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Jumping plant-lice (Hemiptera: Psylloidea) of the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (Czech Republic)

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Malenovský I. & Lauterer P. 2012: Jumping plant-lice (Hemiptera: Psylloidea) of the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (Czech Republic). In: Malenovský I., Kment P. & Konvička O. (eds.): Species inventories of selected insect groups in the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (Czech Republic). *Acta Musei Moraviae, Scientiae biologicae* (Brno) **96(2)** (2011): 105–154. – A total of 85 species of jumping plant-lice (Hemiptera: Sternorrhyncha: Psylloidea) were recorded in the Bílé Karpaty Protected Landscape Area and Biosphere Reserve and a few closely adjacent localities (south-eastern Moravia, Czech Republic). Most of the records come from field surveys carried out in 1998–2011, with some additional data based on literature and collection specimens. A complete list of all records from the area is supplemented by brief notes on the distribution, host plants and conservation status of each species. *Bactericera lyrata* Seljak, Malenovský & Lauterer, 2008, *Bactericera substriola* Ossiannilsson, 1992, and *Cacopsylla albipes* (Flor, 1861) are recorded here for the Czech Republic for the first time. The jumping plant-louse fauna of the Bílé Karpaty may be characterised as species-rich, comprising 65% of the Psylloidea species known to occur in the Czech Republic. As well as many widely distributed and generally common species, this also includes 17 species categorised in the Red List of threatened invertebrates of the Czech Republic. Especially noteworthy from the viewpoints of nature conservation and biogeography are some rare thermophilous species confined to sunny forest margins and/or dry grassland (*Cacopsylla albipes*, *C. viburni* (Löw, 1876), *Eryngiofaga lautereri* Loginova, 1977, and *Livilla radiata* (Foerster, 1848)), hygrophilous species inhabiting spring fens, wet meadows and shrubs along streams (*Aphalara calthae* (Linnaeus, 1761), *Bactericera maura* (Foerster, 1848), *B. modesta* (Foerster, 1848), *B. substriola*, *Cacopsylla abdominalis* (Meyer-Dür, 1871), and *C. elegantula* (Zetterstedt, 1840)), ruderal habitats (*Bactericera lyrata* and *B. trigonica* Hodkinson, 1981), and several orophilous/psychrophilous species largely restricted to floristically rich pastures and meadows in the central and north-eastern parts of the Bílé Karpaty Mts. (*Craspedolepta sonchi* (Foerster, 1848), *Trioza abdominalis* Flor, 1861, *T. cerastii* (Linnaeus, 1758), *T. chrysanthemi* Löw, 1878, *T. dispar* Löw, 1878, *T. proxima* Flor, 1861, and *T. schrankii* Flor, 1861). *Trioza agrophila* Löw, 1878, was known from the area only by deduction from findings of galls in the past and has not been confirmed in recent years. Three introduced species, *Cacopsylla hippophaes* (Foerster, 1848), *Livilla variegata* (Löw, 1881), and *Psylla buxi* (Linnaeus, 1758), occur in the Bílé Karpaty PLA only in villages, on ornamental woody plants in gardens, parks, and cemeteries.

Key words. Psyllids, Sternorrhyncha, faunistics, new records, nature conservation, White Carpathians, Moravia, central Europe

Introduction

The jumping plant-lice, or psyllids (Hemiptera: Sternorrhyncha: Psylloidea), are a relatively small group of phytophagous insects that feed by sucking plant sap. The group includes some 190 species in central Europe, usually with narrowly restricted host-plant ranges (Burckhardt 2002). The jumping plant-louse fauna of the Czech Republic is

fairly well-known; there is a tradition of investigating the group that goes back to the end of the 19th century (Vondráček 1957; Lauterer 1984, 1998). Also taking into account some unpublished data from the collections of the Moravian Museum, Brno, 130 species of Psylloidea are currently known from the country (Malenovský *et al.* 2011; Lauterer & Malenovský, unpublished). Faunistic knowledge of the individual regions of the Czech Republic is, however, quite uneven. While there are fairly numerous data on the occurrence of Psylloidea, from southern and western Moravia in particular (e.g. Lauterer 1991, 1994, 1995, 1998, 1999; Malenovský *et al.* 2011) and northern Bohemia (Lauterer 2001, Malenovský 2006), most other parts of the Czech lands remain poorly explored. A better knowledge of the distribution of individual species of Psylloidea may provide useful information for phytosanitary advisors and growers as some species are important vectors of phytoplasma diseases, particularly in fruit plantations (Navrátil *et al.* 2004; Burckhardt & Lauterer 2009; Jarausch *et al.* 2009; Tedeschi *et al.* 2009; Ludvíková *et al.* 2010, 2011), as well as for nature conservationists, as many central European species are restricted to endangered habitats such as species-rich grasslands, wetlands and natural forests, thus being under threat of extinction (Lauterer & Malenovský 2005).

The Bílé Karpaty Protected Landscape Area and Biosphere Reserve (abbreviated to PLA hereafter) covers the Czech part of the White Carpathian Mts. [Bílé Karpaty] extending along the Czech-Slovak border in south-eastern Moravia. Due to its specific geology (largely based on calcareous flysch), relief and hydrology, favourable geographical situation, relatively warm climate, post-glacial history, as well as traditional land use, the Bílé Karpaty PLA constitutes a biodiversity hotspot in the Czech Republic; the area is particularly famous for its floristically rich semi-natural grasslands (Kuča *et al.* 1992, Mackovčin & Jatiová 2002, Jongepierová 2008, Konvička *et al.* 2012).

A rich fauna of jumping plant-lice can thus be expected in this region as well. Hard data on the Psylloidea of the Bílé Karpaty PLA have previously, however, been somewhat scarce. Bayer (1909, 1914) made a start with records of two species, *Psyllopsis fraxini* and *Trioza proxima*, based on galls found in the environs of Luhačovice. Lang (1945) reported *Livia junci* from spring fens on Studený vrch Hill near Březová/Suchá Loz. Baudyš (1966a,b) recorded three species, *Cacopsylla pyri*, *Trioza cerastii* and *T. urticae*, based on galls collected in the environs of Bojkovice, Bánov, Nivnice and Valašské Klobouky. Hubáček (1979) published on records of galls of another three species, *Psyllopsis fraxini*, *Eryngiofaga* cf. *lautereri* and *Trioza agrophila*, from the environs of Blatnička and Hluk (the latter two places are situated close to, but outside, the administrative borders of the current Bílé Karpaty PLA). Some additional data were acquired on a number of field trips made by Pavel Lauterer and helpers from the Department of Entomology, Moravian Museum, Brno in the course of the 1970s and 1980s. These records were summarized for the subfamily Psyllinae by Lauterer (1998, 1999); records of other taxa from this period remain unpublished to date and are evaluated in the current paper. Igor Malenovský initiated more extensive collecting activity throughout the Bílé Karpaty PLA in 1998, resulting in a profusion of data on additional species and localities. Some records have already been included in papers by Malenovský (2001), Lauterer & Malenovský (2002) and Malenovský & Lauterer

(2005b,c). General texts on the grassland Hemiptera of the Bílé Karpaty PLA have been compiled by Kment & Malenovský (2008) and Laštůvka *et al.* (2008).

This paper aims to provide a complete list of species of the Psylloidea recorded in the Bílé Karpaty PLA to date, based on data published in literature and, particularly, on evaluation of the prolific additional material collected in the course of recent surveys.

Material and methods

Most data included in the paper were collected in 1998–2011 by sweeping or direct search on host plants. A few specimens were found in Malaise-trap and light-trap samples. Voucher specimens for most records are deposited in the collections of the Moravian Museum, Brno, including those collected in 1979–1985 by Pavel Lauterer, which have been examined for this paper as well. The material comes from a total of 104 collecting sites situated more or less throughout the Bílé Karpaty PLA (including some localities lying outside its current administrative borders, but close to them), although detailed data are still absent for some areas, particularly the environs of the towns of Bojkovice, Luhačovice, and Slavičín (see Fig. 1 and List of collecting sites).

The nomenclature and classification of Psylloidea follows Burckhardt (2002, 2008, 2011); the same sources, together with Gegechkori & Loginova (1990) and Ossiannilsson (1992), were used to extract brief accounts of the distribution and host plants of each species for the List of species section. The nomenclature of host plants is derived from Kubát *et al.* (2002). The conservation status of each psyllid species is categorised according to the Red List of threatened invertebrates of the Czech Republic (Lauterer & Malenovský 2005).

The following abbreviations are used in the paper: NM – Nature Monument, NNR – National Nature Reserve, NR – Nature Reserve, PLA – Protected Landscape Area (all of these are the various categories and terms specified by the Czech system of legally protected natural areas, Act No. 114/1992 coll.); LT – light trap, MT – Malaise trap; IM – Igor Malenovský leg., JJ – Jan Ježek leg., JM – Jan Macek leg., KD – Katarína Devánová leg., KF – Karel Fajmon leg., MH – Michal Horsák leg., PB – Petr Baňař leg., PBz – Pavel Bezděčka leg., PC – Pavel Chvojka leg., PK – Petr Kment leg., PL – Pavel Lauterer leg., RJ – Radek Janíček leg.; CR – critically endangered species, EN – endangered species, VU – vulnerable species, NT – near-threatened species (the latter four all categories derived from the Red List of threatened invertebrates of the Czech Republic; Lauterer & Malenovský 2005).

List of collecting sites

Each entry in the list of collecting sites is arranged as follows: number of locality, name of the nearest village or town, local name of the collecting site or name of the small-scale protected area (reserve) if appropriate, code of the field (in parentheses) in the faunistic and floristic grid mapping system of central Europe (Ehrendorfer & Hamann 1965, Pruner & Míka 1996, each basic field divided into 16 subfields; Konvička *et al.* 2012), GPS coordinates, altitude, and habitat.

1. Luhačovice (6872/6972); precise location of collecting sites unknown.
1a. Pozlovice, towards Horní Lhota (6872d1), ca. 350–400 m a.s.l., 49°08′14″N 17°46′511″E; precise location of the collecting site unknown.
2. Petrůvka, U Petrůvky NM (6872d4), 49°06′35″N 17°48′38″E, 360–400 m a.s.l.; mesic meadows, pasture, forest margins.
3. Valašské Klobouky, Brumovská street – 0.4–0.7 km SE from town centre (6874c1), 49°08′06″N 18°00′50″E, 380–400 m a.s.l.; mesic meadows and shrubs, gardens, ornamental and ruderal vegetation.
4. Valašské Klobouky, U Rybníků – valley of an unnamed brook on NW slopes of Královec hill (6874c1), 49°08′15″N 18°01′16″E, 430–510 m a.s.l.; shore vegetation around small ponds, alder carr, spruce monoculture forest.
5. Valašské Klobouky, Javorůvky NR (6874c1), 49°08′03″N 18°01′57″E, 510–575 m a.s.l.; mesic to wet meadows, spring fen, forest margins.
6. Valašské Klobouky, Dobšená NM (6874c1), 49°07′55″N 18°02′04″E, 525–580 m a.s.l.; dry to mesic meadows, spring fen, spruce monoculture margin.
7. Valašské Klobouky, Brumovka (= Kloboucký potok) brook valley – SW slopes of Královec hill 1.5 km SSE from town centre (6874c1), 49°07′47″N 18°01′03″E, 400–480 m a.s.l.; meadows, spring fens, forest margins.
8. Valašské Klobouky, Na Nivách – 1.3 km SWW from the top of the Královec hill (6874c1), 49°07′48″N 18°01′25″, 555 m a.s.l.; spring fen, meadows, shrubs and trees, forest road vegetation.
9. Valašské Klobouky, Královec hill – main ridge and hilltop environs (6874c1/c2), 49°07′59″N 18°02′01″E, 570–650 m a.s.l.; spruce monoculture, forest glades.
10. Poteč, Ploščiny NR (6874c2), 49°08′22″N 18°03′42″E, 670–739 m a.s.l.; mesic to dry meadows, pastures, forest margins, forest glades.
11. Valašské Klobouky, Bílé potoky NR (6874c3), 49°07′01″N 18°01′25″E, 380–500 m a.s.l., mesic to wet meadows and pastures, spring fens, forest margins, forest undergrowth.
12. Návojná, Vrchy hill (6874c3), 49°07′03″N 18°02′13″E, 550–600 m a.s.l.; spruce and beech forest undergrowth, glades.
13. Brumov, Uhličky (6874c3), 49°06′16″N 18°01′57″E, 390–400 m a.s.l.; mesic meadows.
14. Nedašov, village (6874c4), 49°06′33″N 18°04′04″E, 410–430 m a.s.l.; ruderal and brook-side vegetation, meadows and pastures.
15. Nedašov, Jalovcová stráň NR (6874d3), 49°06′06″N 18°05′35″E, 580–650 m a.s.l.; dry pastures, meadows, spring fens, forest margins.
16. Nedašov, Kaňoury NM (6874d3), 49°06′52″N 18°06′21″E, 610–660 m a.s.l.; dry to mesic meadows, solitary trees and shrubs, forest margins.
17. Nedašov, Kaňúr hill and Hrušová dolina valley (6874d3), 49°06′23″N 18°06′35″E, 630–750 m a.s.l.; meadows, pastures, meadow and forest spring fens.
18. Luhačovice, Luhačovická dolina valley (6972a2), 49°05′18″N 17°44′26″E, 230–300 m a.s.l.; forest margins, meadows.
19. Petrůvka, Kladenka brook valley (6972b2), 49°05′50″N 17°48′53″E, 390 m a.s.l.; alder carr.
20. Bojkovice, town (6972d2), 49°02′38″N 17°48′22″E, 330–360 m a.s.l.; ruderal vegetation.
21. Rokytnice, Bukovina hill (6973a4), 49°03′31″N 17°53′31″E, 440–450 m; beech forest, clearings (locality cited as Slavičín-Hrádek na Vlárské dráze in Lauterer 1999).
22. Popov, Havránkův potok brook valley (6973b2), 49°05′29″N 17°57′50″E, 360–400 m a.s.l.; forest margins, meadows, pastures, streamside vegetation.
23. Štítná nad Vláří (6973b4); precise location of collecting sites unknown.
24. Brumov, Kloboucká street (6974a1), 49°05′54″N 18°01′47″E, 350–400 m a.s.l.; dry to mesic sheep pastures.
25. Bylnice, Na Stráži (6974a1), 49°04′40″N 18°00′30″E, 350–390 m a.s.l.; dry grassland, shrubs.
26. Bylnice, Bylničky – S slopes of Tarandové hill towards Bylnička brook (6974a2/a4), 49°04′33″N 18°02′10″E, 360–530 m a.s.l.; streamside vegetation, pastures, dry to mesic meadows, birch stands (locality cited as Bylnice, Na Tatrách in Lauterer 1998 and 1999).
27. Bylnice, railway station environs (6974a3), 49°04′05″N 18°00′53″E, 300 m a.s.l.; dry to wet ruderal vegetation, woody streamside vegetation along the Vlára river.

28. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (6974a3), 49°03′33″N 18°00′34″E, 380–425 m a.s.l.; mesic to wet meadows, spring fens, forest margins.
29. Nedašov, Na Salaši (6974b1), 49°05′41″N 18°06′10″E, 500–600 m a.s.l.; tall-sedge bed in beech forest, streamside vegetation.
30. Nedašov, Pod Cigánem NM (6974b1), 49°05′43″N 18°05′26″E, 575–605 m a.s.l.; mesic to wet meadows and pastures, spring fen.
31. Svatý Štěpán, Nadříčí (6974c1), 49°02′29″N 18°02′14″E, 300–330 m a.s.l.; broad-leaved forest, vegetation along forest brook, river shore.
32. Sidonie, Vlárský průsmyk pass (6974c2), 49°01′53″N 18°03′06″E, 270 m a.s.l.; river shore vegetation [on the Czech-Slovak state border, near Horné Srnie-Rybníky].
33. Hluk, Kobylí hlava NM (7071a3), 48°57′22″N 17°31′31″E, 330–340 m a.s.l.; dry grassland, forest glade, forest margins.
34. Hluk, Babí hora NM (7071a4), 48°57′23″N 17°33′47″E, 320–330 m a.s.l.; fragment of dry grassland, shrubs.

34a. Nivnice (7071b2/b4); precise location of collecting site unknown.

35. Blatnička, Milejovské louky meadows (7071c1), 48°56′45″N 17°30′44″E, 270–295 m a.s.l.; dry meadows, reed, shrubs.
36. Blatnička, Jasenová hill (7071c2), 48°56′16″N 17°33′02″E, 270–400 m a.s.l.; oak-hornbeam forest, meadows.
37. Boršice u Blatnice, Boršický potok brook valley (7071c2), 48°56′46″N 17°34′04″E, 260–280 m a.s.l.; ruderal and streamside vegetation, dry grassland, forest undergrowth.
38. Louka, Hloží NR (7071c3), 48°54′39″N 17°30′26″E, 270–300 m a.s.l.; dry grassland, shrubs.
39. Horní Němčí, village (7071d1), 48°55′42″N 17°37′40″E, 330–350 m a.s.l.; ruderal and ornamental vegetation.
40. Horní Němčí, Hornoněmčanský háj forest (7071d1), 48°55′02″N 17°37′43″E, 380–400 m a.s.l.; oak-hornbeam forest.
41. Korytná, Březí (7071d2), 48°55′32″N 17°39′48″E, 400–450 m a.s.l.; pastures, solitary trees and shrubs, forest margins.
42. Suchov, Kazivec brook valley (7071d3), 48°54′14″N 17°36′57″E, 480–550 m a.s.l.; mesic to wet meadows, streamside vegetation.
43. Horní Němčí, Drahy NR (7071d4), 48°55′20″N 17°38′13″E, 380–510 m a.s.l.; dry grassland, meadows and pastures, spring fens, solitary trees and shrubs, orchards.
44. Horní Němčí, Vinohrádky (7071d4), 48°55′19″N 17°38′35″E, 430–500 m a.s.l.; intensively used cattle pasture.
45. Horní Němčí, Horní kopec hill (7071d4), 48°54′60″N 17°39′12″E, 550–590 m a.s.l.; forest road margin, broad-leaved forest.
46. Horní Němčí, Lesná hill (7071d4/7171b2), 48°53′54″N 17°38′53″E, 550–690 m a.s.l.; meadows and pastures, solitary shrubs and trees, forest margins.
47. Bánov, Skalky hill (7072a2), 48°58′52″N 17°44′34″E, 350–380 m a.s.l.; ruderal vegetation, fields, dry grassland, shrubs.
48. Komňa, Nový Dvůr (7072b2), 48°58′43″N 17°48′15″E, 480–500 m a.s.l.; forest margins, meadow, roadside vegetation.
49. Komňa, Lom Rasová NM (7072b2), 48°58′34″N 17°48′42″E, 540–570 m a.s.l.; abandoned sandstone quarry with pond, dry grassland, spring fen, solitary trees and shrubs.
50. Vápenice, Trstná brook valley (7072b4), 48°58′30″N 17°49′37″E, 430–500 m a.s.l.; spruce forest monoculture, forest glades, streamside vegetation.
51. Korytná, village (7072c1), 48°56′27″N 17°39′54″E, 290–300 m a.s.l.; ornamental gardens.
52. Korytná, Lubná pond environs (7072c1), 48°56′48″N 17°40′51″E, 320 m a.s.l.; shore vegetation.
53. Březová, Kalábová NM (7072c2), 48°56′22″N 17°44′38″E, 500–550 m a.s.l.; spring fen (including the material cited by Lang (1945) from the site no. III: Suchá Loz – Studený vrch hill; based on Lang's indication that his collecting sites were small spring fens situated on the south-eastern slope of the Studený vrch hill, he collected probably close to the current Kalábová NM).

54. Strání, Hrnčárky NM and Žabka reservoir surroundings (7072c3), 48°54′32″N 17°40′34″E, 440–500 m a.s.l.; dry to mesic meadows, spring fen, disturbed wetland vegetation on resevoir shores, solitary trees and shrubs, forest margins, forest road.
55. Strání, Obecnice hill (7072c3), 48°54′51″N 17°40′55″E, 530–550 m a.s.l.; dry, intensively used sheep pasture, shrubs.
56. Strání, village (7072c3), 48°54′13″N 17°42′06″E, 400 m a.s.l.; ornamental vegetation.
57. Strání, Dúbrava hill (7072c4), 48°55′05″N, 17°43′29″E, 540–550 m a.s.l.; forest glade.
58. Lopeník, U Zvonice NM (7072d1), 48°56′25″N 17°47′12″E, 630–670 m a.s.l.; mesic to wet meadows, spring fens, solitary trees and shrubs, small woods.
59. Lopeník, Lopenické sedlo (7072d2), 48°56′13″N 17°48′04″E, 700–720 m a.s.l.; cattle pasture, spring fen, solitary trees and shrubs.
60. Lopeník, Mikulčin vrch hill (7072d2), 48°56′40″N 17°48′26″E, 700–790 m a.s.l.; beech forest, spruce monoculture, forest glade.
61. Žítková, Hutě NR (7073a2), 48°59′24″N 17°54′21″E, 460 m a.s.l.; meadow spring area, mesic meadow.
62. Vápenice, Krátkovský potok brook valley (7073a3), 48°58′04″N 17°50′42″E, 550 m a.s.l.; streamside vegetation.
63. Starý Hrozenkov, Skalka (= Hrozenkovský lom) quarry (7073a3), 48°58′22″N 17°52′12″E, 550–580 m a.s.l.; dry grassland, forest margins, dry to wet ruderal vegetation in abandoned basalt quarry.
64. Starý Hrozenkov, Hrozenkovské terasy (7073a3), 48°58′15″N 17°51′51″E, 470–550 m a.s.l.; apple orchard grazed by cattle, shrubs, disturbed spring fens.
65. Vyškovec, Vyškovecké Bošačky (7073c1), 48°55′52″N 17°49′55″E, 550 m a.s.l.; dry cattle pasture, mesic meadows, orchard.
66. Vyškovec, Pod Hribovňou NM (7073c1), 48°55′58″N 17°50′43″E, 550–640 m a.s.l.; mesic meadows and pastures, shrubs, small woods.
67. Vyškovec, Ve Vlčí NR (7073c1), 48°55′46″N 17°51′25″E, 600–700 m a.s.l.; dry to mesic meadows, forest margins, small woods.
68. Radějov, Žerotín NM (7169b4), 48°51′44″N 17°19′34″E, 290–320 m a.s.l.; dry grassland, open thermophilous oak forest, solitary trees and shrubs, spring fen, fields.
69. Kněždub, village (7170a2), 48°53′14″N 17°23′59″E, 190 m a.s.l.; ornamental vegetation.
70. Radějov, village (7170a3), 48°51′44″N 17°20′21″E, 236 m a.s.l.; orchards, gardens, ornamental vegetation.
71. Radějov, Holý vrch hill (7170a3), 48°51′03″N 17°20′01″E, 280–380 m a.s.l.; ruderal grassland, forest margins.
72. Kněždub, Kněždubský háj forest (7170a4), 48°52′14″N 17°24′31″E, 270–350 m a.s.l.; oak and hornbeam forest, forest margins.
73. Radějov, Lučina (7170a4), 48°51′46″N 17°23′45″E, 300 m a.s.l.; floodplain woodland, shrubs and trees, nitrophilous vegetation along brook and around pond.
74. Kněždub, Čertoryje NNR – Járkovec brook valley (7170a4/c2), 48°51′18″N 17°24′44″E, 320–440 m a.s.l.; dry to wet meadows, spring fens, solitary trees and shrubs, forest margins.
75. Kněždub, Čertoryje NNR – Radějovka brook valley (7170b3), 48°51′38″N 17°25′43″E, 350–440 m a.s.l.; mesic to wet meadows, solitary trees and shrubs, streamside vegetation.
76. Malá Vrbka, Výzkum hill (7170b3), 48°52′03″N 17°26′27″E, 350–430 m a.s.l., restored grassland on arable land, disused fields, ruderal vegetation, forest margins.
77. Malá Vrbka, village (7170b3), 48°52′09″N 17°27′33″E, 280 m a.s.l.; ornamental gardens.
78. Hrubá Vrbka, football ground (7170b4), 48°52′07″N 17°28′08″E, 260 m a.s.l.; mesic to dry ruderal vegetation, windbreaks.
79. Hrubá Vrbka, village (7170b4), 48°52′13″N 17°28′49″E, 260 m a.s.l.; ornamental vegetation.
80. Radějov, Měsíční údolí valley (7170c1), 48°50′28″N 17°20′54″E, 280–330 m a.s.l.; forest margins, streamside vegetation, meadows.
81. Radějov, Veselka hill (7170c1/c2), 48°50′31″N 17°22′38″E, 300–495 m a.s.l.; oak and hornbeam forest.

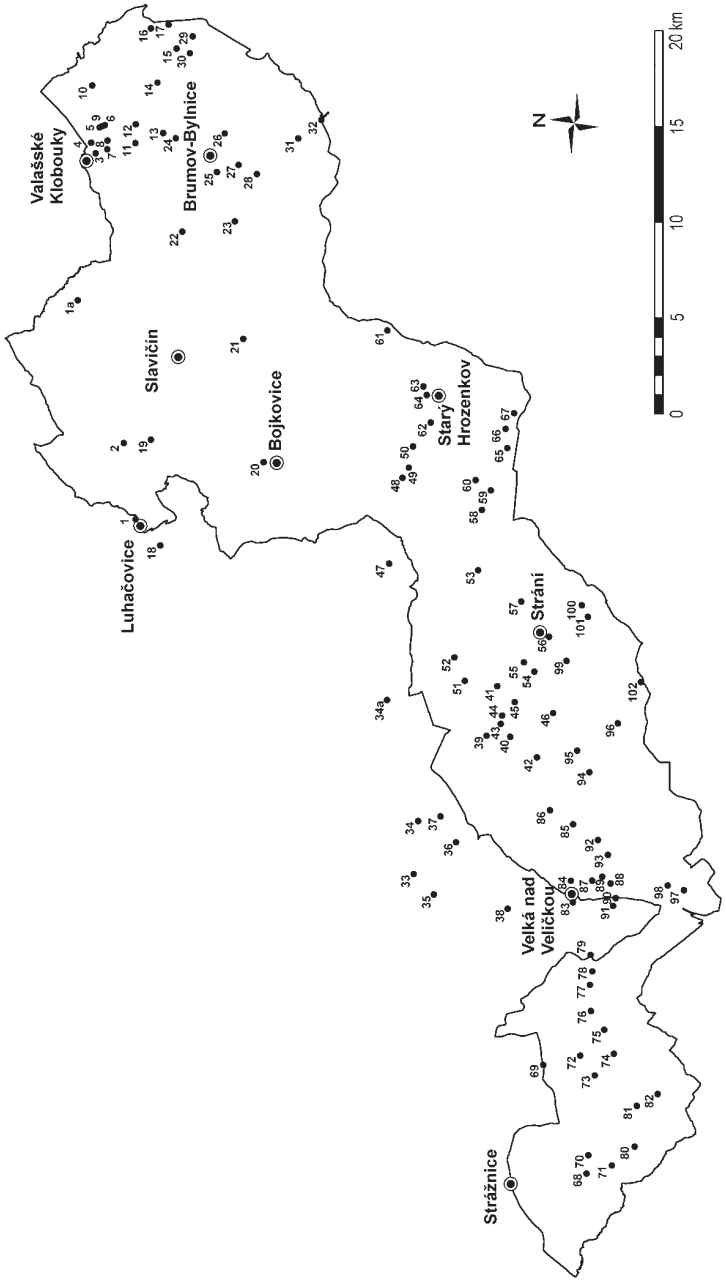

Fig. 1. Simplified map of the Bílé Karpaty PLA with the location of the collecting sites studied.

82. Radějov, Kútky NR (7170c2), 48°49′58″N 17°23′13″E, 350–480 m a.s.l.; mesic meadows, spring fens, forest margins.
83. Velká nad Veličkou, village (7171a1), 48°52′51″N 17°30′58″E, 290–330 m a.s.l.; ruderal vegetation, orchards and ornamental gardens.
84. Velká nad Veličkou, Zahrady pod Hájem NNR (7171a1), 48°52′58″N 17°31′52″E, 300–480 m a.s.l.; dry grassland, meadows, orchards, small fields, solitary trees and shrubs, forest margins.
85. Suchov, Suchovské Mlýny (7171a2), 48°53′03″N 17°34′16″E, 360–380 m a.s.l.; dry sheep pastures, mesic meadows, spring fen, streamside vegetation.
86. Suchov, Trnovský Mlýn (7171a2), 48°53′44″N 17°34′46″E, 440–450 m a.s.l.; dry sheep pastures, mesic meadows.
87. Velká nad Veličkou, towards Javorník (7171a3), 48°52′22″N 17°31′58″E, 330–390 m a.s.l.; meadows.
88. Javorník, village (7171a3), 48°51′51″N 17°31′55″E, 310–320 m a.s.l.; ruderal and ornamental vegetation.
89. Javorník, SW slopes of Háj hill (7171a3), 48°52′06″N 17°32′10″E, 260–300 m a.s.l.; dry grassland, meadows.
90. Javorník, Nad Vápenkou NM (7171a3), 48°51′40″N 17°31′19″E, 360 m a.s.l.; dry grassland, shrubs.
91. Javorník, loampit W of village (proposed as Javorník-hliník NM) (7171a3), 48°51′43″N 17°30′59″E, 350–390 m a.s.l.; abandoned loampit, dry grassland, spring fen, ruderal vegetation, shrubs, railway embankment.
92. Javorník, Jazevčí NNR (7171a4), 48°52′19″N 17°33′42″E, 340–475 m a.s.l.; mesic to dry meadows, spring fens, solitary trees and shrubs, forest margins, small woods.
93. Javorník, Petruchovy Mlýny (7171a4), 48°52′00″N 17°33′07″E, 370 m a.s.l.; dry to mesic meadows, cattle pasture.
94. Nová Lhota, Fojtické Mlýny (7171b1), 48°52′44″N 17°36′32″E, 440–480 m a.s.l.; meadows.
95. Nová Lhota, Vápenky, Porážky NNR (7171b1/b2), 48°53′08″N 17°37′24″E, 550–640 m a.s.l.; meadows, forest fringes.
96. Nová Lhota, Vápenky, Velička brook valley towards Mt Velká Javořina (7171b4), 48°52′04″N 17°38′43″E, 470–900 m a.s.l.; streamside vegetation, beech forest.
97. Javorník, Machová NR (7171c1), 48°49′47″N 17°31′56″E, 380–575 m a.s.l.; meadows, spring fens, solitary trees and shrubs, forest margins.
98. Javorník, Výzkum hill – W and SW slopes (7171c1), 48°50′15″N 17°32′04″E, 460–500 m a.s.l.; meadows, shrubs.
99. Strání, Záhumenice NM (7172a1), 48°53′40″N 17°41′09″E, 450–510 m a.s.l.; mesic to wet meadows, cattle pasture, forest margins, small woods.
100. Strání, Nová hora NR (7172a2), 48°53′23″N 17°43′34″E, 400–490 m a.s.l.; mesic meadows, forest margins.
101. Strání, Květná, village (7172a2), 48°53′11″N 17°43′06″E, 350 m a.s.l.; ornamental gardens.
102. Strání, Javorina NNR (7172a3), 48°51′32″N 17°40′33″E, 830–970 m a.s.l.; submontane meadow, beech and ravine forests, forest glades.

Annotated list of species

All material examined for each species is listed with individual records ordered according to the number of the collecting site. Each record is arranged as follows: name of the collecting site and its number (in parentheses), date(s) of collection(s), number of specimens, and collector(s). For previously published records, only name and number of the collecting site are given; other details of these records can mostly be found in the corresponding papers.

Family PSYLLIDAE

Aphalara avicularis Ossiannilsson, 1981

Published records. Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, Brumovská street (3), 9.ix.1999, 2 ♂♂ 1 ♀, IM. Nedašov, Jalovcová stráň NR (15), 3.vii.1999, 1 ♂, IM. Bylnice, railway station environs (27), 11.ix.1999, 2 ♂♂, IM. Boršice u Blatnice, Boršický potok brook valley (37), 16.viii.1984, 8 ♂♂ 6 ♀♀, PL. Horní Němčí, Vinohrádky (44), 13.viii.2001, 1 ♂, IM. Bánov, Skalky hill (47), 21.viii.1984, many ♂♂ ♀♀, PL. Komňa, Nový Dvůr (48), 21.viii.1984, 4 ♂♂ 3 ♀♀, PL. Lopeník, Lopenické sedlo (59), 27.vi.2004, 1 ♀; 25.ix.2004, 3 ♂♂ 2 ♀♀; 21.v.2005, 1 ♀; all IM. Radějov, Žerotín NM (68), 11.vii.1998, many ♂♂ ♀♀, IM. Malá Vrbka, Výzkum hill (76), 17.iv.2000, 8 ♂♂ 3 ♀♀; 27.vii.2000, 2 ♂♂ 2 ♀♀; 2.v.2001, 2 ♂♂ 3 ♀♀; 22.vi.2001, 1 ♂; 20.ix.2001, 1 ♀; all IM & PK. Hrubá Vrbka, football ground (78), 20.ix.2001, 4 ♀♀, IM. Velká nad Veličkou, village (83), 22.x.2000, 1 ♀, IM. Javorník, Petruchovy Mlýny (93), 23.ix.2001, 1 ♀; 7.ix.2002, 1 ♂; both IM. Javorník, Machová NR (97), 9.vii.1998, 1 ♂ 2 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread throughout the area and locally common in trampled places, along roads and paths, in fields, and dry ruderal sites. **General distribution:** European. **Host plants:** *Polygonum aviculare* agg. **Red List status:** –.

Aphalara calthae (Linnaeus, 1761) (VU) (Fig. 2)

Material examined. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 1 ♂ 1 ♀, IM. Valašské Klobouky, Bílé potoky NR (11), 19.v.1999, 1 ♀, IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 1 ♂; 3.vii.1999, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Associated with spring fens at relatively cool sites in the north-eastern part of the area, rare. **General distribution:** Palaearctic. **Host plant:** *Caltha palustris*. **Red List status:** Vulnerable.

Comments. *Aphalara calthae* is currently a quite rare species in the Czech Republic that has been recorded from wet meadows e.g. in northern and central Moravia and the Jizerské hory and Krkonoše Mts. in northern Bohemia (Lauterer 1963, 1981, 2001).

Aphalara exilis (Weber et Mohr, 1804)

Material examined. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 1 ♀; 11.ix.1999, 1 ♂ 5 ♀♀; all IM. Valašské Klobouky, Brumovka brook valley (7), 9.ix.1999, 1 ♀, IM. Valašské Klobouky, Na Nivách (8), 9.ix.1999, 1 ♀, IM. Nedašov, Jalovcová stráň NR (15), 16.viii.2006, 2 ♀♀, PK. Nedašov, Pod Cigánem NM (30), 1.ix.2004, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Restricted to wet meadows and pastures in the north-eastern part of the area, uncommon. **General distribution:** West Palaearctic. **Host plant:** *Rumex acetosa*. **Red List status:** –.

Aphalara freji Burckhardt et Lauterer, 1997

= *Aphalara polygoni* auct. *nec* Foerster, 1848

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Valašské Klobouky, U Rybníků (4), 10.ix.1999, 2 ♀♀, IM. Valašské Klobouky, Královec hill (9), 13.ix.1999, 1 ♂ 1 ♀, IM. Valašské Klobouky, Bílé potoky NR (11), 9.ix.1999, ?1 ♀, IM. Bylnice, railway station environs (27), 11.ix.1999, 1 ♂ 3 ♀♀, IM. Sidonie, Vlárský průsmyk pass (32), 12.ix.1999, 7 ♂♂ 9 ♀♀, IM. Horní Němčí, Drahy NR (43), 21.vii.2002, 1 ♂, IM. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, ?2 ♀♀, IM. Malá Vrbka, Výzkum hill (76), 28.vii.2001, ?3 ♀♀, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 13.vii.1998, 1 ♂ 3 ♀♀, IM. Strání, Javorina NNR (102), 29.x.2011, 2 ♂♂ 4 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Scattered throughout the area on shores of standing and running water, in ditches along roads, and in wet ruderal sites; overwintering specimens were found also at the highest elevations on the top of Mt Velká Javořina. Identification of some females is uncertain. **General distribution:** West Palaearctic. **Host plants:** *Persicaria* spp. (*P. amphibia*, *P. hydropiper*, *P. lapathifolia*, *P. maculosa*, and *P. tomentosa*). **Red List status:** –.

Aphalara maculipennis Löw, 1886

Published records. Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, U Rybníků (4), 10.ix.1999, 1 ♂, IM. Malá Vrbka, Výzkum hill (76), 2.v.2001, 1 ♀; 20.ix.2001, 1 ♂; all IM & PK. Velká nad Veličkou, village (83), 28.iv.2000, 1 ♂ 2 ♀♀, IM. Javorník, Jazevčí NNR (92), 6.v.2000, 1 ♀, IM. Strání, Javorina NNR (102), 29.x.2011, 4 ♂♂ 2 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Probably widespread throughout the area but uncommon. On shores of standing and running water, in ditches along roads, and in wet fields; overwintering specimens were found also at the highest elevations on the top of Mt Velká Javořina. **General distribution:** Palaearctic. **Host plants:** *Persicaria amphibia*, *P. lapathifolia*, and *P. tomentosa*. **Red List status:** –.

Aphalara polygoni Foerster, 1848

= *Aphalara rumicicola* Klimaszewski, 1966

Material examined. Valašské Klobouky, Javorůvky NR (5), 11.ix.1999, ?2 ♀♀, IM. Nedašov, Pod Cigánem NM (30), 28.vii.2005, 1 ♂, IM. Vápenice, Trstná brook valley (50), 6.vii.2001, 4 ♂♂ 11 ♀♀, IM & PK. Lopeník, Mikulčin vrch hill (60), 24.vii.2005, 1 ♂ 2 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Recorded only for the central and north-eastern parts of the area, rare. In forest glades and wet meadows, usually on

acidic substrates. Identification of some females is uncertain. **General distribution:** European. **Host plants:** *Rumex acetosa*, *R. acetosella*, and *R. scutatus*. **Red List status:** –.

Comments. Partly because of its critical taxonomy (see OSSIANNILSSON & JANNSON 1981, OSSIANNILSSON 1992, BURCKHARDT & LAUTERER 1997a), *Aphalara polygoni* has been a poorly documented species in the Czech Republic. The only previously published and confirmed finding for the country is from the Hrubý Jeseník Mts. (LAUTERER 1993). Based on an unpublished material from the collections of the Moravian Museum, Brno, the species is, however, quite widespread in the country, although it probably occurs only locally in regions with acidic bedrock.

Aphalara purpurascens (Hartig, 1841)

= *Aphalara crispicola* Ossiannilsson, 1987

Material examined. Valašské Klobouky, Dobšená NM (6), 2.vii.1999, 3 ♂♂ 1 ♀, IM. Valašské Klobouky, Bílé potoky NR (11), 16.vi.2006, 2 ♂♂ 4 ♀♀, IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 2 ♂♂ 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Recorded only for the north-eastern part of the area, rare. Associated with *Rumex obtusifolius* on forest roads and in wet pastures. **General distribution:** European. **Host plants:** *Rumex aquaticus*, *R. conglomeratus*, *R. crispus*, *R. longifolius*, and *R. obtusifolius*. **Red List status:** –.

Baeopelma foersteri (Flor, 1861)

Published records. LAUTERER (1998): Luhačovice, Luhačovická dolina valley (18); Popov, Havránkův potok brook valley (22); Bylnice, Bylničky (26); Komňa, Nový Dvůr (48); Radějov, Kútky NR (82). MALENOVSKÝ (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, Brumovka brook valley (7), 30.vi.1999, 1 ♀, MH. Valašské Klobouky, Bílé potoky NR (11), 16.vi.2006, 4 ♂♂ 1 ♀; 11.vii.2006, 1 ♂ 1 ♀; all IM. Bylnice, railway station environs (27), 1.vii.1999, 1 ♂ 1 ♀, MH & PK. Blatnička, Milejovské louky meadows (35), 11.vii.2009, 8 ♂♂ 8 ♀♀; 16.viii.2009, 1 ♂; all PB. Horní Němčí, Drahy NR (43), 30.vi.2001, 4 ♂♂ 7 ♀♀, IM; 21.ix.2001, 1 ♂, PK; 23.v.2002, 1 ♂, IM. Korytná, Lubná pond environs (52), 5.vii.2001, 2 ♀♀, IM. Březová, Kalábová NM (53), 4.vii.2001, 2 ♂♂ 3 ♀♀, IM. Strání, Hrnčárky NM and Žabka reservoir surroundings (54), 10.vii.1998, 4 ♂♂ 2 ♀♀, IM. Vápenice, Krátkovský potok brook valley (62), 6.vii.2001, 1 ♂, IM & PK. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, 2 ♂♂ 2 ♀♀, IM. Radějov, Lučina (73), 14.vii.1998, 2 ♂♂ 1 ♀; 17.vi.2000, 1 ♀; all IM. Hrubá Vrbka, football ground (78), 19.vi.2000, 2 ♀♀, IM & PK. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 13.vii.1998, 2 ♀♀, IM. Nová Lhota, Vápenky, Velička brook valley towards Mt Velká Javořina (96), 12.vii.1998, 7 ♂♂ 4 ♀♀, IM. Javorník, Machová NR (97), 9.vii.1998, 2 ♂♂ 3 ♀♀, IM. Strání, Záhumenice NM (99), 2.vii.2001, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common throughout the area in the vicinity of running or standing water and in wet grassland and spring fens. **General distribution:** Palaearctic. **Host plants:** *Alnus glutinosa* and *A. incana*. **Red List status:** –.

Cacopsylla abdominalis (Meyer-Dür, 1871) (EN) (Fig. 3)

Material examined. Bylnice, railway station environs (27), 11.ix.1999, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Collected only from the streamside vegetation of the Vlára river in the north-eastern part of the area. **General distribution:** Europe (except Scandinavia), Caucasus, Central Asia, Mongolia. **Host plants:** *Salix* spp. (*S. alba*, *S. aurita*, *S. caprea*, *S. elaeagnos*, *S. purpurea*, and *S. viminalis*). **Red List status:** Endangered.

Comments. *Cacopsylla abdominalis* is a sporadic species in the Czech Republic that was collected only at three sites in central and south-eastern Moravia in the past 50 years (Lauterer 1999). Usually, it is associated with *Salix purpurea* and *S. viminalis* but some other willow species have also been reported as hosts in literature (Lauterer & Burckhardt 1997, Lauterer 1999).

Cacopsylla affinis (Löw, 1880)

Published records. Lauterer (1982): Strání, Dúbrava hill (57); Kněždub, Čertoryje NNR (74, 75); Javorník, SW slopes of Háj hill (89). Lauterer (1999): Horní Němčí, Hornoněmčanský háj forest (40); Velká nad Veličkou, towards Javorník (87); Javorník, Výzkum hill (98). Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).

Additional material examined. Nedašov, Kaňoury NM (16), 17.vi.2006, 2 ♂♂, IM. Brumov, Kloboucká street (24), 30.vi.2004, 1 ♂, IM. Bylnice, Na Stráži (25), 16.vi.2006, 2 ♂♂, IM. Louka, Hloží NR (38), 24.iv.1999, 1 ♂ 1 ♀, MH. Horní Němčí, Drahy NR (43), 23.v.2002, 12 ♂♂, IM. Lopeník, U Zvonice NM (58), 25.ix.2004, 1 ♂, IM. Kněždub, Čertoryje NNR, Járkovec brook valley (74), 2.vi.2008, 1 ♂; 7.vi.2010, 1 ♂ 1 ♀; all IM. Velká nad Veličkou, village (83), 28.iv.2000, 3 ♂♂, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 18.iv.2000, 3 ♂♂, IM. Suchov, Suchovské Mlýny (85), 26.v.2005, 11 ♂♂ 10 ♀♀, IM. Javorník, Petruchovy Mlýny (93), 24.v.2002, 15 ♂♂ 12 ♀♀; 26.v.2005, 2 ♂♂; all IM. Strání, Záhumenice NM (99), 23.v.2002, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and quite common on solitary hawthorn shrubs scattered in grassland and at sunny margins of scrub and small woods throughout the area. **General distribution:** European. **Host plants:** *Crataegus* spp. **Red List status:** –.

Cacopsylla albipes (Flor, 1861) (Fig. 4)

Material examined. Valašské Klobouky, Bílé potoky NR (11), 11.vii.2006, 1 ♂ 4 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Known only from one site in the north-eastern part of the area; collected at a sunny forest margin. **General distribution:** Europe (Austria, France, Germany, Great Britain, Italian mainland, Poland, Slovakia, Switzerland, and Ukraine), Caucasus. **Host plants:** *Sorbus* spp. (e.g. *S. aria* and *S. torminalis*). **Red List status:** Not evaluated.

Comments. *Cacopsylla albipes* is recorded here for the Czech Republic for the first time. In central Europe, it is generally a rare species confined to open woodland, often in hilly

situations or mountains (Lauterer 1965, Conci *et al.* 1993). In western Slovakia, *C. albipes* was recorded on *Sorbus torminalis* (Lauterer 1965) which is a probable host plant also in the Bílé Karpaty PLA.

Cacopsylla ambigua (Foerster, 1848)

Published records. Lauterer (1999): Strání, Dúbrava hill (57). Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, Brumovská street (3), 19.v.1999, 4 ♂♂ 6 ♀♀, IM. Valašské Klobouky, U Rybníků (4), 22.v.1999, 2 ♀♀, IM. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 2 ♂♂ 3 ♀♀, IM. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 1 ♂ 1 ♀, IM. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 3 ♂♂; 17.vi.2006, 1 ♂ 1 ♀; all IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 3 ♂♂ 7 ♀♀, IM. Bylnice, railway station environs (27), 1.vii.1999, 1 ♀, MH & PK. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 21.v.1999, 2 ♂♂ 7 ♀♀, IM. Korytná, Březí (41), 5.vii.2001, 1 ♂ 2 ♀♀, IM. Horní Němčí, Drahy NR (43), 30.vi.2001, 4 ♀♀, IM. Horní Němčí, Lesná hill (46), 15.v.1998, 2 ♂♂ 5 ♀♀, IM. Komňa, Lom Rasová NM (49), 5.vii.2001, 1 ♀, IM. Vápenice, Trstná brook valley (50), 6.vii.2001, 1 ♀, IM & PK. Strání, Hrnčárky NM and Žabka reservoir surroundings (54), 16.v.1998, 2 ♂♂ 2 ♀♀; 10.vii.1998, 5 ♂♂ 5 ♀♀; all IM. Starý Hrozenkov, Skalka quarry (63), 2.vii.2007, 1 ♂ 1 ♀, IM. Vyškovec, Ve Vlčí NR (67), 22.v.2005, 5 ♂♂ 1 ♀, IM. Radějov, Lučina (73), 22.vi.2001, 2 ♀♀, IM & PK. Suchov, Suchovské Mlýny (85), 6.v.2000, 1 ♂; 29.vi.2001, 2 ♂♂ 3 ♀♀; all IM. Javorník, loampit W of village (91), 24.v.2002, 3 ♂♂ 1 ♀, IM. Javorník, Jazevčí NNR (92), 6.v.2000, 6 ♂♂ 3 ♀♀; 19.vi.2000, 1 ♂ 1 ♀; all IM. Javorník, Machová NR (97), 14.v.1998, many ♂♂ ♀♀; 9.vii.1998, 1 ♀; all IM. Strání, Záhumenice NM (99), 2.vii.2001, 2 ♂♂ 12 ♀♀, IM; 23.v.2002, 1 ♂ 5 ♀♀, PK. Strání, Nová hora NR (100), 16.v.1998, 1 ♂ 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common throughout the area. Usually associated with *Salix caprea* and *S. cinerea* in wet meadows and spring fens, in the vicinity of pools and ponds and in pioneer stands such as forest glades and abandoned quarries. **General distribution:** Palaearctic. **Host plants:** *Salix* spp. (*S. aurita*, *S. caprea*, *S. cinerea*, *S. elaeagnos*, *S. glauca*, *S. lapponum*, *S. myrsinifolia*, *S. phylicifolia*, and *S. viminalis*). **Red List status:** –.

Cacopsylla brunneipennis (Edwards, 1896)

Published records. Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, Brumovská street (3), 19.v.1999, 2 ♂♂ 10 ♀♀, IM. Valašské Klobouky, U Rybníků (4), 22.v.1999, 1 ♂ 2 ♀♀; 10.ix.1999, 5 ♂♂ 1 ♀; all IM. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 3 ♂♂ 19 ♀♀; 2.vii.1999, 1 ♂; 11.ix.1999, 4 ♂♂ 4 ♀♀; all IM. Valašské Klobouky, Dobšená NM (6), 22.v.1999, 2 ♂♂ 7 ♀♀; 2.vii.1999, 2 ♂♂; all IM. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 5 ♀♀, IM; 30.vi.1999, 1 ♀, MH. Valašské Klobouky, Na Nivách (8), 9.ix.1999, 1 ♀, IM. Poteč, Ploščiny NR (10), 4.vii.1999, 2 ♀♀, IM; 13.ix.1999, 3 ♂♂ 1 ♀, IM; 17.viii.2006, 2 ♀♀, PK. Valašské Klobouky, Bílé potoky NR (11), 19.v.1999, 1 ♂ 6 ♀♀; 9.ix.1999, 5 ♀♀; 16.vi.2006, 2 ♀♀; 11.vii.2006, 4 ♀♀; all IM. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 8 ♀♀; 3.vii.1999, 1 ♀; 5.x.2004, 1 ♂; 17.vi.2006, 1 ♀; 12.vii.2006, 1 ♀; all IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 1 ♂ 2 ♀♀, IM. Bylnice, railway station environs (27), 21.v.1999, 2 ♀♀, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 21.v.1999, 2 ♂♂ 6 ♀♀, IM. Nedašov, Pod Cigánem NM (30), 28.v.2005, 3 ♂♂ 3 ♀♀, IM. Suchov, Kazivec brook valley (42), 15.v.1998, 6 ♀♀, IM. Horní Němčí, Drahy NR (43), 15.v.1998, several ♂♂ ♀♀, IM. Horní Němčí, Lesná hill (46), 15.v.1998, 1 ♂ 10 ♀♀, IM. Komňa, Lom Rasová NM (49), 5.vii.2001, 1 ♀, IM. Strání, Hrnčárky NM and Žabka reservoir surroundings (54), 16.v.1998,

2 ♂♂ 2 ♀♀; 10.vii.1998, 1 ♂ 3 ♀♀; all IM. Strání, Obecnice hill (55), 23.v.2002, 1 ♂ 1 ♀, IM & PK. Lopeník, U Zvonice NM (58), 25.ix.2004, 1 ♂ 6 ♀♀, IM. Lopeník, Lopenické sedlo (59), 21.v.2005, 2 ♀♀, IM. Starý Hrozenkov, Skalka quarry (63), 2.vii.2007, 3 ♀♀; 8.viii.2007, 13 ♀♀; all IM. Vyškovec, Vyškovecké Bošačky (65), 21.v.2005, 1 ♀, IM. Vyškovec, Pod Hribovňou NM (66), 21.v.2005, 2 ♀♀, IM. Vyškovec, Ve Vlčí NR (67), 22.v.2005, 1 ♀, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 14.v.1998, 1 ♂, IM; 19.vi.2000, 1 ♀, PK. Suchov, Suchovské Mlýny (85), 6.v.2000, 2 ♂♂ many ♀♀, IM. Javorník, loampit W of village (91), 24.v.2002, 1 ♀, IM. Javorník, Jazevčí NNR (92), 6.v.2000, 2 ♂♂ 23 ♀♀, IM. Nová Lhota, Vápenky, Porážky NNR (95), 15.vii.1998, 5 ♂♂ 1 ♀; 9.ix.1998, 1 ♂; 28.x.2011, 1 ♂; all IM. Javorník, Machová NR (97), 14.v.1998, many ♂♂ ♀♀; 8.v.2000, 3 ♂♂ 11 ♀♀; all IM. Strání, Záhumenice NM (99), 24.v.2001, 1 ♀, IM; 23.v.2002, 1 ♂ 2 ♀♀, PK. Strání, Nová hora NR (100), 16.v.1998, 1 ♂ 1 ♀, IM. Strání, Javorina NNR (102), 29.x.2011, 4 ♂♂ 4 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common on willows (mostly *Salix caprea* and *S. cinerea*) in various kinds of habitats throughout the area, from low to the highest elevations. **General distribution:** Eurosiberian. **Host plants:** *Salix* spp. (*S. aurita*, *S. caprea*, *S. cinerea*, *S. glauca*, *S. lanata*, *S. lapponum*, *S. myrsinifolia*, *S. pentandra*, *S. phylicifolia*, *S. viminalis*, and *S. triandra* × *viminalis*). **Red List status:** –.

Cacopsylla crataegi (Schrank, 1801)

Published records. Lauterer (1999): Bylnice, Bylničky (26); Radějov, village (70); Kněždub, Čertoryje NNR (74, 75); Javorník, SW slopes of Háj hill (89). Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, Bílé potoky NR (11), 30.vi.1999, 1 ♂, PK. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 1 ♀, IM. Bylnice, Na Stráži (25), 11.vii.2006, 2 ♂♂ 3 ♀♀, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 21.v.1999, 1 ♀, IM. Hluk, Kobylí hlava NM (33), 24.viii.2002, 1 ♀, IM. Louka, Hloží NR (38), 24.iv.1999, 1 ♀, MH. Horní Němčí, village (39), 15.v.1998, 1 ♂, IM. Horní Němčí, Drahy NR (43), 15.v.1998, 1 ♀, IM; 30.vi.1998, 1 ♂ 2 ♀♀, IM & PK. Strání, Obecnice hill (55), 2.vii.2001, 2 ♂♂, IM & PK. Lopeník, Mikulčin vrch hill (60), 25.ix.2004, 1 ♂; 24.vii.2005, 1 ♂; both IM. Starý Hrozenkov, Skalka quarry (63), 2.vii.2007, 1 ♀, IM. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, 2 ♀♀, IM. Kněždub, Kněždubský háj forest (72), 28.vii.2000, 1 ♀, IM & PK. Radějov, Měsíční údolí valley (80), 8.ix.1998, 1 ♂, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 14.v.1998, 3 ♂♂ 2 ♀♀; 13.vii.1998, 2 ♂♂ 7 ♀♀; 18.iv.2000, 8 ♂♂ 4 ♀♀; all IM; 19.vi.2000, 3 ♀♀, PK; 27.vii.2000, 1 ♂ 2 ♀♀, IM. Suchov, Suchovské Mlýny (85), 23.vi.2004, 2 ♂♂ 1 ♀, IM. Suchov, Trnovský Mlýn (86), 23.vi.2004, 2 ♂♂; 27.vii.2005, 1 ♀; all IM. Javorník, Nad Vápenkou NM (90), 9.vii.1998, 1 ♂ 1 ♀, IM. Javorník, Jazevčí NNR (92), 6.v.2000, 1 ♂ 2 ♀♀; 19.vi.2000, 2 ♀♀; all IM. Javorník, Petruchovy Mlýny (93), 24.v.2002, 1 ♀; 23.vi.2004, 1 ♀; 26.v.2005, 1 ♂; all IM. Strání, Záhumenice NM (99), 2.vii.2001, 1 ♂ 2 ♀♀, IM & PK. Strání, Javorina NNR (102), 29.x.2011, 1 ♂ 4 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common on solitary hawthorn shrubs scattered in grassland, along hedgerows and forest margins throughout the area. Overwintering specimens were found also at the highest elevations on the top of Mt Velká Javořina (ca. 950 m). **General distribution:** Palaearctic. **Host plants:** *Crataegus* spp. **Red List status:** –.

Cacopsylla elegantula (Zetterstedt, 1840)

Material examined. Valašské Klobouky, U Rybníků (4), 10.ix.1999, 2 ♂♂ 2 ♀♀, IM. Valašské Klobouky, Javorůvky NR (5), 11.ix.1999, 1 ♂ 3 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Found only at two small adjacent sites in the north-eastern part of the area: on *Salix caprea* in a spring fen and as overwintering specimens on *Picea abies* at a forest margin: rare. **General distribution:** Palaearctic. **Host plants:** *Salix* spp. (*S. aurita*, *S. cinerea*, *S. caprea*, *S, myrsinifolia*, and *S. phylicifolia*). **Red List status:** –.

Comments. *Cacopsylla elegantula* is a psychrophilous species, absent from relatively warm areas of the Czech Republic (Lauterer 1999).

Cacopsylla hippophaes (Foerster, 1848)

Published records. Malenovský & Lauterer (2005b): Velká nad Veličkou, village (83).
Additional material examined. Nedašov, village (14), 17.viii.2006, 1 ♂ 2 ♀♀, PK. Malá Vrbka, village (77), 19.vi.2000, 7 ♂♂ 6 ♀♀, IM & PK; 20.ix.2001, 2 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: An introduced species, restricted to ornamental vegetation and gardens in villages: rare (locally abundant). **General distribution:** Palaearctic. **Host plant:** *Hippophaë rhamnoides*. **Red List status:** –.

Cacopsylla mali (Schmidberger, 1836)

Published records. Lauterer (1999): Luhačovice, Luhačovická dolina valley (18); Štítná nad Vláří (23); Bylnice, Bylničky (26); Boršice u Blatnice, Boršický potok brook valley (37); Horní Němčí, Hornoněmčanský háj forest (40); Komňa, Nový Dvůr (48); Strání, Dúbrava hill (57); Radějov, village (70); Radějov, Holý vrch hill (71); Kněždub, Čertoryje NNR (74, 75); Radějov, Kútky NR (82); Velká nad Veličkou, towards Javorník (87); Javorník, SW slopes of Háj hill (89); Nová Lhota, Fojtické Mlýny (94). Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Petrůvka, U Petrůvky NM (2), 6.viii.1999, 5 ♂♂ 8 ♀♀, PK. Valašské Klobouky, Brumovská street (3), 9.ix.1999, 1 ♂; 13.ix.1999, LT, 1 ♂; all IM. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 3 ♂♂ 1 ♀, IM; 30.vi.1999, many ♂♂ ♀♀, MH; 9.ix.1999, many ♂♂ ♀♀, IM. Poteč, Ploščiny NR (10), 13.ix.1999, 1 ♂ 2 ♀♀, IM. Valašské Klobouky, Bílé potoky NR (11), 19.v.1999, 3 ♂♂ 4 ♀♀, IM; 9.ix.1999, many ♂♂ ♀♀, IM; 16.vi.2006, many ♂♂ ♀♀, IM; 11.vii.2006, many ♂♂ ♀♀, IM; 14.viii.2006, many ♂♂ ♀♀, PK. Nedašov, village (14), 3.vii.1999, 12 ♂♂ 13 ♀♀, IM; 17.viii.2006, 2 ♀♀, PK. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 1 ♀; 3.vii.1999, 3 ♂♂ 1 ♀; 10.ix.1999, 5 ♂♂ 11 ♀♀; 12.vii.2006, 2 ♀♀; all IM. Nedašov, Kaňoury NM (16), 17.vi.2006, many ♂♂ ♀♀, IM; 12.vii.2006, 5 ♂♂ 3 ♀♀, IM; 16.viii.2006, 5 ♂♂ 8 ♀♀, PK. Brumov, Kloboucká street (24), 5.x.2004, 1 ♀; 28.v.2005, 4 ♂♂; all IM. Bylnice, Na Stráži (25), 16.vi.2006, many ♂♂ ♀♀, IM; 11.vii.2006, 1 ♂ 5 ♀♀, IM; 18.viii.2006, 2 ♀♀, PK. Bylnice, railway station environs (27), 21.v.1999, 1 ♂ 2 ♀♀, IM; 1.vii.1999, 2 ♂♂ 6 ♀♀, MH & PK; 11.ix.1999, 5 ♂♂ 5 ♀♀, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 21.v.1999, 4 ♂♂ 1 ♀, IM; 1.vii.1999, 1 ♂ 1 ♀, PK; 12.ix.1999, 4 ♂♂ 7 ♀♀, IM. Hluk, Kobylí hlava NM (33), 24.viii.2002, 17 ♂♂ 19 ♀♀, IM. Horní Němčí, village (39), 13.viii.2001, 1 ♂ 1 ♀, PK. Korytná, Březí (41), 5.vii.2001, many ♂♂ ♀♀, IM. Horní Němčí, Drahy NR (43), 30.vi.2001, 1 ♂, IM. Vápenice, Trstná brook valley (50), 6.vii.2001, 3 ♂♂ 2 ♀♀, IM & PK. Strání, Hrnčárky NM and Žabka reservoir surroundings (54), 10.vii.1998, 4 ♂♂ 5 ♀♀, IM. Strání, Obecnice hill (55), 2.vii.2001, 2 ♂♂ 3 ♀♀, IM. Lopeník, U Zvonice NM (58), 25.ix.2004, 3 ♂♂, IM. Starý Hrozenkov, Skalka quarry (63), 2.vii.2007, many ♂♂ ♀♀; 8.viii.2007, 3 ♂♂ 5 ♀♀; all IM. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, many ♂♂ ♀♀; 8.viii.2007, 5 ♂♂ 8 ♀♀; 22.ix.2007, 2 ♂♂ 4 ♀♀; all IM. Vyškovec, Vyškovecké Bošačky (65), 21.v.2005, 1 ♂ 3 ♀♀, IM. Vyškovec, Pod Hribovňou NM (66), 21.v.2005, 1 ♀, IM. Kněždub, Kněždubský háj forest (72), 17.vi.2000, 1 ♂ 3 ♀♀, IM. Radějov, Lučina

(73), 14.vii.1998, many ♂♂ ♀♀; 20.ix.2001, 1 ♂; all IM. Kněždub, Čertoryje NNR (74, 75), 22.v.2000, 1 ♀, PK. Kněždub, Čertoryje NNR, Radějovka brook valley (75), 12.viii.2008, 1 ♀, KD & KF. Malá Vrbka, Výzkum hill (76), 18.vi.2000, 1 ♂, IM & PK. Malá Vrbka, village (77), 28.vii.2001, 1 ♂ 5 ♀♀, IM. Radějov, Veselka hill (81), 11.vii.1998, 1 ♂, IM. Radějov, Kútky NR (82), 11.vii.1998, 1 ♂, IM. Velká nad Veličkou, village (83), 19.vi.2000, 4 ♂♂ 10 ♀♀, PK; 29.vi.2001, 3 ♂♂ 1 ♀, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 14.v.1998, 1 ♂; 13.vii.1998, many ♂♂ ♀♀; all IM; 19.vi.2000, many ♂♂ ♀♀, PK. Suchov, Suchovské Mlýny (85), 29.vi.2001, 5 ♂♂ 6 ♀♀; 1.x.2004, 1 ♂; all IM. Javorník, Jazevčí NNR (92), 19.vi.2000, many ♂♂ ♀♀, IM; 18.viii.2000, many ♂♂ ♀♀, PK; 10.ix.2000, 4 ♀♀, IM. Nová Lhota, Vápenky, Porážky NNR (95), 9.ix.1998, 1 ♂, IM. Javorník, Machová NR (97), 14.v.1998, 1 ♂; 9.vii.1998, 2 ♂♂; 8.v.2000, 4 ♂♂ 7 ♀♀; all IM. Strání, Záhumenice NM (99), 2.vii.2001, many ♂♂ ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common throughout the area in orchards, on solitary apple trees in villages, meadows and pastures, and at forest margins, often dispersed more or less far from the hosts. **General distribution:** Palaearctic, introduced to North America, Australia and South Africa. **Host plants:** *Malus* spp. **Red List status:** –.

Comments. *Cacopsylla mali* is an occasional pest on cultivated apples, particularly in the organic and old deserted orchards (Blattný *et al.* 1943; Lauterer 1999; Ludvíková *et al.* 2010, 2011).

Cacopsylla melanoneura (Foerster, 1848)

Published records. Lauterer (1999): Kněždub, Čertoryje NNR (74, 75); Radějov, Kútky NR (82); Velká nad Veličkou, towards Javorník (87); Javorník, SW slopes of Háj hill (89); Javorník, Výzkum hill (98). Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).

Additional material examined. Valašské Klobouky, Brumovská street (3), 19.v.1999, 2 ♂♂ 4 ♀♀, IM. Valašské Klobouky, U Rybníků (4), 10.ix.1999, 2 ♂♂ 5 ♀♀, IM. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 2 ♂♂ 1 ♀; 2.vii.1999, 1♂ 1♀; 11.ix.1999, 5 ♂♂ 3 ♀♀; all IM. Valašské Klobouky, Dobšená NM (6), 2.vii.1999, 3 ♂♂ 2 ♀♀; 10.ix.1999, 3 ♂♂; all IM. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 7 ♂♂ 2 ♀♀, IM; 30.vi.1999, 1 ♂, MH. Valašské Klobouky, Na Nivách (8), 9.ix.1999, many ♂♂ ♀♀, IM. Poteč, Ploščiny NR (10), 4.vii.1999, 2 ♀♀; 13.ix.1999, 3 ♂♂ 4 ♀♀; 1.vi.2002, 1 ♂; all IM. Valašské Klobouky, Bílé potoky NR (11), 9.ix.1999, 1 ♂ 1 ♀; 16.vi.2006, 1 ♂ 1 ♀, IM; 11.vii.2006, 4 ♂♂ 2 ♀♀; all IM. Brumov, Uhličky (13), 28.v.2005, 1 ♀, IM. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 1 ♂ 1 ♀, IM; 16.viii.2006, 1 ♂, PK. Nedašov, Kaňoury NM (16), 17.vi.2006, 8 ♂♂ 10 ♀♀, IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 1 ♀, IM. Bylnice, Na Stráži (25), 16.vi.2006, 6 ♂♂, IM. Svatý Štěpán, Nadříčí (31), 21.v.1999, 1 ♂, IM. Blatnička, Milejovské louky meadows (35), 24.v.2009, 1 ♂ 1 ♀, PB. Horní Němčí, Drahy NR (43), 15.v.1998, several ♂♂ ♀♀, IM; 30.vi.2001, 1 ♂, IM & PK; 23.v.2002, 38 ♂♂ 6 ♀♀, IM & PK. Horní Němčí, Vinohrádky (44), 23.v.2002, 1 ♂ 2 ♀♀, IM. Strání, Obecnice hill (55), 2.vii.2001, 1 ♀; 23.v.2002, 14 ♂♂ 18 ♀♀; all IM & PK. Lopeník, U Zvonice NM (58), 25.ix.2004, 1 ♂, IM. Lopeník, Lopenické sedlo (59), 27.vi.2004, 1 ♀; 25.ix.2004, 1 ♀; both IM. Lopeník, Mikulčin vrch hill (60), 25.ix.2004, 5 ♂♂ 3 ♀♀, IM. Vyškovec, Pod Hribovňou NM (66), 21.v.2005, 2 ♀♀, IM. Vyškovec, Ve Vlčí NR (67), 22.v.2005, 1 ♂, IM. Radějov, Lučina (73), 13.v.1998, several ♂♂ ♀♀, IM. Kněždub, Čertoryje NNR (74, 75), 22.v.2000, 1 ♂ 3 ♀♀, PK. Malá Vrbka, Výzkum hill (76), 25.v.2000, 1 ♂ 3 ♀♀; 17.iv.2000, 1 ♂; all IM. Radějov, Měsíční údolí valley (80), 8.ix.1998, 3 ♂♂ 5 ♀♀, IM. Velká nad Veličkou, village (83), 28.iv.2000, many ♂♂ ♀♀, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 14.v.1998, many ♂♂ ♀♀; 18.iv.2000, many ♂♂ ♀♀; 27.vii.2000, 1 ♂; all IM. Suchov, Suchovské Mlýny (85), 23.vi.2004, 1 ♂, IM. Javorník, loampit W of village (91), 24.v.2002, 6 ♂♂ 9 ♀♀, IM. Javorník, Jazevčí NNR (92), 6.v.2000, many ♂♂ ♀♀, IM. Javorník, Petruchovy Mlýny (93), 24.v.2002, 3 ♂♂ 1 ♀; 26.v.2005, 1 ♂; all IM. Nová Lhota, Vápenky, Porážky NNR (95), 15.vii.1998, 1 ♂ 1 ♀; 28.x.2011, 2 ♀♀; all IM. Javorník, Machová NR (97), 9.vii.1998, many ♂♂ ♀♀; 9.vii.1998, 1 ♀; 8.v.2000, 4 ♂♂ 9 ♀♀; all IM. Strání, Záhumenice NM (99), 24.v.2001, 1 ♂ 1 ♀; 20.vii.2002, 1 ♂; all IM. Strání, Javorina NNR (102), 29.x.2011, 17 ♂♂ 10 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common on hawthorns in various kinds of habitats throughout the area. **General distribution:** Palaearctic. **Host plants:** *Crataegus* spp. and *Malus* spp. **Red List status:** –.

Comments. *Cacopsylla melanoneura* is a potential vector of the apple proliferation phytoplasma on apple trees (Tedeschi *et al.* 2002). However, it seems to have a minor economic importance in central Europe (Jarausch *et al.* 2009; Mayer *et al.* 2009; Ludvíková *et al.* 2010, 2011).

Cacopsylla moscovita (Andrianova, 1948)

Published records. Lauterer (1999): Kněždub, Čertoryje NNR (74, 75).

Distribution and frequency in the Bílé Karpaty PLA: Known from a single female specimen collected in 1980 in the south-western part of the area. More material is needed to confirm the presence of *C. moscovita* in the Bílé Karpaty. **General distribution:** Palaearctic. **Host plants:** *Salix* spp. (*S. caprea*, *S. cinerea*, *S. aurita*, *S. lapponum*, and *S. repens*). **Red List status:** –.

Cacopsylla peregrina (Foerster, 1848)

Published records. Lauterer (1999): Rokytnice, Bukovina hill (21); Bylnice, Bylničky (26); Boršice u Blatnice, Boršický potok brook valley (37); Horní Němčí, Hornoněmčanský háj forest (40); Bánov, Skalky hill (47); Komňa, Nový Dvůr (48); Radějov, village (70); Radějov, Holý vrch hill (71); Kněždub, Čertoryje NNR (74, 75); Radějov, Kútky NR (82); Velká nad Veličkou, towards Javorník (87); Javorník, SW slopes of Háj hill (89); Nová Lhota, Fojtické Mlýny (94); Javorník, Výzkum hill (98). Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).

Additional material examined. Valašské Klobouky, Brumovská street (3), 9.ix.1999, 10 ♀♀, IM. Valašské Klobouky, U Rybníků (4), 10.ix.1999, 1 ♂ 2 ♀♀, IM. Valašské Klobouky, Javorůvky NR (5), 2.vii.1999, 3 ♂♂ 1 ♀; 11.ix.1999, 1 ♂ 1 ♀; all IM. Valašské Klobouky, Dobšená NM (6), 10.ix.1999, 4 ♂♂, IM. Valašské Klobouky, Brumovka brook valley (7), 30.vi.1999, 1 ♀, MH; 9.ix.1999, 4 ♀♀, IM. Valašské Klobouky, Na Nivách (8), 9.ix.1999, 5 ♂♂ 3 ♀♀, IM. Poteč, Ploščiny NR (10), 4.vii.1999, 16 ♂♂ 14 ♀♀, IM; 13.ix.1999, 3 ♂♂ 3 ♀♀, IM; 1.vi.2002, 8 ♂♂ 7 ♀♀, IM; 17.viii.2006, 1 ♂ 7 ♀♀, PK. Valašské Klobouky, Bílé potoky NR (11), 30.vi.1999, 6 ♂♂ 11 ♀♀, PK; 9.ix.1999, 1 ♀, IM; 11.vii.2006, 1 ♀, IM. Nedašov, Jalovcová stráň NR (15), 16.viii.2006, 1 ♂, PK. Nedašov, Kaňoury NM (16), 17.vi.2006, 16 ♂♂ 9 ♀♀, IM; 16.viii.2006, 22 ♂♂ 23 ♀♀, PK. Bylnice, Na Stráži (25), 16.vi.2006, many ♂♂ ♀♀, IM; 11.vii.2006, 2 ♂♂ 4 ♀♀, IM; 18.viii.2006, 1 ♂, PK. Bylnice, railway station environs (27), 11.ix.1999, 1 ♀, IM. Svatý Štěpán, Nadříčí (31), 21.v.1999, 1 ♂, IM. Hluk, Kobylí hlava NM (33), 24.viii.2002, 5 ♂♂ 2 ♀♀, IM. Hluk, Babí hora NM (34), 24.viii.2002, many ♂♂ ♀♀, IM. Blatnička, Milejovské louky meadows (35), 24.v.2009, 1 ♂, PB. Horní Němčí, village (39), 15.v.1998, 2 ♂♂, IM. Korytná, Březí (41), 5.vii.2001, many ♂♂ ♀♀, IM. Horní Němčí, Drahy NR (43), 15.v.1998, several ♂♂ ♀♀, IM; 10.ix.1998, many ♂♂ ♀♀; 30.vi.2001, 15 ♀♀; all IM; 21.ix.2001, 2 ♂♂ 6 ♀♀, PK; 23.v.2002, 8 ♂♂ 10 ♀♀, IM & PK. Horní Němčí, Vinohrádky (44), 21.ix.2001, 1 ♂, IM. Korytná, Lubná pond environs (52), 5.vii.2001, 1 ♀, IM. Strání, Hrnčárky NM and Žabka reservoir surroundings (54), 10.vii.1998, 1 ♂; 10.ix.1998, many ♂♂ ♀♀; all IM. Strání, Obecnice hill (55), 24.v.2001, 1 ♀, IM; 2.vii.2001, 1 ♂, IM; 23.v.2002, 70 ♂♂ 69 ♀♀, IM & PK. Lopeník, Lopenické sedlo (59), 27.vi.2004, 1 ♂; 25.ix.2004, 1 ♀; 24.vii.2005, 1 ♀; all IM. Lopeník, Mikulčin vrch hill (60), 24.vii.2005, 2 ♂♂ 1 ♀, IM. Starý Hrozenkov, Skalka quarry (63), 2.vii.2007, 3 ♂♂ 2 ♀♀; 8.viii.2007, 5 ♀♀; 22.ix.2007, 2 ♂♂ 2 ♀♀; all IM. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, 2 ♀♀; 22.ix.2007, 1 ♀; all IM. Radějov, Žerotín NM (68), 11.vii.1998, many ♂♂ ♀♀, IM. Radějov, Holý vrch hill (71), 8.ix.1998, 1 ♀, IM. Kněždub, Kněždubský háj forest (72), 17.vi.2000, 5 ♀♀, IM; 28.vii.2000, 3 ♀♀, IM & PK. Radějov, Lučina (73), 13.v.1998, many ♂♂

♀♀; 14.vii.1998, 3 ♀♀; all IM. Kněždub, Čertoryje NNR (74, 75), 22.v.2000, 1 ♂ 4 ♀♀, PK. Kněždub, Čertoryje NNR, Járkovec brook valley (74), 22.vi.2008, 1 ♂ 1 ♀; 12.viii.2008, 13 ♂♂ 26 ♀♀; all KD & KF, 7.vi.2010, 1 ♀, IM. Malá Vrbka, Výzkum hill (76), 25.v.2000, 1 ♂, IM; 18.vi.2000, 4 ♂♂ 18 ♀♀, IM & PK; 16.viii.2000, 1 ♀, PK. Radějov, Měsíční údolí valley (80), 8.ix.1998, many ♂♂ ♀♀, IM; 20.viii.2002, 1 ♀, PK. Radějov, Veselka hill (81), 11.vii.1998, 1 ♀, IM. Radějov, Kútky NR (82), 11.vii.1998, 3 ♂♂ 3 ♀♀; 8.ix.1998, many ♂♂ ♀♀; all IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 14.v.1998, many ♂♂ ♀♀; 13.vii.1998, many ♂♂ ♀♀; all IM; 19.vi.2000, many ♂♂ ♀♀, PK; 27.vii.2000, many ♂♂ ♀♀, IM; 18.viii.2000, 1 ♂ 2 ♀♀, PK; 9.–10.ix.2000, 8 ♂♂ ♀♀; IM. Suchov, Suchovské Mlýny (85), 23.vi.2004, 1 ♂; 1.ix.2004, 1 ♀; both IM. Suchov, Trnovský Mlýn (86), 23.vi.2004, 1 ♂; 1.ix.2005, 1 ♀; both IM. Javorník, Nad Vápenkou NM (90), 9.vii.1998, 2 ♀♀, IM. Javorník, loampit W of village (91), 7.ix.1998, many ♂♂ ♀♀; 24.v.2002, 2 ♂♂ 6 ♀♀; all IM. Javorník, Jazevčí NNR (92), 15.vii.1998, 1 ♂ 1 ♀, IM; 19.vi.2000, many ♂♂ ♀♀, IM; 18.viii.2000, 2 ♂♂ 2 ♀♀, PK; 10.ix.2000, many ♂♂ ♀♀, IM; 29.vi.2001, 4 ♂♂ 4 ♀♀, IM. Javorník, Petruchovy Mlýny (93), 24.v.2002, 1 ♂ 1 ♀, IM & PK; 26.v.2005, 2 ♂♂ 6 ♀♀; 27.vii.2005, 2 ♂♂; 1.ix.2005, 1 ♀; all IM. Nová Lhota, Vápenky, Porážky NNR (95), 15.vii.1998, many ♂♂ ♀♀; 9.ix.1998, many ♂♂ ♀♀; 28.x.2011, 1 ♂ 2 ♀♀; all IM. Nová Lhota, Vápenky, Velička brook valley towards Mt Velká Javořina (96), 12.vii.1998, many ♂♂ ♀♀, IM. Javorník, Machová NR (97), 14.v.1998, many ♂♂ ♀♀; 9.vii.1998, many ♂♂ ♀♀; all IM. Strání, Záhumenice NM (99), 2.vii.2001, many ♂♂ ♀♀, IM & PK; 21.ix.2001, 2 ♂♂ 1 ♀, IM, 23.v.2002, 2 ♂♂ 2 ♀♀, PK; 20.vii.2002, 1 ♀, IM; 12.ix.2002, 2 ♀♀, IM. Strání, Javorina NNR (102), 4.vii.2001, 2 ♂♂ 10 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common on hawthorns in various kinds of habitats throughout the area. Often dispersed more or less far from the hosts. **General distribution:** Palaearctic, introduced into North America. **Host plants:** *Crataegus* spp. **Red List status:** –.

Cacopsylla picta (Foerster, 1848)

= *Cacopsylla costalis* (Flor, 1861)

Material examined. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 2 ♂♂, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 21.v.1999, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Recorded only for the north-eastern part of the area; on neglected apple trees around isolated cottages and haylofts, rare. **General distribution:** European. **Host plants:** *Malus* spp. **Red List status:** –.

Comments. *Cacopsylla picta* is the main vector of the *Candidatus* Phytoplasma mali, the causal agent of the apple proliferation disease, in central Europe, including the Czech Republic (Jarausch *et al.* 2009; Ludvíková *et al.* 2010, 2011).

Cacopsylla pruni (Scopoli, 1763)

Published records. Lauterer (1999): Radějov, Kútky NR (82). Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).

Additional material examined. Valašské Klobouky, Brumovská street (3), 19.v.1999, 3 ♂♂ 3 ♀♀, IM. Valašské Klobouky, Javorůvky NR (5), 11.ix.1999, 1 ♂, IM. Valašské Klobouky, Dobšená NM (6), 22.v.1999, 1 ♂; 2.vii.1999, 1 ♂; 10.ix.1999, 1 ♂ 2 ♀♀; all IM. Valašské Klobouky, Na Nivách (8), 9.ix.1999, 3 ♂♂ 1 ♀, IM. Poteč, Ploščiny NR (10), 13.ix.1999, 1 ♂; 1.vi.2002, 3 ♂♂ 3 ♀♀; all IM. Valašské Klobouky, Bílé potoky NR (11), 9.ix.1999, 3 ♂♂ 1 ♀; 16.vi.2006, 1 ♂ 3 ♀♀; 11.vii.2006, 1 ♂; all IM. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 1 ♀, IM; 16.viii.2006, 1 ♂, PK. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 1 ♀, IM. Bylnice, Na Stráži (25), 16.vi.2006, 2 ♂♂ 5 ♀♀, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 21.v.1999, 1 ♀, IM. Louka, Hloží NR (38), 24.iv.1999, 1 ♀, MH. Horní Němčí,

Drahy NR (43), 15.v.1998, several ♂♂ ♀♀; 30.vi.2001, 1 ♀; 23.v.2002, 1 ♀; all IM. Lopeník, U Zvonice NM (58), 25.ix.2004, 1 ♂, IM. Lopeník, Mikulčin vrch hill (60), 25.ix.2004, 1 ♂, IM. Žítková, Hutě NR (61), 11.iv.–9.v.2007, 3 ♂♂, MT, PC, JJ & JM. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, 1 ♀, IM. Vyškovec, Vyškovecké Bošačky (65), 27.vi.2004, 1 ♂, IM. Radějov, Žerotín NM (68), 11.vii.1998, 1 ♂, IM. Kněždub, Kněždubský háj forest (72), 17.vi.2000, 1 ♀, IM; 22.vi.2001, 1 ♂, IM & PK. Malá Vrbka, Výzkum hill (76), 18.vi.2000, 3 ♀♀, IM & PK. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 14.v.1998, 1 ♀; 13.vii.1998, 1 ♀; 18.iv.2000, 3 ♂♂ 2 ♀♀; all IM; 19.vi.2000, 1 ♂, PK. Suchov, Suchovské Mlýny (85), 29.vi.2001, 1 ♀; 23.vi.2004, 1 ♂; both IM. Javorník, Nad Vápenkou NM (90), 6.v.2000, 1 ♀, IM. Strání, Záhumenice NM (99), 8.vi.2001, 3 ♀♀, PL; 2.vii.2001, 1 ♂, IM. Strání, Nová hora NR (100), 16.v.1998, 1 ♀, IM. Strání, Javorina NNR (102), 4.vii.2001, 1 ♀; 29.x.2011, 1 ♂ 4 ♀♀; all IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common on *Prunus spinosa* in scrub and along forest margins throughout the area, including the highest elevations. **General distribution:** Eurosiberian. **Host plants:** *Prunus* spp. **Red List status:** –.

Comments. *Cacopsylla pruni* is a major vector of the *Candidatus* Phytoplasma prunorum, the causal agent of the European stone fruit yellow disease that causes significant economic loss, particularly on apricots and peaches in central Europe (Navrátil *et al.* 2004, Jarausch *et al.* 2009).

Cacopsylla pulchra (Zetterstedt, 1838)

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Radějovka brook valley (75).
Additional material examined. Valašské Klobouky, Bílé potoky NR (11), 9.ix.1999, ?1 ♀, IM. Radějov, Lučina (73), 13.v.1998, several ♂♂ ♀♀, IM. Velká nad Veličkou, village (83), 28.iv.2000, 2 ♂♂, IM. Strání, Javorina NNR (102), 29.x.2011, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Probably widespread throughout the area but quite rare; collected at forest margins and in the vicinity of brooks, ponds and spring fens; overwintering specimens were found on ornamental conifers in a village as well as at the highest point of the Bílé Karpaty Mts., Mt Velká Javořina. **General distribution:** Palaearctic. **Host plants:** *Salix* spp. (*S. alba*, *S. caprea*, *S. cinerea*, *S. myrsinifolia*, *S. pentandra*, *S. purpurea*, *S. repens*, *S. viminalis*, and *S. triandra* × *viminalis*). **Red List status:** –.

Cacopsylla pyri (Linnaeus, 1758)

Published records. Baudyš (1966a): Valašské Klobouky (3; precise location of collecting site unknown). Lauterer (1999): Bylnice, Bylničky (26); Radějov, village (70); Radějov, Kútky NR (82); Velká nad Veličkou, towards Javorník (87); Javorník, SW slopes of Háj hill (89); Javorník, Výzkum hill (98).
Additional material examined. Blatnička, Milejovské louky meadows (35), 24.v.2009, 3 ♀♀; 11.vii.2009, 1 ♂ 1 ♀; all PB. Horní Němčí, Drahy NR (43), 15.v.1998, several ♂♂ ♀♀, IM. Radějov, Veselka hill (81), 11.vii.1998, 1 ♂, IM. Velká nad Veličkou, village (83), 29.vi.2001, 1 ♂, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 14.v.1998, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Probably widespread throughout the area, but quite common only at warm sites in its south-western part; on pear trees in orchards, villages, along roads etc. **General distribution:** Europe and Turkey. **Host plants:** *Pyrus* spp. **Red List status:** –.

Comments. In the Czech Republic, *Cacopsylla pyri* is a serious pest in pear plantations (Lauterer 1999, Kocourek & Stará 2007, Ludvíková *et al.* 2010) and a potential vector of the *Candidatus* Phytoplasma pyri, the causal agent of the pear decline disease (Ludvíková *et al.* 2011).

Cacopsylla pyricola (Foerster, 1848)

Published records. Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, Dobšená NM (6), 2.vii.1999, 1 ♀, IM. Valašské Klobouky, Bílé potoky NR (11), 9.ix.1999, 1 ♀, IM; 11.vii.2006, 8 ♂♂ 14 ♀♀, IM; 14.viii.2006, 2 ♂♂ 5 ♀♀, PK. Nedašov, Jalovcová stráň NR (15), 12.vii.2006, 1 ♀, IM. Nedašov, Kaňoury NM (16), 3.vii.1999, 1 ♀, IM; 17.vi.2006, 1 ♂ 2 ♀♀, IM; 12.vii.2006, 1 ♂ 1 ♀, IM; 16.viii.2006, 2 ♂♂ 1 ♀, PK. Bylnice, Na Stráži (25), 16.vi.2006, 3 ♂♂ 7 ♀♀; 11.vii.2006, 2 ♀♀; all IM. Korytná, Březí (41), 5.vii.2001, 1 ♀, IM. Radějov, Žerotín NM (68), 19.iv.2012, 1 ♂, IM. Velká nad Veličkou, village (83), 29.vi.2001, 3 ♂♂, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 13.vii.1998, 6 ♂♂ 8 ♀♀; 18.iv.2000, 1 ♀; all IM. Javorník, Jazevčí NNR (92), 15.vii.1998, 1 ♂; 19.vi.2000, 2 ♂♂ 3 ♀♀; all IM. Javorník, Machová NR (97), 9.vii.1998, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and quite common throughout the area in scrub and along sunny forest margins, as well as in orchards and villages. **General distribution:** European, introduced into North America. **Host plants:** *Pyrus communis* and *P. pyraster*. **Red List status:** –.

Comments. *Cacopsylla pyricola* is a potential vector of the *Candidatus* Phytoplasma pyri, the causal agent of the pear decline disease (Ludvíková *et al.* 2011). However, it has only a minor economic importance in the Czech Republic (Lauterer 1999, Kocourek & Stará 2007).

Cacopsylla pyrisuga (Foerster, 1848)

Published records. Lauterer (1999): Bylnice, Bylničky (26); Velká nad Veličkou, towards Javorník (87); Javorník, Výzkum hill (98). Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, Javorůvky NR (5), 11.ix.1999, 2 ♂♂, IM. Valašské Klobouky, Na Nivách (8), 9.ix.1999, 1 ♂, IM. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 1 ♂ 1 ♀, IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 1 ♀, IM. Horní Němčí, Drahy NR (43), 10.ix.1998, 1 ♂, IM. Lopeník, U Zvonice NM (58), 25.ix.2004, 1 ♀, IM. Lopeník, Mikulčin vrch hill (60), 25.ix.2004, 1 ♂, IM. Vyškovec, Vyškovecké Bošačky (65), 21.v.2005, 1 ♀, IM. Radějov, Holý vrch hill (71), 8.ix.1998, 1 ♂, IM. Malá Vrbka, Výzkum hill (76), 22.vi.2001, 2 ♀♀, IM & PK. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 14.v.1998, 2 ♀♀; 18.iv.2000, 8 ♂♂ 4 ♀♀; all IM. Javorník, Machová NR (97), 14.v.1998, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and quite common on pear trees in various kinds of habitats throughout the area. **General distribution:** Europe, Turkey, and Caucasus. **Host plants:** *Pyrus* spp. **Red List status:** –.

Comments. In the Czech Republic, *C. pyrisuga* is an occasional pest of cultivated pears (Lauterer 1999, Navrátil & Stará 2007, Ludvíková *et al.* 2010) and a potential vector of the *Candidatus* Phytoplasma pyri, the causal agent of the pear decline disease (Ludvíková *et al.* 2011).

Cacopsylla rhamnicola (Scott, 1876)

Material examined. Valašské Klobouky, U Rybníků (4), 10.ix.1999, 1 ♂, IM. Poteč, Ploščiny NR (10), 1.vi.2002, 1 ♂, IM. Bylnice, Na Stráži (25), 16.vi.2006, many ♂♂ ♀♀, IM. Horní Němčí, Drahy NR (43), 23.v.2002, 9 ♂♂ 6 ♀♀ 11 larvae, IM. Lopeník, Mikulčin vrch hill (60), 25.ix.2004, 1 ♀, IM. Suchov, Trnovský Mlýn (86), 23.vi.2004, 1 ♂, IM. Javorník, loampit W of village (91), 24.v.2002, 6 ♂♂ 4 ♀♀, IM. Nová Lhota, Vápenky, Porážky NNR (95), 28.x.2011, 1 ♀, IM. Strání, Javorina NNR (102), 29.x.2011, 6 ♂♂ 7 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and quite common in scrub and along forest margins throughout the area; overwintering specimens were found also at the highest point, the top of Mt Velká Javořina (ca. 950 m). **General distribution:** Eurosiberian. **Host plant:** *Rhamnus cathartica*. **Red List status:** –.

Cacopsylla saliceti (Foerster, 1848)

Material examined. Lopeník, U Zvonice NM (58), 25.ix.2004, 1 ♂ 1 ♀, IM. Lopeník, Lopenické sedlo (59), 25.ix.2004, 3 ♂♂ 2 ♀♀, IM. Radějov, Lučina (73), 22.vi.2001, 10 ♂♂ 4 ♀♀, IM & PK. Suchov, Suchovské Mlýny (85), 29.vi.2001, 1 ♂ 2 ♀♀, IM. Javorník, village (88), 24.v.2002, 1 ♂, IM. Strání, Záhumenice NM (99), 8.vi.2001, 5 ♂♂ 2 ♀♀, PL. Strání, Javorina NNR (102), 29.x.2011, 2 ♂♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Collected in the central and south-western parts of the area on willows in various habitats (banks of streams, shores of a pond, along roads) but quite uncommon. Overwintering specimens were found also at the highest point, the top of Mt Velká Javořina (ca. 950 m). **General distribution:** Palaearctic. **Host plants:** *Salix* spp. (*S. alba*, *S. aurita*, *S. caprea*, *S. cinerea*, *S. elaeagnos*, *S. fragrans*, *S. fragilis*, and *S. purpurea*). **Red List status:** –.

Cacopsylla sorbi (Linnaeus, 1758)

Material examined. Valašské Klobouky, Dobšená NM (6), 2.vii.1999, 2 ♂♂ 3 ♀♀, IM. Poteč, Ploščiny NR (10), 4.vii.1999, 1 ♂; 1.vi.2002, 8 ♂♂ 4 ♀♀; all IM. Bylnice, Na Stráži (25), 16.vi.2006, 2 ♂♂ 1 ♀, IM. Strání, Hrnčárky NM and Žabka reservoir surroundings (54), 10.vii.1998, 9 ♂♂ 2 ♀♀, IM. Lopeník, Mikulčin vrch hill (60), 24.vii.2005, 1 ♂ 6 ♀♀, IM. Kněždub, Kněždubský háj forest (72), 28.vii.2000, 1 ♂, IM & PK. Nová Lhota, Vápenky, Velička brook valley towards Mt Velká Javořina (96), 12.vii.1998, 3 ♂♂ 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread but quite uncommon; mostly along forest margins and forest roads, and in forest glades. **General distribution:** Palaearctic, introduced into North America. **Host plant:** *Sorbus aucuparia*. **Red List status:** –.

Cacopsylla ulmi (Foerster, 1848)

Published records. Lauterer (1999): Boršice u Blatnice, Boršický potok brook valley (37); Horní Němčí, Hornoněmčanský háj forest (40); Kněždub, Čertoryje NNR (74, 75). Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Valašské Klobouky, Brumovská street (3), 9.ix.1999, 1 ♀, IM. Poteč, Ploščiny NR (10), 17.viii.2006, 2 ♂♂ 3 ♀♀, PK. Nedašov, village (14), 17.viii.2006, 1 ♀, PK. Nedašov, Jalovcová stráň NR (15), 16.viii.2006, 1 ♀, PK. Svatý Štěpán, Nadříčí (31), 21.v.1999, many ♂♂ ♀♀, IM. Horní Němčí, Drahy NR (43), 23.v.2002, 2 ♂♂ 1 ♀, IM. Horní Němčí, Horní kopec hill (45), 23.v.2002, 3 ♂♂ 1 ♀, IM. Lopeník,

U Zvonice NM (58), 25.ix.2004, 4 ♂♂ 1 ♀, IM. Lopeník, Lopenické sedlo (59), 25.ix.2004, 2 ♂♂, 24.vii.2005, 2 ♀♀; all IM. Lopeník, Mikulčin vrch hill (60), 24.vii.2005, 1 ♂ 1 ♀; 25.ix.2004, 4 ♂♂ 4 ♀♀; all IM. Radějov, Žerotín NM (68), 11.vii.1998, 1 ♂ 1 ♀, IM. Radějov, Holý vrch hill (71), 8.ix.1998, 2 ♂♂ 2 ♀♀, IM. Radějov, Lučina (73), 14.vii.1998, 1 ♀; 17.vi.2000, 3 ♀♀; 28.vii.2000, 1 ♂ 4 ♀♀; 22.vi.2001, 3 ♀♀; all IM & PK. Malá Vrbka, Výzkum hill (76), 18.vi.2000, 3 ♂♂, IM & PK. Hrubá Vrbka, football ground (78), 20.ix.2001, 1 ♀, IM. Radějov, Měsíční údolí valley (80), 20.viii.2002, 1 ♀, PK. Radějov, Veselka hill (81), 11.vii.1998, 9 ♀♀, IM. Velká nad Veličkou, village (83), 18.viii.2000, 1 ♂ 1 ♀, PK. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 27.vii.2000, 3 ♀♀; 9.–10.ix.2000, 1 ♂ 2 ♀♀; all IM. Suchov, Trnovský Mlýn (86), 16.viii.2004, 1 ♂, PK; 1.x.2004, 4 ♂♂ 1 ♀, IM. Javorník, village (88), 8.viii.2001, 1 ♂ 2 ♀♀, PK. Javorník, Jazevčí NNR (92), 15.vii.1998, 1 ♀, IM. Javorník, Petruchovy Mlýny (93), 24.v.2002, 1 ♀, PK. Nová Lhota, Vápenky, Velička brook valley towards Mt Velká Javořina (96), 12.vii.1998, many ♂♂ ♀♀, IM. Strání, Javorina NNR (102), 4.vii.2001, 9 ♂♂ 16 ♀♀; 29.x.2011, 7 ♂♂ 2 ♀♀; all IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common in various kinds of habitats throughout the area, from low to the highest elevations; associated with elm trees but often dispersed more or less far from the hosts. **General distribution:** Palaearctic. **Host plants:** *Ulmus* spp. **Red List status:** –.

Cacopsylla viburni (Löw, 1876) (VU) (Fig. 5)

Published records. Lauterer (1999): Horní Němčí, Hornoněmčanský háj forest (40); Kněždub, Čertoryje NNR (74, 75); Velká nad Veličkou, towards Javorník (87). Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Horní Němčí, Drahy NR (43), 15.v.1998, 1 ♂; 23.v.2002, 1 ♀; both IM. Horní Němčí, Lesná hill (46), 15.v.1998, 5 ♂♂ 3 ♀♀, IM. Radějov, Žerotín NM (68), 11.vii.1998, 3 ♂♂ 1 ♀, IM. Radějov, Lučina (73), 13.v.1998, 2 ♂♂, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 13.vii.1998, 5 ♂♂ 13 ♀♀, IM; 19.vi.2000, 2 ♀♀, PK; 27.vii.2000, 2 ♂♂, IM; 9.–10.ix.2000, 1 ♂, IM. Javorník, Jazevčí NNR (92), 6.v.2000, 10 ♂♂ ♀♀; 19.vi.2000, 5 ♂♂ 6 ♀♀; 10.ix.2000, 2 ♂♂ 3 ♀♀; all IM.

Distribution and frequency in the Bílé Karpaty PLA: Restricted to the warm south-western part of the area; quite common on *Viburnum lantana* at sunny forest margins and scrub (e.g. along roads and scattered in meadows). **General distribution:** Palaearctic. **Host plants:** *Viburnum* spp. (in central Europe *V. lantana*). **Red List status:** Vulnerable.

Comments. *Cacopsylla viburni* is a thermophilous species; the Bílé Karpaty Mts. probably form the northern limit of its natural distributional range in central Europe (Lauterer 1999, Laštůvka *et al.* 2008).

Cacopsylla visci (Curtis, 1835)

Published records. Lauterer (1999), Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Javorník, Jazevčí NNR (92), 19.vi.2000, 2 ♀♀, IM. Strání, Záhumenice NM (99), 2.vii.2001, 5 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Recorded only for the south-western part of the area; associated with *Loranthus europaeus* on solitary oaks scattered in meadows. **General distribution:** Western Palaearctic. **Host plants:** *Loranthus europaeus* and *Viscum* spp. **Red List status:** –.

Camarotoscena speciosa (Flor, 1861)

Material examined. Hrubá Vrbka, football ground (78), 28.vii.2001, 1 ♀; 20.ix.2001, 1 ♂; both IM.

Distribution and frequency in the Bílé Karpaty PLA: Collected on *Populus* × *canadensis* or *Populus nigra* at a single, anthropogenic site (a windbreak) at foothills of the Bílé Karpaty in the south-western part of the area. **General distribution:** Western Palaearctic. **Host plants:** *Populus* spp. **Red List status:** –.

Chamaepsylla hartigii (Flor, 1861)

Published records. Lauterer (1998): Bylnice, Bylničky (26).
Additional material examined. Valašské Klobouky, Brumovská street (3), 19.v.1999, 2 ♂♂ 4 ♀♀, IM. Valašské Klobouky, U Rybníků (4), 22.v.1999, 1 ♂ 1 ♀, IM. Valašské Klobouky, Javorůvky NR (5), 2.vii.1999, 1 ♀, IM. Poteč, Ploščiny NR (10), 4.vii.1999, 1 ♂ 1 ♀; 1.vi.2002, 6 ♀♀; all IM. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 1 ♂; 3.vii.1999, 1 ♀; both IM. Bylnice, railway station environs (27), 21.v.1999, 1 ♂, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 21.v.1999, 1 ♂, IM. Nedašov, Pod Cigánem NM (30), 30.vi.2004, 1 ♂; 28.v.2005, 1 ♂; both IM. Korytná, Březí (41), 5.vii.2001, 1 ♀, IM. Horní Němčí, Drahy NR (43), 23.v.2002, 2 ♂♂ 6 ♀♀, IM. Strání, village (56), 16.v.1998, 2 ♂♂ 1 ♀, IM. Radějov, Lučina (73), 7.v.2000, 1 ♂; 17.vi.2000, 1 ♂; both IM. Velká nad Veličkou, village (83), 19.vi.2000, 1 ♀, PK. Javorník, village (88), 6.v.2000, 9 ♂♂ 6 ♀♀; 24.v.2002, 2 ♂♂ 3 ♀♀; all IM. Javorník, loampit W of village (91), 24.v.2002, 1 ♀, IM. Strání, Záhumenice NM (99), 2.vii.2001, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and quite common on *Betula pendula* throughout the area; mostly in small woods and on solitary trees scattered in meadows and pastures, frequently also in villages. **General distribution:** Holarctic. **Host plants:** *Betula* spp. **Red List status:** –.

Craspedolepta flavipennis (Foerster, 1848)

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 1 ♀, IM. Valašské Klobouky, Dobšená NM (6), 22.v.1999, 4 ♂♂ 2 ♀♀, IM. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 6 ♂♂ 3 ♀♀, IM; 30.vi.1999, 1 ♀, MH. Poteč, Ploščiny NR (10), 1.vi.2002, 11 ♂♂ 8 ♀♀, IM. Valašské Klobouky, Bílé potoky NR (11), 16.vi.2006, 7 ♂♂ 6 ♀♀, IM. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 1 ♂; 28.v.2005, 3 ♀♀; 17.vi.2006, 1 ♂ 4 ♀♀; all IM. Nedašov, Kaňoury NM (16), 17.vi.2006, 3 ♂♂ 7 ♀♀, IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 3 ♂♂ 2 ♀♀, IM. Bylnice, Na Stráži (25), 16.vi.2006, 5 ♂♂ 5 ♀♀, IM. Bylnice, Bylničky (26), 24.vi.1982, 4 ♂♂ 9 ♀♀, PL. Nedašov, Pod Cigánem NM (30), 30.vi.2004, 1 ♀; 28.v.2005, 9 ♂♂ 10 ♀♀; all IM. Horní Němčí, Drahy NR (43), 23.v.2002, 1 ♂, PK. Lopeník, U Zvonice NM (58), 27.vi.2004, 1 ♀, IM. Vyškovec, Vyškovecké Bošačky (65), 27.vi.2004, 4 ♂♂ 4 ♀♀; 21.v.2005, 1 ♂; all IM. Kněždub, Čertoryje NNR, Járkovec brook valley (74), 2.vi.2008, 9 ♂♂ 27 ♀♀, IM; 22.vi.2008, 2 ♀♀, KD & KF; 7.vi.2010, 9 ♂♂ 19 ♀♀, IM. Kněždub, Čertoryje NNR, Radějovka brook valley (75), 2.vi.2008, 1 ♂ 1 ♀, IM. Kněždub, Čertoryje NNR (74, 75), 19.vi.1980, 7 ♂♂, PL. Radějov, Kútky NR (82), 2.vi.1979, 2 ♂♂ 5 ♀♀, PL. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 14.v.1998, 1 ♂, IM. Javorník, SW slopes of Háj hill (89), 19.vi.1980, 1 ♀, PL. Suchov, Suchovské Mlýny (85), 26.v.2005, 7 ♂♂ 2 ♀♀, IM. Nová Lhota, Fojtické Mlýny (94), 7.vii.1980, 2 ♀♀, PL. Javorník, Výzkum hill (98), 10.vi.1982, 1 ♀, PL. Strání, Záhumenice NM (99), 24.v.2001, 22 ♂♂ 16 ♀♀, IM; 8.vi.2001, 9 ♂♂ 16 ♀♀, PL; 23.v.2002, 105 ♂♂ 103 ♀♀, IM & PK.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common in species-rich meadows throughout the area. **General distribution:** Central Europe (Lauterer & Burckhardt 2004). **Host plant:** *Leontodon hispidus*. **Red List status:** –.

Craspedolepta nebulosa (Zetterstedt, 1828)

Material examined. Strání, Javorina NNR (102), 4.vii.2001, 10 ♂♂ 6 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Found only at the top of Mt Velká Javořina. **General distribution:** Holarctic. **Host plant:** *Epilobium angustifolium*. **Red List status:** –.

Craspedolepta nervosa (Foerster, 1848)

Material examined. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 3 ♂♂ 5 ♀♀; 3.vii.1999, 18 ♂♂ 11 ♀♀; 28.v.2005, 11 ♂♂ 17 ♀♀; 28.vii.2005, 1 ♂ 5 ♀♀; 17.vi.2006, 4 ♂♂ 7 ♀♀; all IM. Nedašov, Kaňoury NM (16), 17.vi.2006, 1 ♀, IM; 12.vii.2006, 3 ♂♂ 6 ♀♀, IM. Bylnice, Na Stráži (25), 16.vi.2006, 1 ♂ 4 ♀♀; 11.vii.2006, 1 ♂; all IM. Bylnice, Bylničky (26), 24.vi.1982, 1 ♂ 1 ♀, PL. Horní Němčí, Hornoněmčanský háj forest (40), 7.vii.1980, 2 ♂♂ 1 ♀, PL. Korytná, Březí (41), 5.vii.2001, 1 ♂ 1 ♀, IM. Horní Němčí, Drahy NR (43), 30.vi.2001, 1 ♀, IM & PK. Horní Němčí, Vinohrádky (44), 30.vi.2001, 1 ♂, IM. Strání, Dúbrava hill (57), 7.vii.1980, 1 ♂ 1 ♀, PL. Starý Hrozenkov, Skalka quarry (63), 2.vii.2007, 2 ♀♀, IM. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, 1 ♀, IM. Vyškovec, Vyškovecké Bošačky (65), 27.vi.2004, 1 ♂; 21.v.2005, 1 ♂; both IM. Radějov, Žerotín NM (68), 11.vii.1998, 10 ♂♂ 8 ♀♀, IM. Kněždub, Kněždubský háj forest (72), 17.vi.2000, 1 ♀, IM. Kněždub, Čertoryje NNR (74, 75), 19.vi.1980, 3 ♀♀, PL. Kněždub, Čertoryje NNR, Járkovec brook valley (74), 2.vi.2008, 1 ♀, IM. Malá Vrbka, Výzkum hill (76), 28.vii.2001, 1 ♂ 1 ♀, IM & PK. Hrubá Vrbka, football ground (78), 19.vi.2000, 1 ♀, IM & PK. Radějov, Kútky NR (82), 2.vi.1979, 1 ♂ 1 ♀, PL. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 13.vii.1998, 11 ♂♂ 9 ♀♀, IM. Suchov, Suchovské Mlýny (85), 29.vi.2001, 1 ♂ 1 ♀, IM. Suchov, Trnovský Mlýn (86), 26.v.2005, 1 ♀, IM. Velká nad Veličkou, towards Javorník (87), 10.vi.1982, 1 ♀, PL. Javorník, SW slopes of Háj hill (89), 19.vi.1980, 1 ♂, PL. Javorník, loampit W of village (91), 24.v.2002, 1 ♂ 1 ♀, IM. Javorník, Jazevčí NNR (92), 19.vi.2000, 2 ♂♂; 29.vi.2001, 1 ♂; all IM. Javorník, Petruchovy Mlýny (93), 29.vi.2001, 1 ♂ 1 ♀; 23.vi.2004, 4 ♂♂ 4 ♀♀; 26.v.2005, 1 ♂; all IM. Nová Lhota, Fojtické Mlýny (94), 7.vii.1980, 1 ♂ 1 ♀, PL. Nová Lhota, Vápenky, Porážky NNR (95), 15.vii.1998, 2 ♀♀, IM. Javorník, Machová NR (97), 9.vii.1998, 3 ♂♂ 4 ♀♀; 8.v.2000, 1 ♀; all IM. Javorník, Výzkum hill (98), 10.vi.1982, 3 ♀♀, PL. Strání, Záhumenice NM (99), 24.v.2001, 1 ♂, IM; 8.vi.2001, 3 ♂♂, PL; 2.vii.2001, 25 ♂♂ 29 ♀♀, IM; 23.v.2002, 5 ♂♂ 3 ♀♀, 20.vii.2002, 1 ♂ 2 ♀♀; all IM & PK. Strání, Javorina NNR (102), 4.vii.2001, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common in dry to mesic meadows and pastures throughout the area. **General distribution:** Eurosiberian. **Host plants:** *Achillea millefolium* agg. and *A. ptarmica*. **Red List status:** –.

Craspedolepta omissa Wagner, 1944

Material examined. Poteč, Ploščiny NR (10), 4.vii.1999, 4 ♂♂ 6 ♀♀, IM. Nedašov, village (14), 3.vii.1999, 5 ♂♂, IM. Radějov, Žerotín NM (68), 11.vii.1998, 2 ♂♂ 3 ♀♀, IM. Radějov, Lučina (73), 28.vii.2000, 3 ♂♂ 2 ♀♀, IM & PK. Kněždub, Čertoryje NNR (74, 75), 22.v.2000, 1 ♂, PK. Malá Vrbka, Výzkum hill (76), 18.vi.2000, 3 ♀♀; 27.vii.2000, 1 ♀; 28.vii.2001, 4 ♂♂ 5 ♀♀; all IM & PK. Javorník, Machová NR (97), 9.vii.1998, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Probably widespread and locally common in ruderal sites throughout the area. **General distribution:** Eurosiberian. **Host plant:** *Artemisia vulgaris*. **Red List status:** –.

Craspedolepta sonchi (Foerster, 1848) (VU)

Material examined. Nedašov, Jalovcová stráň NR (15), 1.ix.2004, 3 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Recorded at only one site (Přední louky – mesic meadows adjacent to the Jalovcová stráň NR), sporadic. **General distribution:** European (Lauterer & Burckhardt 2004). **Host plants:** *Leontodon autumnale* and *L. hispidus*. **Red List status:** Vulnerable.

Comments. *Craspedolepta sonchi* is an uncommon species in the Czech Republic which occurs mostly in meadows and pastures in highlands (Lauterer 1963, 1965, 2001; Lauterer & Burckhardt 2004).

Craspedolepta subpunctata (Foerster, 1848)

Material examined. Strání, Dúbrava hill (57), 7.vii.1980, 1 ♂, PL. Strání, Javorina NNR (102), 12.vii.1998, galls; 4.vii.2001, 2 ♂♂ 1 ♀; all IM.

Distribution and frequency in the Bílé Karpaty PLA: Found only at two sites; the top of Mt Velká Javořina and a forest glade near Strání. **General distribution:** Holarctic. **Host plant:** *Epilobium angustifolium*. **Red List status:** –.

Livia junci (Schrank, 1789)

Published records. Lang (1945): Březová, Kalábová NM (53). Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, U Rybníků (4), 22.v.1999, 2 ♂♂, IM. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 1 ♀; 11.ix.1999, 3 ♂♂ 4♀♀; all IM. Valašské Klobouky, Dobšená NM (6), 2.vii.1999, 1 ♂; 10.ix.1999, 1 ♂ 4 ♀♀; all IM. Valašské Klobouky, Brumovka brook valley (7), 9.ix.1999, 2 ♀♀, IM. Valašské Klobouky, Na Nivách (8), 9.ix.1999, 1 ♂, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 12.ix.1999, 4 ♂♂ 1 ♀, IM. Horní Němčí, Drahy NR (43), 30.vi.2001, 2 ♂♂ 1 ♀, IM. Březová, Kalábová NM (53), 4.vii.2001, 1 ♂, IM. Lopeník, Lopenické sedlo (59), 25.ix.2004, 1 ♂, IM. Radějov, Měsíční údolí valley (80), 8.ix.1998, 1 ♀, IM. Radějov, Kútky NR (82), 11.vii.1998, 1 ♂ 3 ♀♀; 8.ix.1998, 1 ♀; all IM. Javorník, Jazevčí NNR (92), 6.v.2000, 1 ♂; 19.vi.2000, 2 ♀♀; all IM. Strání, Javorina NNR (102), 4.vii.2001, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and quite common in spring fens throughout the area. **General distribution:** Palaearctic. **Host plants:** *Juncus* spp. **Red List status:** –.

Livilla radiata (Foerster, 1848) (EN) (Fig. 6)

Material examined. Starý Hrozenkov, Skalka quarry (63), 2.vii.2007, 1 ♀, IM. Kněždub, Kněždubský háj forest (72), 17.vi.2000, 1 ♂, IM; 22.vi.2001, 1 ♂, IM & PK.

Distribution and frequency in the Bílé Karpaty PLA: Recorded only at two sites in the central and south-western parts of the area; sporadic on *Cytisus nigricans* at sunny forest margins. **General distribution:** Europe (except Scandinavia). **Host plants:** *Chamaecytisus* spp. and *Cytisus* spp. **Red List status:** Endangered.

Comments. *Livilla radiata* is a xerothermophilous species occurring locally in warm areas of the Czech Republic in dry grassland and at forest margins (Vondráček 1957, Lauterer 1963, Malenovský *et al.* 2011).

Livilla variegata (Löw, 1881)

Published records. Lauterer & Malenovský (2002), Malenovský & Lauterer (2005c): Korytná, village (51); Velká nad Veličkou, village (83). Malenovský & Lauterer (2005c): Strání, Květná, village (101).

Distribution and frequency in the Bílé Karpaty PLA: Restricted to ornamental vegetation (gardens, parks, etc.) in villages: uncommon. **General distribution:** Native to south-western Europe and the Alps, introduced to central Europe, Great Britain and North America. **Host plants:** *Laburnum anagyroides* and *L. alpinum*. **Red List status:** –.

Psylla alni (Linnaeus, 1758)

Published records. Lauterer (1998): Luhačovice, Luhačovická dolina valley (18); Popov, Havránkův potok brook valley (22); Bylnice, Bylničky (26); Boršice u Blatnice, Boršický potok brook valley (37); Komňa, Nový Dvůr (48); Lopeník, Mikulčin vrch hill (60); Kněždub, Čertoryje NNR (74, 75); Radějov, Kútky NR (82); Nová Lhota, Fojtické Mlýny (94). Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, Brumovská street (3), 9.ix.1999, 2 ♂♂ 4 ♀♀, IM. Valašské Klobouky, U Rybníků (4), 10.ix.1999, 1 ♂ 1 ♀, IM. Valašské Klobouky, Javorůvky NR (5), 24.viii.2002, 1 ♂, PK. Valašské Klobouky, Brumovka brook valley (7), 30.vi.1999, 19 ♂♂ 10 ♀♀, MH. Poteč, Ploščiny NR (10), 17.viii.2006, 1 ♂, PK. Valašské Klobouky, Bílé potoky NR (11), 30.vi.1999, 1 ♀, PK; 9.ix.1999, 3 ♀♀, IM; 23.viii.2002, 1 ♂, PK; 16.vi.2006, many ♂♂ ♀♀, IM; 11.vii.2006, 1 ♂ 4 ♀♀, IM. Brumov, Uhličky (13), 28.vii.2005, 1 ♂; 4.ix.2005; 1 ♂; both PK. Nedašov, Jalovcová stráň NR (15), 3.vii.1999, 1 ♂, IM. Bylnice, railway station environs (27), 1.vii.1999, 1 ♂ 4 ♀♀, MH & PK; 11.ix.1999, 7 ♂♂ 8 ♀♀, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 12.ix.1999, 1 ♂, IM. Nedašov, Na Salaši (29), 10.ix.1999, 2 ♂♂ 3 ♀♀, IM. Nedašov, Pod Cigánem NM (30), 28.vii.2005, 1 ♀, IM. Korytná, Březí (41), 5.vii.2001, 2 ♂♂ 1 ♀, IM. Horní Němčí, Drahy NR (43), 15.v.1998, 1 ♀; 10.ix.1998, many ♂♂ ♀♀; all IM; 30.vi.2001, 6 ♂♂ 3 ♀♀, IM & PK; 13.viii.2001, 1 ♂, PK; 21.ix.2001, 3 ♂♂, PK; 23.v.2002, 5 ♂♂ 8 ♀♀, IM. Vápenice, Trstná brook valley (50), 6.vii.2001, 1 ♂, IM & PK. Korytná, Lubná pond environs (52), 5.vii.2001, 1 ♀, IM. Březová, Kalábová NM (53), 4.vii.2001, 4 ♂♂, IM. Strání, Hrnčárky NM and Žabka reservoir surroundings (54), 10.vii.1998, 1 ♂ 2 ♀♀; 10.ix.1998, 2 ♂♂ 1 ♀; all IM. Lopeník, U Zvonice NM (58), 25.ix.2004, 2 ♂♂ 1 ♀, IM. Lopeník, Mikulčin vrch hill (60), 24.vii.2005, 1 ♂ 1 ♀, IM. Vápenice, Krátkovský potok brook valley (62), 6.vii.2001, 1 ♂, IM & PK. Starý Hrozenkov, Skalka quarry (63), 2.vii.2007, 1 ♂, IM. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, 8 ♂♂ 1 ♀, IM. Vyškovec, Vyškovecké Bošačky (65), 25.ix.2004, 1 ♀, PK. Radějov, Lučina (73), 14.vii.1998, 3 ♂♂ 3 ♀♀; 17.vi.2000, 2 ♀♀, IM; 28.vii.2000, 1 ♂; 22.vi.2001, 1 ♂ 5 ♀♀, all IM & PK. Kněždub, Čertoryje NNR (74, 75), 22.v.2000, 2 ♂♂ 2 ♀♀, PK. Radějov, Měsíční údolí valley (80), 8.ix.1998, many ♂♂ ♀♀, IM; 20.viii.2002, 2 ♂♂ 1 ♀, PK. Radějov, Veselka hill (81), 11.vii.1998, 2 ♂♂, IM. Radějov, Kútky NR (82), 8.ix.1998, 1 ♂, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 14.v.1998, 1 ♀, IM. Suchov, Suchovské Mlýny (85), 1.ix.2005, 1 ♀, IM. Javorník, village (88), 8.viii.2001, 1 ♀, PK. Javorník, Jazevčí NNR (92), 29.vi.2001, 1 ♀, IM. Nová Lhota, Vápenky, Porážky NNR (95), 9.ix.1998, 1 ♀, IM. Nová Lhota, Vápenky, Velička brook valley towards Mt Velká Javořina (96), 12.vii.1998, 3 ♂♂ 2 ♀♀, IM. Javorník, Machová NR (97), 9.vii.1998, 2 ♀♀, IM. Strání, Záhumenice NM (99), 2.vii.2001, 5 ♂♂ 5 ♀♀; 9.viii.2001, 1 ♂ 2 ♀♀; 21.ix.2001, 2 ♀♀; all IM; 23.v.2002, 1 ♀, PK.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common throughout the area; on *Alnus glutinosa* and *A. incana* in the vicinity of standing and running water, in wet meadows, floodplains, etc. **General distribution:** Holarctic. **Host plants:** *Alnus* spp. **Red List status:** –.

Psylla buxi (Linnaeus, 1758)

Material examined. Strání, village (56), 10.vii.1998, 5 ♀♀, IM. Kněždub, village (69), 22.vi.2001, 1 ♂ 1 ♀, IM & PK. Radějov, village (70), 11.vii.1998, 1 ♂ 2 ♀♀, IM; 9.viii.2002, 2 ♀♀, PK. Hrubá Vrbka, village (79), 28.vii.2001, 2 ♂♂ 8 ♀♀, IM. Velká nad Veličkou, village (83), 19.vi.2000, 3 ♂♂ 6 ♀♀, PK. Javorník, village (88), 8.viii.2001, 6 ♀♀, PK.

Distribution and frequency in the Bílé Karpaty PLA: Restricted to ornamental vegetation in villages (gardens, hedges, cemeteries, etc.), quite common at least in the south-western part of the area. **General distribution:** Native to western and southern Europe and Caucasus, introduced into central and northern Europe, North America and Pacific. **Host plant:** *Buxus sempervirens*. **Red List status:** –.

Psylla fusca (Zetterstedt, 1828)

Material examined. Bylnice, railway station environs (27), 1.vii.1999, 1 ♂ 3 ♀♀, MH & PK. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 1.vii.1999, 1 ♂, PK. Nedašov, Na Salaši (29), 5.vii.1999, 4 ♂♂, IM. Horní Němčí, Drahy NR (43), 30.vi.2001, 7 ♂♂ 4 ♀♀, IM. Suchov, Suchovské Mlýny (85), 29.vi.2001, 13 ♂♂ 7 ♀♀, IM. Nová Lhota, Vápenky, Velička brook valley towards Mt Velká Javořina (96), 12.vii.1998, 3 ♂♂ 9 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Probably widespread throughout the area but somewhat local and uncommon; in the vicinity of running water and locally (Drahy NR) also on shrubs growing on landslides. **General distribution:** Europe and Caucasus. **Host plant:** *Alnus incana*. **Red List status:** –.

Psyllopsis discrepans (Flor, 1861)

Material examined. Radějov, Lučina (73), 22.vi.2001, 2 ♂♂ 1 ♀, IM & PK. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 9.–10.ix.2000, 1 ♀, IM. Velká nad Veličkou, towards Javorník (87), 10.vi.1982, 1 ♂ 1 ♀, PL.

Distribution and frequency in the Bílé Karpaty PLA: Found only at low elevations in the warm, south-western part of the area; on *Fraxinus excelsior* in floodplain woodland along a brook and at forest margins, rare. **General distribution:** Western Palaearctic, introduced into North America. **Host plants:** *Fraxinus* spp. **Red List status:** –.

Psyllopsis fraxini (Linnaeus, 1758)

Published records. Bayer (1909, 1914): Luhačovice (1). Hubáček (1979): Blatnička, Jasenová hill (36). Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Valašské Klobouky, Brumovská street (3), 9.ix.1999, 2 ♂♂ 2 ♀♀, IM. Valašské Klobouky, Bílé potoky NR (11), 9.ix.1999, 2 ♂♂, IM. Nedašov, village (14), 3.vii.1999, 1 ♀, IM. Nedašov, Jalovcová stráň NR (15), 10.ix.1999, 1 ♀, IM. Nedašov, Kaňoury NM (16), 12.vii.2006, 1 ♂ 1 ♀, IM.

Bylnice, Bylničky (26), 24.vi.1982, many ♂♂ ♀♀, PL. Nedašov, Na Salaši (29), 10.ix.1999, 2 ♂♂ 2 ♀♀, IM. Vápenice, Trstná brook valley (50), 6.vii.2001, 1 ♀, IM & PK. Komňa, Nový Dvůr (48), 21.viii.1984, 1 ♀, PL. Korytná, Lubná pond environs (52), 5.vii.2001, 1 ♂ 3 ♀♀, IM. Březová, Kalábová NM (53), 4.vii.2001, 1 ♂, IM. Lopeník, U Zvonice NM (58), 25.ix.2004, 1 ♀, IM. Vyškovec, Vyškovecké Bošačky (65), 25.ix.2004, 1 ♂ 1 ♀, PK. Radějov, Lučina (73), 14.vii.1998, 1 ♀, IM; 17.vi.2000, 4 ♂♂ 4 ♀♀, IM; 22.vi.2001, 2 ♂♂ 3 ♀♀, IM & PK. Malá Vrbka, Výzkum hill (76), 25.v.2000, 1 ♀, IM; 18.vi.2000, 3 ♂♂ 4 ♀♀, IM & PK. Radějov, Veselka hill (81), 11.vii.1998, 1 ♂ 1 ♀, IM. Velká nad Veličkou, village (83), 19.vi.2000, 1 ♂ 4 ♀♀, PK. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 13.vii.1998, 1 ♂ 1 ♀, IM; 19.vi.2000, 3 ♀♀, PK; 9.–10.ix.2000, 1 ♂ 6 ♀♀, IM. Suchov, Suchovské Mlýny (85), 29.vi.2001, 7 ♂♂ 5 ♀♀, IM. Nová Lhota, Vápenky, Velička brook valley towards Mt Velká Javořina (96), 12.vii.1998, 2 ♂♂ 4 ♀♀, IM. Strání, Javorina NNR (102), 4.vii.2001, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common throughout the area; on *Fraxinus excelsior* in various habitats (floodplain woodland, ravine forests, forest margins, solitary trees, etc.). **General distribution:** Western Palaearctic, introduced into North America, Australia and New Zealand. **Host plants:** *Fraxinus* spp. **Red List status:** –.

Psyllopsis fraxinicola (Foerster, 1848)

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Nedašov, Kaňoury NM (16), 12.vii.2006, 1 ♂ 2 ♀♀, IM. Bylnice, Bylničky (26), 24.vi.1982, 4 ♂♂ 1 ♀, PL. Bylnice, railway station environs (27), 1.vii.1999, 1 ♂ 1 ♀, MH & PK. Korytná, Lubná pond environs (52), 5.vii.2001, 1 ♀, IM. Lopeník, U Zvonice NM (58), 25.ix.2004, 1 ♂, IM. Radějov, Lučina (73), 14.vii.1998, 1 ♀; 17.vi.2000, 1 ♂ 1 ♀; all IM. Malá Vrbka, Výzkum hill (76), 18.vi.2000, 4 ♂♂ 6 ♀♀, IM & PK. Velká nad Veličkou, village (83), 19.vi.2000, 7 ♂♂ 10 ♀♀, PK. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 13.vii.1998, 2 ♂♂; 9.–10.ix.2000, 2 ♀♀; all IM. Javorník, village (88), 8.viii.2001, 1 ♂ 4 ♀♀, PK. Javorník, Petruchovy Mlýny (93), 24.v.2002, 1 ♀, PK. Nová Lhota, Vápenky, Porážky NNR (95), 15.vii.1998, 1 ♂ 1 ♀, IM. Javorník, Machová NR (97), 9.vii.1998, 3 ♂♂ 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common throughout the area; on *Fraxinus excelsior* in various habitats (e.g. at forest margins and along streams). **General distribution:** Western Palaearctic, introduced into North and South America, Australia and New Zealand. **Host plants:** *Fraxinus* spp. **Red List status:** –.

Rhinocola aceris (Linnaeus, 1758)

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Valašské Klobouky, Brumovská street (3), 19.v.1999, 2 ♂♂ 1 ♀, IM. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 3 ♂♂ 5 ♀♀; 2.vii.1999, 1 ♀; all IM. Valašské Klobouky, Dobšená NM (6), 22.v.1999, 1 ♀; 2.vii.1999, 1 ♀; all IM. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 1 ♂ 3 ♀♀, IM. Poteč, Ploščiny NR (10), 4.vii.1999, 3 ♂♂ 1 ♀, IM; 1.vi.2002, 1 ♀, IM; 17.viii.2006, 1 ♀, PK. Valašské Klobouky, Bílé potoky NR (11), 9.ix.1999, 1 ♀; 16.vi.2006, 1 ♀; 11.vii.2006, 3 ♂♂ 1 ♀; all IM. Nedašov, Kaňoury NM (16), 12.vii.2006, 2 ♂♂, IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 1 ♀, IM. Petrůvka, Kladenka brook valley (19), 25.vi.–15.vii.2008, 1 ♀, MT, PC, JJ & JM. Bylnice, Na Stráži (25), 16.vi.2006, 5 ♂♂ 8 ♀♀; 11.vii.2006, 2 ♂♂ 4 ♀♀; all IM. Bylnice, railway station environs (27), 21.v.1999, 1 ♂, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 21.v.1999, 1 ♂ 1 ♀, IM. Horní Němčí, village (39), 15.v.1998, 1 ♂, IM. Horní Němčí, Hornoněmčanský háj forest (40), 7.vii.1980, 2 ♀♀, PL. Korytná, Březí (41), 5.vii.2001, 1 ♂, IM. Horní Němčí, Drahy NR (43), 23.v.2002, 1 ♂ 4 ♀♀, IM. Strání, Hrnčárky NM and Žabka reservoir surroundings (54), 10.vii.1998, 1 ♀, IM. Lopeník, U

Zvonice NM (58), 27.vi.2004, 2 ♂♂ 2 ♀♀; 24.vii.2005, 4 ♂♂ 14 ♀♀; all IM. Lopeník, Mikulčin vrch hill (60), 24.vii.2005, 2 ♂♂ 1 ♀, IM. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, 1 ♂, IM. Radějov, village (70), 14.viii.1977, 1 ♂, RJ. Radějov, Holý vrch hill (71), 8.ix.1998, 1 ♂, IM. Kněždub, Kněždubský háj forest (72), 17.vi.2000, 1 ♀, IM. Radějov, Lučina (73), 13.v.1998, 1 ♂; 14.vii.1998, 2 ♂♂ 1 ♀; all IM. Kněždub, Čertoryje NNR (74, 75), 19.vi.1980, 1 ♀, PL. Malá Vrbka, Výzkum hill (76), 25.v.2000, 2 ♂♂ 4 ♀♀; 18.vi.2000, 2 ♂♂ 8 ♀♀; 27.vii.2000, 1 ♀; all IM & PK. Radějov, Veselka hill (81), 11.vii.1998, 3 ♂♂ 4 ♀♀, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 19.vi.2000, 1 ♂ 2 ♀♀, PK. Suchov, Suchovské Mlýny (85), 6.v.2000, 1 ♀; 29.vi.2001, 3 ♀♀; 23.vi.2004, 1 ♀; all IM. Javorník, village (88), 24.v.2002, 1 ♂, IM; 8.viii.2001, 1 ♀, PK. Javorník, Jazevčí NNR (92), 6.v.2000, 10 ♂♂ 2 ♀♀; 19.vi.2000, 1 ♂ 5 ♀♀; all IM. Nová Lhota, Vápenky, Velička brook valley towards Mt Velká Javořina (96), 12.vii.1998, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common in various kinds of habitats (e.g. at forest margins) throughout the area. **General distribution:** Western Palaearctic. **Host plants:** *Acer* spp. **Red List status:** –.

Strophingia ericae (Curtis, 1835)

Material examined. Nedašov, Jalovcová stráň NR (15), 3.vii.1999, 4 ♂♂ 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Found in only one, extremely small heathland site in the north-eastern part of the area: sporadic and local. **General distribution:** European. **Host plant:** *Calluna vulgaris*. **Red List status:** –.

Family TRIOZIDAE

Bactericera albiventris (Foerster, 1848)

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Valašské Klobouky, Brumovská street (3), 19.v.1999, 1 ♂, IM. Valašské Klobouky, U Rybníků (4), 22.v.1999, 1 ♀, IM. Bylnice, railway station environs (27), 21.v.1999, 1 ♀; 11.ix.1999, 1 ♂ 1 ♀; all IM. Boršice u Blatnice, Boršický potok brook valley (37), 16.viii.1984, 1 ♀, PL. Horní Němčí, village (39), 15.v.1998, 1 ♀; 10.ix.1998, 2 ♀♀; all IM. Suchov, Kazivec brook valley (42), 15.v.1998, 1 ♀, IM. Starý Hrozenkov, Skalka quarry (63), 2.vii.2007, 1 ♀; 8.viii.2007, 1 ♀; both IM. Starý Hrozenkov, Hrozenkovské terasy (64), 8.viii.2007, 2 ♀♀, IM. Radějov, village (70), 14.viii.1977, 1 ♀, RJ. Radějov, Lučina (73), 13.v.1998, 1 ♀; 14.vii.1998, 4 ♀♀; 28.vii.2000, 2 ♀♀; 22.vi.2001, 1 ♂ 5 ♀♀; all IM & PK. Kněždub, Čertoryje NNR (74, 75), 19.vi.1980, 1 ♂, PL. Malá Vrbka, Výzkum hill (76), 2.v.2001, 1 ♂, IM & PK. Malá Vrbka, village (77), 28.vii.2001, 1 ♂ 3 ♀♀, IM. Velká nad Veličkou, village (83), 19.vi.2000, 1 ♀, PK; 9.ix.2000, 1 ♂, IM. Suchov, Suchovské Mlýny (85), 29.vi.2001, 1 ♂ 2 ♀♀, IM. Strání, Záhumenice NM (99), 8.vi.2001, 1 ♂, PL.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and quite common throughout the area: along streams, around ponds and springs, as well as on ornamental weeping willows in villages. **General distribution:** Palaearctic. **Host plants:** *Salix* spp. (*S. alba*, *S. fragilis*, *S. triandra*, *S. pentandra*, and *S. purpurea*). **Red List status:** –.

Bactericera curvatinervis (Foerster, 1848)

Material examined. Horní Němčí, Drahy NR (43), 10.ix.1998, 1 ♂, IM. Lopeník, U Zvonice NM (58), 25.ix.2004, 1 ♂ 1 ♀, IM. Starý Hrozenkov, Skalka quarry (63), 22.ix.2007, 1 ♀, IM. Strání, Záhumenice NM (99), 24.v.2001, 1 ♂, IM. Strání, Nová hora NR (100), 16.v.1998, 1 ♀, IM. Strání, Javorina NNR (102), 29.x.2011, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Recorded from the central and south-western parts of the area; quite uncommon at road margins, in wet meadows and pastures, as well as in an abandoned quarry. An overwintering specimen was found also at the highest elevation, the top of Mt Velká Javořina (ca. 950 m). **General distribution:** Palaearctic. **Host plants:** *Salix* spp. (*S. alba*, *S. aurita*, *S. caprea*, *S. cinerea*, *S. purpurea*, *S. repens*, and *S. viminalis*). **Red List status:** –.

Bactericera femoralis (Foerster, 1848)

Material examined. Valašské Klobouky, Javorůvky NR (5), 2.vii.1999, 1 ♂; 11.ix.1999, 1 ♂ 1 ♀; all IM. Valašské Klobouky, Brumovka brook valley (7), 30.vi.1999, 1 ♂, MH; 9.ix.1999, 1 ♂ 1 ♀, IM. Poteč, Ploščiny NR (10), 1.vi.2002, 2 ♀♀, IM. Valašské Klobouky, Bílé potoky NR (11), 16.vi.2006, 2 ♂♂ 3 ♀♀; 11.vii.2006, 3 ♂♂ 5 ♀♀; all IM. Brumov, Uhličky (13), 30.vi.2004, 1 ♂ 2 ♀♀, IM; 28.vii.2005, 1 ♀; 4.ix.2005, 1 ♀; both PK. Nedašov, Jalovcová stráň NR (15), 16.viii.2006, 1 ♂, PK. Nedašov, Kaňoury NM (16), 17.vi.2006, 1 ♂, IM; 12.vii.2006, 3 ♂♂ 12 ♀♀, IM. Brumov, Kloboucká street (24), 4.ix.2005, 1 ♂, PK. Nedašov, Pod Cigánem NM (30), 30.vi.2004, 3 ♂♂ 1 ♀; 5.x.2004, 1 ♂; 28.vii.2005, 3 ♂♂ 5 ♀♀; 6.ix.2005, 6 ♂♂ 2 ♀♀; all IM. Horní Němčí, Drahy NR (43), 30.vi.2001, 1 ♀, IM. Horní Němčí, Vinohrádky (44), 30.vi.2001, 2 ♂♂; 20.vii.2002, 1 ♂, IM. Lopeník, U Zvonice NM (58), 27.vi.2004, 4 ♂♂ 6 ♀♀; 25.ix.2004, 1 ♂; all IM. Lopeník, Lopenické sedlo (59), 27.vi.2004, 4 ♂♂ 4 ♀♀; 25.ix.2004, 11 ♂♂ 16 ♀♀; 21.v.2005, 1 ♀; 24.vii.2005, 3 ♂♂ 2 ♀♀; all IM; 3.ix.2005, 1 ♀, PK. Vyškovec, Vyškovecké Bošačky (65), 27.vi.2004, 1 ♂ 1 ♀, IM; 19.viii.2004, 1 ♂, PK; 3.ix.2005, 1 ♂, PK. Vyškovec, Pod Hribovňou NM (66), 28.vi.2004, 4 ♂♂ 3 ♀♀, IM. Suchov, Trnovský Mlýn (86), 23.vi.2004, 1 ♂ 2 ♀♀, IM; 16.viii.2004, 1 ♀, PK; 27.vii.2005, 1 ♂, IM; 1.ix.2005, 2 ♂♂ 1 ♀, IM. Nová Lhota, Vápenky, Porážky NNR (95), 15.vii.1998, 1 ♂; 9.ix.1998, 2 ♂♂ 1 ♀; all IM. Strání, Záhumenice NM (99), 2.vii.2001, 41 ♂♂ 33 ♀♀, IM & PK; 9.viii.2001, 2 ♂♂ 2 ♀♀, PK; 21.ix.2001, 9 ♂♂ 15 ♀♀, IM; 20.vii.2002, 3 ♂♂ 4 ♀♀, IM; 12.ix.2002, 1 ♂ 2 ♀♀, IM. Strání, Javorina NNR (102), 4.vii.2001, 1 ♂ 2 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common in mesic to wet meadows and pastures throughout most of the area but apparently absent from the warmest, extreme south-western part. **General distribution:** Eurosiberian. **Host plants:** *Alchemilla* spp. **Red List status:** –.

Bactericera kratochvili Vondráček, 1957 (EN)

Material examined. Komňa, Nový Dvůr (48), 21.viii.1984, 1 ♀, PL.

Distribution and frequency in the Bílé Karpaty PLA: Recorded as a single specimen in the central part of the area. As the main host plant of the species, *Allium senescens* subsp. *montanum*, is extremely rare in the Czech part of the Bílé Karpaty Mts. (Jongepier & Jongepierová 2006, Jongepier & Pechanec 2006) and *B. kratochvili* has not been collected again in the area in recent years, the finding may be due to a migrating specimen collected on a dispersion flight. Suitable habitats for *Bactericera kratochvili* are, however, present in the limestone cliff zone of the Slovak part of the Bílé Karpaty Mts. (ca. 60 km away from the collecting site in Komňa) and the species may naturally occur there. **General distribution:** Central and eastern Europe, Central Asia and Mongolia. **Host plant:** *Allium senescens* subsp. *montanum*. **Red List status:** Endangered.

Comments. In the Czech Republic, *Bactericera kratochvili* occurs only locally, being largely restricted to dry grassland sites on rocks. It has been recorded for southern Bohemia (the Vyšenské kopce hills near Český Krumlov) and southern Moravia (e.g. the environs of Brno, Miroslav, and the Pavlovské vrchy hills) (Lauterer 1965, 1991, 1995; Lauterer & Malenovský 2002).

Bactericera lyrata Seljak, Malenovský et Lauterer, 2008 (Fig. 7)

Material examined. Hrubá Vrbka, football ground (78), 20.ix.2001, 2 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Known from only one site at the foothills of the Bílé Karpaty Mts. in the south-western part of the area; the specimens were collected in a mesic, quite eutrophicated grassland on a margin of a football ground and fields. **General distribution:** So far known only from Slovenia (type series) and Hungary (unpublished data based on a material from the Hungarian Natural History Museum, Budapest, P. Lauterer & I. Malenovský det.). **Host plant:** Unknown, perhaps *Potentilla reptans* or *Sanguisorba officinalis* (Seljak *et al.* 2008). **Red List status:** Not evaluated.

Comments. *Bactericera lyrata* is a recently described species, quite similar in morphology to the related *B. modesta* and *B. reuteri* (Šulc, 1913) and perhaps partly overlooked or misidentified so far. It is reported here for the Czech Republic for the first time.

Bactericera maura (Foerster, 1848) (NT)

Material examined. Horní Němčí, Drahy NR (43), 30.vi.2001, 3 ♂♂ 8 ♀♀, IM. Radějov, Lučina (73), 13.v.1998, 1 ♀, IM. Velká nad Veličkou, village (83), 18.iv.2000, 1 ♂, IM; 19.vi.2000, 1 ♀, PK. Suchov, Suchovské Mlýny (85), 6.v.2000, 1 ♀, IM. Strání, Záhumenice NM (99), 8.vi.2001, 1 ♀, PL.

Distribution and frequency in the Bílé Karpaty PLA: Found at several sites in the south-western part of the area, mostly on *Salix purpurea* along streams and around springs and ponds: uncommon. **General distribution:** Europe, Caucasus, Kazakhstan. **Host plants:** *Salix* spp. (*S. alba*, *S. fragilis*, *S. triandra*, *S. purpurea*; Vondráček 1957). **Red List status:** Near-threatened.

Comments. In the Czech Republic, *Bactericera maura* is a quite rare species found at a few sites in the lowlands of central and southern Moravia (Lauterer 1963, 1994).

Bactericera modesta (Foerster, 1848) (EN)

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Brumov, Uhličky (13), 30.vi.2004, 3 ♀♀, IM; 4.ix.2005, 1 ♀, PK. Nedašov, Kaňoury NM (16), 12.vii.2006, 1 ♀, IM. Nedašov, Pod Cigánem NM (30), 30.vi.2004, 1 ♂; 1.ix.2004, 1 ♂ 3 ♀♀; 5.x.2004, 3 ♂♂; 28.vii.2005, 1 ♀; 6.ix.2005, 7 ♀♀; all IM. Horní Němčí, Drahy NR (43), 10.ix.2002, 1 ♂, IM. Komňa, Lom Rasová NM (49), 5.vii.2001, 1 ♂ 1 ♀, IM. Kněždub, Čertoryje NNR, Járkovec brook valley (74), 12.viii.2008, 2 ♀♀, KD & KF. Kněždub, Čertoryje NNR, Radějovka brook valley (75), 22.vi.2008, 1 ♂ 1 ♀, KD & KF. Nová Lhota, Vápenky, Porážky NNR (95), 28.x.2011, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread throughout the area but quite rare; mostly associated with *Sanguisorba officinalis* in non-intensively used mesic to wet meadows but also found on *S. minor* in a fragment of dry grassland in an abandoned quarry (Komňa, Lom Rasová NM). **General distribution:** Europe, Central Asia, Mongolia. **Host plants:** *Sanguisorba minor* and *S. officinalis*. **Red List status:** Endangered.

Comments. In the Czech Republic, *B. modesta* is probably a widespread but local and rare species confined to habitats valuable from a general nature-conservationist viewpoint. It has been documented from the Pavlovské vrchy Hills and the environs of Hustopeče in southern Moravia, the Bohemian-Moravian Highlands, the Bohemian Karst in central Bohemia, the environs of Dvůr Králové in north-eastern Bohemia, the environs of Plzeň in western Bohemia, as well as from the eastern part of the Šumava Mts. in southern Bohemia (Šulc 1912; Vondráček 1957; Doskočil & Hůrka 1962; Lauterer 1963, 1991, 1994, 1995; Malenovský *et al.* 2011; and unpublished material from the collections of the Moravian Museum, Brno).

Bactericera nigricornis (Foerster, 1848)

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Poteč, Ploščiny NR (10), 1.vi.2002, 1 ♂ 1 ♀, IM. Brumov, Uhličky (13), 30.vi.2004, 2 ♂♂ 2 ♀♀; 1.ix.2004, 1 ♂; 5.x.2004, 3 ♂♂ 1 ♀; all IM; 28.vii.2005, 4 ♂♂ 5 ♀♀; 4.ix.2005, 1 ♂ 1 ♀; all PK. Bojkovice, town (20), 5.viii.1962, 1 ♀, PL. Nedašov, Pod Cigánem NM (30), 5.x.2004, 2 ♂♂ 1 ♀; 28.vii.2005, 1 ♀; 6.ix.2005, 1 ♂ 1 ♀; all IM. Horní Němčí, Drahy NR (43), 10.ix.2002, 1 ♂ 1 ♀, IM. Horní Němčí, Vinohrádky (44), 30.vi.2001, 1 ♀, IM. Vápenice, Trstná brook valley (50), 6.vii.2001, 1 ♀, IM & PK. Strání, Obecnice hill (55), 20.vii.2002, 1 ♀, IM & PK; 12.ix.2002, 1 ♀, IM. Lopeník, Lopenické sedlo (59), 3.ix.2005, 1 ♂, PK. Vyškovec, Vyškovecké Bošačky (65), 19.viii.2004, 1 ♂ 1 ♀; 25.ix.2004, 1 ♂; 3.ix.2005, 1 ♂; all PK. Vyškovec, Pod Hribovňou NM (66), 25.ix.2004, 2 ♀♀, PK. Malá Vrbka, Výzkum hill (76), 18.vi.2000, 1 ♀; 27.vii.2000, 1 ♂; 2.v.2001, 1 ♀; 28.vii.2001, 4 ♂♂ 6 ♀♀; 20.ix.2001, 1 ♂; all IM & PK. Suchov, Suchovské Mlýny (85), 29.vi.2001, 1 ♀, IM; 16.viii.2004, 2 ♂♂ 1 ♀, PK; 1.x.2004, 4 ♂♂ 6 ♀♀, IM. Javorník, Petruchovy Mlýny (93), 23.ix.2001, 1 ♂; 17.vii.2002, 1 ♂ 2 ♀♀; 7.ix.2002, 1 ♂; 2.ix.2004, 1 ♀; all IM. Strání, Záhumenice NM (99), 9.viii.2001, 3 ♀♀, PK; 21.ix.2001, 9 ♂♂ 1 ♀, IM; 20.vii.2002, 2 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and quite common in meadows, pastures and ruderal sites throughout the area, although usually collected in low numbers of specimens. **General distribution:** Western Palaearctic, Central Asia, Siberia, Mongolia. **Host plants:** Polyphagous on a variety of dicotyledonous herbs. **Red List status:** –.

Bactericera striola (Flor, 1861)

Material examined. Valašské Klobouky, Bílé potoky NR (11), 9.ix.1999, 1 ♂, IM. Bylnice, Bylničky (26), 24.vi.1982, 1 ♀, PL. Bylnice, railway station environs (27), 21.v.1999, 1 ♀, IM. Starý Hrozenkov, Skalka quarry (63), 22.ix.2007, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Found in the north-eastern and central parts of the area; quite rare in willow shrubs along streams, around springs, as well as in an abandoned quarry. **General distribution:** Palaearctic. **Host plants:** *Salix*

spp. (*S. aurita*, *S. caprea*, *S. cinerea*, *S. myrsinifolia*, *S. phylicifolia*, *S. fragilis*, *S. purpurea*, and *S. lapponum*). **Red List status:** –.

Bactericera substriola Ossiannilsson, 1992 (Fig. 8)

Material examined. Bylnice, railway station environs (27), 11.ix.1999, 1 ♀, IM. Suchov, Suchovské Mlýny (85), 29.vi.2001, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Known from two isolated collections in the valleys of the Vlára and Velička rivers in the north-eastern and south-western parts of the area, respectively; sporadic on streamside vegetation at relatively low elevations. **General distribution:** European (Austria, Germany, Great Britain, Sweden, and Switzerland). **Host plants:** Reported from *Salix lapponum* and *S. elaeagnos* (Ossiannilsson 1992, Burckhardt & Lauterer 1997b). Both willow species currently do not occur in the Bílé Karpaty PLA (Jongepier & Jongepierová 2006, Jongepier & Pechanec 2006). *Bactericera substriola* is thus probably more oligophagous and associated with some additional *Salix* sp. in the region. **Red List status:** Not evaluated.

Comments. *Bactericera substriola* is a member of a taxonomically critical group of species (Ossiannilsson 1992, Burckhardt & Lauterer 1997b). Here we report it for the first time for the Czech fauna. Based on an unpublished material from the Moravian Museum, Brno, it is more widespread in the country but has been partly misidentified in the past.

Bactericera trigonica Hodkinson, 1981 (VU)

Material examined. Bylnice, railway station environs (27), 11.ix.1999, 1 ♂, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 13.vii.1998, 1 ♂; 18.iv.2000, 1 ♀; both IM.

Distribution and frequency in the Bílé Karpaty PLA: Known from only two sites in the north-eastern and south-western parts of the area: an abandoned field and a dry grassland. **General distribution:** Southern parts of the western Palaearctic region. **Host plant:** *Daucus carota*. **Red List status:** Vulnerable.

Comments. *Bactericera trigonica* is a quite rare thermophilous species associated with dry ruderal sites in the Czech Republic. Its distribution in the country is, as far as known, restricted to southern Moravia where it perhaps reaches the northern limit of its distribution (Lauterer 1991, 1993; Malenovský *et al.* 2011).

Eryngiofaga lautereri Loginova, 1977 (EN)

Published records. Hubáček (1979): Hluk, Kobylí hlava NM (33) [as *Trioza bupleuri*].
Material examined. Kněždub, Čertoryje NNR (74, 75), 19.vi.1980, 1 ♂, PL.

Distribution and frequency in the Bílé Karpaty PLA: Known from two sites in the south-western part of the area (the identification of Hubáček's record of galls is hypothetical), not confirmed in recent years. **General distribution:** Central European

(Czech Republic, Germany, Slovakia). **Host plant:** *Bupleurum falcatum*. **Red List status:** Endangered.

Comments. *Eryngiofaga lautereri* is a generally rare species associated with dry grasslands and sunny forest margins. In the Czech Republic, it is known only from southern Moravia: the Pavlovské vrchy and Dunajovické kopce Hills, the environs of Hustopeče, Brno, and Tišnov, the Moravian Karst, and the valleys of the Jihlava and Oslava rivers (Lauterer 1965, 1979, 1991, 1995; Malenovský *et al.* 2011). Despite a common occurrence of its host plant in the south-western part of the Bílé Karpaty PLA (Jongepier & Jongepierová 2006, Jongepier & Pechanec 2006), *E. lautereri* has not been collected there in the course of the recent intensive field surveys and may have become extremely rare or extinct in the area.

Trichochermes walkeri (Foerster, 1848)

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Valašské Klobouky, Na Nivách (8), 9.ix.1999, many ♂♂ ♀♀, IM. Bylnice, Na Stráži (25), 18.viii.2006, 7 ♂♂ 2 ♀♀, PK. Boršice u Blatnice, Boršický potok brook valley (37), 16.viii.1984, 7 ♂♂ 1 ♀, PL. Louka, Hloží NR (38), 7.ix.1998, 1 ♂, IM. Horní Němčí, Drahy NR (43), 10.ix.1998, many ♂♂ ♀♀, IM. Bánov, Skalky hill (47), 21.viii.1984, 2 ♂♂ 2 ♀♀, PL. Strání, Hrnčárky NM and Žabka reservoir surroundings (54), 10.ix.1998, many ♂♂ ♀♀, IM. Radějov, village (70), 14.viii.1977, 2 ♂♂, RJ. Malá Vrbka, Výzkum hill (76), 16.viii.2000, 1 ♂, PK. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 27.vii.2000, 2 ♂♂; 9.–10.ix.2000, 6 ♂♂ ♀♀; all IM. Javorník, Jazevčí NNR (92), 10.ix.2000, 5 ♂♂ ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and quite common throughout the area; in scrub and along forest margins. **General distribution:** Europe, Caucasus, Central Asia. **Host plant:** *Rhamnus cathartica*. **Red List status:** –.

Trioza abdominalis Flor, 1861 (VU)

Material examined. Poteč, Ploščiny NR (10), 4.vii.1999, 2 ♀♀; 1.vi.2002, 1 ♂; all IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 3.vii.1999, 1 ♀, IM. Bylnice, Na Stráži (25), 16.vi.2006, 1 ♀, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 21.v.1999, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Restricted to pastures and meadows in the north-eastern part of the area, quite rare. **General distribution:** Europe, Siberia, Central Asia. **Host plants:** *Achillea* spp. **Red List status:** Vulnerable.

Comments. In the Czech Republic, *T. abdominalis* is a rare psychrophilous species occurring locally in some submontane regions and mountains. Published records come from the Bohemian-Moravian Highlands, the Nízký Jeseník Hills, the Doupovské hory Mts., and the Jizerské hory Mts. (Vondráček 1957; Lauterer 1963, 2001).

Trioza agrophila Löw, 1888 (EX)

Published records. Hubáček (1979): Hluk, Kobylí hlava NM (33).

Distribution and frequency in the Bílé Karpaty PLA: Cited here based on a record of galls collected in 1966–1976 at a single site situated outside but close to the administrative borders of the area; not confirmed in recent years. **General distribution:** Northern, central and eastern Europe, Caucasus. **Host plant:** *Cirsium arvense*. **Red List status:** Regionally extinct in the Czech Republic.

Comments. Based on information published in literature (concerning particularly records of galls), *T. agrophila* used to be a widespread and common species throughout the Czech Republic (Bayer 1909, 1914; Baudyš 1916, 1926a,b,c, 1944, 1954, 1960, 1962, 1964, 1965, 1966c, 1967a, 1969; Vondráček 1957; Lauterer 1991) but disappeared after a period of massive applications of pesticides in the Czech agriculture in the second half of the 20th century (Lauterer 1998). The last specimens documented in the collections were collected in 1968 (unpublished data from the Moravian Museum, Brno) and the species is currently considered as extinct in the country (Lauterer & Malenovský 2005).

Trioza anthrisci Burckhardt, 1986

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Radějovka brook valley (75).
Additional material examined. Valašské Klobouky, Brumovská street (3), 19.v.1999, 1 ♂, IM. Valašské Klobouky, U Rybníků (4), 22.v.1999, 1 ♂ 1 ♀, IM. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 1 ♂, IM. Valašské Klobouky, Bílé potoky NR (11), 19.v.1999, 5 ♂♂ 10 ♀♀, IM. Horní Němčí, village (39), 15.v.1998, 1 ♀, IM. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, 1 ♂, IM. Vyškovec, Vyškovecké Bošačky (65), 21.v.2005, 1 ♂, IM. Javorník, Machová NR (97), 9.vii.1998, 1 ♂ 3 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread throughout the area but quite uncommon; usually in quite eutrophicated grassland along roads and paths, in floodplains along brooks or at pasture margins; in most places probably associated with *Anthriscus silvestris* but once collected also on *Chaerophyllum hirsutum* (Valašské Klobouky, Bílé potoky NR). **General distribution:** Eurosiberian. **Host plants:** *Anthriscus silvestris* and some other Apiaceae (*Angelica silvestris*, *Heracleum sphondylium*, *Peucedanum ostruthium*, and *Pastinaca sativa*). **Red List status:** –.

Trioza apicalis Foerster, 1848

Material examined. Nedašov, Jalovcová stráň NR (15), 10.ix.1999, 1 ♀; 5.x.2004, 1 ♀; both IM. Bylnice, railway station environs (27), 11.ix.1999, 2 ♀♀, IM. Lopeník, Lopenické sedlo (59), 25.ix.2004, 1 ♀, IM. Suchov, Suchovské Mlýny (85), 23.vi.2004, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Probably widespread in the area but quite rare in pastures and abandoned fields. **General distribution:** Eurosiberian. **Host plants:** *Daucus carota* and some other Apiaceae (e.g. *Petroselinum crispum* and *Carum carvi*). **Red List status:** –.

Comments. *Trioza apicalis* is a serious pest of cultivated carrots in northern and occasionally also in central Europe (Láska 1974, 2011)

Trioza cerastii (Linnaeus, 1758) (VU)

Published records. Baudyš (1966b): common on *Cerastium holosteoides* subsp. *triviale* in the environs of Bojkovice (20), Nivnice (34a) and Bánov (47; precise locations of all collecting sites unknown) [as *Trioza ceraszini*, misspelled].
Material examined. Valašské Klobouky, Dobšená NM (6), 2.vii.1999, 1 ♀, IM. Poteč, Ploščiny NR (10), 4.vii.1999, 2 ♀♀; 13.ix.1999, 1 ♂; 1.vi.2002, 1 ♀; all IM. Nedašov, Jalovcová stráň NR (15), 12.vii.2006, 1 ♂, IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 3.vii.1999, 1 ♂ 1 ♀, IM. Brumov, Kloboucká street (24), 30.vi.2004, 1 ♂, IM. Lopeník, U Zvonice NM (58), 27.vi.2004, 1 ♀, IM. Lopeník, Lopenické sedlo (59), 27.vi.2004, 7 ♂♂ 12 ♀♀; 25.ix.2004, 1 ♀; all IM. Vyškovec, Vyškovecké Bošačky (65), 27.vi.2004, 1 ♀, IM. Vyškovec, Pod Hribovňou NM (66), 28.vi.2004, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Restricted to pastures and meadows in the cooler north-eastern and central parts of the area, uncommon. **General distribution:** Eurosiberian. **Host plants:** *Cerastium* spp. **Red List status:** Vulnerable.

Comments. *Trioza cerastii* is probably a widespread species in the Czech Republic, at least in the highlands, submontane regions and mountains; most previously published records are based on galls (e.g. Bayer 1909, 1914; Baudyš 1926a,b, 1954, 1966b; Vondráček 1957; Malenovský & Lauterer 1997).

Trioza chenopodii Reuter, 1876

Published records. Lauterer (1982): Bojkovice, town (20).
Additional material examined. Nedašov, Pod Cigánem NM (30), 28.vii.2005, 1 ♂, IM. Boršice u Blatnice, Boršický potok brook valley (37), 16.viii.1984, 1 ♂ 4 ♀♀, PL. Horní Němčí, Drahy NR (43), 21.vii.2002, 1 ♀, IM. Bánov, Skalky hill (47), 21.viii.1984, 4 ♂♂ 2 ♀♀, PL. Komňa, Nový Dvůr (48), 21.viii.1984, 3 ♂♂ 1 ♀, PL. Strání, Dúbrava hill (57), 7.vii.1980, 1 ♂ 2 ♀♀, PL. Malá Vrbka, Výzkum hill (76), 16.xi.1999–4.iii.2000, 1 ♀; 4.iii.–8.iv.2000, 4 ♀♀; all pitfall traps, PBz; 17.iv.2000, 2 ♂♂; 27.vii.2000, 1 ♀; 2.v.2001, 1 ♀; 22.vi.2001, 1 ♀; 28.vii.2001, 1 ♂; all IM & PK.

Distribution and frequency in the Bílé Karpaty PLA: Probably widespread in ruderal vegetation throughout the area. **General distribution:** Palaearctic, introduced into North and South America. **Host plants:** *Chenopodium* spp., *Atriplex* spp. and some other Chenopodioideae. **Red List status:** –.

Trioza chrysanthemi Löw, 1878 (EN) (Fig. 9)

Material examined. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 1 ♀, IM. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 1 ♀, IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 1 ♀, IM. Horní Němčí, Hornoněmčanský háj forest (40), 10.ix.2002, 1 ♂, IM. Lopeník, Lopenické sedlo (59), 25.ix.2004, 1 ♀, IM. Starý Hrozenkov, Skalka quarry (63), 22.ix.2007, 1 ♀, IM. Vyškovec, Vyškovecké Bošačky (65), 27.vi.2004, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Restricted to the cooler north-eastern and central parts of the area with one isolated finding near Horní Němčí in the south-west; quite rare in pastures and meadows. **General distribution:** Central, northern, and eastern Europe. **Host plants:** *Leucanthemum* spp. **Red List status:** Endangered.

Comments. *Trioza chrysanthemi* is a rare species in the Czech Republic that seems to be restricted to species-rich grasslands in submontane and mountain regions (including

subalpine grassland). It has been recorded so far only from a few sites in the Jeseníky and Javorníky Mts. in northern and eastern Moravia and perhaps (based on a record of galls) also in the Krkonoše Mts. in north-eastern Bohemia (Baudyš 1954, 1967b; Lauterer 1963; Malenovský & Lauterer 1997).

Trioza cirsii Löw, 1881

Published records. Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 26 ♂♂ 32 ♀♀, IM; 2.vii.1999, 4 ♂♂ 3 ♀♀, IM; 11.ix.1999, 1 ♀, IM; 24.viii.2002, 1 ♀, PK. Valašské Klobouky, Dobšená NM (6), 22.v.1999, 1 ♂ 3 ♀♀, IM. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 1 ♂, IM. Valašské Klobouky, Bílé potoky NR (11), 19.v.1999, 1 ♂ 5 ♀♀; 16.vi.2006, 2 ♂♂ 1 ♀; 11.vii.2006, many ♂♂ ♀♀; all IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 1.vii.1999, 1 ♂ 1 ♀, PK. Suchov, Kazivec brook valley (42), 15.v.1998, 1 ♂ 2 ♀♀, IM. Horní Němčí, Drahy NR (43), 10.ix.2002, 1 ♂, IM. Vápenice, Trstná brook valley (50), 6.vii.2001, 1 ♂, IM & PK. Lopeník, U Zvonice NM (58), 25.ix.2004, 1 ♀, IM. Lopeník, Lopenické sedlo (59), 8.v.2004, 1 ♂ 1 ♀, IM. Vyškovec, Pod Hribovňou NM (66), 25.ix.2004, 1 ♀, PK. Radějov, village (70), 14.viii.1977, 1 ♂ 4 ♀♀, RJ. Malá Vrbka, Výzkum hill (76), 2.v.2001, 2 ♂♂ 2 ♀♀; 28.vii.2001, 1 ♂ 1 ♀; all IM & PK. Nová Lhota, Vápenky, Porážky NNR (95), 15.vii.1998, many ♂♂ ♀♀; 28.x.2011, 2 ♂♂ 3 ♀♀; all IM. Javorník, Machová NR (97), 14.v.1998, many ♂♂ ♀♀; 9.vii.1998, 2 ♂♂ 4 ♀♀; 8.v.2000, 1 ♂ 4 ♀♀; all IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread throughout the area; quite common in wet meadows, rarely also at ruderal sites. **General distribution:** European. **Host plants:** *Cirsium* spp. (*C. oleraceum*, *C. palustre*, *C. heterophyllum*, *C. arvense*, and *C. erisithales*). **Red List status:** –.

Trioza dichroa Scott, 1879

Material examined. Komňa, Nový Dvůr (48), 21.viii.1984, 11 ♂♂ 10 ♀♀, PL.

Distribution and frequency in the Bílé Karpaty PLA: Known from only one finding on ruderal vegetation in the central part of the area. **General distribution:** Western Palaearctic. **Host plant:** *Atriplex tatarica*. **Red List status:** –.

Trioza dispar Löw, 1878 (VU) (Fig. 10)

Material examined. Poteč, Ploščiny NR (10), 13.ix.1999, 2 ♀♀, IM. Valašské Klobouky, Bílé potoky NR (11), 14.viii.2006, 1 ♀, PK. Nedašov, Jalovcová stráň NR (15), 3.vii.1999, 3 ♂♂ 9 ♀♀; 10.ix.1999, 9 ♂♂ 16 ♀♀; 5.x.2004, 1 ♂; 28.vii.2005, 1 ♀, 12.vii.2006, 3 ♀♀; all IM; 16.viii.2006, 3 ♀♀, PK. Nedašov, Kaňoury NM (16), 12.vii.2006, 1 ♂, IM. Nedašov, Pod Cigánem NM (30), 30.vi.2004, 3 ♂♂ 3 ♀♀; 5.x.2004, 1 ♂; all IM. Starý Hrozenkov, Skalka quarry (63), 8.viii.2007, 4 ♀♀, IM. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Restricted to the relatively cool north-eastern and central parts of the area, locally common there, particularly in pastures. **General distribution:** Eurosiberian. **Host plants:** *Taraxacum* spp., perhaps also *Leontodon hispidus*. **Red List status:** Vulnerable.

Comments. In the Czech Republic, *Trioza dispar* has been mostly found associated with *Taraxacum* sect. *Ruderalia* as locally common in a few submontane and mountain

regions (the Javorníky Mts., Králický Sněžník Mts., Rychlebské hory Mts., Jeseníky Mts. and Drahanská vrchovina Highlands in eastern, central and nothern Moravia, and the Šumava Mts. in southern Bohemia; Baudyš 1954, Malenovský & Lauterer 1997, Lauterer & Malenovský 2002, Malenovský *et al.* 2008, and unpublished material from the Moravian Museum, Brno).

Trioza flavipennis Foerster, 1848

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Valašské Klobouky, U Rybníků (4), 22.v.1999, 1 ♀; 10.ix.1999, 2 ♂♂; all IM. Valašské Klobouky, Javorůvky NR (5), 11.ix.1999, 1 ♀, IM. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 1 ♀, IM. Valašské Klobouky, Na Nivách (8), 9.ix.1999, 1 ♀, IM. Valašské Klobouky, Bílé potoky NR (11), 19.v.1999, 1 ♂, IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 1 ♂ 1 ♀, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 21.v.1999, 1 ♀, IM. Svatý Štěpán, Nadříčí (31), 21.v.1999, 1 ♂ 2 ♀♀, IM. Horní Němčí, Horní kopec hill (45), 23.v.2002, 1 ♀ and galls, IM. Radějov, Lučina (73), 7.v.2000, 1 ♂ and galls, IM. Suchov, Suchovské Mlýny (85), 6.v.2000, 2 ♂♂ 3 ♀♀, IM. Strání, Javorina NNR (102), 29.x.2011, 1 ♂, IM.

Distribution and frequency in the Bílé Karpaty PLA: Probably widespread and common throughout the area; usually in quite eutrophicated sites, e.g. along brooks and roads. **General distribution:** European. **Host plant:** *Aegopodium podagraria*. **Red List status:** –.

Trioza foersteri Meyer-Dür, 1871

Material examined. Návojná, Vrchy hill (12), 12.vii.2006, larvae and galls, IM. Lopeník, Mikulčin vrch hill (60), 24.vii.2005, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Recorded only from two sites in the north-eastern and central parts of the area; in beech and spruce forest undergrowth. **General distribution:** Central and southern Europe, North Africa. **Host plant:** *Mycelis muralis*. **Red List status:** –.

Trioza galii Foerster, 1848

Material examined. Valašské Klobouky, U Rybníků (4), 22.v.1999, 1 ♀; 10.ix.1999, 1 ♂; both IM. Bylnice, Bylničky (26), 24.vi.1982, 1 ♂, PL. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 12.ix.1999, 1 ♀, IM. Horní Němčí, Drahy NR (43), 30.vi.2001, 1 ♀, IM. Bánov, Skalky hill (47), 21.viii.1984, 2 ♂♂ 1 ♀, PL. Komňa, Nový Dvůr (48), 21.viii.1984, 2 ♂♂ 1 ♀, PL.

Distribution and frequency in the Bílé Karpaty PLA: Perhaps widespread throughout the area, although not documented from its extreme south-western part; uncommon in various, wet to dry, open grassland sites (meadows and pastures, a shore of a pond, etc.). **General distribution:** Western Palaearctic and Central Asia (Burckhardt & Lauterer 2006). **Host plants:** *Galium* spp. (*G. album*, *G. aparine*, and *G. palustre*) and *Asperula cynanchica*. **Red List status:** –.

Comments. A revision of previously published data on *T. galii* from the Czech Republic is needed because of the involvement of closely-related *T. velutina* (see Burckhardt &

Lauterer 2006). Based on recently published data, *T. galii* is known from both Bohemia and Moravia (Lauterer 2001, Malenovský 2006, Malenovský *et al*. 2011). The record from Čertoryje NNR (Malenovský 2001) belongs to *T. velutina*.

Trioza proxima Flor, 1861 (VU)

Published records. Bayer (1909, 1914): Pozlovice, towards Horní Lhota (1a). Lauterer & Malenovský (2002): Nedašov, Jalovcová stráň NR (15); Nedašov, Kaňúr hill and Hrušová dolina valley (17).
Additional material examined. Nedašov, Jalovcová stráň NR (15), 25.vi.2002, 1 ♀, PK; 12.vii.2006, 1 ♂ 3 ♀♀, IM; 16.viii.2006, 1 ♂, PK.

Distribution and frequency in the Bílé Karpaty PLA: Recently recorded only from the north-easternmost part of the area; found there on *Hieracium pilosella* and as overwintering specimens on *Juniperus communis* at two small sites with sunny grassland on acidic soils. **General distribution:** Europe (except Scandinavia), Caucasus. **Host plants:** *Hieracium* spp. **Red List status:** Vulnerable.

Comments. *Trioza proxima* is currently probably quite rare in the Czech Republic and occurrs only locally at sunny dry sites in highlands. Besides the Bílé Karpaty Mts., there have been recent records from the Bohemian-Moravian Highlands and several historical records based on galls (reviewed in Lauterer & Malenovský 2002).

Trioza remota Foerster, 1848

Published records. Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Nedašov, Jalovcová stráň NR (15), 5.x.2004, 1 ♂, IM. Lopeník, U Zvonice NM (58), 25.ix.2004, 2 ♂♂, IM. Žítková, Hutě NR (61), 11.iv.–9.v.2007, 1 ♀, MT, PC, JJ & JM. Velká nad Veličkou, village (83), 22.x.2000, 1 ♂ 4 ♀♀, IM. Javorník, Jazevčí NNR (92), 6.v.2000, 2 ♀♀, IM. Strání, Javorina NNR (102), 29.x.2011, 16 ♂♂ 25 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread throughout the area but quite rarely documented; associated with various habitats. Overwintering specimens were found also at the highest elevations: on the top of Mt Velká Javořina (ca. 950 m). **General distribution:** Palaearctic. **Host plants:** *Quercus* spp. (*Q. petraea*, *Q. robur*, and *Q. pubescens*). **Red List status:** –.

Trioza rhamni (Schrank, 1801)

Published records. Malenovský (2001): Kněždub, Čertoryje NNR, Járkovec brook valley (74).
Additional material examined. Valašské Klobouky, Dobšená NM (6), 2.vii.1999, 1 ♀, IM. Bylnice, Na Stráži (25), 16.vi.2006, 1 ♀; 11.vii.2006, 1 ♂; both IM. Horní Němčí, Drahy NR (43), 15.v.1998, several ♂♂ ♀♀, IM. Strání, Hrnčárky NM and Žabka reservoir surroundings (54), 10.ix.1998, 1 ♀, IM. Malá Vrbka, Výzkum hill (76), 2.v.2001, 1 ♀, IM & PK. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 14.v.1998, 1 ♀, IM. Suchov, Suchovské Mlýny (85), 29.vi.2001, 1 ♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread throughout the area, even if quite rarely documented; associated with forest margins and scrub scattered in meadows and pastures. **General distribution:** Europe, Caucasus, and Central Asia. **Host plant:** *Rhamnus cathartica*. **Red List status:** –.

Trioza rotundata Flor, 1861

Material examined. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 1 ♀; 11.ix.1999, 1 ♀; both IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 2 ♂♂ 2 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Found only in shaded spring fens with *Cardamine amara* in the relatively cooler, north-easternmost part of the area: rare. **General distribution:** Europe and possibly also Caucasus (Burckhardt & Lauterer 2002). **Host plants:** *Cardamine amara* and perhaps other *Cardamine* spp. **Red List status:** –.

Trioza schrankii Flor, 1861 (EN) (Fig. 11)

Published records. Lauterer & Malenovský (2002): Valašské Klobouky, Brumovka brook valley (7); Valašské Klobouky, Javorůvky NR (5); Nedašov, Kaňoury NM (16); Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28).

Additional material examined. Valašské Klobouky, U Rybníků (4), 10.ix.1999, 1 ♀, IM. Nedašov, Kaňoury NM (16), 17.vi.2006, 2 ♀♀; 12.vii.2006, 2 ♀♀; all IM. Lopeník, U Zvonice NM (58), 8.v.2004, 1 ♂ 7 ♀♀, IM; 27.vi.2004, 1 ♀, IM; 18.viii.2004, 2 ♀♀, PK; 21.v.2005, 5 ♂♂ 18 ♀♀, IM; 24.vii.2005, 7 ♂♂ 10 ♀♀, IM; 3.ix.2005, 1 ♂ 3 ♀♀, PK. Vyškovec, Pod Hribovňou NM (66), 8.v.2004, 2 ♂♂ 1 ♀; 21.v.2005, 1 ♂ 1 ♀; all IM. Vyškovec, Ve Vlčí NR (67), 22.v.2005, 2 ♀♀, IM. Nová Lhota, Vápenky, Porážky NNR (95), 28.x.2011, 1 ♂ 3 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Locally common in mesic, species-rich meadows and along forest margins in the north-eastern and central parts of the area but apparently absent from the warmest south-western part despite the occurrence of its host plant. **General distribution:** Mountains of central, south-western and eastern Europe (Lauterer & Malenovský 2002). **Host plant:** *Astrantia major*. **Red List status:** Endangered.

Comments. In the Czech Republic, *T. schrankii* has been recorded so far only locally in a few submontane areas: the Bílé Karpaty Mts. and Hostýnské vrchy Hills in eastern Moravia and the Blanský les Mts. in southern Bohemia (Lauterer & Malenovský 2002).

Trioza senecionis (Scopoli, 1763)

Material examined. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 5 ♂♂ 7 ♀♀, IM. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 2 ♂♂ 4 ♀♀, IM. Valašské Klobouky, Bílé potoky NR (11), 19.v.1999, 8 ♂♂ 5 ♀♀, IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 6 ♂♂ 7 ♀♀, IM. Svatý Štěpán, Nadříčí (31), 21.v.1999, 1 ♀, IM. Strání, Javorina NNR (102), 29.x.2011, 2 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Recorded only from the cool, north-eastern part of the area and Mt Velká Javořina in the south-west; locally common in beech and spruce forest undergrowth. **General distribution:** Central and eastern Europe, Caucasus. **Host plant:** *Senecio ovatus*. **Red List status:** –.

Trioza urticae (Linnaeus, 1758)

Published records. Baudyš (1966b): Bojkovice, town (20). Malenovský (2001): Kněždub, Čertoryje NNR (74, 75).
Additional material examined. Valašské Klobouky, Brumovská street (3), 19.v.1999, 4 ♀♀, IM. Valašské Klobouky, U Rybníků (4), 22.v.1999, 2 ♂♂ 2 ♀♀; 10.ix.1999, 1 ♀; all IM. Valašské Klobouky, Javorůvky NR (5), 22.v.1999, 1 ♀; 2.vii.1999, 2 ♂♂; all IM. Valašské Klobouky, Dobšená NM (6), 22.v.1999, 1 ♂; 2.vii.1999, 8 ♂♂ 3 ♀♀; all IM. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 1 ♂ 1 ♀, IM. Poteč, Ploščiny NR (10), 4.vii.1999, 6 ♂♂ 5 ♀♀, IM; 1.vi.2002, 3 ♀♀, IM; 17.viii.2006, 1 ♂ 1 ♀, PK. Valašské Klobouky, Bílé potoky NR (11), 19.v.1999, 1 ♀, IM; 30.vi.1999, 1 ♂ 14 ♀♀, PK; 16.vi.2006, 1 ♀, IM; 11.vii.2006, 3 ♀♀, IM. Nedašov, village (14), 3.vii.1999, 1 ♂, IM. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 1 ♂ 5 ♀♀; 3.vii.1999, 5 ♂♂ 1 ♀; all IM. Nedašov, Kaňúr hill and Hrušová dolina valley (17), 20.v.1999, 2 ♂♂ 1 ♀, IM. Bylnice, Bylničky (26), 24.vi.1982, 1 ♂ 1 ♀, PL. Bylnice, railway station environs (27), 1.vii.1999, 2 ♂♂ 8 ♀♀, MH & PK; 11.ix.1999, 5 ♀♀, IM. Bylnice, Lazy NR and surrounding meadows on N slopes of Pláňava hill (28), 21.v.1999, 1 ♀, IM. Svatý Štěpán, Nadříčí (31), 21.v.1999, 2 ♀♀, IM. Sidonie, Vlárský průsmyk pass (32), 12.ix.1999, 1 ♀, IM. Boršice u Blatnice, Boršický potok brook valley (37), 16.viii.1984, 2 ♂♂, PL. Korytná, Březí (41), 5.vii.2001, 27 ♂♂ 20 ♀♀, IM. Suchov, Kazivec brook valley (42), 15.v.1998, 6 ♀♀, IM. Horní Němčí, Drahy NR (43), 30.vi.2001, 1 ♂ 1 ♀, IM. Horní Němčí, Vinohrádky (44), 10.ix.2002, 1 ♀, IM. Horní Němčí, Lesná hill (46), 15.v.1998, 2 ♀♀, IM. Komňa, Lom Rasová NM (49), 5.vii.2001, 1 ♂, IM. Vápenice, Trstná brook valley (50), 6.vii.2001, 2 ♂♂ 1 ♀, IM & PK. Korytná, Lubná pond environs (52), 5.vii.2001, 11 ♂♂ 3 ♀♀, IM. Strání, Hrnčárky NM and Žabka reservoir surroundings (54), 10.vii.1998, 1 ♀; 16.v.1998, 2 ♂♂ 2 ♀♀; all IM. Strání, Obecnice hill (55), 2.vii.2001, 278 ♂♂ 275 ♀♀; 23.v.2002, 2 ♀♀; all IM & PK. Strání, Dúbrava hill (57), 7.vii.1980, 1 ♀, PL. Lopeník, U Zvonice NM (58), 27.vi.2004, 1 ♀, IM. Lopeník, Lopenické sedlo (59), 25.ix.2004, 1 ♀, IM. Lopeník, Mikulčin vrch hill (60), 25.ix.2004, 4 ♀♀, IM. Starý Hrozenkov, Skalka quarry (63), 2.vii.2007, 1 ♀, IM. Starý Hrozenkov, Hrozenkovské terasy (64), 2.vii.2007, 12 ♂♂ 7 ♀♀; 8.viii.2007, 2 ♂♂ 2 ♀♀; all IM. Vyškovec, Vyškovecké Bošačky (65), 27.vi.2004, 2 ♂♂ 2 ♀♀, IM. Radějov, Žerotín NM (68), 11.vii.1998, 1 ♂ 3 ♀♀, IM. Radějov, Lučina (73), 14.vii.1998, 1 ♂; 17.vi.2000, 3 ♂♂ 5 ♀♀; 28.vii.2000, 1 ♂ 2 ♀♀; 22.vi.2001, 3 ♂♂ 8 ♀♀; all IM & PK. Kněždub, Čertoryje NNR, Járkovec brook valley (74), 22.vi.2008, 1 ♂, KD & KF. Malá Vrbka, Výzkum hill (76), 17.iv.2000, 1 ♂; 18.vi.2000, 2 ♂♂ 1 ♀; 2.v.2001, 1 ♀; 22.vi.2001, 1 ♀; all IM & PK. Radějov, Veselka hill (81), 11.vii.1998, 1 ♂ 3 ♀♀, IM. Radějov, Měsíční údolí valley (80), 8.ix.1998, 1 ♂ 4 ♀♀, IM. Radějov, Kútky NR (82), 2.vi.1979, 1 ♀, PL. Velká nad Veličkou, village (83), 22.x.2000, 4 ♂♂, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 18.iv.2000, 3 ♂♂ 1 ♀; 27.vii.2000, 1 ♀; all IM. Suchov, Suchovské Mlýny (85), 6.v.2000, 1 ♀; 29.vi.2001, 8 ♂♂ 8 ♀♀; all IM. Javorník, loampit W of village (91), 24.v.2002, 9 ♀♀, IM. Javorník, Jazevčí NNR (92), 15.vii.1998, 2 ♂♂ 2 ♀♀; 6.v.2000, 5 ♂♂ 13 ♀♀; 19.vi.2000, 9 ♂♂ 6 ♀♀; 10.ix.2000, 1 ♂ 1 ♀; all IM. Javorník, Petruchovy Mlýny (93), 23.ix.2001, 1 ♀, IM. Nová Lhota, Vápenky, Porážky NNR (95), 28.x.2011, 1 ♂ 2 ♀♀, IM. Nová Lhota, Vápenky, Velička brook valley towards Mt Velká Javořina (96), 12.vii.1998, 8 ♂♂ 2 ♀♀, IM. Javorník, Machová NR (97), 14.v.1998, many ♂♂ ♀♀; 9.vii.1998, 8 ♂♂ 3 ♀♀; 8.v.2000, 2 ♂♂ 9 ♀♀; all IM. Strání, Záhumenice NM (99), 2.vii.2001, 3 ♂♂ 3 ♀♀, IM & PK; 23.v.2002, 1 ♂, PK. Strání, Javorina NNR (102), 17.viii.1979, 1 ♂, RJ; 4.vii.2001, 22 ♂♂ 18 ♀♀; 29.x.2011, 9 ♂♂ 18 ♀♀; all IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common in various habitats (e.g. pastures, ruderal sites, forests, in the vicinity of standing and running water, etc.) throughout the area, from the lowest to the highest elevations. **General distribution:** Palaearctic. **Host plants:** *Urtica dioica* and *U. urens*. **Red List status:** –.

Trioza velutina Foerster, 1848

Published records. Malenovský (2001): Kněždub, Čertoryje NNR (74, 75) [as *Trioza galii*, misidentified].
Material examined. Valašské Klobouky, Brumovka brook valley (7), 19.v.1999, 1 ♀, IM. Nedašov, Jalovcová stráň NR (15), 20.v.1999, 6 ♂♂ 7 ♀♀; 28.v.2005, 3 ♂♂ 8 ♀♀; 28.vii.2005, 2 ♂♂ 1 ♀; 6.ix.2005, 1 ♂; all IM.

Nedašov, Kaňoury NM (16), 17.vi.2006, 1 ♀, IM; 16.viii.2006, 1 ♂ 1 ♀, PK. Brumov, Kloboucká street (24), 28.v.2005, 2 ♀♀, IM. Bylnice, Na Stráži (25), 16.vi.2006, 1 ♀, IM. Bylnice, Bylničky (26), 24.vi.1982, 1 ♂ 2 ♀♀, PL. Blatnička, Milejovské louky meadows (35), 24.v.2009, 5 ♀♀; 16.viii.2009, 1 ♀; all PB. Horní Němčí, Drahy NR (43), 15.v.1998, 1 ♀, IM; 23.v.2002, 2 ♀♀, IM & PK. Starý Hrozenkov, Skalka quarry (63), 22.ix.2007, 1 ♀, IM. Kněždub, Čertoryje NNR, Járkovec brook valley (74), 6.v.2000, 1 ♂ 1 ♀, IM; 2.vi.2008, 1 ♀, IM; 12.viii.2008, 1 ♀, KD & KF; 10.ix.2008, 1 ♀, IM. Kněždub, Čertoryje NNR (74, 75), 19.vi.1980, 1 ♀, PL. Malá Vrbka, Výzkum hill (76), 2.v.2001, 1 ♂ 1 ♀; 28.vii.2001, 1 ♂; all IM & PK. Radějov, village (70), 14.viii.1977, 2 ♂♂, RJ. Radějov, Měsíční údolí valley (80), 8.ix.1998, 1 ♀, IM. Velká nad Veličkou, Zahrady pod Hájem NNR (84), 27.vii.2000, 1 ♀, IM. Suchov, Suchovské Mlýny (85), 16.viii.2004, 1 ♀, PK; 26.v.2005, 1 ♂ 4 ♀♀, IM; 27.vii.2005, 5 ♂♂, IM. Suchov, Trnovský Mlýn (86), 26.v.2005, 1 ♂, IM. Javorník, Jazevčí NNR (92), 6.v.2000, 3 ♀♀, IM. Javorník, Petruchovy Mlýny (93), 3.v.2001, 1 ♀; 17.vii.2002, 1 ♀; both IM. Javorník, Machová NR (97), 14.v.1998, several ♂♂ ♀♀; 8.v.2000, 2 ♀♀; all IM. Strání, Záhumenice NM (99), 24.v.2001, 5 ♀♀, IM.

Distribution and frequency in the Bílé Karpaty PLA: Widespread and common throughout the area; in sunny, dry to mesic grassland (meadows, pastures, waysides, field balks, etc.). **General distribution:** Probably Palaearctic but this has to be checked (Burckhardt & Lauterer 2006). **Host plants:** *Galium* spp. **Red List status:** –.

Comments. *Trioza velutina* was partly confused with *T. galii* in the past, so previous Czech records should be revised after Burckhardt & Lauterer (2006). The species is, however, apparently widespread and fairly common in the Czech Republic (Lauterer 2001, Malenovský 2006, Malenovský *et al.* 2011).

Discussion and conclusions

A total of 85 species of jumping plant-lice has been recorded to date from the Bílé Karpaty PLA and a few closely adjacent localities. The fauna of this region may be characterised as species-rich as it comprises 65% of all Psylloidea species known to occur in the Czech Republic. The number of species recorded in the Bílé Karpaty PLA also appears relatively high in comparison with three other areas in the Czech Republic where the fauna of Psylloidea has been the subject of detailed faunistic surveys: the Pálava Biosphere Reserve in its extended concept (65 species of Psylloidea, listed by Lauterer 1995), the Jizerské hory Mts. (40 species; Lauterer 2001), and the Kokořínsko Protected Landscape Area (41 species; Malenovský 2006).

As well as many widely distributed and generally common species, the jumping plant-louse fauna of the Bílé Karpaty PLA includes several species noteworthy from biogeographical and conservationist viewpoints. Three of them, *Bactericera lyrata*, *B. substriola* and *Cacopsylla albipes*, are recorded here for the Czech Republic for the first time. *Bactericera lyrata* has been known so far only from the type series recently described from Slovenia (Seljak *et al.* 2008) and a few additional specimens from Hungary (P. Lauterer, unpublished). Due to its close resemblance to related species, it may have been overlooked or misidentified also in other countries. Based on the few data available so far, *B. lyrata* occurs sporadically in mesic to slightly wet ruderal habitats (e.g. along ditches, drainage channels, and field margins) at low elevations in relatively warm regions. *Bactericera substriola* is a member of a taxonomically critical group of

similar species as well (Ossiannilsson 1992, Burckhardt & Lauterer 1997b). It is a willow-feeder that is probably more widespread than currently known from published data. In central Europe, *Cacopsylla albipes* is a rare species confined to sunny forest margins or open forests, often in hilly situations or mountains (Lauterer 1965, Conci *et al.* 1993). Sunny forest margins in the Bílé Karpaty PLA, particularly its south-western part, are also inhabited by *Cacopsylla viburni*, *Eryngiofaga lautereri* and *Livilla radiata*, remarkable thermophilous elements in the local fauna, that extend into the Bílé Karpaty from neighbouring outskirts of the Pannonian lowland (Lauterer 1963, 1979, 1999; Malenovský *et al.* 2011). In contrast, several orophilous and/or psychrophilous species occur in the central and north-eastern parts of the Bílé Karpaty Mts., where they are restricted to floristically rich pastures (*Craspedolepta sonchi*, *Trioza abdominalis*, *T. cerastii*, *T. chrysanthemi*, *T. dispar*, and *T. proxima*), meadow margins (*Trioza schrankii*), spring fens (*Aphalara calthae*, *Cacopsylla elegantula*, and *Trioza rotundata*), and forests (*Trioza foersteri* and *T. senecionis*). Some of these species are widely distributed in northern Europe and/or Asia and restricted mountain areas in central Europe (perhaps presenting a boreomontane distribution: e.g. *Cacopsylla elegantula*, *Trioza abdominalis*, *T. cerastii*, *T. chrysanthemi*, and *T. dispar*), or they occur in the mountain complexes of central and southern Europe (the Alps, Carpathians, Pyrenees, Balkans, etc.), without being reported from Scandinavia and northern Siberia (*Trioza schrankii* and *T. senecionis*) (Gegechkori & Loginova 1990, Ossiannilsson 1992, Conci *et al.* 1996, Lauterer 1999, Lauterer & Malenovský 2002, Laštůvka *et al.* 2008, Burckhardt 2011). Other local species also include the acidophilous *Strophingia ericae*, found on a fragment of heathland (*Calluna vulgaris*) only in the environs of Nedašov at the north-easternmost tip of the Bílé Karpaty and *Craspedolepta nebulosa* and *C. subpunctata*, both of which were recorded on *Epilobium angustifolium* on the top of Mt Velká Javořina, the highest point in the Bílé Karpaty Mts. Climatic and/or historical factors rather than the indigenous flora may provide possible explanations for differences in the fauna of Psylloidea between the south-western and north-eastern parts of the Bílé Karpaty, as the host plants of most of the above-mentioned species are generally common and widely distributed in the area. However, at least for *Cacopsylla viburni*, *Strophingia ericae* and *Trioza rotundata*, restricted distributions of their respective host plants, *Viburnum lantana*, *Calluna vulgaris* and *Cardamine amara*, must be the main cause for the local occurrence of these psyllid species in the Bílé Karpaty (Hájek 1998, Jongepier & Jongepierová 2006, Jongepier & Pechanec 2006). Three species, *Cacopsylla hippophaes*, *Livilla variegata* and *Psylla buxi* (all allochthonous in the fauna of the Czech Republic: Malenovský & Lauterer 2005a,b,c), occur in the Bílé Karpaty PLA only in villages, on ornamental woody plants in gardens, parks, cemeteries, around churches, etc. and do not spread into natural habitats.

Altogether 17 species recorded in the Bílé Karpaty PLA appear in the Red List of threatened invertebrates of the Czech Republic (Lauterer & Malenovský 2005), categorised as: extinct – *Trioza agrophila*; endangered – *Bactericera kratochvili*, *B. modesta*, *Cacopsylla abdominalis*, *Eryngiofaga lautereri*, *Livilla radiata*, *T. chrysanthemi*, *T. schrankii*; vulnerable – *Aphalara calthae*, *Bactericera trigonica*,

Cacopsylla viburni, *Craspedolepta sonchi*, *Trioza abdominalis*, *T. cerastii*, *T. dispar*, and *T. proxima*; and near-threatened – *Bactericera maura*. In addition to the species already mentioned in the preceding paragraph, *Bactericera modesta* is particularly noteworthy from a conservationist viewpoint as the Bílé Karpaty PLA probably represents one of the few remaining regions in the Czech Republic where it can still find relatively large areas of suitable habitats: non-intensively managed humid meadows with abundant populations of one of its host plants, *Sanguisorba officinalis*. *Trioza agrophila*, known from the close vicinity of the current Bílé Karpaty PLA (Kobylí hlava Hill near Hluk) based on past findings of galls (Hubáček 1979) has not been confirmed in the area in recent years. *Trioza agrophila* also disappeared from other places in the Czech Republic after 1970 and has been assumed to be extinct in the whole country (Lauterer 1998, Lauterer & Malenovský 2005).

The high diversity and the considerable number of threatened species of Psylloidea present in the area make the Bílé Karpaty PLA probably one of the most important regions for the conservation of this phytophagous insect group in the Czech Republic. As many species are dependent on the existence of species-rich grasslands, spring fens and forest margins, which need to be maintained by grazing, mowing and/or (selective) scrub removal, an active but sensible approach to the management of these habitats on the part of farmers and nature conservation authorities is essential to sustaining the rich regional jumping-plant louse fauna in the long term.

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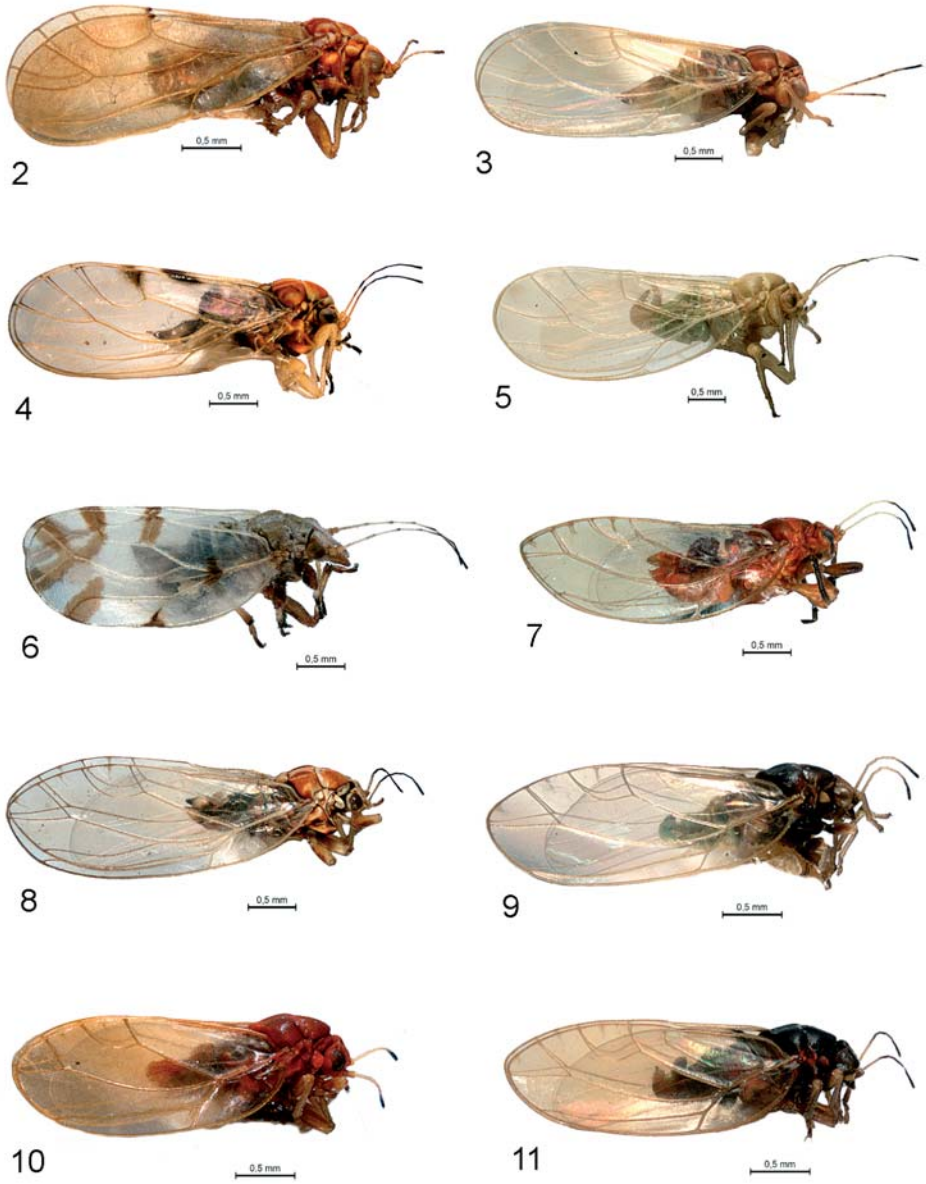

Figs 2–9. Some noteworthy jumping plant-louse species recorded in the Bílé Karpaty PLA. 2 – *Aphalara calthae* (Linnaeus); 3 – *Cacopsylla abdominalis* (Meyer-Dür); 4 – *Cacopsylla albipes* (Flor); 5 – *Cacopsylla viburni* (Löw); 6 – *Livilla radiata* (Foerster); 7 – *Bactericera lyrata* Seljak, Malenovský et Lauterer; 8 – *Bactericera substriola* Ossiannilsson; 9 – *Trioza chrysanthemi* Löw; 10 – *T. dispar* Löw; 11 – *T. schrankii* Flor. Scale bar 0.5 mm.

Souhrn

Mery (Hemiptera: Psylloidea) Chráněné krajinné oblasti a biosférické rezervace Bílé Karpaty.
Na základě faunistického průzkumu v letech 1998–2011, dřívějších sběrů uložených ve sbírkách Moravského zemského muzea v Brně a údajů publikovaných v literatuře bylo v Chráněné krajinné oblasti a biosférické rezervaci Bílé Karpaty a na několika blízce situovaných lokalitách dosud nalezeno celkem 85 druhů mer (Hemiptera: Sternorrhyncha: Psylloidea). Tři druhy, *Bactericera lyrata* Seljak, Malenovský et Lauterer, 2008, *Bactericera substriola* Ossiannilsson, 1992 a *Cacopsylla albipes* (Flor, 1861), jsou zde poprvé uvedeny z území České republiky. Faunu mer moravské strany Bílých Karpat lze charakterizovat jako výjimečně bohatou, jelikož zahrnuje 65 % ze všech druhů mer současně známých z České republiky. Kromě mnoha široce rozšířených a obecně hojných druhů bylo v Bílých Karpatech nalezeno i 17 druhů zařazených do Červeného seznamu ohrožených bezobratlých České republiky. Z pohledu ochrany přírody a biogeografie jsou obzvláště významné teplomilné druhy vázané na osluněné lesní okraje (*Cacopsylla albipes* a *C. viburni* (Löw, 1876)), případně suché trávníky (*Eryngiofaga lautereri* Loginova, 1977, *Livilla radiata* (Foerster, 1848)), vlhkomilné druhy obývající prameniště, vlhké louky a břehové porosty (*Aphalara calthae* (Linnaeus, 1761), *Bactericera maura* (Foerster, 1848), *B. modesta* (Foerster, 1848), *B. substriola*, *Cacopsylla abdominalis* (Meyer-Dür, 1871), *C. elegantula* (Zetterstedt, 1840)), ruderální stanoviště (*Bactericera lyrata* and *B. trigonica* Hodkinson, 1981) a rovněž několik horských a chladnomilných druhů, které jsou zde převážně vázány na floristicky bohaté pastviny a louky ve střední a severovýchodní části Bílých Karpat (*Craspedolepta sonchi* (Foerster, 1848), *Trioza abdominalis* Flor, 1861, *T. cerastii* (Linnaeus, 1758), *T. chrysanthemi* Löw, 1878, *T. dispar* Löw, 1878, *T. proxima* Flor, 1861, *T. schrankii* Flor, 1861). Druh *Trioza agrophila* Löw, 1878 byl z oblasti uveden na základě nálezu hálek v 60.–70. letech 20. století a jeho výskyt se v současné době nepodařilo ověřit (je současně považován za vymizelý v celé ČR). Tři nepůvodní, zavlečené druhy, *Cacopsylla hippophaes* (Foerster, 1848), *Livilla variegata* (Löw, 1881) a *Psylla buxi* (Linnaeus, 1758), se v Bílých Karpatech vyskytují pouze na okrasných dřevinách ve vesnicích (parcích, zahradách, na hřbitovech apod.).

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