. Known hostplants: *Prunus mahaleb*, *P. armeniaca*, *P. spinosa* and *P. cerasus*. Locally frequent pest.

Orussidae

Orussus abietinus (Scopoli, 1763): Hajnáčka (Ajnácskő): Sás Bikk 26. 05. 2019, 1 female. Sporadic. Parasitoid of *Semanotus undatus* L.

Cephidae

Calameuta (Calameuta) pallipes (Klug, 1803): Čamovce (Csomatelke): Bodoszó, 22. 05. 2019, 1 female; Jestice (Jeszte), 03. 05. 2019, 1 female; Čamovce (Csomatelke): László hegy, 24. 04. 2019, 2 females; Čamovce (Csomatelke): Bodoszó, 24. 05. 2019, 1 female. Frequent species. Hostplants: diverse Poaceae.

Cephus brachycercus Thomson, 1871: Hajnáčka (Ajnácskő): Sás Bikk 01. 05. 2019, 1 male. Widely distributed, sporadic species. Hostplant unknown.

Cephus pygmeus (Linné, 1767): Stará Bašta (Óbást), Nagy–mocsaras, 09. 06. 2019, 1 male; Šurice (Sőreg), 21. 05. 2018, 1 male. Common. Insect pest of cereals and Gramineae.

Cephus spinipes (Panzer, 1800): Hajnáčka (Ajnácskő): Sás Bikk 26. 05. 2019, 2 males; Čamovce (Csomatelke): Bodoszó, 22. 05. 2019, 1 female. Frequent species. Known hostplant: *Phleum pratense*.

Argidae

Aprosthem a austriacum (Konow, 1892): Čamovce (Csomatelke): Isten-hegye, 20. 04. 2019, 1 female. Rare. Hostplant unknown. New record for Slovakia.

Arge cyanocrocea (Förster, 1771): Šurice (Sőreg): below the Pogány castle, 21. 05. 2018, 1 female. Common species. Known hostplants: *Rubus idaeus* and *Sanguisorba officinalis*.

Arge melanochra (Gmelin, 1790): Stará Bašta (Óbást), Nagy–mocsaras 09. 06. 2019, 1 male. Frequent. Hostplant: *Crataegus oxyacantha*.

Arge nigripes (Retzius, 1783): Hajnáčka (Ajnácskő): Sás Bikk 30. 04. 2019, 1 female; Hajnáčka (Ajnácskő): Sás Bikk, 21. 04. 2019, 1 female; Čamovce (Csomatelke): Vidosza, 25. 04. 2019, 1 female. Frequent. Larva on *Rosa* spp.

Sterictiphora longicornis Chevin, 1982: Jestice (Jeszte): Nagy-Somos, 03. 05. 2019, 1 female. Sporadic. Hostplants unknown, Adults associated with *Prunus spinosa*.

Tenthredinidae

Dolerinae

Dolerus (Dicrodolerus) vestigialis (Klug, 1818): Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30. 06. 2019, 2 males; Hostice (Gesztete), valley west of the village, 03. 05. 2019, 1 female; Čamovce (Csomatelke): Szentfali, 24. 04. 2019, 2 males; Jestice

(Jeszte), 03. 05. 2019, 3 females. Common. Hostplants: *Equisetum palustre*, *E. sylvaticum*, *E. arvense* and *E. pratense*.

Dolerus (Oncodolerus) eversmanni W. F. Kirby, 1882: Čamovce (Csomatelke): Rákos, 07. 06. 2019, 1 female; Čamovce (Csomatelke): Szentfali, 24. 04. 2019, 1 male. Frequent. Larva on *Equisetum arvense* and *E. palustre*.

Dolerus (Dolerus) aericeps Thomson, 1871: Čamovce (Csomatelke): Rákos, 07. 06. 2019, 1 female. Frequent. Larva on *Equisetum palustre*.

Dolerus (Dolerus) germanicus germanicus (Fabricius, 1775): Čamovce (Csomatelke): Rákos, 07. 06. 2019, 1 female. Common. Larva on *Equisetum arvense* and *E. palustre*.

Dolerus (Poodolerus) brevicornis Zaddach, 1859: Čamovce (Csomatelke): Istenehegye, 20. 04. 2019, 1 female. Sporadic. Hostplant: *Carex* spp.

Dolerus (Poodolerus) gonager (Fabricius, 1781): Šurice (Sőreg): Bagoly-vár, 21. 04. 2019, 1 female. Common. Larva on Graminae.

Dolerus (Poodolerus) nigratus (O.F. Müller, 1776): Čamovce (Csomatelke): Lászlóhegy, 18. 04. 2019, 1 female, 1 male.; Tachty (Tajti) valley of Meleg-hill, 01. 05. 2019, 1 female. Common. Larva on Gramineae including cereals.

Dolerus (Poodolerus) picipes (Klug, 1818): Hajnáčka (Ajnácskő): Sás Bikk 21. 04. 2019, 1 female; Tachty (Tajti) valley of Gorva brook, 03. 05. 2019, 1 female. Frequent. Larva on Graminae.

Dolerus (Poodolerus) puncticolis Thomson, 1871: Čamovce (Csomatelke): Lászlóhegy, 18. 04. 2019, 1 female; Hajnáčka (Ajnácskő): Sás Bikk 21. 04. 2019, 1 female. Common. Larva on Graminae including cereals.

Selandrinae

Nesoselandria morio (Fabricius, 1781): Jestice (Jeszte): Nagy-Somos, 03. 05. 2019, 1 male; Jestice (Jeszte): Nagy-Somos 03. 05. 2019, 1 female. 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*.

Allantinae

Allantus (Emphytus) didymus (Klug, 1818): Gemerské Dechtáre (Détér), 02. 05. 2019, 1 female; Jestice (Jeszte), Nagy-Somos, 03. 05. 2019, 1 male. Sporadic. Larva on *Sanguisorba minor*: old records from *Rubus* and *Rosa* spp. need checking. (LISTON, 2004).

Allantus (Emphytus) cingulatus (Scopoli, 1763): Hajnáčka (Ajnácskő): Sás Bikk 26. 05. 2019, 1 female. Frequent. Larva on *Fragaria* and *Rosa* spp.

Allantus (Emphytus) cinctus (Linné, 1758): Petrovce (Gömörpéterfala): Fenek, 30. 04. 2019, 1 male; Čamovce (Csomatelke): Szentfali, 24. 04. 2019, 1 male. Frequent. Hostplants: *Rosa* spp.

Ametastegia (Ametastegia) equiseti (Fallén, 1808): Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30. 06. 2019, 3 males. Frequent. Larva on *Chenopodium album*, *Lythrum salicaria*, *Polygonum persicaria* and *Rumex acetosella*.

Ametastegia (Ametastegia) glabrata (Fallén, 1808): Petrovce (Gömörpéterfala): Papberki, 25. 04. 2019, 1 male. Frequent. Larva on Chenopodiaceae, Polygonaceae, *Plantago*, *Salix*, *Lithrum*, *Ribes* and *Rubus* spp.

Athalia bicolor Serville, 1823: Hajnáčka (Ajnácskő), Tilic Hill, 20. 05. 2018, 1 female. Frequent. Hostplant: *Ranunculus* spp.

Athalia circularis (Klug, 1815): Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30. 06. 2019, 3 females. Frequent. Hostplants: *Arctium lappa*, *Ajuga reptans*, *Veronica becabunga*, *V. longifolia*, *V. officinalis*, *Alliaria petiolata*, *Glechoma hederacea*, *Melampyrum*, *Capsella* and *Lycopus* spp.

Athalia cordata Serville, 1823: Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30. 06. 2019, 1 male; Tachty (Tajti) valley of Gortva stream, 01. 05. 2019, 1 female. Common. Larva on *Misopates orontinum*, *Antirrhinum majus*, *Ajuga reptans*, *Teucrium scorodonia* and *Plantago* spp.

Empria liturata (Gmelin, 1790): Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30. 06. 2019, 1 male; Jestice (Jeszte): Nagy-Somos 03. 05. 2019, 1 female; Petrovce (Gömörpéterfala): Fenek, 30. 04. 2019, 3 females, 1 male; Čamovce (Csomatelke): László hegy, 18. 04. 2019, 2 females; Čamovce (Csomatelke): Szentfali, 24. 04. 2019, 1 female; Tachty (Tajti) valley of Meleg-hill, 01. 05. 2019, 1 female. Frequent. Hostplants: *Fragaria* and *Geum* spp.

Empria sexpunctata (Serville, 1823): Petrovce (Gömörpéterfala): Fenek, 30. 04. 2019, 1 female, 1 male; Čamovce (Csomatelke): László hegy, 18. 04. 2019, 1 female. Frequent. Larva on *Geum* spp.

Taxonus agrorum (Fallén, 1808): Petrovce (Gömörpéterfala): Fenek, 30. 04. 2019, 1 female. Frequent. Hostplants: *Rubus idaeus* and *R. caesius*.

Heterarthrinae

Fenusella glaucopis (Konow, 1907): Čamovce (Csomatelke): Rákos, 20. 04. 2019, 1 female. Rare. Hostplants: *Populus alba*, *P. tremula*, *P. nigra*.

Blennocampinae

Blennocampa phyllocolpa Viitasaari & Vikberg, 1985: Petrovce (Gömörpéterfala): Fenek, 30. 04. 2019, 1 female. Frequent. Larva rolls the leaves of *Rosa* spp.

Eutomostethus ephippium (Panzer, 1798): Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30. 06. 2019, 5 males; Jestice (Jeszte), Nagy-Somos, 03. 05. 2019, 2 males, 1 female; Tachty (Tajti) valley of Gortva stream, 01. 05. 2019; 2 males; Jestice (Jeszte), 03. 05. 2019, 2 females. Common, larva on Poaceae.

Halidamia affinis (Fallén, 1807): Čamovce (Csomatelke): Szentfali, 24. 04. 2019, 1 female. Frequent. Hostplants: *Galium aparine* and *G. mollugo*.

Stethomostus fuliginosus (Schränk, 1781): Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30. 06. 2019, 4 females.; Petrovce (Gömörpéterfala): near Almápuszta, 30. 04. 2019, 1 female. Sporadic. Larva on *Helleborus* spp., *Ranunculus acris*.

Monophadnus pallescens (Gmelin, 1790): Tachty (Tajti) valley of Gortva stream, 01. 05. 2019, 1 female; Čamovce (Csomatelke): Rákos, 20. 04. 2019, 1 female. Common. Hostplants: *Ranunculus acris*, *R. repens*, *R. lanuginosus* and *Anemone nemorosa*.

Pareophora pruni (Linné, 1758): Čamovce (Csomatelke): Rákos, 20. 04. 2019, 1 female. Frequent. Larva on *Prunus spinosa*.

Stethomostus fuliginosus (Schränk, 1781) Jestice (Jeszte): Nagy-Somos 03. 05. 2019, 1 female. Frequent. Larva on *Ranunculus acris*, *R. repens* and *R. sceleratus*.

Tenthredininae

Aglaostigma (Astochus) aucupariae (Klug, 1817): Čamovce (Csomatelke): László hegy, 18. 04. 2019, 1 female, 1 male; Šurice (Sőreg): Bagoly-vár, 21. 04. 2019, 1 male. Common. Larva on *Galium mollugo* and *G. boreale*.

Aglaostigma (Astochus) fulvipes (Scopoli, 1763): Petrovce (Gömörpéterfala): Fenek, 30.04. 2019, 1 female. Common. Larva on *Galium mollugo* and *G. verum*.

Macrophya (Macrophya) albicincta (Schränk, 1776): Jestice (Jeszte), 03. 05. 2019, 1

female; Stará Bašta (Óbást), Nagy-mocsaras, 09. 06. 2019, 1 female; Čamovce (Csomatelke): Rákos, 07. 06. 2019, 1 female; Hajnáčka (Ajnácskő): Sás Bikk, 26. 05. 2019, 1 female, Petrovce (Gömörpéterfala): Fenek, 30. 04. 2019, 4 females; Jestice (Jeszte), Nagy-Somos 03. 05. 2019, 5 females, 1 male. Common. Hostplants: *Sambucus ebulus*, *S. nigra*, *S. racemosa*, *Valeriana officinalis* and *Viburnum opalus*.

Macrophya (Macrophya) duodecimpunctata duodecimpunctata (Linné, 1758): Čamovce (Csomatelke): Rákos, 07. 06. 2019, 5 females; Petrovce (Gömörpéterfala): Fenek, 30. 04. 2019, 1 male. Common. Hostplants: *Graminae*, *Cyperaceae* and *Carex* spp.

Macrophya (Macrophya) montana (Scopoli, 1763): Hajnáčka (Ajnácskő): Sás Bikk 26. 05. 2019, 4 females (Fig. 5). Common. Hostplant: *Rubus caesius*.

Macrophya (Macrophya) postica (Brullé, 1832): Šurice (Sőreg): below the Pogány castle, 21. 05. 2018, 1 male. Frequent. Hostplant unknown.

Macrophya (Pseudomacrophya) punctumalbum (Linné, 1767): Čamovce (Csomatelke): Bodoszó, 24. 05. 2019, 1 female. Sporadic. Hostplants: *Fraxinus* spp. and *Ligustrum* spp.

Pachyprotasis rapae (Linné, 1767) Čamovce (Csomatelke): Szentfali, 24. 04. 2019, 1 female. Regularly common, frequently dominant species however in 2019, only one specimen was collected. 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.

Rhogogaster (Rhogogaster) scalaris (Klug, 1817): Jestice (Jeszte): Nagy-Somos 03. 05. 2019, 2 females; Čamovce (Csomatelke): Szentfali, 24. 04. 2019, 1 male.; Šurice (Sőreg): Bagoly-vár, 21. 04. 2019, 1 male. Frequent. Hostplants: *Pteridium aquilinum*, *Alnus glutinosa*, *Circaea*, *Prunus* spp., *Ranunculus* spp., *Rosa* spp., *Salix alba*, *S. purpurea*, *Stellaria* spp., *Filipendula ulmaria*, *Populus tremula*, *Padus* spp., *Betula* spp., *Corylus avellana* and *Sorbus* spp.

Rhogogaster (Cytisogaster) picta (Klug, 1817): Gemerské Dechtáre (Détér): Nagymál-Bérc 02. 05. 2019, 1 female; Tachty (Tajti) valley of Meleg-hill, 01. 05. 2019, 1 female. Sporadic. *Cytisus scoparius*, *C. nigricans*, *Genista germanica* and *G. tinctoria*.

Siobla sturmii (Klug, 1817): Tachty (Tajti) valley of Meleg-hill, 23. 05. 2019, 2 males. Larva on *Impatiens nolitangere*. Sporadic.

Sciapteryx consobrina (Klug, 1816): Čamovce (Csomatelke): László hegy, 18. 04. 2019, 1 female. Generally frequent, locally common. Larval hosts: *Adoxa* spp., *Anemone* spp. and *Ranunculus ficaria*.

Tenthredo (Temuledo) temula Scopoli, 1763: Hajnáčka (Ajnácskő): Sás Bikk 26. 05. 2019, 1 male. Frequent, locally common. Larva on *Ligustrum* and *Origanum* spp.

Tenthredo (Eurogaster) mesomela Linné, 1758: Stará Bašta (Óbást): Nagy-mocsaras, 09. 06. 2019, 1 female; Čamovce (Csomatelke): Bodoszó, 22. 05. 2019, 1 female. 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 (Zonuledo) zonula Klug, 1817: Hajnáčka (Ajnácskő), 26. 05. 2019, 4 females. 1 male; Čamovce (Csomatelke): Bodoszó, 22. 05. 2019, 1 female; Tachty (Tajti) valley of Meleg-hill, 01. 05. 2019, 1 female; Jestice (Jeszte): Várhegy, 01. 05. 2019, 1 male. Frequent. Hostplant: *Hypericum perforatum*.

Tenthredopsis nassata (Linné, 1767): Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30. 06. 2019, 1 female; Gemerské Dechtáre (Détér): Nagymál-Bérc, 24. 05. 2019, 1 female. Frequent. Hostplants: *Dactylis glomerata*, *Deschampsia caespitosa*, *D. calmagrostis*, *Flexuosa* spp., *Holcus* spp., *Lolium perenne*, *Agropyron* spp., *Carex* spp.,

Fig. 5: *Macrophyta montana* (Scopoli, 1763) at Hajnáčka (Ajnácskő)

Fig. 6: *Pseudocephaleia praeteritorum* (Semenov, 1934) in dorsal view

Fig. 7: *Aprosthema austriacum* (Konow, 1892) in dorsal view

Anthriscus silvestris and *Artemisia* spp.

Tenthredopsis stigma (Fabricius, 1798): Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30. 06. 2019, 1 female; Gemerské Dechtáre (Détér): Nagymál–Bérc, 04. 05. 2019, 3 males; Gemerské Dechtáre (Détér): Nagymál–Bérc, 24. 05. 2019, 1 male; Čamovce (Csomatelke): Bodoszó, 24. 05. 2019, 1 female. Frequent. Hostplant: *Triticum intermedium*.

Tenthredopsis tessellata (Klug, 1817): Hajnáčka (Ajnácskő): Sás Bikk 01. 05. 2019, 1 female; Petrovce (Gömörpéterfala): Fenek, 30. 04. 2019, 1 female. Sporadic. Larva on *Deschampsia*, *Dactylis*, *Aira* and *Lolium* spp.

Nematinae

Cladius (Priophorus) brullei (Dahlbom, 1835): Čamovce (Csomatelke): László hegy, 24. 04. 2019, 1 female. Frequent. Larva on *Rubus* spp.

Cladius (Priophorus) compressicornis (Fabricius, 1804) (Known as *Priophorus pal-lipes* Serville, 1823): Čamovce (Csomatelke): László hegy, 18. 04. 2019, 1 female. Frequent, insect pest. Hostplants: *Betula*, *Cotoneaster*, *Prunus*, *Rubus*, *Sorbus*, *Fragaria*, *Crataegus*, *Corylus* and *Rosa* spp.

Cladius (Cladius) pectinicornis (Geoffroy, 1785): Tachty (Tajti) valley of Meleg-hill, 01. 05. 2019, 1 female, 1 male. Frequent. Hostplant: *Rubus* spp.

Euura calcicola (Benson, 1948): Tachty (Tajti) valley of Meleg-hill, 01. 05. 2019, 1 female. Rare. Hostplant unknown. New record for Slovakia.

Euura leucosticta (Hartig, 1837): Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30. 06. 2019, 6 males. Frequent. *Salix aurita*, *S. caprea*, *S. atrocinerea* and *S. cinerea*.

Euura myosotidis (Fabricius, 1804): Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30. 06. 2019, 1 female, 2 males; Jestice (Jeszte), 03. 05. 2019, 1 female; Petrovce (Gömörpéterfala): Fenek, 06. 07. 2019, 1 female; Čamovce (Csomatelke), 20. 06. 2019, 1 female. Common. Larval hosts: *Onobrychis* and *Trifolium* spp.

Euura obducta (Hartig, 1837): Petrovce (Gömörpéterfala): Malaise trap, 30. 04. – 30.

06. 2019, 1 female. Sporadic. Larva on Gramineae (*Poa*, *Festuca* spp.) and *Carex*.

Euura pavida (Serville, 1823): Tachty (Tajti): valley of Gortva stream, 01. 05. 2019, 1 female.

Euura tibialis (Newman, 1837): Chrámec (Harmac): Farkas völgy, 06. 07. 2019, 2 females. Frequent. Larva on *Robinia pseudacacia*.

Euura fallax (Serville, 1823) known as *Pachynematus xanthocarpus* (Hartig, 1840): Hajnáčka (Ajnácskő), 30. 04. 2019, 1 male; Jestice (Jeszte): Nagy-Somos, 03. 05. 2019, 1 female. Frequent. Larva on Graminae.

Hoplocampa crataegi (Klug, 1816): Tachty (Tajti): valley of Gortva stream, 01. 05. 2019, 17 females, 1 male. Frequent. Hostplants: *Crataegus* spp.

Hoplocampa minuta (Christ, 1791): Tachty (Tajti): valley of Gortva stream, 01. 05. 2019, 1 female. Frequent. Larva on *Prunus domestica*, *P. armeniaca*, *P. instita*, *P. avium* and *P. spinosa*.

Pristiphora (*Pristiphora*) *pallidiventris* (Fallén, 1808): Tachty (Tajti) valley of Meleg-hill, 01. 05. 2019, 1 female; Jestice (Jeszte): Várhegy, 01. 05. 2019, 1 female. Frequent. Larva on *Geum*, *Potentilla*, *Rubus* and *Filipendula* spp.

Pristiphora (*Pristiphora*) *armata* (C.G. Thomson, 1862): Tachty (Tajti) valley of Meleg-hill, 01. 05. 2019, 2 females; Tachty (Tajti) valley of Gortva brook, 12. 06. 2019, 1 male. Frequent. Larva on *Crataegus* spp.

Pristiphora (*Pristiphora*) *subbifida* (C. G. Thomson, 1871): Čamovce (Csomatelke): Szentfali, 24. 04. 2019, 2 females. Sporadic. Hostplants: *Acer campestre*, sometimes *A. pseudoplatanus* and *A. orientale*.

Discussion

Dominant species

Dominant species are *Xyela* (*Xyela*) *graeca* J.P.E.F. Stein, 1876 with 11 collected specimens, *Dolerus* (*Dicrodolerus*) *vestigialis* (Klug, 1818) with 9 specimens, *Empria liturata* (Gmelin, 1790) with 9 specimens, *Eutomostethus ephippium* (Panzer, 1798) with 12 specimens, *Hoplocampa crataegi* (Klug, 1816) with 18 specimens and *Macrophya* (*Macrophya*) *albicincta* (Schränk, 1776) with 10 specimens. These species make 36% of the total material

Rare species and new records

Pseudocephaleia praeteritorium (Semenov, 1934) (Fig. 6) First record for Slovakia. Palaearctic species. The species is known from Albania, Azerbaijan, China, Croatia, Italy, Romania and Turkey. Only 2 specimens are known from the Carpathian Basin so far, one female from Vászoly (North of Lake Balaton) collected on 23rd April 1984 and one female from Borosjenő (Ineu, West Transylvania) collected on 10th April 1921.

Euura calcicola (Benson, 1948) First record for Slovakia and even for the Carpathian Basin. West Palaearctic species, known from Austria, Czech Republic, France, Germany, Great Britain, Ireland, Sweden and Switzerland. The three recorded males, published by ZOMBORI (2016) from Hungary, after genitalia studies, proved to be identical with *Euura clitellata* (Serville, 1823), better known as *Pachynematus clitellatus* (Serville, 1823).

Aprosthemum austriacum (Konow, 1892) (Fig. 7) First record for Slovakia. West Palaearctic species, known from Austria, Croatia, Finland, Germany, Greece, Hungary, Italy, Romania, Spain, Sweden and Ukraine. In Hungary, this species sporadically occur,

rather rare, known from Budapest: János-hegy and Hársbokorhegy, Mecsek, Simontornya, Szilvásvár and Hetes. From the Romanian Carpathian Mountains known from Lepsa and we have indefinite records from Burgenland (Austria) and Subcarpathia (Ukraine) either.

Fenusella glaucopsis (Konow, 1907) Rare species. From Slovakia known only from PR Ostrov Kopáč (Kopács sziget). Also known from Trepcza k. Sanoka from South Poland and we have indefinite record from Croatia.

References

- ACHTERBERG, C. 2013: Hymenoptera in Fauna Europaea version 2.6.2. <http://www.faunaeur.org>. last accessed 5th August 2019.
- ACHTERBERG, C. VAN & B. VAN AARTSEN 1986: The European Pamphiliidae (Hymenoptera: Symphyta), with special reference to The Netherlands. – Zoologische Verhandelingen Leiden 234: 1-98.
- BIELY, A., BEZÁK, V., ELEČKO, M., GROSS, P., KALIČIAK, M., KONEČNÝ, V., LEXA, J., MELLO, J., NEMČOK, J., POLÁK, M., POTFAJ, M., RAKÚS, M., VASS, D., VOZÁR, J., VOZÁR, A. 2002 Geologická stavba 1 : 500 000. Atlas krajiny Slovenskej republiky, Bratislava: Ministerstvo životného prostredia SR, 2002. ISBN80-88833-27-2, s. 124-125.
- BOLFÍK, J. et al. 1990: Gemer-Malohont I. Príroda. Martin: Osveta, pp. 760.
- CSIKY, J. 2004: A Karancs, a Medves-vidék és a Cеровá Vrchovina (Nógrád-Gömöri Bazaltvidék) flóra- és vegetációtérképezése – Pécs. 451 pp.
- GYURKOVICS, H. & HARIS, A. 2012: Sawflies (Hymenoptera: Symphyta) from Szeged and its surroundings (SE Hungary) – Natura Somogyiensis 22: 163-182.
- HARIS, A. 2001: Revisional list of the Hungarian Nematinae with the description of three new species (Hymenoptera: Tenthredinidae). – Folia Entomologica Hungarica 62: 95-114.
- HARIS, A. 2006: Study on the Palaearctic *Pristiphora* species (Hymenoptera: Tenthredinidae) – Natura Somogyiensis 9: 201-277.
- HARIS, A. 2009: Sawflies of the Zselic Hills, SW Hungary (Hymenoptera: Symphyta) – Natura Somogyiensis 15: 127-158.
- HARIS, A. 2010: Sawflies of the Vértes Mountains (Hymenoptera: Symphyta) – Natura Somogyiensis 17: 209-238.
- HARIS, A. 2011: Sawflies of the Börzsöny Mountains (North Hungary) (Hymenoptera: Symphyta). – Natura Somogyiensis 19: 149-176.
- HARIS, A. 2012: Sawflies of Belső-Somogy (Hymenoptera: Symphyta) – Natura Somogyiensis 22: 141-162.
- HARIS, A. 2018a: Second contribution to the sawflies of Belső Somogy (Hymenoptera: Symphyta) – Natura Somogyiensis 31: 45-62.
- HARIS, A. 2018b: Sawflies from Külső-Somogy, South-West Hungary (Hymenoptera: Symphyta). – Natura Somogyiensis 32: 147-164.
- HORVÁTH, G. & GAÁLOVÁ, K. 2007 Éghajlati viszonyok, In: KIS G. & BARÁZ Cs. (Eds.): A Karancs-Medves és a Cseres-hegység. Bükk N. P. Eger, pp. 91-92.
- PROUS, M.; BLANK, S.; GOULET, H.; HEIBO, E.; LISTON, A.; MALM, T.; NYMAN, T.; SCHMIDT, S.; SMITH, D.; VARDAL, H.; VIITASAARI, M.; VIKBERG, V. & TAEGER, A. 2014: The genera of Nematinae (Hymenoptera, Tenthredinidae) - Journal of Hymenoptera Research 40: 1-69.
- ROLLER, L. 1993: New records of sawflies (Hymenoptera: Symphyta) from Slovakia. - Entomological Problems 24(2): 81-84.
- ROLLER, L., 1994: Faunistics records. Symphyta. - Entomological Problems 25(2): 24.
- ROLLER, L. 1996: New records of sawflies (Hymenoptera, Tenthredinidae) in Slovakia. - Biologia, Bratislava 51(1): 549-550.
- ROLLER, L. 1998: Sawfly (Hymenoptera, Symphyta) community in the Devínska Kobyla National Nature Reserve. - Biologia, Bratislava 53(2): 213-221.
- ROLLER, L. 1999a: Spoločensvá hrubopásych (Hymenoptera: Symphyta) vybraných zoogeografických regiónov Slovenska. PhD thesis, Ústav zoológie, Slovenská akadémia vied, Bratislava, 180 pp.
- ROLLER, L. 1999b: First records of Nematinae (Hymenoptera, Symphyta, Tenthredinidae) in Slovakia. - Biologia, Bratislava 54(5): 599-600.

- ROLLER, L. 1999c: Faunistic records from Slovakia. Hymenoptera: Symphyta: Tenthredinidae: Nematinae. - Entomological Problems 30(1): 30.
- ROLLER, L. 1999d: Faunistic records from Slovakia. Hymenoptera: Symphyta: Tenthredinidae: Nematinae. - Entomological Problems 30(1): 52.
- ROLLER, L., 1999e: Check list of the sawflies (Hymenoptera: Symphyta) of Slovakia. - Entomological Problems 30(2): 37-48.
- ROLLER, L., 2000a Zubačkovité (Megalodontesidae) – hrubopáse xerothermov. Hmyz 1(1): 17-18.
- ROLLER, L., 2000b First records of Blasticotomidae, Tenthredinidae, Pamphiliidae (Hymenoptera) from Slovakia. - Biologia, Bratislava 55(5): 561-562.
- ROLLER, L., 2000c Súčasný stav poznania fauny hrubopásych (Hymenoptera, Symphyta) na Slovensku. - Správy Slovenskej zoolologickej spoločnosti 18: 109-114.
- ROLLER, L., 2001: Príspevok k poznaniu hrubopásych (Hymenoptera, Symphyta) a rohačkovitých (Diptera, Sciomyzidae) prírodnej pamiatky Mitická slatina. p. 32-36. In: MÁJSKY, J. (ed.), Zborník výsledkov inventarizačného výskumu prírodnej pamiatky Mitická slatina. Občianske združenie Pre Prírodu, Trenčín, 99 pp.
- ROLLER, L. 2004. Hrubopáse blanokridlovce (Hymenoptera, Symphyta) Tematínskych kopcov. - Entomofauna Carpathica 16: 56-64.
- ROLLER, L., 2005: Blanokridlovce (Hymenoptera): hrubopáse (Symphyta). 117-123 In: Fauna Devínskej Kobyly. APOP, Bratislava, 181 pp.
- ROLLER, L., 2006a: Seasonal flight activity of sawflies (Hymenoptera, Symphyta) in submontane region of the West Carpathians, Central Slovakia. - Biologia, Bratislava 61(2): 193-205.
- ROLLER, L., 2006b: Hrubopáse blanokridlovce (Hymenoptera, Symphyta) Tematínskych vrchov – zhrnutie faunistického výskumu. p. 53-55. In: K. RAJCOVÁ (ed.): Najvzácnejšie prírodné hodnoty Tematínskych vrchov. Zborník výsledkov inventarizačného výskumu územia európskeho významu Tematínske vrchy. KOZA, Trenčín a Pre Prírodu, Trenčín, 101 pp.
- ROLLER, L. 2010. Hrubopáse blanokridlovce (Hymenoptera: Symphyta) PR Šúr, pp. 215-235. In: Majzlan, O., Vidlička, E. (eds). Príroda rezervácie Šúr. Ústav zoológie SAV, Bratislava, 410 pp.
- ROLLER, L., LUKÁŠ, J., 1999: New records of sawflies (Hymenoptera, Symphyta) in Slovakia. - Biologia, Bratislava 54(2): 225-228.
- ROLLER L., BENEŠ K., BLANK S. M., HOLUŠA J., JANSEN E., JÄNICKE 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. and MACEK, J. 2017: Provnález Hrubopásych Blanokridlovcov (Hymenoptera, Symphyta) na Slovensku - Entomofauna carpathica, 29(1): 53-63.
- ROLLER, L. & OLŠOVSKÝ, T. 2012: Prvonálezy hrubopásych blanokridlovcov (Hymenoptera, Symphyta) v slatiných lesoch s tavoľníkom vrboľistým (*Spiraea salicifolia*) v Borskej nížine. - Entomofauna carpathica 24(1): 15-20.
- 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.
- ZOMBORI, L. 2016: Levéldarázs-alkauak IV. Tenthredinoidea IV. In Fauna Hungariae 9. Hymenoptera I. Fauna Hungariae 174. 3/c booklet. Mondat Kft. and Hungarian Natural History Museum, Budapest. 160 pp.