

Checklist and distribution of the Swedish jumping plant-lice (Hemiptera: Psylloidea) with new province records and distribution in the Nordic countries

CARL-AXEL GERTSSON

Gertsson, C.-A.: Checklist and distribution of the Swedish jumping plant-lice (Hemiptera: Psylloidea) with new province records and distribution in the Nordic countries. [Företeckning över Sveriges bladloppor med nya landskapsfynd inklusive de nordiska arterna.] – Entomologisk Tidskrift 144(4): 145–163. Björnlunda, Sweden 2023. ISSN 0013-886x.

The checklist comprises 99 species of jumping plant-lice (psyllids) so far found in Sweden and includes all known province records. Species found in Denmark, Finland and Norway are also listed. One species, *Acizzia acaciabaileyanae* (Frogatt, 1901) is new to Sweden. Three species *Cacopsylla borealis* Nokalla & Nokalla, 2019, *C. lapponica* Nokalla & Nokalla, 2019 and *Livilla variegata* (Löw, 1881) have recently been reported in Sweden. According to province records, the most widely distributed species in Sweden are *Craspedolepta sonchi* (Foerster, 1848), *C. subpunctata* (Foerster, 1848), *Strophingia ericae* (Curtis, 1835), *Psylla alni* (Linnaeus, 1758), *P. foersteri* (Flor, 1861), *P. hartigii* (Flor, 1861), *Bactericera acutipennis* (Zetterstedt, 1828), *Trioza cerastii* (Linnaeus, 1758) and *T. urticae* (Linnaeus, 1758).

Carl-Axel Gertsson, Murarevägen 13, SE-227 30 Lund, Sweden.

E-mail: carlaxel.gertsson@gmail.com

Ossiannilsson (1992) was the first to publish noteworthy contributions on the knowledge of the systematics and distribution of Swedish jumping plant-lice, a.k.a. “psyllids” (Hemiptera: Psylloidea). The total number of species in that publication was 91. Gertsson (2015) and Struwe et al. (2009) recorded two additional species, *Spanioneura fonscolombii* Foerster and *Cacopsylla visci* (Curtis) new to Sweden. In the database Psyl’list 98 species are recorded from Sweden (Ouvrard 2023). Finally, based on material from Malaise traps and museum specimens Gertsson (2010) reported 82 new province records of this group.

Psyllids include all members of the superfamily Psylloidea (Hemiptera: Sternorrhyncha). In Sweden this group comprises four families: Aphalaridae, Liviidae, Psyllidae and Triozidae. They are closely related to aphids (Aphidomorpha), whiteflies (Aleyrodoidea) and scale insects (Coccoomorpha) together forming the suborder Sternorrhyncha. Psyllids are characterized by the position of the short rostrum that is attached between fore coxae and by large metacoxae fused with the sternum (Ouvrard et al. 2010). All species are phytophagous, sucking sap from their plant hosts. Several of the Swedish species cause direct damage on cultivated plants through their feeding – e.g.,

Cacopsylla mali (Schmidberger) (on *Malus* spp. Mill.), *C. pyri* (Linnaeus) (on *Pyrus* spp. L.), *C. pyricola* (Foerster) (on *Pyrus* spp. L.), *C. pyrisuga* (Foerster) (on *Pyrus* spp.), *Spanioneura buxi* Foerster (on *Buxus sempervirens* L.) and *Dyspersa apicalis* (Foerster) (*Daucus carota* L., *Petroselinum crispum* (Mill.) Fuss), *Carum carvi* L.). In general, psyllids develop on perennial dicotyledonous angiosperms. However, some psyllids are associated with monocotyledons, such as species in the genus *Livia*, found throughout the Holarctic region. Reproduction is mainly sexual and immatures pass through five instars before becoming adults (imagines) (Burckhardt et al. 2014). Asexual reproduction through parthenogenesis is rare in psyllids, e.g., in *Cacopsylla myrtilli*, where males are produced through facultative parthenogenesis at or beyond the treeline in northern Sweden (Hodkinson & Bird 2006).

Psyllids are usually very active, their rapid movements being a combination of leaping and flying. Swedish species are very small ranging from 1.2 to 5.8 mm in length. They bear a resemblance to minute leafhoppers (Hemiptera: Auchenorrhyncha: Cicadellidae). But their two-segmented tarsi, multisegmented antennae and a simplified wing venation will distinguish them from leafhoppers (Burckhardt et al. 2014, Gullan & Cranston 2005, Ossiannilsson 1992).

Materials and methods

The present checklist is a result of research into previously literature, online databases, museum collections, material from Rickleå field station, Robertsfors in the north of Sweden and from the Swedish Malaise Project (SMTP). I have investigated collections from the following museums in Sweden: Lund University (Biology Museum), the Museum of Natural History (Gothenburg) and the Swedish Museum of Natural History (Stockholm). Additional data is included from Species Observation System (SLU Artportalen 2023, abbreviated "AP"). Only the most credible and probable species are included in the checklist. The main published sources of information of records from non-Swedish countries are: for Denmark, DanBIF – Danish Biodiversity Information Facility, Project Allearter (DanBIF 2023), for

Finland: Albrecht et al. (2015), Laji.fi. Finnish Biodiversity Info Facility (2023) and for Norway: Greve & Sagvolden (1997), Hansen (1996), Hansen & Greve (1999), Hansen & Hodkinson (2006), Hodkinson (1989), Olsen (1999) and Norwegian Biodiversity Information Centre (Artsdatabanken Norway 2023).

The connections between neighbouring countries were analyzed by a Venn diagram, and the degree of similarity between the psyllid fauna in the four Nordic countries was calculated by means of the Sørensen index (Southwood 1966).

The psyllids were placed in 15 % potassium hydroxide for 24 h, then washed twice for 30 minutes in distilled water, dehydrated by passing through a series of 30%, 50%, 70%, 90 % and 100% (20 minutes each). The cleared insects were placed in clove oil for 30 minutes. After clearing in clove oil they were mounted in Euparal (Hodkinson & White 1979).

For species determination the keys of Burckhardt & Lauterer (1997), Hodkinson & White (1979), Klimaszewski (1975) and Ossiannilsson (1982) were used.

Results and discussion

In Table 1 a survey is presented of the numbers of families, genera and species in Sweden, Denmark, Norway and Finland. The Swedish material includes 4 families, 18 genera and 99 species. The number of species per family in Sweden are (figures in brackets are the total numbers from all the Nordic countries): Aphalaridae 3 genera 17 species (3 genera 17 species); Liviidae 3 genera 6 species (4 genera 7 species); Psyllidae 6 genera 42 species (7 genera 45 species); Triozidae 6 genera 33 species (6 genera 35 species).

Acizzia acaciaebaileyanae (Frogatt, 1901), a greenhouse species in Sweden, is new to Sweden. This species, Cootamundra wattle psyllid, is native to south-eastern Australia. It feeds on *Acacia* Mill. spp. Apart from Sweden the distribution in Europe includes: Great Britain, Croatia, France, Germany, Italy, Poland, Slovenia and Switzerland (Hodkinson 2009, Malumphy & Luker 2014, Ouvrard 2023, Pintar et al. 2021). Two species, *Cacopsylla borealis* Nokkala & Nokkala and *C. lapponica*

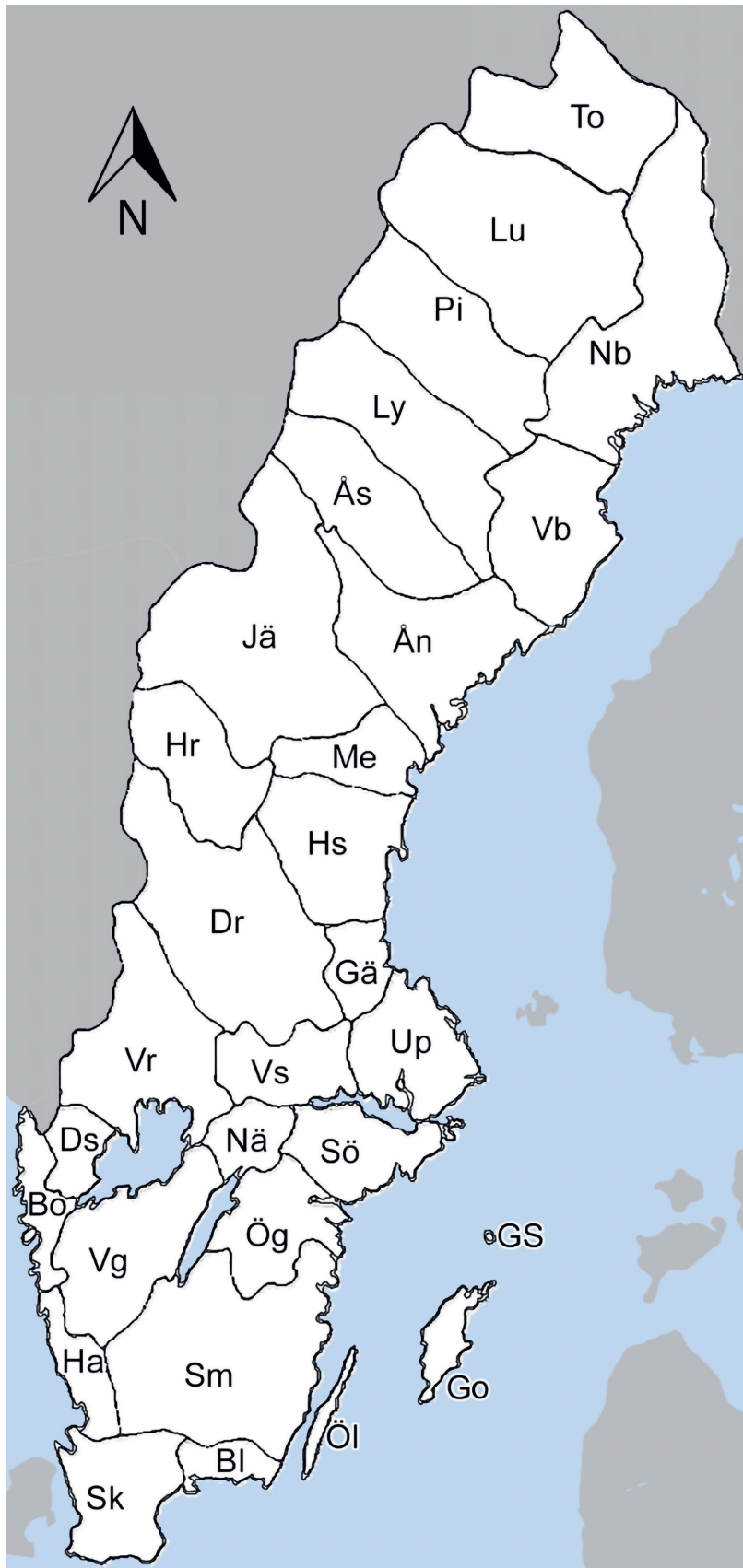


Figure 1. Map of Sweden with borders and used abbreviations for the faunistic provinces from south to north.

Figur1. Karta över Sverige med inrikes gränser och använda förkortningar för faunaprovinser från söder till norr.

Sk	Skåne
Bl	Blekinge
Ha	Halland
Sm	Småland
Öl	Öland
Go	Gotland
GS	Gotsk Sandön
Ög	Östergötland
Vg	Västergötland
Bo	Bohuslän
Ds	Dalsland
Nä	Närke
Sö	Södermanland
Up	Uppland
Vs	Västmanland
Vr	Värmland
Dr	Dalarna
Gä	Gästrikland
Hs	Hälsingland
Me	Medelpad
Hr	Härjedalen
Jä	Jämtland
Ån	Ångermanland
Vb	Västerbotten
Nb	Norrbotten
Ås	Åsele lappmark
Ly	Lycksele lappmark
Pi	Pite lappmark
Lu	Lule Lappmark
To	Torne lappmark

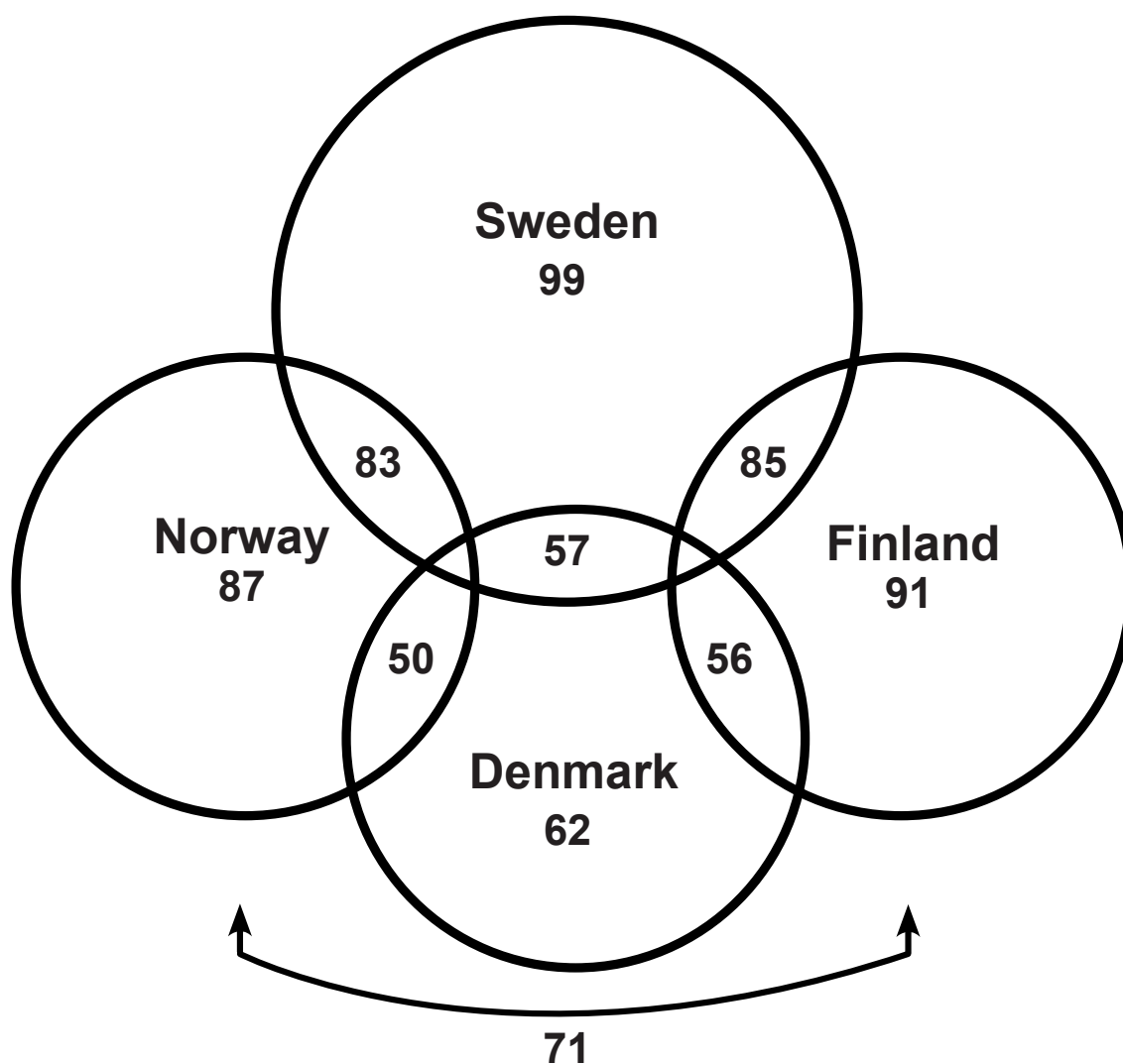


Figure 2. Venn diagram on the number of shared species between Sweden and adjacent countries.

Figur 2. Venndiagram som visar antalet gemensamma arter för Sverige och övriga nordiska länder.

Table 1. The number of families, genera and species of Psylloidea in Sweden, Denmark, Norway and Finland.

Tabell 1. Jämförelser mellan antalet familjer, släkten och arter av bladloppor i Sverige, Danmark, Norge och Finland.

Country	Families	Genera	Species
Sweden	4	18	99
Denmark	4	18	62
Norway	4	18	87
Finland	4	18	91
Nordic	4	20	104

Table 2. Sørensen index for comparing the similarity of species between the Nordic countries.

Tabell 2. Sørensens index för jämförelser av arters likhet mellan de nordiska länderna.

Countries	Sørensen index
Sweden – Denmark	0.71
Sweden – Norway	0.89
Sweden – Finland	0.90
Norway – Denmark	0.67
Norway – Finland	0.80
Denmark – Finland	0.73

Nokkala & Nokkala were described as new to Sweden and Finland by Nokalla et al. (2019). *Cacopsylla borealis* forms dense populations in northern Fennoscandia down to latitude 66° and is not uncommonly found in mixed populations with *C. ledi* (Flor). The species was found in one location in the province of Norrbotten, Muodoalompolo on *Ledum palustre* L. *Cacopsylla lapponica* was found in one location at high altitude above the tree line in the province of Torne lappmark, Abisko on *Vaccinium uliginosum* L. The species coexists with *C. myrtilli* (Wagner) on low growing *Vaccinium uliginosum* L. It is obvious that *C. lapponica* is a rare alpine species restricted to highaltitude open habitats (Nokalla et al. 2019). *Livilla variegata* (Löw) was reported from three provinces, Sk (2023), Go (2020) and Up (2016) (Fig. 1). The species from Go and Up was at that time new to Sweden (Artportalen 2023). It is widespread in western and central Europe: Austria, Bosnia, and Herzegovina, Czech Republic, France, Germany, Great Britain, Hungary, Italy, Netherlands, Romania, Slovakia, Slovenia, Spain, Switzerland and “ex. Yugoslavia”. *Livilla variegata* has also been introduced into Canada. It is oligophagous on *Laburnum* Fabr. spp (Ouvrard 2023).

In the checklist below 119 new province records are presented, totally 64 species. According to these records the most widely distributed species in Sweden are *Bactericera acutipennis* (Zetterstedt), *Craspedolepta sonchi* (Foerster), *C. subpunctata* (Foerster), *Psylla alni* (Linnaeus), *P. foersteri* (Flor), *P. hartigii* (Flor), *Strophingia ericae* (Curtis), *Trioza cerastii* (Linnaeus) and *T. urticae* (Linnaeus).

The Venn diagram shows that the largest number of shared species is between Sweden and Norway and Sweden and Finland respectively (Fig. 2). This is also the result from the Sørensen index calculations (Table 2). Five species from Denmark, Norway or Finland so far have not been reported from Sweden.

The checklist

Provincial records in Sweden (SE) are abbreviated according to Fauna Entomologica Scandinavica (Fig. 1) and the Nordic countries are abbreviated as follows: Denmark

(DK), Norway (NO) and Finland (SF). The nomenclature follows Psyl’list (Ouvrard 2023). Asterisks (*) denote new province records from museum collections, Species observation system (SLU Artportalen 2023), the Swedish Malaise Trap Project (SMTP, 2003–2004) and new records from the Nordic countries.

APHALARIDAE Löw 1879

1. *Aphalara affinis* (Zetterstedt, 1828) – SE: Sm, Ög, Sö, Up, Vr, Dr, Gä, Hs, Jä, Ån, Vb, Nb, Ly*, To. Ly, Kreipe, 14 km SE of Ammarnäs, *Betula* L. forest, 25.vi.2022 (leg. Fägerström). – NO; SF.

2. *Aphalara avicularis* Ossiannilsson, 1981 – SE: Sk, Bl, Öl, Go, Ds, Up; – DK. According to Trolle (1994). – NO; SF.

3. *Aphalara borealis* Heslop-Harrison, 1949 – SE: Sk, Öl, Ög, Ds, Sö, Up, Vs, Vr, Dr, Hs. – SF.

4. *Aphalara calthae* (Linnaeus, 1761) – SE: Sk*, Ha, Sm, Ög, Sö, Up, Dr, Hs, Me*, Hr, Jä, Ån*, Nb, Ly, Lu. Sk. Lund, Veberöd 18.vii.1939 (leg. Ossiannilsson); Landskrona, Ven 12.ix.1948 (leg. Lundblad); Me. Ånge, Fränsta 12.vii.1936 (leg. Notini); Ån, Härnösand 12.vi.1909 (leg. Wahlgren). – NO; SF.

5. *Aphalara exilis* (Weber & Mohr, 1804) – SE: Ha, Sm, Ög, Vg*, Bo, Ds, Nä*, Sö, Up, Vs, Vr, Dr, Gä, Hs, Hr, Jä, Ån, Vb, Nb*, Pi, Lu*, Ly*. Vg. Mark, Öxnevala, Kvistatorpet 30.vii.2018 (leg. Kraft, AP); Nä. Bo, Lilla Emma 14.viii.2016 (leg. Johansson, AP); Nb. Luleå 15.09.1958 (leg. ?), Lu, Jokkmokk, Karats 11.viii.1963 (leg. Gyllensvärd), Ly. Sorsele, Jillsåle, NW Hemfäll (leg. Fägerström). – DK; NO; SF.

6. *Aphalara freji* Burckhardt & Lauterer, 1997 (Fig. 3) – SE: Sk, Bl*, Ha, Sm*, Öl, Go, Ög, Vg*, Bo* Ds, Nä*, Sö*, Up, Vr, Dr, Gä*, Hs, Me, Hr, Pi, Lu. Bl. Karlskrona, Jämjö 1.iii.1959, Ronneby, Johannishus 28.iii.1959, Karlskrona, Lyckeby 18.vii.1963 (leg. Gyllensvärd); Sm. Ljungby, Korsberga, 18.vi.1938 (leg. Gaunitz); Vg. Lidköping, N. Härene 23.vii.1976 (leg.?) Bo. Lysekil, Alsbäck 20.vii.1950 (leg. Lundblad); Sö. Stockholm, Huddinge 12.vii.1922 (leg. Lindberg); Nä. Lekeberg Västkärr, Fjugesta 27.viii.1983 (leg. Sigvald). Yellow trap. Gä. Gävle, Hillesjön, 16.vii.1981 (leg. Danielsson). – DK; NO; SF.



Figure 3. *Aphalara freiji*, male. Only found in one province (Nä). Hostplants: *Polygonum* spp. L. Scale bar: 1.0 mm. Photo: C.-A. Gertsson.

Figur 3. *Aphalara freiji*, hane. Endast funnen i ett landskap (Nä). Värdväxter inom pilörtssläktet (*Polygonum* L.). Skalstreck: 1,0 mm. Foto: C.-A. Gertsson.

SF. According to Burckhardt & Lauterer (1997). – DK; NO. (*Aphalara polygoni* Foerster, 1848 and *A. rumicicola* Klimaszewski, 1966 according to Ossiannilsson (1992) are *A. freiji*. *Aphalara rumicicola* is a junior synonym of *A. polygoni* (Burckhardt & Lauterer 1997).

7. *Aphalara maculipennis* Löw 1886 – SE: Sk, Bl, Sm*, Ög, Up. Sm. Växjö, Högaskröv 29.iv.1989 (leg. Danielsson). – DK; NO; SF.

8. *Aphalara purpurascens* (Hartig, 1841) (syn. *crispicola* Ossiannilsson, 1987) – SE: Sk, Bl*, Ög, Vg, Up. Bl. Karlskrona 1 km S. Bröms 24.vii.1985; Karlskrona Brömsebro 4.vii. 1987 (leg. Danielsson). – SF.

9. *Aphalara ulicis* Foerster, 1838 – SE: Sk*, Sm*. Sk. Kristianstad, Åhus 27.vi 1953 (leg. Danielsson); Sm. Torsås, Tjärekulla 18.vi.1989 (leg. Danielsson). – DK; NO; SF. According to O'Conner & Malumphy (2011).

10. *Craspedolepta campestris* Ossiannilsson, 1987 – SE: Sk, Bl, Ha, Öl, Go; – DK; NO.

11. *Craspedolepta latior* Wagner, 1944 – SE: Sk, Bl, Sm, Öl*, Ög, Vg*, Ds, Sö, Up, Vs, Vr, Dr, Hs, Me, Vb. Öl. Borgholm, N. Udden 20.vi.1989; Vg. 7 km S. Trollhättan 22.06.1988 (leg. Danielsson). – DK; NO; SF.

12. *Craspedolepta malachitica* (Dahlbom, 1851) – SE: Sk, Bl, Ha*, Sm, Öl, Go, Ög, Sö, Up, Me. Ha. Varberg, Hunnestad 01.vii.1999; Varberg, 17.vi.2000 (leg. Gillerfors). – NO; SF.

13. *Craspedolepta nebulosa* (Zetterstedt, 1828) – SE: Sk, Ha*, Sm, Öl, Ög, Nä, Sö, Up, Dr, Gä, Me, Hr, Jä, Vb, Nb, Ås, Ly, Lu, To. Ha. Varberg, sports ground on a school yard, grassland 2.vii.2009 (leg. Gillerfors). – DK; NO; SF.

14. *Craspedolepta nervosa* (Foerster, 1848) – SE: Sk, Bl, Ha, Sm, Go, Ög, Ds, Nä, Sö, Up, Vs, Vr, Dr*, Me, Hr, Ån, Vb, Nb, Ås, Pi, Lu. 17. Dr. Falun, Sundborn, Karlsbyn 15.vi, 21.vi.1940 (leg. Tjeder); Rättvik 19-22.vii.1967 (leg. Gyllensvärd). – DK; NO; SF.

15. *Craspedolepta sonchi* (Foerster, 1848) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Ds, Nä, Sö, Up, Vs, Vr, Dr, Gä, Hs, Me, Hr, Jä, Ån, Vb, Nb, Ås, Ly, Lu; – DK; NO; SF.

16. *Craspedolepta subpunctata* (Foerster, 1848) – SE: Sk, Bl, Ha, Öl, Ög, Vg, Ds, Nä, Up, Vr, Dr, Gä, Hs, Me, Hr, Vb, Nb*, Ly, Pi, Lu, To, Ån. Nb. Kalix, Nederkalix, Ryssbält, Ölänningen 16.viii.2018 (leg. Kihl, AP). – DK; NO; SF.

17. *Rhinocola aceris* (Linnaeus, 1758) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Bo, Sö, Up, Vs, Dr, Gä*. Gä. Hofors, Torsåker, Nyhyttevägen, 23.viii.2018 (leg. Ekfeldt, AP). – DK; NO; SF.

LIVIIDAE Löw, 1879

18. *Camarotoscena speciosa* (Flor, 1861) – DK; SF.

19. *Livia crefeldensis* Mink, 1855 – SE: Öl*, Ög, Bo, Nä, Sö, Up. Öl. Borgholm, Råpplinge, Greby alvar, *Carex* L. marsh, 25.xii.2016 (leg. Fägerström). – DK; SF.

20. *Livia junci* (Schrank, 1789) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Bo, Ds, Nä, Sö, Up, Vs*, Vr, Dr, Gä, Hs, Me, Jä, Ån*, Vb, Ås, Ly, Lu, To. Vs. Nora, Viker, Viker (church) 9.vi.2015



Figure 4. *Acizzia acaciaebaileyanae*, female. New to Sweden. A greenhouse species in Sweden. The species feeds on *Acacia* spp. Mill.; – A) dorsal view; – B) lateral view. Scale bar: 1.0 mm. Photo: C. Fägerström.

Figur 4. *Acizzia acaciaebaileyanae*, hona. Ny art för Sverige som lever på *Acacia* spp. Mill.; – A) vy från ovan; – B) vy från sidan. Skälstreck: 1,0 mm. Foto: C. Fägerström.



(leg. Carlberg, AP); Ån. Nordmaling, Furören-Stor-Sandkärret (N), Glosjön 5.xi.2017 (leg. Grahn, AP). – DK; NO; SF.

21. *Psyllopsis discrepans* (Flor, 1861) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Bo, Sö, Up, Vs*, Dr. Vs. Västerås, Ängsö, Ängsö castle (garden) 22.vii.2011. – NO; SF.

22. *Psyllopsis fraxini* (Linnaeus, 1758) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Bo, Ds, Nä, Sö, Up, Vs*, Jä*. Vs. Västerås, Rytterne, Tidö castle (fruit garden) 20.vii.2012 (leg. Rehnberg, AP); Jä. Krokomb, Täng, Ås 5.viii.2019 (leg. Pålsson, AP). – DK; NO; SF.

23. *Psyllopsis fraxinicola* (Foerster, 1848) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Sö, Up, Vs, Dr*. Dr. Falun, Linnéparken 25.vii.2014 (leg. Bergström, AP). – DK; NO; SF.

24. *Strophingia ericae* (Curtis, 1835) – SE: Sk, Bl, Sm, Öl, Go, GS, Ög, Vg, Bo, Ds, Nä, Sö, Up, Vs, Dr, Hs, Hr, Ån, Vb, Lu, To; – DK; NO; SF.

PSYLLIDAE Latreille, 1807

25. *Acizzia acaciaebaileyanae* (Froggatt, 1901) (Fig. 4A, B) – SE: Up*. New to Sweden. Up. Stockholm, Bergianska trädgården. January 1995 on *Acacia* sp. Mill. in greenhouse (det. Danielsson).

26. *Arytaina genistae* (Latreille, 1804) – SE: Sk, Bl, Ha*, Sm*, Öl, Bo*, Ån*. Ha. Varberg, Björkäng 29.ix.1999 (leg. Gillerfors); Sm. Uppvidinge, Bredhälla, Tornbaggagöl 26.viii.1986 (leg. Gustafsson); Bo. Öckerö, Hönö churchyard, 9.i.2020 (leg. Noresson, Svensson, AP); Ån. Själevad, Veckefjärden, 31.v.2020 (leg. Bohman, AP). NO. According to Artsdatabanken Norway (2023). – DK; SF

27. *Arytainilla spartiophila* (Foerster, 1848) – DK.

Figure 5. *Cacopsylla crataegi*, female. A rare, thermophilic, psyllid previously only found in five provinces (Sk, Bl, Sm, Öl, Go). Host plants: *Crataegus* spp. L. Scale bar: 0.5 mm. Photo: C. Fägerström.

Figur 5. *Cacopsylla crataegi*, hona. En sällsynt värmekrävande art, som tidigare endast påträffats i fem landskap (Sk, Bl, Sm, Öl, Go). Värdväxter är olika hagtomsarter (*Crataegus* spp. L.). Skaltreck: 0,5 mm. Foto: C. Fägerström.

28. *Cacopsylla affinis* (Löw, 1880) – SE: Sk, Öl – NO; SF.

29. *Cacopsylla ambigua* (Foerster, 1848): – SE: Sk, Bl, Sm, Go*, Ög, Vg, Sö, Up, Vs, Vr, Dr, Gä, Hr, Jä, Vb*, Ly, Pi, Lu, To. Go. Gotland, Roleks, grazed calcareous forest, 18.vi-5.vii.2004 (SMTP); Vb, Robertsfors, Rickleå field station 27.vi, 4.vii, 10.viii.1972 (leg. Göthberg). – DK; NO; SF.

30. *Cacopsylla borealis* Nokkala & Nokkala, 2019 – SE: Nb*. Nb. Pajala, Muodoalompolo, 9.viii. 2018 on *Ledum palustre* L. (leg. S. & Ch. Nokkala). – SF.

31. *Cacopsylla brunneipennis* (Edwards, 1896) – SE: Sk, Bl, Ha, Sm, Go, Ög, Vg, Bo, Up, Dr, Hs, Hr, Jä, Vb, Nb, To; – DK; NO; SF.

32. *Cacopsylla corcontum* (Šulc, 1909) – SE: Sm, Go*, Ög, Sö, Up, Vs, Dr, Gä, Hs, Hr, Jä, Ån*, Vb. Go. Gotland, Roleks, grazed calcareous forest, 15.iv-2.vi.2004 (SMTP); Ån. Örnköldsvik, Skuleskogen, Långrå, brook ravine in mixed forest, 21.x (2005?)–24.vi 2006 (SMTP). – NO; SF.

33. *Cacopsylla crataegi* (Schrank, 1801) (Fig. 5) – SE: Sk, Bl, Sm, Öl, Go; – DK.

34. *Cacopsylla elegantula* (Zetterstedt, 1840) – SE: Sm, Up, Dr, Hr, Jä, Vb, Ås, Lu; – NO; SF.

35. *Cacopsylla hippophaes* (Foerster, 1848) – SE: Sk, Go, Up; – DK; SF.

36. *Cacopsylla lapponica* Nokkala & Nokkala, 2019. – SE: To*. To. Abisko, 10.viii. 2012 on *Vaccinium uliginosum* (leg. S. & Ch. Nokkala). – SF.

37. *Cacopsylla ledi* (Flor, 1861) – SE: Ha*, Sm, Vg, Nä, Sö, Up, Vs, Vr, Dr, Gä, Hs, Vb, Nb, Pi, Lu. Ha. Varberg, Nösslinge 13.vii.2005 (leg. Gillerfors). – NO; SF.

38. *Cacopsylla mali* (Schmidberger, 1836) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Ds, Nä, Sö,



Figure 6. *Cacopsylla picta*, female. Only found on two provinces (Ög, Up). It was collected 1978 in Ög and 1965 in Up on *Pyrus malus* ssp. *sylvestris* (L.). Scale bar: 0.5 mm. Photo: C. Fägerström.

Figur 6. *Cacopsylla picta*, hona. Endast två landskapsfynd, Ög och Up, på surapel (*Pyrus malus* ssp. *sylvestris* (L.)) 1978 respektive 1965. Skalstreck: 0,5 mm. Foto: C. Fägerström.

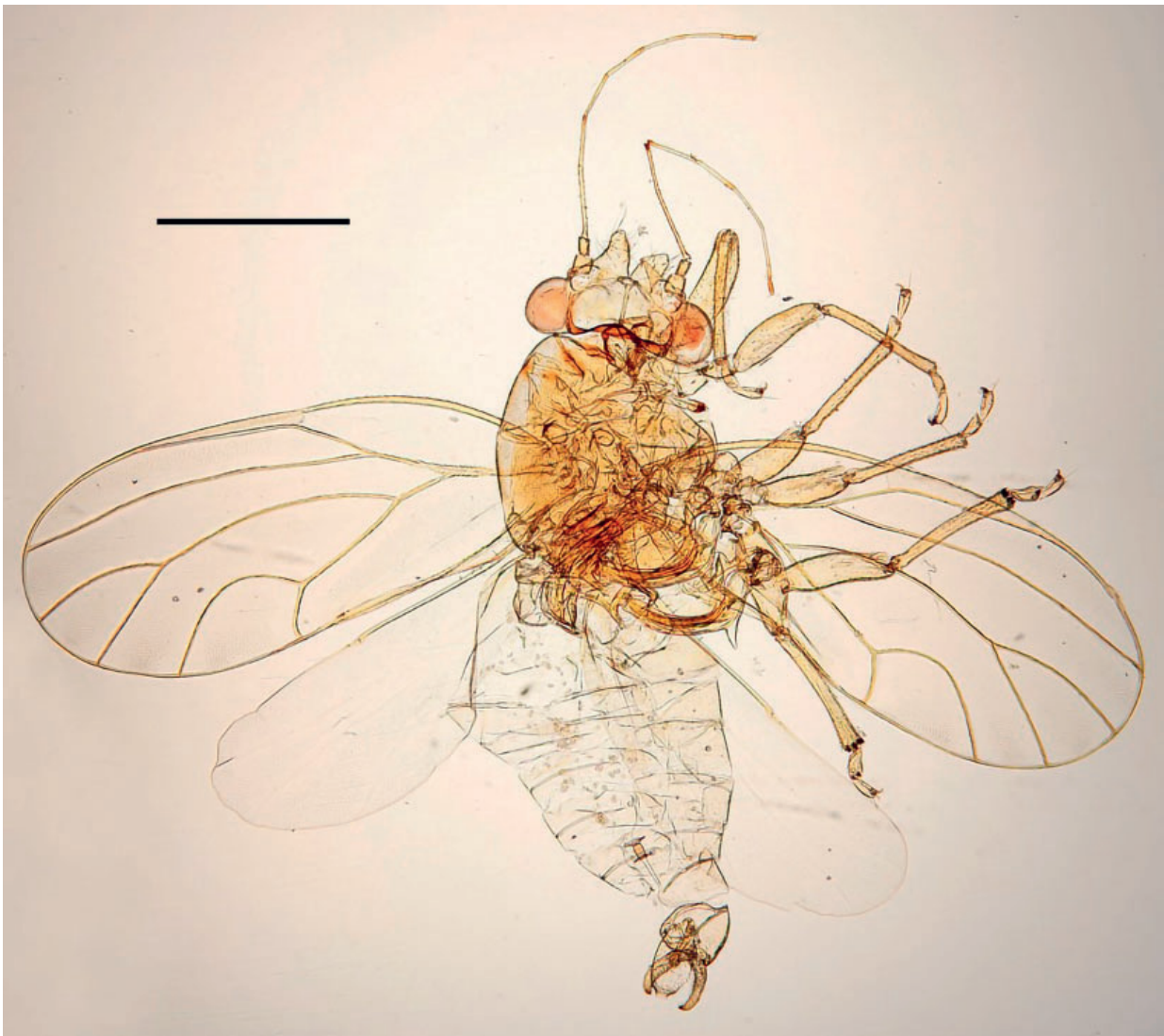


Figure 7. *Cacopsylla visci*, male. Reported as new to Sweden during 2007–2008 in three provinces (Sm, Up, Vs) on leaves of mistletoe. Scale bar: 0.5 mm. Photo: C. Fägerström.

Figur 7. *Cacopsylla visci*, hane. Påträffades som ny för landet 2007–2008 i tre landskap (Sm, Up, Vs) på blad av mistel. Skälstreck: 0,5 mm. Foto: C. Fägerström.

Up, Vs*, Vr, Dr, Me. Vs. Västerås, Romfartuna, Bergbo 1 14.viii.2012 (leg. Rehnberg, AP). – DK; NO; SF.

39. *Cacopsylla melanoneura* (Foerster, 1848) – SE: Sk, Bl, Sm, Öl, Go, Ög, Vg, Bo, Nä, Sö, Up, To; – DK; NO; SF.

40. *Cacopsylla moscovita* (Andrianova, 1948) – SE: Sk, Bl, Ha*, Sm, Öl, Sö, Up, Dr, Jä; Ha. Halmstad, Enslöv, Årnilt 16.ix, 09.vi.1973) leg. Andersson), Halmstad, 13.viii. 1930 (leg. Wieslander), Kungsbacka, Vallda Sandö, 17.vi.1972 (leg. Tjeder), – DK; NO; SF.

41. *Cacopsylla myrtilli* (Wagner, 1947) – SE: Bo, Sö, Up, Vs, Dr, Hs, Hr, Jä, Ån, Vb, Nb, Ly, Pi, Lu, To; – NO; SF.

42. *Cacopsylla nigrita* (Zetterstedt, 1828) – SE: Dr, Hs, Hr, Jä, Vb, Lu, To; – NO; SF.

43. *Cacopsylla palmeni* (Löw, 1882) – SE: Dr, Hr, Jä, Ån, Nb, Ly, Lu, To; – NO; SF. NO and SF. According to Labina (2008).

44. *Cacopsylla parvipennis* (Löw, 1877) – SE: Sk, Bl, Ha, Ög, Vg, Sö, Up; – DK; NO; SF.



Figure 8. *Cacopsylla zaicevi*, female. The species has only been found in the northern part of Sweden. It only feeds exclusively on *Salix* spp. L. Scale bar: 0.5 mm. Photo: C. Fägerström.

Figur 8. *Cacopsylla zaicevi*, hona. Arten är endast funnen i norra Sverige, och där på *Salix* spp. L. Skälstreck: 0,5 mm. Foto: C. Fägerström.

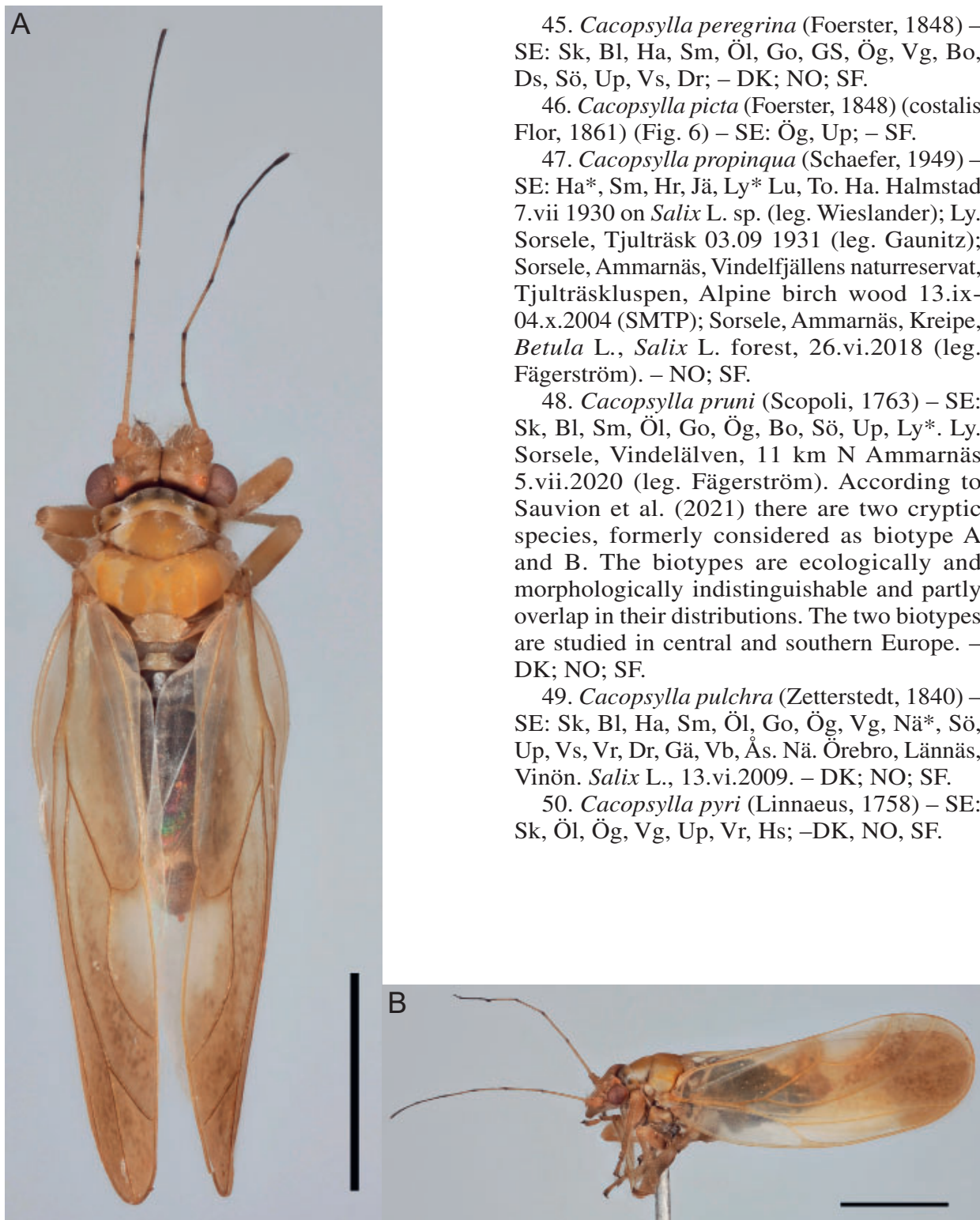


Figure 9. *Livilla variegata*, male. Recently (2023) found in Skåne, Lomma, Alnarp park on *Laburnum x wateri* (G. Kirchn.) Dippel. Previously found in Go and Up; – A) dorsal view; – B) lateral view. Scale bar: 1.0 mm. Photo: C. Fägerström.

Figur 9. *Livilla variegata*, hane. Nyligen (2023) funnen Sk, Lomma, Alnarpsparken på hybridgullregn (*Laburnum x wateri*) (G. Kirchn.) Dippel. Tidigare fynd från Go och Up; – A) vy från ovan; – B) vy från sidan Skalsterck: 1,0 mm. Foto: C. Fägerström.

45. *Cacopsylla peregrina* (Foerster, 1848) – SE: Sk, Bl, Ha, Sm, Öl, Go, GS, Ög, Vg, Bo, Ds, Sö, Up, Vs, Dr; – DK; NO; SF.

46. *Cacopsylla picta* (Foerster, 1848) (costalis Flor, 1861) (Fig. 6) – SE: Ög, Up; – SF.

47. *Cacopsylla propinqua* (Schaefer, 1949) – SE: Ha*, Sm, Hr, Jä, Ly* Lu, To. Ha. Halmstad 7.vii.1930 on *Salix* L. sp. (leg. Wieslander); Ly. Sorsele, Tjulträsk 03.09.1931 (leg. Gaunitz); Sorsele, Ammarnäs, Vindelfjällens naturreservat, Tjulträskluspen, Alpine birch wood 13.ix-04.x.2004 (SMTP); Sorsele, Ammarnäs, Kreipe, *Betula* L., *Salix* L. forest, 26.vi.2018 (leg. Fägerström). – NO; SF.

48. *Cacopsylla pruni* (Scopoli, 1763) – SE: Sk, Bl, Sm, Öl, Go, Ög, Bo, Sö, Up, Ly*. Ly. Sorsele, Vindelälven, 11 km N Ammarnäs 5.vii.2020 (leg. Fägerström). According to Sauvion et al. (2021) there are two cryptic species, formerly considered as biotype A and B. The biotypes are ecologically and morphologically indistinguishable and partly overlap in their distributions. The two biotypes are studied in central and southern Europe. – DK; NO; SF.

49. *Cacopsylla pulchra* (Zetterstedt, 1840) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Nä*, Sö, Up, Vs, Vr, Dr, Gä, Vb, Ås. Nä. Örebro, Lännäs, Vinön. *Salix* L., 13.vi.2009. – DK; NO; SF.

50. *Cacopsylla pyri* (Linnaeus, 1758) – SE: Sk, Öl, Ög, Vg, Up, Vr, Hs; –DK, NO, SF.



Figure 10. *Spanionerura fonscolombii*. A common species on box (*Buxus sempervirens* L.). Photo: C.Fägerström.

Figur 10. *Spanionerura fonscolombii*. En vanlig art på buxbom (*Buxus sempervirens* L.). Foto: C. Fägerström.

51. *Cacopsylla pyricola* (Foerster, 1848) – SE: Sk, Bl, Ha, Sm*, Go, Ög, Up, Vs*. Sm. Jönköping, Torpa, Ladugårdsgatan 30.xii.2011 (leg. Sjödahl, AP); Vs, Rytterne, Tidö castle (fruit garden) 29.vii.2012 (leg. Rehnberg, AP). – DK; NO; SF.

52. *Cacopsylla pyrisuga* (Foerster, 1848) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Bo, Nä, Sö, Up, Vs*, Dr, Hs. Vs. Västerås, Romfartuna, Millingby 7 20.vii.2011 (leg. Rehnberg, AP). – DK; NO; SF.

53. *Cacopsylla rhamnicola* (Scott, 1876) – SE: Sk, Sm, Öl, Go, Up; – DK; SF.

54. *Cacopsylla rhododendri* (Puton, 1871) – SF. According to Laji.fi (2023).

55. *Cacopsylla sorbi* (Linnaeus, 1767) – SE: Sk, Bl, Ha, Sm, Öl, Go*, Ög, Vg, Nä, Sö, Up, Vs, Dr, Gä, Hr, Jä, Ån, Vb, Nb, To. Go. Fröjelgården, *Sorbus aucuparia* L. Klintehamn, 26.viii.2008; Klintehamn, Ekta, St. Karlsö, malaisetrapp, 30.viii.2009 (leg. Struwe). – DK; NO; SF.

56. *Cacopsylla ulmi* (Foerster, 1848) – SE: Sk, Ha, Öl, Go, Up; – DK; NO; SF.

57. *Cacopsylla visci* (Curtis, 1835) (Fig. 7) – SE: Sm, Up, Vs; – DK*. DK. Ottingvej 73, Herslev 11.vi.2015 (leg. Hansen). – NO.

58. *Cacopsylla zaicevi* (Šulc, 1915) (Fig. 8) – SE: Lu, To; – NO; SF.

59. *Cacopsylla zetterstedti* (Thomson, 1878) – SE: Sk, Up; – DK; NO; SF.

60. *Livilla variegata* (Löw, 1881) (Fig. 9A, B). – SE: Sk*, Go*, Up*. Sk. Lomma, Alnarp, Alnarp park, 25.v.2023 on *Laburnum x wateri* (G. Kirchn.) Dippel. Go. Helli, Kyllaj, 1.vi.2020 on *Laburnum* Fabr. sp. (leg. Nyström). Up, Österåker, Åkersberga, Häggkullen, 12.vi.2016 on *Fraxinus exelcior* L. (leg. Björkerling). – SF. According to Laji.fi (2023).

61. *Psylla alni* (Linnaeus, 1758) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Bo, Nä, Sö, Up, Vs, Vr, Dr, Gä, Hs, Me, Hr*, Jä, Ån, Vb, Nb, Ås, Pi, Lu, To. Hr. Vemdalen 07.vii.1949 (leg. Lundblad). – DK; NO; SF.

62. *Psylla betulae* (Linnaeus, 1758) – SE: Sk, Bl, Sm, Öl*, Go, Ög, Vg, Bo, Ds, Nä, Up, Vs, Vr, Dr, Gä, Me, Hr, Jä, Ån, Vb, Nb, Ås, Ly, Pi, Lu, To. Öl. Glömminge, Isgärde, Rosti 6.xi.2011 (leg. Fägerström). – DK; NO; SF.

63. *Psylla betulaenanae* Ossianniilsson 1970 – SE: Nä, Vs, Dr, Me, Hr, Jä, Ån, Vb, Nb, Ly, Pi, Lu, To; – DK; NO; SF.

64. *Psylla foersteri* (Flor, 1861) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Bo, Ds, Nä, Sö, Up, Vs*, Vr, Gä, Hs, Hr, Me, Ån, Vb. Vs. Nora,



Figure 11. *Trioza agrophila*, male. The species has only been found in three provinces (Sk, Up, Vr). Hostplant: *Cirsium arvense* (L.) Scop. Scale bar: 0.5 mm. Photo: C. Fägerström.

Figur 11. *Trioza agrophila*, hane. Arten är endast funnen i tre landskap (Sk, Up, Vr). Värdväxt: åkertistel, *Cirsium arvense* (L.). Skalsterck: 0,5 mm. Foto: C. Fägerström.

Södra Ås, Åsbo lake, SW beach 29.viii.2015 (leg. Carlberg, AP). – DK; NO; SF.

65. *Psylla fusca* (Zetterstedt, 1828) – SE: Sm, Bo, Ds, Nä, Sö, Up, Vs, Vr, Dr, Hs, Me, Hr, Jä, Ån, Vb, Nb, Ly, To; – DK; NO; SF.

66. *Psylla hartigii* (Flor, 1861) – SE: Sk, Bl, Ha, Sm, Öl, Go, Bo, Ög, Vg, Sö, Up, Vs*, Vr, Dr, Gä, Me, Hr, Jä, Ån*, Pi, Ly*, Lu, To. Vs. Västerås, Viker, Viker (churchyard) 18.vi.2015 (leg. Carlberg, AP); Ån, Kramfors, Gudmundrå, 2.vii.2022 (leg. Holmqvist, AP); Ly. Sorsele, Ammarnäs, 27.vi.2018, near small stream, ravine, birch forest (leg. C. Fägerström). – DK; NO; SF.

67. *Psylla obliqua* (Thomson, 1877) – SE: Sk*, Go*. According to Thomson (1877).

68. *Spanioneura buxi* (Linnaeus, 1758) – SE: Sk, Bl, Ha, Sm, Öl*, Go, Vg, Sö*, Up, Vs*. Öl. Borgholm, Råpplinge, Strandtorp 08.vii.1940 (leg. ?); *Borgholm*, Torslunda, (churchyard) 12.xi.2015 (leg. Johnsson, AP); Sö. Huddinge, Milsten 29.v.2015 (leg. Kihl, AP); Vs. Kolbäck, Strömsholm castle 13.vii.2012 (leg. Rehnberg, AP). – DK; NO.

69. *Spanioneura fonscolombii* Foerster, 1848 (Fig. 10) – SE: Sk, Bl, Ha*, Sm, Öl, Go*, Vg*, Bo*, Sö*, Up, Vs*. 72. Ha. Varberg, Lindberg, Norra näs, Fladevägen 5.iii.2019 (leg. Andersson, AP); Go, Visby, Botanical garden, S:t Olofs ruin 29.iii.2019 (leg. Nyström, AP); Vg. Härryda, Råda, Råda säteri 08.iii.2019 (leg. Oomen, AP); Bo. Göteborg, Säve, Lillhagens sandlycka 07.03.2019 (leg. Persson, AP). Sö. Strängnäs, Gammarsvägen 01.iv.2019 (leg. Carlsson, AP); Vs, Kolbäck, Strömsholm castle (garden) 13.07.2012 (leg. Rehnberg, AP). – DK; NO. According to Artsdatabanken Norway (2023).

TRIOZIDAE Löw, 1879

70. *Bactericera acutipennis* (Zetterstedt, 1828) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Ds, Nä, Sö, Up, Vs, Vr, Dr, Gä, Hs, Me, Ån*, Vb, Nb, Ly, Pi, To. Ån. Härnösand, 12.vi.1909 (leg. Wahlgren). – DK; NO; SF.

71. *Bactericera albiventris* (Foerster, 1848) – SE: Sk, Bl, Go, Ög, Sö, Up, Vs, Vr, Dr, Hr, Ly*. Ly. Sorsele, Ammarnäs, Vindelfjällens naturreservat, Tjulträskluspen, Alpine birch wood 30.viii-13.ix.2004 (SMTP). – DK; NO; SF.

72. *Bactericera bohemica* (Šulc, 1913) – SE: Go, Ög, Vg, Sö, Up, Vs, Dr, Me, Hr, Ån, To; – NO; SF.

73. *Bactericera calcarata* (Schaefer, 1949) – SF.

74. *Bactericera curvatinervis* (Foerster, 1848) – SE: Sk, Bl, Ha, Sm, Öl*, Ög, Vg, Nä, Sö, Up, Vr, Dr, Gä, Hr, Vb*, Ly, Lu*, To, Öl. Mörbylånga, Skogsby, Ecological Research Station 24.07-12.08.2008 (SMTP); Vb. Vindeln, Kulbäckslidens försökspark, Gammnybränna, spruce and larch trees 25.v-18.vi.2004 (SMTP); Lu, Jokkmokk, Porjus 21.vii.1955 on *Salix lapponum* L. (leg. Ossiannilsson). – NO; SF.

75. *Bactericera femoralis* (Foerster, 1848) – SE: Bl, Sm, Öl, Go, Ög, Vg, Bo, Ds, Nä, Sö, Up, Vs, Vr, Dr, Gä*, Hs, Me, Hr*, Jä, Ån, Ås, Ly, Lu, To. Gä. Hofors, Torsåker 8.ix.2017 (leg. Ekfeldt, AP); Hr. Messlingen, 11.viii.1975 (leg. Danielsson). – NO; SF.

76. *Bactericera nigricornis* (Foerster, 1848) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Nä, Up, Vs, Vr, Dr, Hs, Me, Jä, Ån, Vb. – NO; SF.

77. *Bactericera parastricola* Conci, Ossiannilsson & Tamanini, 1988 – SE: Dr*, Hr, Ly*, To. Dr. Leksand, Tällberg 26.v.1970 (leg. Tjeder); Ly. Sorsele, Ammarnäs, Vindelfjällens naturreservat, alpine birch wood, 13.ix-04.x.2004 (SMTP).

– NO* NO. According to Artsdatabanken, Norway (2023). – SF.

78. *Bactericera reuteri* (Šulc, 1913) – SE: Öl, Go, Ds, Sö, Up, Vr, Vb*. Vb. Umeå, Holmön, blueberry spruce forest next to pasture, 7.ix-21.ix.2003 (SMTP). – DK; NO; SF.

79. *Bactericera salicivora* (Reuter, 1876) – SE: Sk*, Ög, Up, Dr, Hs, Hr, Ån, Nb, To. Sk. Svedala, Bökeberg 21.v.1926 (leg. Wahlgren). – NO; SF.

80. *Bactericera striola* (Flor, 1861) – SE: Sk, Bl, Sm, Öl, Vg, Ds, Nä, Sö, Up, Vr, Dr, Gä, Hs, Hr, Jä, Ån, Nb*, Ås* Ly, To. Nb. Pajala, 28.vii.1955 (leg. Andersson); Ås, Vilhelmina, Dikanäs 18.vii.1938 (leg. Runquist). – NO; SF.

81. *Bactericera substriola* Ossiannilsson, 1992 – SE: Ds*, Sö, Hr, Ly*, Pi, Lu. Ds, Vänersborg, Ursands camping 22.vi.1988 (leg. Danielsson); Ly, Sorsele, Ammarnäs, Vindelfjällens naturreservat, Tjulträskluspen,



Figure 12. *Trioza munda*, female. A rare species only found in three provinces (Up, Vs, Dr). Host plants *Knautia arvensis* (L.) Coult. and *Succisa pratensis* Moench. Scale bar: 0.5 mm. Photo: C. Fågerström.

Figur 12. *Trioza munda*, hona. En sällsynt art endast funnen i tre landskap (Up, Vs, Dr). Värdväxter: åkervädd (*Knautia arvensis* (L.) Coult.) och ängsvädd (*Succisa pratensis* Moench). Skallstreck: 0,5 mm. Foto: C. Fågerström.

Alpine birch wood 13.09-04.x.2004 (SMTP). – SF.

82. *Dyspersa apicalis* (Foerster, 1848) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Bo, Ds, Nä, Sö, Up, Vr, Dr, Gä, Vb, Pi, To – DK; NO; SF.

83. *Heterotrioza chenopodii* (Reuter, 1876) – SE: Sk, Bl, Sm, Go, Vg, Nä, Sö, Up – DK; NO; SF.

84. *Lauritrioza alacris* (Flor, 1861) SE: Sk*, Öl, Vg, Bo*, Nä, Up. Sk, Lund, Botanical garden, 23.vii.2021 (leg. Sörensson, AP). Bo. Uddevalla, Herrestad, Torp, 23.vii.2022 (leg. Svedholm, AP). – DK; SF.

85. *Trichohermes walkeri* (Foerster, 1848) – SE: Sk, Bl*, Sm*, Öl, Go, Ög*, Up. Bl. Karlskrona, Augerum, Bastasjö meadows 06.11.2018 (leg. Wahlgren, AP).

Sm, Oskarshamn, Misterhult, N. Virsjödal, 13.vii.2018 (leg. Andersson, AP); Ög, Linköping, Vreta kloster, Ljungsbro, Skarpåsenvägen – Göta kanal 21.vii.2017 (leg. Andersson, AP). – DK; SF.

86. *Trioza abdominalis* Flor, 1861 – SE: Sk, Bl, Ha, Sm, Ög, Vg, Nä, Sö, Up, Vs, Vr, Dr, Me, Hr, To; – NO; SF.

87. *Trioza agrophila* Löw, 1888 (Fig. 11) – SE: Sk, Up, Vr; – DK; NO; SF.

88. *Trioza anthrisci* Burckhardt, 1986 – SE: Sk, Bl, Sm, Öl, Ög, Vg, Sö, Up, Dr, Hs, Hr, Ly*, Lu, To. Ly. Sorsele, Ammarnäs, 27.vi.2018, near small stream, ravine, birch forest (leg. C. Fågerström). – DK. According to Trolle (2003). – NO; SF.

89. *Trioza centranthi* (Vallot, 1829) – DK.

90. *Trioza cerastii* (Linnaeus, 1758) – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Ds, Bo, Sö, Up, Vs, Vr, Dr, Gä*, Hs, Hr, Jä, Än, Vb*, Nb, Ly, To. Gä. Hofors, Torsåker, Nyhyttevägen 16.vi.2013 (leg. Ekkfeldt, AP); Vb. Umeå, Umeå aeroport 23.vii.2015 (leg. Gudmundson, AP). – DK; NO; SF.

91. *Trioza chrysanthemi* Löw, 1878 – SE: Öl*, Sö, Up, Vr*. Öl, Mörbylånga, Skogsby, Ecological Research Station, garden 24.vii-12.viii.2008; Vr. Hagfors, Gustaf Adolf, Malmbäckarna 25.vi.2019 (leg. Tunander, Karlsson, AP). According to Ossiannilsson (1992) a rare species. – NO; SF.

92. *Trioza cirsii* Löw, 1881 – SE: Sk, Ha, Sm, Ög, Ds, Sö, Up; – DK; NO; SF.

93. *Trioza dispar* Löw, 1878 – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg*, Bo, Ds, Nä, Sö, Up, Vs*, Vr, Gä*, Jä, Ån, Vb*, Nb, Ly. Vg. Falköping, Dala, Varholmen 23.v. 2018 (leg. Ennerfelt, AP); Vs. Romfartuna, Bergbo 1 17.vi.2017 (leg. Rehnberg, AP); Gä. Hofors, Torsåker, Nyhyttevägen 6.vi.2018 (leg. Efeldt, AP); Vb. Skellefteå, Brännbergets naturreservat, mixed boreal forest, 4.vi-15.vi.2004 (SMTP). – NO; SF.

94. *Trioza flavipennis* Foerster, 1848 – SE: Sk, Ha*, Sm, Öl*, Go*, Ög, Vg*, Bo*, Ds*, Nä*, Sö, Up, Vs*, Vr*, Dr*, Gä*, Hs*, Me*, Vb. Ha. Varberg, Dagsås, Humsjön 1.v. 2011 (leg. Gillerfors); Öl. Borgholm, Högsrum, S. Rönnerum 08.xi.2015 (leg. Johnsson, AP); Go. Visby, Visby by the prison 28.vii.2015 (leg. Nyström, AP); Vg, Alingsås, Hemsjö, Bordana, Bordanavägen 11 09.07 2017 (leg. Sjödahl, AP); Bo. Göteborg, Björlanda, NE Söreredsgården 04.vi.2015 (leg. Fritzon, AP); Ds. Åmål, Mo, Bo 12.ix.2018 (leg. Gran, AP); Nä. Örebro, Garphyttan, Tysslinge, Metallvägen 10 27.v.2018 (leg. Andersson, AP). Vs. Västerås, Romfartuna, Äsåsen 29.vii.2017 (leg. Jonsson AP); Vr. Hagfors, Gustav Adolf, Vålfallshöjden 20.vi. 2017 (leg. Turander, AP); Dr. Falun, Stora Kopparberg, meadow mine of Domän 09.vi.2018 (leg. Bergström, AP); Gä. Hofors, Torsåker, Nyhyttevägen 4.vi. 2017 (leg. Jonzon AP); Hs. Nordanstig, Bjälsta 144, Bergsjö 25.vi.2017 (leg. Myhrer, AP); Me. Timrå, Näsberget 22.vii.2017 (leg. Hansson AP); Vb. Umeå, Umeå aeroport 9.vi.2018 (leg. Bergström, AP). – DK; NO; SF.

95. *Trioza galii* Foerster, 1848 – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Nä, Sö, Up, Vs, Dr, Hr; – DK. According to Trolle (2003). – NO; SF.

96. *Trioza laserpitii* Burckhardt & Lauterer, 1982. – SE: Up.

97. *Trioza munda* Foerster, 1848 (Fig. 12) – SE: Up, Vs, Dr. – NO.

98. *Trioza proxima* Flor, 1861. – SE*. According to Šulc (1912). In Ossiannilsson (1992) syn. to *T. dispar*.

99. *Trioza remota* Foerster, 1848 – SE: Sk, Bl, Ha, Sm, Öl, Go, Ög, Vg, Bo, Ds*, Sö, Up, Vs*, Dr*, Gä*. Ds. Åmål, Vingnäsviden, Ånimskog 2.vii.2019 (leg. Gran, AP). Vs. Ängsö, Dyvik 20.ix.2015 (leg. Rhenberg, AP); Dr. Falun, Stora Kopparberg, Racketjärnens outflow, 9.vi.2010

(leg. Bergström, AP); Gä. Gävle, Hedesunda, Gysinge, Färnebofjärden, 7.ix.2020 (leg. Ekfeldt, AP). – DK; NO; SF.

100. *Trioza rhamni* (Schrank, 1801) – SE: Sk, Sm*, Öl, Go, Ög, Vg, Bo, Up. Sm. Växjö, Bergkvara, 11.vii.1977 (leg. Danielsson). – DK; NO; SF.

101. *Trioza rotundata* Flor, 1861 – SE: Ög, Up, Hr, Ly*. Ly. Sorsele, Ammarnäs, 27.vi. 2018, near small stream, ravine, birch forest (leg. Fägerström). – NO; SF.

102. *Trioza tatrensis* Klimaszewski, 1965. – SE: Go*. Go. Hallfreda according to Greenslade et al. (2020). – NO.

103. *Trioza urticae* (Linnaeus, 1758) – SE: Sk, Bl, Ha, Sm, Öl, Go, GS, Ög, Vg, Bo, Nä, Sö, Up Vs, Vr, Dr, Gä*, Hs, Me, Hr, Jä, Ån, Vb, Nb, Lu, To. Gä. Hofors, Torsåker, Nyhyttevägen 30.v.2016 (leg. Ekfeldt, AP). – DK; NO; SF.

104. *Trioza viridula* (Zetterstedt, 1828) – SE: Up*, Hr, Nb, Ly*, Lu, To. Up. Enköping, Djurgården, Experimentalfältet 15.viii.1925 (leg. ?); Ly. Storuman, Tärna, 7.viii.2020 (leg. Press, AP). SF. According to Laji.fi (2023). – NO; SF.

Acknowledgements

I would like to thank the Swedish Taxonomy Initiative for funding this project (SLU. dha.2018.4.3-65). Dave Karlsson and Carina Romero Ugarrh, of the Swedish Malaise Trap Project supplied me with psyllid specimens for which I am very grateful. Rune Bygebjerg, Christoffer Fägerström and Ellen Sandström, who allowed me to borrow from and visit the Biological Museum (entomology), at Lund University. Gunvi Lindberg at the Swedish Museum of Natural History, Stockholm, and Charlotte Jonsson at the Museum of Natural History in Gothenburg were similarly generous in providing me access to the collections required for my research. Anders Göthberg, Vadstena (from the former Rickleå fieldstaion, Västerbotten), contributed with material as well. Lars Skipper and Lars Ove Hansen supplied journal information from Denmark and Norway respectively. I am indebted also to Daniel Burckhardt, Naturhistorisches Museum, Basel, Switzerland and David Ouvrard, French Agency for Food, Environmental and

Occupational Health & Safety, Montferrier-sur-Lez, France, who checked and corrected of my identifications. Last but by no means least, I wish to express my sincere gratitude to Christer Hansson, Biological Museum, Lund University, for valuable comments of the manuscript.

References

- Albrecht, A., Rinne, V., Söderman, G. & Mattila, K. 2015. Check-list of Finnish Hemiptera. – Jalla 1: 1–29.
- Artsdatabanken Norway. 2023. <https://www.artsdatabanken.no> (accessed 2023-05-01).
- Burckhardt, D. & Lauterer, P. 1997. Systematics and biology of the *Aphalara exilis* (Weber & Mohr) species assemblage (Hemiptera: Psyllidae). – Entomologica Scandinavica 28: 271–305.
- Burckhardt, D., Ouvrard, D., Queiroz D. & Percy, D. 2014. Psyllid host-plants (Hemiptera: Psylloidea): Resolving a semantic problem. – Florida Entomologist 97: 242–246.
- DanBIF. 2023. Danish Biodiversity Information Facility. Projekt Allearter. Species checklist Denmark. <https://arter.dk> (accessed 2023-10-01).
- Gertsson, C.-A. 2010. Fångst av bladloppor (Hemiptera: Psylloidea) från svenska Malaisefällprojekter – nya provinsfynd samt sällsynt förekommande arter i Sverige. – Entomologisk Tidskrift 131: 55–65.
- Gertsson, C.-A. 2015. Bladloppan *Spanioneura fonscolombii* Foerster (Hemiptera: Psylloidea) ny för Sverige. – Entomologisk Tidskrift 136: 162–164.
- Greve, L. & Sagvolden, A. 1997. *Arytaina genistae* (Latreille, 1804) (Homoptera, Psylloidea), a new Psyllid for Norway. – Fauna Norvegica Series B 44: 79.
- Greenslade, A.F.C., Carnegie, M., Ouvrard, D., Sjölund, M.J., Highet, F., Sigvald, R., Kenyon, D.M. & Bell, J.R. 2020. Aerial psyllid (Hemiptera: Psylloidea) detection and monitoring using suction traps in Britain: population observations, new species found and a revised British checklist. – Entomologist's Gazette 71: 151–163.
- Gullan, P.J. & Cranston, P.S. 2005. The Insects. An outline of entomology. 3rd edition. – Blackwell Publishing, Hoboken.
- Hansen, L.O. 1996. Two species of Psyllidae (Homoptera) new to Norway. – Fauna Norvegica Series B 43: 98.
- Hansen, L.O. & Greve, L. 1999. New records of Trioziidae (Hem., Psylloidea) from Norway. – Norwegian Journal of Entomology 46: 47–48.
- Hansen, L.O. & Hodkinson, I.D. 2006. The mistletoe associated psyllid *Cacopsylla visci* (Curtis, 1835) (Homoptera, Psyllidae) in Norway. – Norwegian Journal of Entomology 53: 89–91.
- Hodkinson, I.D. 1989. Psyllids (Homoptera: Psylloidea) collected in Southern Norway. – Fauna Norvegica Series B 36: 97–99.
- Hodkinson, I.D. 2009. Life cycle variation and adaptation in jumping plant lice (Insecta: Hemiptera: Psylloidea): a global synthesis. – Journal of Natural History 43: 65–179.
- Hodkinson, I.D. & White, I.M. 1979. Homoptera. Psylloidea. – Handbook for the identification of British insects. Vol. II. Part 5 (a).
- Hodkinson, I.D. & Bird, J. M. 2006. Facultative parthenogenesis in *Cacopsylla myrtilli* (Wagner) (Hemiptera: Psylloidea) in northern Sweden: possible explanations for the occurrence of males. – Entomologisk Tidskrift 127: 157–160.
- Klimaszewski, S.M. 1975. Psylloidea koliszki (Insecta: Homoptera). – Fauna Poloniae 3.
- Labina, E. S. 2008 - The jumping plant lice (Homoptera, Psyllinea) fauna of the Republic of Altai. – Entomologicheskoe Obozrenie 87: 325–335.
- Laji.fi. 2023. Finlands Artdatabank. Finnish Biodiversity Info Facility. <https://laji.fi> (accessed 2023-10-01).
- Malumphy, C. & Luker, S. 2014. The status of *Acizza acaciaebaileyanae* (Froggat), *A. jamatonica* (Kuwayama) and *A. uncatoides* (Ferris & Kluver) (Hemiptera: Psyllidae) in Britain. – Entomologist's Gazette 65: 161–167.
- Nokkala, C., Kuznetsova, V.G., Rinne, V. & Nokkala, S. 2019. Description of two new species of the genus *Cacopsylla* Ossiannilsson, 1970 (Hemiptera, Psylloidea) from northern Fennoscandia recognized by morphology, cytogenetic characters and COI barcode sequence. – Comparative Cytogenetics 13: 367–382.
- O'Connor, J.P. & Malumphy, C. 2011. A review of the Irish jumping plant-lice (Hemiptera: Psylloidea). – Irish Biogeographical Society Bulletin 35: 21–63.
- Olsen, T.J. 1999. New records of Psylloidea and Auchenorrhyncha (Homoptera) from Norway. – Norwegian Journal of Entomology 46: 110.
- Ossiannilsson, F. 1992. The Psylloidea (Homoptera) of Fennoscandia and Denmark. – Fauna Entomologica Scandinavica. Vol. 26.
- Ouvrard, D. 2023. Psyllid list – The World Psylloidea Database. <http://www.hemiptera-databases.com/psyllid> (accessed 2023-04-01).

- Ouvrard, D., Burckhardt, D., Azar, D. & Grimaldi, D. 2010. Non-jumping plant-lice in Cretaceous amber (Hemiptera: Sternorrhyncha: Psylloidea). – *Systematic Entomology* 35(1): 172–180.
- Pintar, M., Šimala, M., Baric, B., Milek, T. & Markotic, V. 2021. First record of *Acizzia uncatoides* (Ferris & Klyver, 1932) and *Acizzia acaciaebaileyanae* (Frogatt, 1901) (Hemiptera: Psylloidea: Psyllidae) in Croatia. – *Journal of Central European Agriculture* 22: 807–815.
- Sauvion, N., Peccoud, J., Meynard, CN & Ouvrard, D. 2021. Occurrence data for the two cryptic species of *Cacopsylla pruni* (Hemiptera, Psylloidea). – *Biodiversity Data Journal* 9: e68860.
- SLU Artportalen. 2023. SLU. Swedish Species Information Center. Species Observation System. <https://www.artportalen.se> (2023-10-01).
- Southwood, T.R.E. 1966. *Ecological methods. With particular reference to the study of insect populations.* – Methuen & Co LTD, London.
- Struwe, I., Gertsson, C.-A. & Coulianos, C.-C. 2009. För Sverige nyupptäckta insekter monofaga på mistel: bladloppan *Cacopsylla visci* (Curtis, 1835) (Hemiptera, Psyllidae) och skinnbaggen *Pinalitus viscicola* (Puton, 1888) (Hemiptera, Miridae). – *Entomologisk Tidskrift* 130: 155–160.
- Šulc, K. 1912. *Monographia generis Trioza Foerster. Species regionis palearcticae. Pars II.* – No 11-20 Sitzungsberichte der Königlichen bairischen Gesellschaft der Wissenschaften Mathematisch-naturwissenschaftliche Classe, 1911(V): 1–34.
- Thomson, C.G. 1877. – *Opuscula Entomologica* 8: 820–841.
- Trolle, L. 1994. En ny dansk bladloppe - fundet på Bornholm. – *Bornholms Natur* 18: 30–31.
- Trolle, L. 2003. En ny dansk bladloppe fundet på Bornholm. *Trioza anthrisci* Burckhardt, 1986. – *Natur på Bornholm* 1: 51–53.

Svensk sammanfattning

Inte sedan 1992 har en komplett översikt publicerats om förekomsten av våra svenska bladloppor publicerats. Data för den här översikten har hämtats från exemplar i de större svenska museernas samlingar, från Rickleå fältstation, samt från det Svenska Malaisefällexpeditionen (SMTP). Dessutom har data från SLU Artportalen samt uppgifter hämtats i litteraturen från de nordiska länderna. Listan omfattar 99 hittills rapporterade arter. Totalt redovisas även 119 nya provinsfynd, samt kommentarer till dessa. Totalt har 104 arter noterats i Sverige, Danmark, Norge och Finland. Fem av dessa arter är ännu ej funna i Sverige. Bland de nordiska länderna har flest antal arter noterats från Sverige. Flest gemensamma arter finns mellan Sverige och Norge samt mellan Sverige och Finland.