

## **ADDENDUM TO “A REVIEW OF THE IRISH JUMPING PLANT-LICE (HEMIPTERA: PSYLLOIDEA)”**

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### **Abstract**

New records of Irish Psylloidea are provided based on slide-mounted specimens in the collections of the Natural History Museum, London. Both *Cacopsylla* (*Hepatopsylla*) *brunneipennis* (Edwards, 1896) and *C.* (*Thamnopsylla*) *rhamnicola* (Scott, 1876) were recorded without details in the review of the Irish fauna by O’Connor and Malumphy (2011). The London material has provided records for these two species. In addition, new data are provided for another 14 species. Altogether, a total of 18 new county records are listed. The possibility is also discussed that *Cacopsylla* (*Thamnopsylla*) *alaterni* may have been collected by A. H. Haliday in the west of Ireland.

**Key words:** Psylloidea, Hemiptera, Ireland, checklist, new county records, jumping plant-lice, *Cacopsylla alaterni*, *Cacopsylla brunneipennis*, *Cacopsylla rhamnicola*.

### **Introduction**

O’Connor and Malumphy (2011) reviewed the Irish psyllid (Hemiptera) fauna. A checklist was provided of the 50 known species along with new distributional data. However, it was only possible to report both *Cacopsylla brunneipennis* (Edwards, 1896) and *C. rhamnicola* (Scott, 1876) from Ireland without any other details. Their occurrence was mentioned in Hodkinson and White (1979) but no records were cited. Since the publication of the review, little research has been carried out on the group on the island. However, O’Connor (2012) did report the first Irish male of *Craspedolepta nebulosa* (Zetterstedt, 1828), a species previously only known from nymphs. As there have been some nomenclatural changes since O’Connor and Malumphy (*op. cit.*), a revised checklist is given (Appendix 1).

While preparing the information contained in O’Connor and Malumphy (*op. cit.*) for inclusion in a psyllid dataset for the National Biodiversity Data Centre, JPOC came across photographs of Irish specimens mounted on slides and housed in the Natural History Museum, London, through the Global Biodiversity Information Facility (GBIF) <<https://www.gbif.org>>.

Photographs of the slides had been made available by The Trustees of the Natural History Museum, London through the dataset Natural History Museum (London) Collection Specimens < Natural History Museum (2020). Natural History Museum (London) Collection Specimens. Occurrence dataset <https://doi.org/10.5519/0002965>>.

This material provided new data for 16 of the known Irish species including 18 new county records. Most important, records were found for *Cacopsylla brunneipennis* and *C. rhamnicola*. The vast majority of specimens were identified by David Hollis of the Natural History Museum, London. Many were also collected by him during a visit to Ireland in 1976.

The possibility is also discussed that *Cacopsylla (Thamnopsylla) alaterni* may have been collected by A. H. Haliday in the west of Ireland.

### **The records**

#### ***Aphalara exilis* (Weber and Mohr, 1804) (Fig. 1)**

**KERRY:** Dereenacullig near the Horses Glen (W0081), 1♂2♀♀ 5 August 1976, *Calluna/Ulex* stand, collected and determined D. Hollis.

**WEXFORD:** Saltee Island Great (X9596), 1♂ 2 June 1976, swept, collected M. C. D. Speight, determined D. Hollis.

This is the first record of *Aphalara exilis* from an Irish offshore island.

#### ***Cacopsylla (Cacopsylla) mali* (Schmidberger, 1836)**

**DUBLIN:** Dundrum (O1628), 3♀♀ 11 August 1976, collected and determined D. Hollis.

**KERRY:** Tomies Wood (V9088), 1♂3♀♀ 6 August 1976, *Malus sylvestris*, collected and determined D. Hollis.

During the last 100 years, there has only been one other Irish record of *Cacopsylla mali* when it was found in Trinity College, Dublin, in 2011. All the other records are older.

#### ***Cacopsylla (Cacopsylla) peregrina* (Foerster, 1848) New to County Cork**

**CORK:** near Carran (V9957), 1♂ 3 August 1976, *Quercus*, collected and determined D. Hollis.

**DUBLIN:** Dundrum (O1628), 1♂ 11 August 1976, collected and determined D. Hollis.

#### ***Cacopsylla (Cacopsylla) sorbi* (Linnaeus, 1767) New to County Cork**

**CORK:** Rosnagrena (V8859), 3♂♂3♀♀ 4 August 1976, *Sorbus aucuparia*, collected and determined D. Hollis.

#### ***Cacopsylla (Hepatopsylla) ambigua* (Foerster, 1848) New to County Cork**

**CORK:** Rosnagrena (V8859), 1♀ 4 August 1976, *Salix*, collected and determined D. Hollis.

**KERRY:** Muckross Wood (V9686), 3♂♂2♀♀ 7 August 1976, collected and determined D. Hollis.

***Cacopsylla (Hepatopsylla) brunneipennis* (Edwards, 1896) New to Counties Kerry and Wicklow (Fig. 2, Plates 1-2)**

**KERRY:** Lough Guitane (W0385), 1♀ 7 August 1976, *Betula*, collected and determined D. Hollis; Tomies Wood (V9088), ♂3♀♀ 6 August 1976, *Picea*, collected and determined D. Hollis.

**WICKLOW:** Knocksink Wood (O2117), 3♀♀ 12 August 1976, *Salix*, collected and determined D. Hollis.

This species was only recorded from “Ireland” by O’Connor and Malumphy (2011). *Cacopsylla brunneipennis* is a complex species with two colour morphs - the forms *typica* (brown wings) and *klapaleki* (clear wings)

***Cacopsylla (Hepatopsylla) pulchra* (Zetterstedt, 1840) New to County Kerry**

**KERRY:** Tomies Wood (V9088), 1♂2♀♀ 6 August 1976, *Salix*, collected and determined D. Hollis.

***Cacopsylla (Hepatopsylla) saliceti* (Foerster, 1848) New to County Cork**

**CORK:** near Carran (V9957), 5♂♂1♀ 3 August 1976, *Crataegus* and *Salix*, collected and determined D. Hollis; Rossnagrena (V8859), 1♂1♀ 4 August 1976, *Salix*, collected and determined D. Hollis.

**WEXFORD:** The Raven (T1124), 3♂♂1♀ 25 May 1975, collected M. C. D. Speight, determined D. Hollis.

***Cacopsylla (Thamnopsylla) alaterni* (Foerster, 1848)**

*Cacopsylla alaterni* was described as *Psylla alaterni* by Foerster (1848) based on *inter alia* two ♂♂ sent by A. H. Haliday under the manuscript name *alaterni*. Walker (1852) also mentioned Haliday material. O’Connor and Malumphy (2011) considered that this record required confirmation. The host plant is *Rhamnus alaternus* popularly known as Mediterranean or Italian buckthorn and as the name implies, it is a native of the Mediterranean region. Although it has been cultivated in British gardens since 1629, there appears to be only one subsequent record of *Cacopsylla alaterni* from *R. alaternus* in the British Isles. It is known that Haliday spent most of the years 1841-1848 in Italy (Nash and O’Connor, 2011) and there was a possibility that he had sent Italian specimens to Foerster from Ireland. However, prior to 1836, Haliday spent time collecting insects in Galway in the west of Ireland and provided parasitic wasps from there to Francis Walker (O’Connor *et al.*, 2004). As *R. alaternus* has become naturalised in an area near Lough Corrib not far from Galway City (grid reference M2-4-) (Anon, 2020), it is now possible that Haliday collected the psyllids in the garden of a demense or estate in that locality.

***Cacopsylla (Thamnopsylla) crataegi* (Schrank, 1801) New to County Cork (Fig. 3)**

**CORK:** near Carran (V9957), 3♂♂5♀♀ 3 August 1976, *Quercus*, collected and determined D. Hollis.

*Cacopsylla crataegi* was previously only known in Ireland from a male taken at Lough Bunny, County Clare (O'Connor and Malumphy, 2011).

***Cacopsylla (Thamnopsylla) melanoneura* (Foerster, 1848) New to Counties Cork and Kerry**

**CORK:** near Carran (V9957), 2♂♂1♀ 3 August 1976, *Quercus*, collected and determined D. Hollis.

**KERRY:** Lough Guitane (W0385), 1♀ 7 August 1976, *Betula*, collected and determined D. Hollis.

***Cacopsylla (Thamnopsylla) rhamnicola* (Scott, 1876) New to County Clare (Fig. 4)**

**CLARE:** Dromore Forest (R3585), 5♂♂4♀♀ 5 August 1976, *Euonymus* and *Rhamnus cathartica*, collected and determined D. Hollis.

This species was only recorded from "Ireland" by O'Connor and Malumphy (2011).

***Chamaepsylla hartigii* (Flor, 1861)**

**KERRY:** Lough Guitane (W0385), 3♀♀ 7 August 1976, *Betula*, collected and determined D. Hollis.

***Strophingia ericae* (Curtis, 1835) New to County Cork**

**CORK:** Glengarriff Wood (V9156), 6♂♂3♀♀ 3-4 August 1976, *Calluna vulgaris*, collected and determined D. Hollis.

***Psyllopsis fraxinicola* (Foerster, 1848) New to Country Antrim**

**ANTRIM:** Portmore Harbour (C4258), ♂♀, August 1903 collected J. N. Halbert, determined J. P. O'Connor.

The locality for the above record is given as Portmore, County Donegal, in O'Connor and Malumphy (2011) as only "Portmore" was given on the label. However from Halbert (1935), it is evident that "Portmore" refers to Portmore Lough in County Antrim.

***Bactericera crithmi* (Low, 1877) New to County Cork**

**CORK:** Seal Harbour (V9052), 2♂♂ 10 July 1952, samphire, collected C. A. Prevost, determined I. D. Hodkinson.

***Trioza remota* Foerster, 1848 New to Counties Cork and Galway**

**CORK:** Glengarriff Forest (V9157), 1♀ 18 April 1975, swept in *Quercus* woodland, collected M. C. D. Speight, determined D. Hollis.

**DUBLIN:** Dundrum (O1627), 2♀♀ 23 April 1976, swept in garden, collected M. C. D. Speight, determined D. Hollis.

**GALWAY:** Derryclare Nature Reserve (L8349), 1♀ 12 March 1975, from *Taxus*, deciduous wood, collected M. C. D. Speight, determined D. Hollis.

***Trioza urticae* (Linnaeus, 1758) New to Counties Clare and Gaway**

**CLARE:** Lough Inchiquin (R2690), 6 adults 8 August 1976, *Urtica dioica*, collected and determined D. Hollis.

**CORK:** near Carran (V9957), 12 adults 3 August 1976, *U. dioica*, collected and determined D. Hollis.

**GALWAY:** Garryland Wood (M4206), 5 adults 10 August 1976, *U. dioica*, collected and determined D. Hollis.

**KERRY:** Lough Guitane (W0385), 11 adults 5 August 1976, *U. dioica*, collected and determined D. Hollis; Muckross Wood (V9686), 10 adults 7 August 1976, *U. dioica*, collected and determined D. Hollis; Tomies Wood (V8088), 11 adults 6 August 1976, *U. dioica*, collected and determined D. Hollis.

**WEXFORD:** Rosslare Strand (T0916), 2 adults 13 August 1976, *U. dioica*, collected and determined D. Hollis.

**Acknowledgements**

The authors are indebted to the Global Biodiversity Information Facility and The Trustees of the Natural History Museum, London for making available the photographs of the slides. We also wish to thank David Hollis for his identifications and collection of specimens. The photographs were kindly provided by Joe Botting. The Irish distribution maps were prepared using DMAP and we are indebted to Dr Alan Morton for supplying the relevant programme.

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**APPENDIX 1.** A revised checklist of the Irish Psylloidea.

**PSYLLOIDEA**

**APHALARIDAE LÖW, 1879**

1. *Aphalara exilis* (Weber & Mohr, 1804)
2. *Aphalara polygoni* Foerster, 1848  
Synonym: *Aphalara poligoni* (Shinji, 1938)
3. *Aphalara ulicis* Foerster, 1848
4. *Craspedolepta flavipennis* (Foerster, 1848)
5. *Craspedolepta nebulosa* (Zetterstedt, 1828)
6. *Craspedolepta nervosa* (Foerster, 1848)  
Synonym: *Aphalara nervosa* Foerster, 1848
7. *Craspedolepta sonchi* (Foerster, 1848)  
Synonym: *Aphalaria picta* Zetterstedt, 1828
8. *Ctenarytaina eucalypti* (Maskell, 1890)
9. *Ctenarytaina peregrina* Hodkinson, 2007
10. *Ctenarytaina spatulata* Taylor, 1997
11. *Neocraspedolepta subpunctata* (Foerster, 1848)  
Synonym: *Craspedolepta subpunctata* (Foerster, 1848)

**LIVIIDAE LÖW, 1879**

12. *Livia junci* (Schrank, 1789)  
Synonym: *Livia juncorum* (Latreille, 1798)
13. *Livilla ulicis* Curtis, 1836
14. *Psyllopsiopsis discrepans* (Flor, 1861)
15. *Psyllopsiopsis distinguenda* Edwards, 1913
16. *Psyllopsiopsis fraxini* (Linnaeus, 1758)
17. *Psyllopsiopsis fraxinicola* (Foerster, 1848)
18. *Strophingia ericae* (Curtis, 1835)

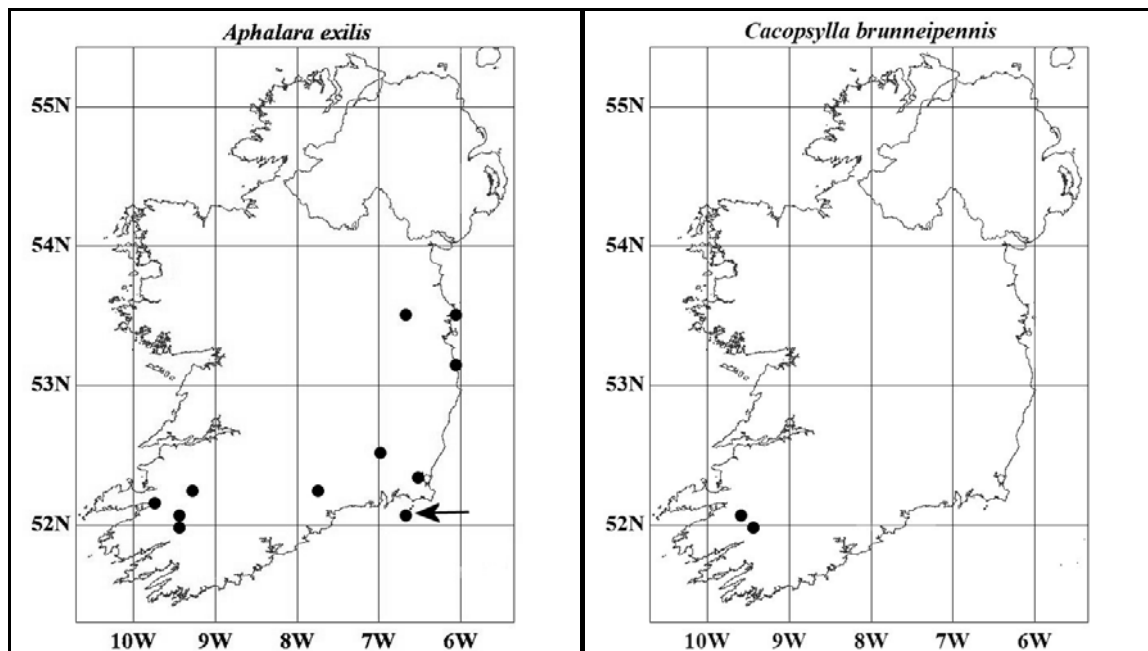
**PSYLLIDAE LATREILLE, 1807**

19. *Arytaina genistae* (Latreille, 1804)  
Synonym: *Arytaena genistae* Latreille, 1804
20. *Arytainilla spartiophila* (Foerster, 1848)  
Synonym: *Psylla spartii* Guérin-Méneville, 1843
21. *Baeopelma foersteri* (Flor, 1861)
22. *Cacopsylla (Cacopsylla) mali* (Schmidberger, 1836)  
Synonym: *Psylla aeruginosa* Foerster, 1848  
Synonym: *Psylla occulta* Foerster, 1848
23. *Cacopsylla (Cacopsylla) peregrina* (Foerster, 1848)
24. *Cacopsylla (Cacopsylla) sorbi* (Linnaeus, 1767)
25. *Cacopsylla (Hepatopsylla) ambigua* (Foerster, 1848)
26. *Cacopsylla (Hepatopsylla) brunneipennis* (Edwards, 1896)
27. *Cacopsylla (Hepatopsylla) hippophaes* (Foerster, 1848)
28. *Cacopsylla (Hepatopsylla) pulchra* (Zetterstedt, 1840)
29. *Cacopsylla (Hepatopsylla) pyri* (Linnaeus, 1758)
30. *Cacopsylla (Hepatopsylla) pyricola* (Foerster, 1848)  
Synonym: *Psylla apiophila* Foerster, 1848
31. *Cacopsylla (Hepatopsylla) saliceti* (Foerster, 1848)  
Synonym: *Psylla salicicola* Foerster, 1848 partim
32. *Cacopsylla (Thamnopsylla) alaterni* (Foerster, 1848)
33. *Cacopsylla (Thamnopsylla) crataegi* (Schrank, 1801)  
Synonym: *Psylla costatopunctata* Foerster, 1848
34. *Cacopsylla (Thamnopsylla) melanoneura* (Foerster, 1848)  
Synonym: *Psylla costalis* Flor (partim)
35. *Cacopsylla (Thamnopsylla) pruni* (Scopoli, 1763)  
Synonym: *Psylla fumipennis* Foerster, 1848
36. *Cacopsylla (Thamnopsylla) rhamnocola* (Scott, 1876)
37. *Chamaepsylla hartigii* (Flor, 1861)
38. *Psylla (Asphagidella) buxi* (Linnaeus, 1758)
39. *Psylla (Psylla) alni* (Linnaeus, 1758)  
Synonym: *Psylla fuscinervis* Foerster, 1848  
Synonym: *Psylla heydeni* Foerster, 1848
40. *Psylla (Psylla) betulae* (Linnaeus, 1758)
41. *Spanioneura fonscolombii* Foerster, 1848

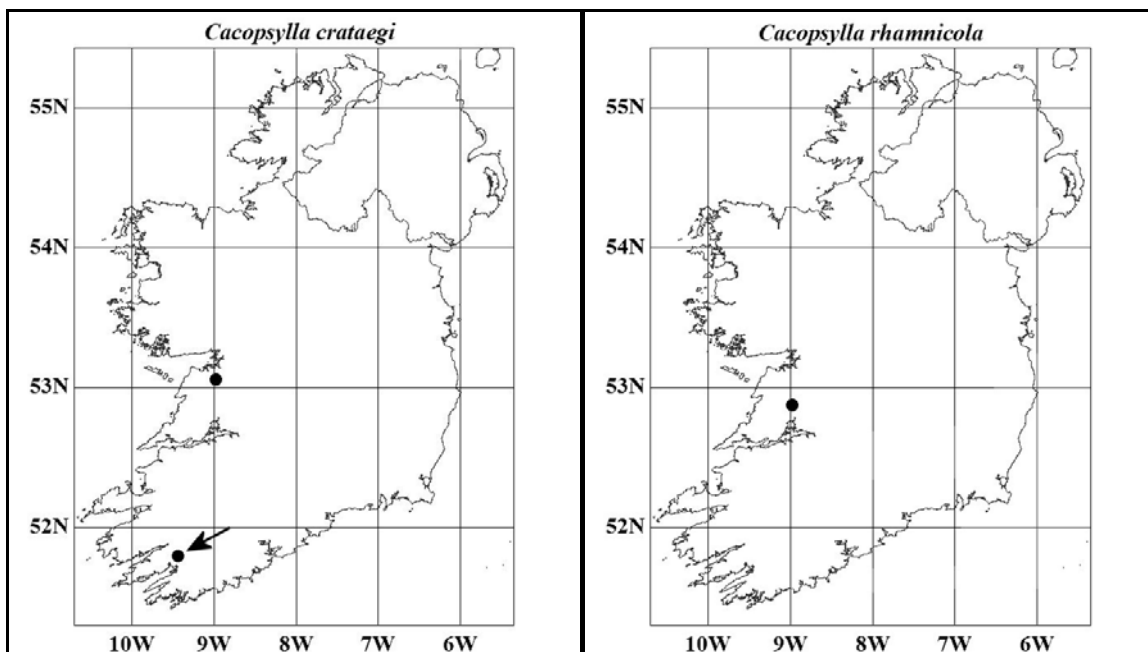
**TRIOZIDAE LÖW, 1879**

42. *Bactericera albiventris* (Foerster, 1848)
43. *Bactericera crithmi* (Löw, 1877)
44. *Bactericera curvatinervis* (Foerster, 1848)
45. *Lauritrioza alacris* (Flor, 1861)  
Synonym: *Trioza alacris* Flor, 1861
46. *Powellia vitreoradiata* Maskell, 1879  
Synonym: *Trioza vitreoradiata* (Maskell, 1879)
47. *Trioza galii* Foerster, 1848  
Synonym: *Trioza velutina* Foerster, 1848
48. *Trioza munda* Foerster, 1848
49. *Trioza remota* Foerster, 1848
50. *Trioza urticae* (Linnaeus, 1758)





**FIGURES 1-2.** The known Irish distributions of *Aphalara exilis* (Weber & Mohr, 1804) and *Cacopsylla brunneipennis* (Edwards, 1896). The island record of *A. exilis* is indicated by an arrow.



**FIGURES 3-4.** The known Irish distributions of *Cacopsylla crataegi* (Schrank, 1801) and *C. rhamnicola* (Scott, 1876). The new record of *C. crataegi* is indicated by an arrow.



**PLATE 1.** Adult female, form *typica* of *Cacopsylla brunneipennis*. Huddersfield, England (February 2008). Photograph © Joe Botting.



**PLATE 2.** Adult male, form *klapaleki* of *Cacopsylla brunneipennis*. Huddersfield, England (February 2008). Photograph © Joe Botting.