

# The Aphids (Homoptera: Aphididae) of British Columbia

## 21. Further Additions

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### ABSTRACT

Seven species are added to the aphid fauna of British Columbia. Sixty-five of the 113 new aphid-host associations of plant species are newly recorded.

### INTRODUCTION

Four-hundred-and-five species of aphids collected from 1178 host plant species or in traps, and 2321 aphid-host associations were recorded in previous lists of the aphids of British Columbia (Forbes and Chan 1989a, 1989b, 1991). The present list adds 7 aphid species (indicated with an asterisk in the list) and 113 aphid-host plant associations to the previous lists. Sixty-five of the new aphid-host associations of plant species are recorded for the first time. The additions bring the number of known aphid species in British Columbia to 412. Aphids have now been collected from 1243 different host plants and the total number of aphid-host associations is 2434.

The aphid names are in conformity with Eastop and Hille Ris Lambers (1976) and are listed alphabetically by species. Names of native host plants are based on Anonymous (1982) and Taylor and MacBryde (1977). Names of cultivated host plants are based on Anonymous (1976). Thirteen new collection sites are given in Table 1. The reference points are the same as those shown on the map which accompanies the basic list (Forbes et al. 1973). Most of the aphids were collected by the authors.

### LIST OF SPECIES

#### AEGOPODII (Scopoli 1763), CAVARIELLA

*Apium graveolens* 'Prize Pink': Vancouver (UBC), Aug19/93.

*Oenanthe sarmentosa*: Amphitrite Point, Sep02/92.

#### AGATHONICA Hottes 1950, AMPHOROPHORA

*Rubus idaeus* 'Algonquin': Abbotsford, Jul30/93.

*Rubus idaeus* 'Chilliwack': Abbotsford, Jul30/93.

*Rubus idaeus* 'Comox': Abbotsford, Jul30/93.

*Rubus idaeus* 'Meeker': Abbotsford, Jul30/93.

#### AMERICANUM (Riley 1879), ERIOSOMA

*Ulmus carpinifolia*: Vancouver, May18/93.

#### ANTIRRHINII (Macchiati 1883), MYZUS

*Symphoricarpos x chenaultii*: Vancouver (UBC), Jun16/93.

*Vinca minor*: Vancouver (UBC), Jun09/93.

#### \*ARUNDICOLENS (Clarke 1903), TAKECALLIS

*Arundinaria pygmaea*: Vancouver (UBC), Sep16/92, Oct23/92, Nov25/92.

#### ASCALONICUS Doncaster 1946, MYZUS,

*Arabidopsis thaliana*: Vancouver (UBC), May06/83.

*Corydalis aurea* ssp. *aurea*: Vancouver (UBC), Mar22/85, May11/83, Nov07/84, Nov28/83.

*Potentilla fruticosa* ssp. *floribunda*: Vancouver (UBC), May20/93.

*Spergularia rubra*: Vancouver (UBC), Nov03/83.

#### AVENAE (Fabricius 1775), SITOBION

*Agrotis exarata* ssp. *exarata* var. *exarata*: Abbotsford, Jul21/93.

*Bromus mollis*: Abbotsford, Jul21/93.

*Bromus pacificus*: Abbotsford, Jul21/93.

*Digitaria ischaemum*: Cumberland, Sep03/92.

*Digitaria sanguinalis*: Abbotsford, Jul21/93.

*Hordeum murinum*: Abbotsford, Jul21/93.

*Phalaris arundinacea*: Abbotsford, Jul23/93.

*Poa annua*: Abbotsford, Jul21/93.

*Zea mays* 'Miracle': Vancouver (UBC), Aug19/93.

AZALEAE (Mason 1925), ILLINOIA

*Vaccinium corymbosum*: Richmond, May22/93; Aug15/90.

BETAEE Doane 1900, PEMPHIGUS

*Lactuca sativa*: Vancouver, Sep15/83.

\*BETAEE Westwood 1849, SMYNTHURODES

*Phaseolus vulgaris* var. *humulis*: Vancouver, Jul23/93.

\*BLACKMANI Forbes & Chan 1993, SITOBION

*Holodiscus discolor* ssp. *discolor*: Vancouver (UBC), Mar19/84, Mar26/84, Apr14/86, Apr16/86, Apr24/84, Apr30/86, May01/86, May08/84 Aug25/86, Sep20/84, Oct18/85, Oct20/86, Oct21/86, Oct25/86, Nov02/83, Nov07/85, Nov08/85, Nov10/81 (Forbes & Chan 1993).

BRASSICAE (Linnaeus 1758), BREVICORYNE

*Capsella bursa-pastoris*: Abbotsford, Jul15/91.

Table 1

Collection sites of aphids, with airline distances from reference points.

| Locality                                | Reference Point | Dir | Distance |     |
|---|-----------------|-----|----------|-----|
|   |                 |     | km       | mi  |
| Amphitrite Point<br>(Vancouver Island)  | Victoria        | NW  | 172      | 108 |
| Chester Beach<br>(Vancouver Island)     | Victoria        | NW  | 193      | 121 |
| Combers Beach<br>(Vancouver Island)     | Victoria        | NW  | 193      | 121 |
| Cumberland<br>(Vancouver Island)        | Victoria        | NW  | 182      | 114 |
| Forbidden Plateau<br>(Vancouver Island) | Victoria        | NW  | 207      | 129 |
| Gabriola Island                         | Vancouver       | W   | 51       | 32  |
| Green Lake<br>(near Whistler)           | Vancouver       | NE  | 103      | 64  |
| Grouse Mountain                         | Vancouver       | N   | 12       | 8   |
| Long Beach<br>(Vancouver Island)        | Vancouver       | W   | 210      | 130 |
| Mount Washington<br>(Vancouver Island)  | Victoria        | NW  | 207      | 129 |
| Radar Hill<br>(Vancouver Island)        | Vancouver       | W   | 210      | 130 |
| Royston<br>(Vancouver Island)           | Victoria        | NW  | 179      | 112 |
| Ucluelet<br>(Vancouver Island)          | Victoria        | NW  | 173      | 108 |

- Brassica oleracea* 'Minaret': Vancouver (UBC), Aug19/93.  
*Brassica oleracea* var. *capitata* 'Red Rodan': Vancouver (UBC), Aug19/93.  
*Brassica oleracea* var. *capitata* 'Savoy King': Vancouver (UBC), Aug19/93.
- CARAGANAE (Cholodkovsky 1907), ACYRTHOSIPHON  
*Caragana arborescens*: Vancouver (UBC), Jun17/93.  
*Colutea arborescens*: Vancouver (UBC), May18/93.
- CARICIS (Glendenning 1926), SITOBION  
*Carex mertensii*: Mount Washington, Sep04/92.
- CARNOSUM (Buckton 1876), MICROLOPHIUM  
*Urtica dioica* ssp. *gracilis* var. *lyallii*: Abbotsford, Jun04/93; Vancouver, Aug18/89.
- CERASI (Fabricius 1775), MYZUS  
*Prunus x yedoensis*: Vancouver (UBC), May20/93.
- CERTUS (Walker 1849), MYZUS  
*Spergularia rubra*: Abbotsford, Jun21/92.
- CIRCUMFLEXUM (Buckton 1876), AULACORTHUM,  
*Notholirion campanulatum*: Vancouver (UBC), May20/93.  
*Potentilla fruticosa* ssp. *floribunda*: Vancouver (UBC), May20/93.
- CORNI (Fabricius 1775), ANOECIA  
*Agropyron repens*: Abbotsford, Aug05/93, Oct13/92; Cumberland, Sep03/92.
- CORYLI (Goeze 1778), MYZOCALLIS  
*Corylus cornuta* var. *californica*: Abbotsford, Jun19/93.
- CRACCIVORA Koch 1854, APHIS  
*Laburnum anagyroides*: Vancouver (UBC), May20/93.  
*Laburnum x watereri*: Vancouver (UBC), Jun25/93.
- CRYSTLEAE (Smith & Knowlton 1939), ILLINOIA  
*Holodiscus discolor* ssp. *discolor*: Vancouver (UBC), Jun15/93.
- CYPERI (Walker 1848), THRIPSAPHIS  
*Carex mertensii*: Mount Washington, Sep04/92.
- DIRHODUM (Walker 1849), METOPOLOPHIUM  
*Echinochloa crusgalli*: Westham Island, Aug12/93.  
*Phalaris arundinacea*: Abbotsford, Jul23/93.  
*Rosa* 'Roseaie de L' Hay': Vancouver (UBC), Nov09/84.
- DORSATUM Richards 1967, AULACORTHUM  
*Gaultheria shallon*: Chester Beach, Sep03/92.
- EQUISETI Holman 1961, SITOBION  
*Equisetum arvense*: Vancouver, May29/93, Jun25/86.
- EUPHORBIAE (Thomas 1878), MACROSIPHUM  
*Fagopyron esculentum*: Abbotsford, Aug12/92.  
*Solanum nigrum*: Abbotsford, Aug12/92.  
*Solanum sarrachoides*: Abbotsford, Aug12/92.
- FABAE Scopoli 1763, APHIS  
*Euonymus hamiltoniana* var. *hans*: Vancouver (UBC), Jun03/89.  
*Staphylea pinnata*: Vancouver (UBC), Jul30/93.
- FAGI (Linnaeus 1767), PHYLLAPHIS  
*Fagus sylvatica*: Vancouver, May18/93.
- FARINOSA Gmelin 1790, APHIS  
*Salix* sp.: Vancouver, Jun14/87.
- FIMBRIATA Richards 1959, FIMBRIAPHIS  
*Capsella bursa-pastoris*: Abbotsford, May25/93.  
*Fragaria x ananassa* 'Totem': Abbotsford, Oct13/92.

- FOENICULI (Passerini 1860), HYADAPHIS  
*Lonicera ciliosa*: Gabriola Island, Jul10/93.
- FRAGAEFOLII (Cockerell 1901), CHAETOSIPHON,  
*Fragaria x ananassa* 'Sakuma': Vancouver (UBC), Nov04/85.  
*Fragaria chiloensis*: Long Beach, Sep03/92.
- FRAGARIAE (Walker 1848), SITOBION  
*Fragaria x ananassa* 'Burlington': Vancouver (UBC), Nov04/85.  
*Fragaria x ananassa* 'Totem': Abbotsford, Sep29/92.
- FRAXINIFOLII (Riley 1879), PROCIPHILUS  
*Fraxinus latifolia*: Vancouver (UBC), May19/93.  
*Fraxinus oxycarpa*: Vancouver, May18/93.  
*Fraxinus pennsylvanica*: Vancouver, May18/93.
- FREQUENS (Walker 1848), DIURAPHIS,  
*Agropyron caninum*: Abbotsford, Jul15/93, Aug05/93, Aug20/93.  
*Agropyron repens*: Abbotsford, Jul15/93, Aug05/93, Aug20/93.  
*Bromus pacificus*: Abbotsford, Aug17/93, Aug20/93.
- GENTNERI (Mason 1947), FIMBRIAPHIS  
*Crataegus mollis*: Vancouver (UBC), May19/93.  
*Crataegus phaenopyrum*: Vancouver, May18/93.
- GLYCERIAE (Kaltenbach 1843), SIPHA  
*Glyceria grandis*: Vancouver, Sep15/89.
- GOSSYPII Glover 1877, APHIS  
*Datura stramonium*: Vancouver (CDA), Jun15/93.
- HEDERAE Kaltenbach 1843, APHIS  
*Hedera helix*: Combers Beach, Sep03/92.
- HELICHRYSI (Kaltenbach 1843), BRACHYCAUDUS  
*Adelocaryum anchusoides*: Vancouver (UBC), May31/89.  
*Crataegus mollis*: Vancouver (UBC), May19/93.  
*Petasites palmatus*: Vancouver, Jun22/87.  
*Symphytum officinale*: Vancouver, Jun09/93.
- HUMULI (Schränk 1801), PHORODON  
*Humulus lupulus* 'Nugget': Sardis, May14/93, Jul22/93.
- \*INCOGNITA Hottes & Frison 1931, CEDOAPHIS  
*Symphoricarpos x chenaultii*: Vancouver (UBC), May20/93; Jun16/93.
- LACTUCAE (Linnaeus 1758), HYPEROMYZUS  
*Ribes sativum* 'Red Lake': Vancouver (UBC), Sep24/84.
- LYTHRI (Schränk 1801), MYZUS  
*Prunus emarginata*: Vancouver (UBC), May17/93.
- MACROSIPHUM (Wilson 1912), ACYRTHOSIPHON  
*Amelanchier alnifolia*: Green Lake, Nov05/92.
- MANITOBENSE (Robinson 1965), SITOBION  
*Cornus alba* 'Sibirica': Squamish, Nov20/92.
- NERVATA (Gillette 1908), WAHLGRENIELLA  
*Arbutus menziesii*: Nanaimo, Oct13/92.
- NICOTIANAE Blackman 1987, MYZUS  
*Solanum tuberosum* 'Russet Burbank': Abbotsford, Jul30/93.
- NOXIA (Mordvilko ex Kurdjumov 1913), DIURAPHIS  
*Capsella bursa-pastoris*: Vancouver (CDA), May15/93.
- ORNATUS Laing 1932, MYZUS  
*Alyogyne hakeifolia*: Vancouver (UBC), May20/93.

- Androsace geraniifolia*: Vancouver (UBC), May20/93.  
*Arnica latifolia* var. *latifolia*: Vancouver (UBC), Jun15/87.  
*Astartea fascicularis*: Vancouver (UBC), May20/93.  
*Cuphea cyanea*: Vancouver (UBC), Oct25/83.  
*Lithodora diffusa* 'Heavenly Blue': Vancouver (UBC), Jun21/85.  
*Phyllodoce empetriformis*: Vancouver (UBC), May20/93.  
*Spergularia rubra*: Vancouver (UBC), Nov03/83.

## PADI (Linnaeus 1758), RHOPALOSIPHUM

- Agropyron caninum*: Abbotsford, Jul21/93.  
*Zea mays*: Chilliwack, Aug29/83.

## PARVIFOLII (Richards 1967), SITOBION

- Vaccinium alaskaense*: Forbidden Plateau, Sep03/92; Grouse Mountain, Jul24/93; Mount Washington, Sep03/92.

- Vaccinium ovalifolium*: Grouse Mountain, Jul24/93.

## PASTINACAE (Linnaeus 1758), CAVARIELLA

- Heracleum sphondylium* ssp. *montanum*: Ucluelet, Sep02/92.

## PERSICAE (Sulzer 1776), MYZUS

- Fagopyron esculentum*: Abbotsford, Jun21/92.  
*Rorippa palustris* ssp. *palustris* var. *palustris*: Abbotsford, Sep15/92.  
*Solanum nigrum*: Abbotsford, Aug15/92.  
*Solanum sarrachoides*: Abbotsford, Aug15/92.  
*Solanum tuberosum* 'Norchip': Ladner, Jul27/93.  
*Solanum tuberosum* 'Russet Norkotah': Ladner, Jul27/93.

## \*PHLOXAE (Sampson 1939), OVATUS

- Capsella bursa-pastoris*: Abbotsford, May15/92.

## PISUM (Harris 1776), ACYRTHOSIPHON

- Cytisus austriacus*: Vancouver (UBC), May18/93, Oct04/84.

## POAE (Gillette 1908), RHOPALOMYZUS

- Phalaris arundinacea*: Abbotsford, Jul23/93.

## POPULIVENAE Fitch 1859, PEMPHIGUS

- Rumex acetosella*: Abbotsford, May11/93.

## PRUNI (Geoffroy 1762), HYALOPTERUS

- Phalaris arundinacea*: Abbotsford, Jul23/93.  
*Prunus cerasifera* 'Bradshaw': Vancouver (UBC), Aug19/93.

## PTERINIGRUM Richards 1972, AULACORTHUM

- Vaccinium alaskaense*: Grouse Mountain, Jul24/93.

## ROSAE (Linnaeus 1758), MACROSIPHUM

- Centranthus ruber* 'Albiflorus': Vancouver (UBC), Jun26/87.  
*Fragaria x ananassa* 'Burlington': Vancouver (UBC), Nov04/85.  
*Rosa multibracteata*: Vancouver (UBC), Sep16/92.  
*Rosa soulieana*: Vancouver (UBC), Sep16/92.

## ROSARUM (Kaltenbach 1843), MYZAPHIS

- Potentilla fruticosa*: Cumberland, Sep03/92.  
*Rosa virginiana*: Vancouver (UBC), Nov09/84.

## RUMICIS Linnaeus 1758, APHIS

- Rumex crista*: Abbotsford, Jun04/93.

## SALICARIAE Koch 1855, APHIS

- Cornus alba* 'Sibirica': Squamish, Nov20/92.

## SOLANI (Kaltenbach 1843), AULACORTHUM

- Adelocaryum anchusoides*: Vancouver (UBC), May31/89.  
*Amelanchier laevis*: Vancouver (UBC), May20/93.

*Arnica latifolia* var. *latifolia*: Vancouver (UBC), Jun15/87.

*Cardiocrinum giganteum*: Vancouver (UBC), May16/93.

*Eryngium varifolium*: Vancouver (UBC), Jul13/87.

*Hedera helix*: Combers Beach, Sep02/92.

*Hibiscus syriacus*: Horseshoe Bay, Sep01/92.

*Oxalis stricta*: Vancouver (UBC), Jul13/87.

*Rubus x loganobaccus*: Vancouver (UBC), Oct16/92.

*Symphytum officinale*: Vancouver, Jun09/93.

**SPYROTHECAE** Passerini 1856, PEMPHIGUS

*Populus nigra* 'Italica': Ladner, Jul30/93; Royston, Sep04/92; Westham Island, Aug20/93.

\***STACHYOPHILA** Hille Ris Lambers 1966, AMPHOROPHORA

*Stachys cooleyae*: Radar Hill, Sep03/92.

**STAPHYLEAE** (Koch 1854), RHOPALOSIPHONINUS

*Buxus harlandi*: Vancouver (UBC), Apr18/86.

*Dianthus uralensis*: Vancouver (UBC), Feb28/87.

*Euonymus hamiltoniana* var. *hans*: Vancouver (UBC), Jun03/89.

*Staphylea pinnata*: Vancouver (UBC), Jun03/89.

**TENUICAUDA** Bartholomew 1932, MACROSIPHUM

*Urtica dioica* ssp. *gracilis* var. *lyallii*: Abbotsford, Jun04/93; Vancouver, Aug18/89.

**TESTUDINACEUS** (Ferne 1852), PERIPHYLLUS

*Acer platanoides* 'Harlequin': Cumberland, Sep03/93.

*Aesculus x carnea*: Vancouver, May18/93.

*Aesculus hippocastanum* 'Rubricunda': Vancouver (UBC), May24/89.

**TILIAE** (Linnaeus 1758), EUCALLIPTERUS

*Tilia platyphyllos*: Vancouver, May18/93.

*Tilia tomentosa* 'Brabant': Vancouver (UBC), Oct16/92.

\***TOLMIEA** (Essig 1942), MACROSIPHUM

*Tellima grandiflora*: Vancouver (UBC), May29/93.

**WAKIBAE** (Hottes 1934), FIMBRIAPHIS

*Vaccinium parvifolium*: Vancouver (UBC), May18/93.

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