New faunistics records of Agromyzidae (Diptera) from the Czech Republic and Slovakia

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Abstract: Altogether 11 species of the family Agromyzidae (Diptera) are recorded from the Czech Republic and Slovakia. Three species represent first records from the Czech Republic and 1 species from Slovakia, 8 species are new additions to the fauna of Bohemia and 4 to the fauna of Moravia. The most interesting findings are those of *Melanagromyza kerkinica* Černý, 2011, *Cerodontha* (*Poemyza*) *alpina* Nowakowski, 1967 and *Chromatomyia ochracea* (Hendel, 1920).

Key words: Agromyzidae, faunistics, distribution, new records, Czech Republic, Slovakia

Introduction

The fauna of Agromyzidae (Diptera) is relatively well known in the Czech Republic, and somewhat less in Slovakia. Hitherto 472 species have been recorded from the Czech Republic (375 from Bohemia, 393 from Moravia) but only 313 from Slovakia (Černý 2009a,b, 2012, 2013, Černý & Vála 2009, Černý et al 2013). The recent faunal investigations performed in both these countries revealed a number of species which proved to represent new additions to their regional faunas. They are recorded below to update the knowledge about the species spectrum of Agromyzidae in both the Czech Republic and Slovakia.

Survey of species

SUBFAMILY AGROMYZINAE

Agromyza woerzi Groschke, 1957

Czech Republic: Bohemia: Milovice 3 km N, former military area, 50°15'32"N 14°53'27"E, 240 m a.s.l., 1 ♂, 27.v.2012, mixed forest, SW, M. Černý leg., det. et coll.

European species, known from Belarus, Germany, Latvia, Lithuania, Norway, Poland and Slovakia, in the Czech Republic previously only recorded from Moravia (Vála & Černý 1997). First record from Bohemia.

Melanagromyza kerkinica Černý, 2011

Czech Republic: Bohemia: CHKO Český kras, Karlštejn, 1 km NW, NPR Karlštejn (Res.) (6051), 350 m a.s.l., 1 ♂, 31.v.2002, mixed forest, M. Černý leg., det. et coll.; CHKO Český kras, Koněprusy, 1 km W, NPP Kotýz (Res.) (6050), 430 m a.s.l., 1 ♂, 1.vi.2002, mixed forest, M. Černý leg., det. et coll. Moravia: CHKO Beskydy, Karolinka, 49°20'22"N 18°14'07"E, 560 m a.s.l., 1 ♂, 7.vi.2013, vegetation along the road near water reservoir 'Karolinka', M. Černý leg., det. et coll.

Described recently and hitherto only known from Greece (Černý 2011). This first record from the Czech Republic represents also first record of the species in Central Europe.

Ophiomyia aquilegiana Lundqvist, 1947

Czech Republic: Bohemia: CHKO Český kras, Srbsko, 1 ♂, 1 ♀, 49°56'19"N 14°08'16"E, 225 m a.s.l., ex puparium found in external stem mine on *Aquilegia vulgaris*, emerged 12.vi.2014, M. Černý leg., det. et coll.

European species recorded in British Isles, Estonia, Germany, Lithuania and Sweden, in the Czech Republic previously recorded from Moravia (Černý 1999). First record from Bohemia.

SUBFAMILY PHYTOMYZINAE

***Cerodontha (Dizygomyza) ireos* (Robineau-Desvoidy, 1851)**

Czech Republic: Bohemia: Šnepov, PR Mydlovarský luh (Res.), 50°10'43"N 14°55'30"E, 178 m a.s.l., 2 ♂♂, 26.v.2012, meadow 0.2 km SE, sweeping, M. Černý leg., det. et coll.

Palearctic species, known from Europe and also recorded from South Korea and Japan. In the Czech Republic previously known from Moravia (Vála & Černý 1997). First record from Bohemia.

***Cerodontha (Poemyza) alpina* Nowakowski, 1967**

Czech Republic: Bohemia: Krkonoše Mts. Bíner, 50°37'50,1"N 14°40'34,3"E, 609 m a.s.l., 2 ♂♂, 16.vi.-7.vii.2009, damp meadow, MT, J. Vaněk leg., M. Barták coll., M. Černý det. et coll. Slovakia: Kamenica nad Hronom, 47°51'N 18°13'E, 160 m a.s.l., 1 ♂, 27.iv.1986, 1.5 km damp valley, M. Barták leg. et coll.

This species was described from the upper forest zone of the East Carpathians (Poland) and later has been also found in Austria, Hungary and Switzerland. First record from Czech Republic and Slovakia.

***Cerodontha (Poemyza) spencerae* Zlobin, 1993**

Czech Republic: Bohemia: Vráž near Písek, 49°24'01"N 14°07'02"E, 400 m a.s.l., 2 ♂♂, 19.-25.vi.2010, meadow+wood, M. Barták leg. et coll.

Holarctic species, in Europe was recorded from Belarus, British Isles, Croatia, Estonia, Finland, Italy, Latvia, Lithuania, Poland, Russia, Slovakia and Switzerland. In the Czech Republic previously reported from Moravia as *Cerodontha (Poemyza) inconspicua* (Malloch, 1913) (Černý & Vála 1996, misidentification). First record from Bohemia.

***Chromatomyia ochracea* (Hendel, 1920)**

Czech Republic: Moravia: Podyjí NP, Devět mlýnů, 48°49'07"N 15°58'17"E, 270 m a.s.l., 3 ♂♂, 1 ♀, 21.v.-12.vi.2004, floodplain wood, MT, M. Barták & Š. Kubík leg., Barták coll.

European species known from Austria, Germany, Poland, Russia and Sweden. In the Czech Republic recently recorded from Bohemia (Černý et al 2013). First record from Moravia.

***Phytomyza calthivora* Hendel, 1934**

Czech Republic: Moravia: Biskupce, 0.8 km E, 49°04'42,5"N 17°43'30,7"E, 240 m a.s.l., 3 ♂♂, 29.iv.2013, near road bog with *Caltha palustris* and *Carex* sp., sweeping, M. Černý leg., coll. et det.

European species, in the Czech Republic recently recorded from Bohemia (Černý & Vlk 2001). First record from Moravia.

***Phytomyza selini* Hering, 1922**

Czech Republic: Bohemia: Vráž near Písek, 49°24'13"N 14°07'15"E, 400 m a.s.l., 1 ♂, 30.v.-3.vi.2005, damp meadow, M. Barták leg. et coll.; Moravia: Nature park Chřiby, Halenkovice, 49°10'45"N 17°27'30"E, 245 m a.s.l., 1 ♂, 11.vii.2013, pasture, sweeping, M. Černý leg., coll. et det.

European species recorded only from Germany, Lithuania and Poland. First record from the Czech Republic.

***Phytomyza subrostrata* Frey, 1946**

Czech Republic: Moravia: Jeseníky Mts., Velká Kotlina, 50°03'16"N 17°14'15"E, 1180 m a.s.l., 6 ♂♂, 9.vi.-26.vi.2006, wetland, Malaise traps, J. Ševčík & J. Roháček leg., Barták coll.

European species recorded from Estonia, Finland, Lithuania, Russia, Slovakia, Sweden and in the Czech Republic from Bohemia (Černý 1999). First record from Moravia.

***Phytomyza varipes* Macquart, 1835**

Czech Republic: Bohemia: Vráž near Písek, 49°23'N 14°08'E, 400 m a.s.l., 1 ♂, 31.v.1993, 1 ♂, 31.v.1994, damp meadow, M. Barták leg. et coll.

Holarctic species, described from northern France and widespread in Europe, locally abundant in the Alps, recorded also from Canada (Nova Scotia), Russia (Yakutia) and Greenland. In the Czech Republic it has recently been found in Moravia (Černý 2005). First record from Bohemia.

Conclusions

The above records essentially increase the number of species known from the Czech and Slovak Republics. With inclusion of the above additions, the family Agromyzidae is now represented by 475 species in the Czech Republic (383 in Bohemia, 397 in Moravia) and by 314 species in Slovakia.

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Nové nálezy vrtalek (Diptera: Agromyzidae) z České republiky a Slovenska

Celkem 11 druhů z čeledi Agromyzidae (Diptera) je poprvé hlášeno z území České republiky (10 druhů) a Slovenska (1 druh), 3 druhy představují nové nálezy pro Českou republiku, 8 druhů je nových pro faunu Čech, 4 pro faunu Moravy a jeden pro faunu Slovenska. Mezi nejzajímavější zjištěné druhy patří: *Melanagromyza kerkinica* Černý, 2011, *Cerodontha (Poemyza) alpina* Nowakowski, 1967 and *Chromatomyia ochracea* (Hendel, 1920).

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