A contribution to the knowledge of Agromyzidae (Diptera) of Zlaté Hory and its vicinity (Czech Republic)

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Abstract. Results of a biodiversity investigation of Agromyzidae (Diptera) in the cadastre of Zlaté Hory town (Silesia, Czech Republic) in June 2017 are presented. In the area under study a total of 43 species of 12 genera have been recorded including 29 species representing new additions to the fauna of Czech Silesia. *Agromyza seticercus*, *Cerodontha* (*Poemyza*) *beigerae*, *Galiomyza galiivora*, *Liriomyza europaea*, *L. puella*, *Phytomyza aurei*, *Ph. cirsii*, *Ph. vilnensis* and *Pseudonapomyza palliditarsis* being to most interesting species found in the area. The importance of these species from a faunistic point of view is discussed.

Keywords. Diptera, Agromyzidae, faunistics, Zlaté Hory, Silesia, Czech Republic

Introduction

The Agromyzidae belongs to the most species-diverse but relatively well studied families of Diptera in the Czech Republic: a total of 495 species are currently known from the country, with 408 species recorded from Moravia. In spite of this, the biodiversity and distribution of species of this interesting family are very poorly known in Silesia (representing northernmost part of Moravian region) and, particularly, in the vicinity of the Zlaté Hory town. First records of Agromyzidae in the territory of Silesia were published by B. Starý (1930) and by Zavřel (1953) who largely presented records of larval mines on host plants only, but without documentary material of reared or captured adults from the localities monitored. Several species of agromyzid flies from localities in Czech Silesia were also reported by Nowakowski (1973) in his monograph of the European species of the genus *Cerodontha*. Subsequently, Vála & Roháček (1983) recorded 21 species of Agromyzidae from the raised peat-bog at Rejvíz village (lying within the Zlaté Hory cadastre) collected in the framework of the research project “Acalyprate Diptera of peat-bogs of Northern Moravia”. Most recently, Černý *et al.* (2021) reported *Phytomyza vilnensis* Pakalniškis, 1998 from Zlaté Hory as first record from the Czech Republic. In this contribution results of a faunistic research of mining flies in the vicinity of Zlaté Hory are presented, including a number of new records for the Silesian fauna.

Material and methods

All material examined was collected by means of sweeping (using a light net) on various types of low vegetation during 3 days in June 2017 at 18 localities in the cadastral territory of Zlaté Hory town (Figs 1–7). All documented material (adult flies) is deposited in the collection of author. The faunistically interesting records are commented on. Taxa (genera and species) are arranged alphabetically in two subfamilies, Agromyzinae and Phytomyzinae.

Abbreviations used in text: CHKO – Protected Landscape Area (PLA), det. – determined, coll. – collection, NP – National Park, NPR – National Natural Reserve, PP – Natural Monument, PR – Natural Reserve, Res. – reserve.

Nomenclature and distribution are based on the Fauna Europaea (Martinez 2013) and also follows Papp & Černý (2015, 2016, 2017, 2020) and Spencer (1990).

Results

A LIST OF SPECIES

SUBFAMILY: AGROMYZINAE

Agromyza conjuncta Spencer, 1966

Material examined: Zlaté Hory 0.5 km N, PP Zlaté jezero (Res.), 50°16'40"N, 17°23'56"E, 380 m, vegetation near bank of pond, 1 ♂, 21.vi.2017.

Agromyza mobilis Meigen, 1830

Material examined: Rejvív, 50°13'16"N, 17°17'37"E, 770 m, Nature trail Rejvív, forest road vegetation, 1 ♂, 20.vi.2017; Zlaté Hory 1 km E, „Mnichův kámen“, 50°15'27"N, 17°24'47"E, 575 m, mixed forest, 1 ♂, 19.vi.2017; Zlaté Hory 1.5 km SW, „Zlatorudné mlýny“, 50°15'02"N, 17°21'50"E, 460 m, near stream Olešnice, 1 ♂, 20.vi.2017; Zlaté Hory 0.5 km N, PP Zlaté jezero (Res.), 50°16'32"N, 17°23'43"E, 375 m, meadow near stream Zlatý potok, 1 ♂, 21.vi.2017.

Agromyza nigripes Meigen, 1830

Material examined: Rejvív, 50°13'16"N, 17°17'37"E, 770 m, Nature trail Rejvív, forest road vegetation, 1 ♂, 20.vi.2017; Zlaté Hory 0.5 km N, PP Zlaté Jezero (Res.), 50°16'45"N, 17°23'50"E, 375 m, swamp, 1 ♂, 21.vi.2017, 50°16'33"N, 17°23'39"E, 380 m, meadow near stream Zlatý potok, 8 ♂♂, 21.vi.2017.

Agromyza seticercus L. Papp in Papp & Černý 2015

Material examined: Rejvív, 50°13'26"N, 17°17'59"E, 760 m, Nature trail Rejvív, margin of meadow, 2 ♂♂, 20.vi.2017; Zlaté Hory 0.5 km N, PP Zlaté jezero (Res.), 50°16'40"N, 17°23'56"E, 380 m, bank of pond, 1 ♂, 21.vi.2017.

Remarks: A species of Palearctic distribution, originally described from Hungary (Papp & Černý 2015) and subsequently confirmed from Ukraine (Guglya 2016) and then also found in other European countries (Croatia, Czech Republic, Netherlands, Slovakia and Switzerland – see Černý 2018, Černý & Bächli 2018, Černý & Roháček 2020, von Tschirnhaus & van Wielink 2020) and also in Uzbekistan (Černý 2018). In the Czech Republic it has been recorded from several localities in Bohemia and southern Moravia (Černý 2018) but unknown from Northern Moravia. The above records are the first from Northern Moravia and Czech Silesia.

Melanagromyza aenea (Meigen, 1830)

Material examined: Rejvív, 50°13'26"N, 17°17'59"E, 760 m, Nature trail Rejvív, margin of meadow, 2 ♂♂, 20.vi.2017.

Melanagromyza sativae Spencer, 1957

Material examined: Rejvív, 50°13'26"N, 17°17'59"E, 760 m, Nature trail Rejvív, margin of meadow, 1 ♂, 20.vi.2017.

Ophiomyia orbiculata (Hendel, 1931)

Material examined: Zlaté Hory 0.5 km N, PP Zlaté Jezero (Res.), 50°16'40"N, 17°23'56"E, 380 m, bank of pond, 1 ♂, 21.vi.2017, 50°16'32"N, 17°23'43"E, 375 m, meadow near stream Zlatý potok, 2 ♂♂, 21.vi.2017; Zlaté Hory 1.5 km S, „Zlatorudné mlýny“, 50°15'02"N, 17°21'50"E, 460 m, near stream Olešnice, 1 ♂, 20.vi.2017.

Ophiomyia pulicaria (Meigen, 1830)

Material examined: Zlaté Hory 1.5 km S, „Zlatorudné mlýny“, 50°15'02"N, 17°21'50"E, 460 m, near stream Olešnice, 1 ♂, 20.vi.2017.

SUBFAMILY: PHYTOMYZINAE

Amauromyza (Cephalomyza) monfalconensis (Strobl, 1909)

Material examined: Zlaté Hory 0.5 km N, PP Zlaté Jezero (Res.), 50°16'33"N, 17°23'39"E, 380 m, meadow near stream Zlatý potok, 1 ♂, 21.vi.2017; Zlaté Hory 0.8 km E, 50°15'30"N, 17°24'35"E, 555 m, meadow near forest, 1 ♂, 19.vi.2017.

Cerodontha (Dizygomyza) bimaculata (Meigen, 1830)

Material examined: Rejvív, „U pomníku“, 50°13'35"N, 17°17'46"E, 800 m, forest road vegetation, 1 ♂, 20.vi.2017.

Cerodontha (Icteromyza) capitata (Zetterstedt, 1848)

Material examined: Zlaté Hory 0.5 km N, PP Zlaté jezero (Res.), 50°16'45"N, 17°23'50"E, 375 m, swamp, 4 ♂♂, 21.vi.2017, 50°16'40"N, 17°23'56"E, 380 m, bank of pond, 23 ♂♂, 21.vi.2017.

***Cerodontha (Poemyza) atra* (Meigen, 1830)**

Material examined: Zlaté Hory 0.5 km N, PP Zlaté jezero (Res.), 50°16'45"N, 17°23'50"E, 375 m, swamp, 2 ♂♂, 21.vi.2017, 50°16'45"N, 17°23'47"E, bank of pond, 5 ♂♂, 21.vi.2017, 50°16'33"N, 17°23'39"E, 375 m, meadow near stream Zlatý potok, 8 ♂♂, 21.vi.2017; Zlaté Hory 0.8 km E, 50°15'30"N, 17°24'35"E, 555 m, meadow near forest, 11 ♂♂, 19.vi.2017.

***Cerodontha (Poemyza) beigeriae* Nowakowski, 1973**

Material examined: Rejvíz, Nature trail Rejvíz, 50°13'25"N, 17°17'13"E, 798 m, forest road vegetation, 1 ♂, 20.vi.2017.

Remarks: A Palaearctic species, in Europe known from the Czech Republic, Germany, Hungary, Poland, Sweden and Switzerland (Papp & Černý 2016). In the Czech Republic it has only been reported from Bohemia from Vysoká nad Labem (Černý & Vála 2005) and a few localities from CHKO Brdy (Heřman *et al.* 2019). Recently, it has also been confirmed in Moravia from Jihlava-Pávov (Černý 2018). The above record is the first from the Northern Moravia and Silesia.

***Cerodontha (Poemyza) incisa* (Meigen, 1830)**

Material examined: Zlaté Hory 0.5 km E, 50°15'30"N, 17°24'11"E, 520 m, forest underbrush near forest road, 1 ♂, 19.vi.2017.

***Cerodontha (Poemyza) lateralis* (Macquart, 1835)**

Material examined: Zlaté Hory 0.5 km N, PP Zlaté Jezero (Res.), 50°16'40"N, 17°23'56"E, 380 m, bank of pond, 1 ♂, 21.vi.2017, 50°16'33"N, 17°23'39"E, 380 m, meadow near stream Zlatý potok, 1 ♂, 21.vi.2017.

***Cerodontha (Poemyza) muscina* (Meigen, 1830)**

Material examined: Rejvíz, „U pomníku“, 50°13'35"N, 17°17'46"E, 800 m, forest road vegetation, 1 ♀, 20.vi.2017.

***Cerodontha (Poemyza) pygmella* (Hendel, 1931)**

Material examined: Zlaté Hory 2 km E, „Biskupská kupa“, 50°15'24"N, 17°24'43"E, 890 m, vegetation near view-tower, 3 ♂♂, 19.vi.2017.

***Cerodontha (Xenophytomyza) biseta* (Hendel, 1920)**

Material examined: Rejvíz, Nature trail Rejvíz, 50°13'26"N, 17°17'59"E, 760 m, margin of meadow, 1 ♂, 20.vi.2017; Zlaté Hory 0.5 km E, 50°15'32"N, 17°24'16"E, 530 m, forest underbrush near forest road, 4 ♂♂, 19.vi.2017; Zlaté Hory 1.2 km E, 50°15'28"N, 17°24'55"E, 600 m, vegetation near route, 1 ♂, 2 ♀♀, 19.vi.2017; Zlaté Hory 1.7 km E, 50°15'20"N, 17°24'38"E, 835 m, forest underbrush mixed forest, 1 ♂, 1 ♀, 19.vi.2017; Zlaté Hory 0.5 km N, PP Zlaté Jezero (Res.), 50°16'45"N, 17°23'50"E, 375 m, swamp, 1 ♂, 21.vi.2017, 50°16'40"N, 17°23'56"E, 380 m, bank of pond, 12 ♂♂, 21.vi.2017, 50°16'33"N, 17°23'39"E, 380 m, meadow near stream Zlatý potok, 9 ♂♂, 1 ♀, 21.vi.2017, 50°16'44"N, 17°23'40"E, 380 m, meadow near pond, 1 ♂, 21.vi.2017; Zlaté Hory 1.5 km SW, „Zlatorudné mlýny“, 50°15'02"N, 17°21'50"E, 460 m, near stream Olešnice, 1 ♀, 20.vi.2017.

***Chromatomyia fuscula* (Zetterstedt, 1838)**

Material examined: Zlaté Hory 0.5 km N, PP Zlaté Jezero (Res.), 50°16'33"N, 17°23'39"E, 380 m, meadow near stream Zlatý potok, 1 ♂, 21.vi.2017.

***Chromatomyia milii* (Kaltenbach, 1864)**

Material examined: Rejvíz, Nature trail Rejvíz, 50°13'16"N, 17°17'37"E, 770 m, forest road vegetation, 1 ♂, 1 ♀, 20.vi.2017, „U pomníku“, 50°13'35"N, 17°17'46"E, 800 m, forest road vegetation, 2 ♂♂, 20.vi.2017; Zlaté Hory 1.5 km SW, „Zlatorudné mlýny“, 50°15'02"N, 17°21'50"E, 460 m, near stream Olešnice, 3 ♂♂, 20.vi.2017.

***Galiomyza galiivora* (Spencer, 1969)**

Material examined: Zlaté Hory 0.5 km E, 50°15'30"N, 17°24'11"E, 520 m, forest underbrush near forest road, 1 ♂, 19.vi.2017.

Remarks: *Galiomyza galiivora* is a Holarctic species (Papp & Černý 2016); in Europe there are scattered records from Belgium, Corsica, Czech Republic, Germany, Greece, Hungary, Italy, Lithuania, Norway (Winqvist *et al.* 2020), Poland, Russia (Černý *et al.* 2021), Slovakia and Switzerland. In the Czech Republic it was first reported from the Pálava Biosphere Reserve, from NPR Kotel and Lednice (Černý & Vála 1999) and later confirmed from further localities in Bohemia (Černý 2009, Černý *et al.* 2001, 2013; Černý & Heřman 2015) and southern Moravia (Černý 2001a, b). The above record is the first from the Northern Moravia and Silesia.

***Liriomyza europaea* Zlobin, 2003**

Material examined: Rejvíz, Nature trail Rejvíz, 50°13'16"N, 17°17'37"E, 770 m, forest road vegetation, 1 ♂, 20.vi.2017; Zlaté Hory 2 km E, „Biskupská kupa“, 50°15'24"N, 17°24'43"E, 890 m, vegetation near view-tower, 1 ♂, 19.vi.2017.

Remarks: A European species originally described from Russia (European part), England and Spain. Subsequently, it has been found also in other countries of Europe: Austria, Czech Republic, Finland, Germany, Greece, Netherlands, Sweden and Switzerland (Papp & Černý 2017, Černý & Bächli 2018, Černý *et al.* 2021, von Tschirnhaus & van Wielink 2020). In the Czech Republic it was first found in southern Moravia, in the Podyjí NP (locality Havraníky, see Černý *et al.* 2006). In Bohemia it is known from Úpská jáma in the Krkonoše Mts (Černý *et al.* 2009) and also from a hitherto unpublished record from southern Bohemia: CHKO Třeboňsko, Suchdol nad Lužnicí, Hrdlořezy 1 km NW, 48°52'26"N, 14°51'13"E, 470 m, forest, 1 ♂, 25.v.2015, M. Černý leg. and coll. The records listed above are the first from the Northern Moravia and Silesia.

***Liriomyza flaveola* (Fallén, 1823)**

Material examined: Rejvíz, „U pomníku“, 50°13'35"N, 17°17'46"E, 800 m, forest road vegetation, 1 ♂, 20.vi.2017; Zlaté Hory 0.5 km E, 50°15'30"N, 17°24'11"E, 520 m, forest underbrush near forest road, 1 ♂, 19.vi.2017; Zlaté Hory 0.5 km N, PP Zlaté Jezero (Res.), 50°16'40"N, 17°23'56"E, 380 m, bank of pond, 1 ♂, 21.vi.2017; Zlaté Hory 1.5 km SW, „Zlatorudné mlýny“, 50°15'02"N, 17°21'50"E, 460 m, near stream Olešnice, 1 ♂, 20.vi.2017.

***Liriomyza phryne* Hendel, 1931**

Material examined: Zlaté Hory 0.5 km N, PP Zlaté jezero (Res.), 50°16'45"N, 17°23'50"E, 375 m, swamp, 1 ♂, 21.vi.2017.

***Liriomyza ptarmicae* de Meijere, 1925**

Material examined: Zlaté Hory 0.5 km N, PP Zlaté jezero (Res.), 50°16'32"N, 17°23'43"E, 375 m, meadow near stream Zlatý potok, 1 ♂, 21.vi.2017.

***Liriomyza puella* (Meigen, 1830)**

Material examined: Zlaté Hory 1.5 km S, „Zlatorudné mlýny“, 50°15'02"N, 17°21'50"E, 460 m, near stream Olešnice, 1 ♂, 20.vi.2017.

Remarks: A species only known from the W. Palearctic (Papp & Černý 2017). In the Czech Republic, there are records of *L. puella* from Moravia from Troubsko and Zvěrkovice (Černý & Vlk 2001). The species has later been confirmed from Bohemia in the Jizerské hory Mts (Bílý potok pod Smrkem and PR Meandry Smědý, see Černý 2009). The above record is the first from the Northern Moravia and Silesia.

***Liriomyza pusilla* (Meigen, 1830)**

Material examined: Zlaté Hory 2 km E, „Biskupská kupa“, 50°15'24"N, 17°24'43"E, 890 m, vegetation near view-tower, 1 ♂, 19.vi.2017.

***Liriomyza soror* Hendel, 1931**

Material examined: Zlaté Hory 0.5 km N, PP Zlaté jezero (Res.), 50°16'32"N, 17°23'43"E, 375 m, meadow near stream Zlatý potok, 1 ♂, 21.vi.2017; 50°16'44"N, 17°23'40"E, 380 m, meadow near pond, 1 ♂, 21.vi.2017, 50°16'45"N, 17°23'47"E, 380 m, bank of pond, 1 ♂, 1 ♀, 21.vi.2017.

***Metopomyza flavonotata* (Haliday, 1833)**

Material examined: Zlaté Hory 0.5 km E, 50°15'32"N, 17°24'16"E, 530 m, forest underbrush near forest road, 3 ♂♂, 19.vi.2017, 50°16'45"N, 17°23'50"E, 375 m, swamp, 1 ♂, 21.vi.2017; Zlaté Hory 1.5 km SW, „Zlatorudné mlýny“, 50°15'02"N, 17°21'50"E, 460 m, near stream Olešnice, 1 ♀, 20.vi.2017.

***Metopomyza xanthaspioides* (Frey, 1946)**

Material examined: Zlaté Hory 0.5 km N, PP Zlaté Jezero (Res.), 50°16'33"N, 17°23'39"E, 380 m, meadow near stream Zlatý potok, 1 ♂, 3 ♀♀, 21.vi.2017.

***Phytoliriomyza melampyga* (Loew, 1869)**

Material examined: Zlaté Hory 0.5 km E, 50°15'35"N, 17°24'03"E, 475 m, forest underbrush near forest road, 1 ♂, 1 ♀, 19.vi.2017.

***Phytomyza aurei* Hering, 1931**

Material examined: Zlaté Hory 1.5 km SW, „Zlatorudné mlýny“, 50°15'02"N, 17°21'50"E, 460 m, near stream Olešnice, 1 ♂, 20.vi.2017; Zlaté Hory 2 km E, „Biskupská kupa“, 50°15'24"N, 17°24'43"E, 890 m, vegetation near view-tower, 1 ♂, 19.vi.2017.

Remarks: This West Palearctic species has been recorded from the Czech Republic, Germany, Hungary, Lithuania, Poland, Slovakia, Switzerland, and Turkey (Papp & Černý 2020), and recently also from Ukraine (Guglya 2021). In the Check list of Czechoslovak Insects II (Vála 1987) this species is listed as new for Moravia

but without faunistic data of specimens examined. First valid data are from CHKO Bílé Karpaty, from Hutě (Černý 2001b) and PP Jalovcová louka nr. Trnava u Zlína (Černý 2001a). In Bohemia it was first confirmed from the Šumava Mts (Vimperk, cf. Černý & Vlček 2001). Subsequently it has been collected in the Jizerské hory Mts in Rejdice (Černý 2009) and later also in NPR Karlštejn in Kubrychtova bouda (Černý & Heřman 2015). The above records are the first from Northern Moravia and Silesia.

***Phytomyza chaerophylli* Kaltenbach, 1856**

Material examined: Zlaté Hory 0.5 km E, 50°15'32"N, 17°24'16"E, 530 m, forest underbrush near forest road, 1 ♂, 19.vi.2017.

***Phytomyza cirsii* Hendel, 1923**

Material examined: Zlaté Hory 0.5 km N, PP Zlaté jezero (Res.), 50°16'44"N, 17°23'40"E, 380 m, meadow near pond, 1 ♂, 21.vi.2017.

Remarks: A W. Palaearctic species, largely recorded from central, western and northern Europe and also known from Turkey (Papp & Černý 2020). In the Czech Republic it was first confirmed in the Pálava Biosphere Reserve (locality Milovice, see Černý & Vála 1999); later also encountered in Bohemia (Černý 2009, Černý *et al.* 2001, 2013) and in southern Moravia in the CHKO Bílé Karpaty (NPR Čertoryje-Vojšické louky, cf. Černý 2001b). The above record is the first from Northern Moravia and Silesia.

***Phytomyza crassisetula* Zetterstedt, 1860**

Material examined: Zlaté Hory 2 km E, „Biskupská kupa“, 50°15'24"N, 17°24'43"E, 890 m, vegetation near view-tower, 1 ♂, 19.vi.2017.

***Phytomyza evanescens* Hendel, 1920**

Material examined: Zlaté Hory 1.5 km SW, „Zlatorudné mlýny“, 50°15'02"N, 17°21'50"E, 460 m, near stream Olešnice, 1 ♂, 20.vi.2017.

***Phytomyza plantaginis* Robineau-Desvoidy, 1851**

Material examined: Zlaté Hory 0.8 km E, 50°15'30"N, 17°24'35"E, 555 m, meadow near forest, 1 ♂, 19.vi.2017.

***Phytomyza podagrariae* Hering, 1954**

Material examined: Rejvíz, „U pomníku“, 50°13'35"N, 17°17'46"E, 800 m, forest road vegetation, 4 ♂♂, 20.vi.2017; Zlaté Hory 0.5 km E, 50°15'32"N, 17°24'16"E, 530 m, forest underbrush near forest road, 1 ♂, 19.vi.2017, 50°15'35"N, 17°24'03"E, 475 m, forest underbrush near forest road, 1 ♂, 19.vi.2017.

***Phytomyza ranunculi* (Schrank, 1803)**

Material examined: Zlaté Hory 0.5 km N, PP Zlaté Jezero (Res.), 50°16'33"N, 17°23'39"E, 380 m, meadow near stream Zlatý potok, 1 ♀, 21.vi.2017.

***Phytomyza robustella* Hendel, 1936**

Material examined: Zlaté Hory 1.5 km SW, „Zlatorudné mlýny“, 50°15'02"N, 17°21'50"E, 460 m, near stream Olešnice, 1 ♂, 20.vi.2017.

***Phytomyza vilnensis* Pakalniškis, 1998**

Material examined: Zlaté Hory 2 km E, „Biskupská kupa“, 50°15'24"N, 17°24'43"E, 890 m, vegetation near view-tower, 2 ♂♂, 19.vi.2017.

Remarks: A European species with a poorly known distribution. It was described from Lithuania and later recorded from Hungary (Papp & Černý 2020) and Slovakia (Černý & Roháček 2020). It has been reported only once from the Czech Republic, viz. from PP Zlaté Jezero (Res.) near Zlaté Hory (Černý *et al.* 2021). The record listed above is additional to the occurrence of in the vicinity of the Zlaté Hory.

***Pseudonapomyza atra* (Meigen, 1830)**

Material examined: Zlaté Hory 0.5 km N, PP Zlaté Jezero (Res.), 50°16'33"N, 17°23'39"E, 380 m, meadow near stream Zlatý potok, 3 ♂♂, 1 ♀, 21.vi.2017, 50°16'40"N, 17°23'56"E, 380 m, bank of pond, 2 ♂♂, 21.vi.2017.

***Pseudonapomyza palliditarsis* Černý, 1992**

Material examined: Zlaté Hory 0.5 km N, PP Zlaté Jezero (Res.), 50°16'33"N, 17°23'39"E, 380 m, meadow near stream Zlatý potok, 1 ♀, 21.vi.2017.

Remarks: An insufficiently known species, probably Palaearctic in distribution, originally described from Zvěrkovice (distr. Třebíč, southern Moravia, Czech Republic) (Černý 1992) and subsequently recorded from Bulgaria, Hungary, Poland, European Russia, Slovakia, Spain, Ukraine, Uzbekistan and from Yakutia (Russian E. Siberia) (Papp & Černý 2017). In the Czech Republic, other than the type locality, it is known from the Pálava Biosphere Reserve (Lednice, NPR Lednické rybníky and Podivín, see Černý & Vála 1999), Podyjí NP (Černý *et al.* 2006), Milotice nad Bečvou (Černý 2019) and from several localities in Bohemia (PP Stroupeč and NPR Úhošť, see Černý 2013). The above record is the first from Northern Moravia and Silesia.

Discussion and conclusions

Although the faunal investigation in the vicinity of the Zlaté Hory town was realized within a short time in June 2017, its results have demonstrated the occurrence of a relatively rich species-spectrum of the family Agromyzidae. This territory has hitherto been largely neglected by dipterists and, consequently, the faunal data obtained are largely new for the area. Altogether 43 species of Agromyzidae have been recorded, including 36 species found in the cadastre of Zlaté Hory for the first time and 29 species which are new additions to the fauna of Czech Silesia: *Agromyza conjuncta*, *A. mobilis*, *A. seticercus*, *Amauromyza* (*Cephalomyza*) *monfalconensis*, *Cerodontha* (*Poemyza*) *beigeriae*, *Cerodontha* (*Xenophytomyza*) *biseta*, *Galiomyza galiivora*, *Liriomyza europaea*, *L. ptarmicae*, *L. puella*, *L. pusilla*, *L. soror*, *Melanagromyza aenea*, *M. sativae*, *Metopomyza flavonotata*, *Met. xanthaspioides*, *Ophiomyia orbiculata*, *O. pulicaria*, *Phytoliriomyza melampyga*, *Phytomyza aurei*, *Ph. cirsii*, *Ph. crassiseta*, *Ph. evanescens*, *Ph. chaerophylli*, *Ph. plantaginis*, *Ph. podagrariae*, *Ph. robustella*, *Pseudonapomyza atra* and *Ps. palliditarsis*. The nine faunistically most interesting species, viz. *Agromyza seticercus*, *Cerodontha* (*Poemyza*) *beigeriae*, *Galiomyza galiivora*, *Liriomyza europaea*, *L. puella*, *Phytomyza aurei*, *Ph. cirsii*, *Ph. vilnensis* and *Pseudonapomyza palliditarsis*, are provided with comments on their general distribution and occurrence in the Czech Republic. There is only one previous paper devoted to Agromyzidae in Silesia and containing data from the Zlaté Hory cadastre, viz. Vála & Roháček (1983). In the latter study 21 species were reported from the peat-bog at Rejvíz, namely *Agromyza cinerascens* Macquart, 1835; *A. albipennis* Meigen, 1830; *A. nigripes* Meigen, 1830; *Cerodontha* (*Butomyza*) *scirpi* (Karl, 1926); *C. (Cerodontha) denticornis* (Panzer, 1806); *C. (Dizygomyza) morosa* (Meigen, 1830); *C. (D.) suturalis* (Hendel, 1931); *C. (Icteromyza) churchillensis* Spencer, 1969; *C. (Poemyza) superciliosa* (Zetterstedt, 1860); *C. (P.) incisa* (Meigen, 1830); *Chromatomyia fuscula* (Zetterstedt, 1838); *Ch. nigra* (Meigen, 1830); *Liriomyza flaveola* (Fallén, 1823); *L. phryne* Hendel, 1931; *L. virgo* (Zetterstedt, 1838); *Metopomyza interfrontalis* (Melander, 1913); *Napomyza scrophulariae* Spencer, 1966; *Phytomyza flavofemorata* Strobl, 1893; *Ph. ranunculi* (Schränk, 1803); *Ph. rufipes* Meigen, 1830 and *Ph. spinaciae* Hendel, 1935.

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Figs 1-2: Maps. **1** – localities visited in the cadastre of the Zlaté Hory town (red circles); **2** – situation of the cadastre of the Zlaté Hory town in the Czech Republic.

Fig 3: Zlaté Hory 0.8 km E, meadow near forest, habitat of *Amauromyza* (*Cephalomyza*) *monfalconensis* (Strobl). Photo by M. Černý.

Fig 4: Zlaté Hory 2 km E, mixed (largely beech) forest with rich undergrowth in the vicinity of lookout tower „Biskupská kupa“. Habitat of *Lirionomys europaea* Zlobin and *Phytomyza vilnensis* Pakalniškis. Photo M. Černý.

Fig 5: NPR Rejvív, Nature trail Rejvív, undergrowth of wet spruce forest along trail. Habitat of *Cerodontha (Poemyza) beigeriae* Nowakowski. Photo by M. Černý.

Fig 6: Zlaté Hory 1.5 km SW, Zlatorudné doly, woodland road along river Olešnice. Habitat of *Liriomyza puella* (Meigen) and *Phytomyza aurei* Hering. Photo by M. Černý.

Fig 7: Zlaté Hory 0.5 km N, Zlaté jezero pond, meadows and marshland habitats at shores of water reservoir. Photo by M. Černý.

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