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THE APHIDS (HOMOPTERA:APHIDIDAE) OF BRITISH COLUMBIA

11. FURTHER ADDITIONS

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ABSTRACT

Ten species of aphids and new host records are added to the taxonomic list of the aphids of British Columbia.

INTRODUCTION

The previous seven lists of the aphids of British Columbia (Forbes, Frazer and MacCarthy 1973; Forbes, Frazer and Chan 1974; Forbes and Chan 1976, 1978, 1980, 1981; Forbes, Chan and Foottit 1982) recorded 341 species of aphids collected from 708 different host plants. This comprises 1298 aphid-host plant associations.

The present list adds 10 aphid species (indicated with an asterisk in the list) and 78 aphid-host plant associations to the previous lists. Thirty-five of the new aphid-host plant associations are plant species not in the previous lists. The additions bring the number of known aphid species in British Columbia to 351. Aphids have now been collected from 743 different host plants and the total number of aphid-host plant associations is 1376.

The names of aphids are in conformity with Eastop and Hille Ris Lambers (1976) and are arranged alphabetically by species. The location of each collection site can be determined from the tables of localities in the previous papers.

LIST OF SPECIES

ADIANTI (Oestlund), SITOBION

Pellaea glabella var. *simplex*: Vancouver (CDA), Jul 14/82.

ALBIFRONS Essig, MACROSIPHUM

Lupinus arboreus: Vancouver (UBC), Jul 15/83.
Lupinus nootkatensis var. *nootkatensis*: Vancouver (UBC), Jul 15/83.

AMERICANUM (Riley), ERIOSOMA

Ulmus americana: Kelowna, Jun 12/82, Aug 22/81.

AQUILEGIAE (Essig), KAKIMIA

Aquilegia vulgaris: Vancouver (UBC), Jun 11/79.

ASCALONICUS (Doncaster), MYZUS

Coluta australis: Vancouver (UBC), May 8/81.
Erigeron speciosus var. *speciosus*: Vancouver (UBC), May 8/81.
Potentilla gracilis var. *glabrata*: Vancouver (UBC), May 8/81.
Pulmonaria officinalis: Vancouver (UBC), Aug 24/79.

AVENAE (Fabricius), SITOBION

Hordeum vulgare: Vancouver (CDA), Dec 1/80.

BETAЕ Doane, PEMPHIGUS

Lactuca sativa: Abbotsford, Aug 23/82.

BRAGGII (Gillette), CINARA

Picea sitchensis: Terrace, Aug 26/82.

BRASSICAE (Linnaeus), BREVICORYNE

Brassica 'Osaka Red': Vancouver (UBC), Oct 2/81.

*CALIFORNICA Hille Ris Lambers, NEARCTAPHIS

Sorbus aucuparia: Vancouver, Jul 2/81.

CALIFORNICUM (Clarke), MACROSIPHUM

Salix triandra: Vancouver (UBC), Jul 15/83.

CERASI (Fabricius), MYZUS

Galium aparine: Cloverdale, Aug 24/82.
Nasturtium officinale: Vancouver, Mar 1/82.

CIRCUMFLEXUM (Buckton), AULACORTHUM

Fumaria officinalis: Vancouver (UBC), Aug 18/83.
Pilularia globulifera: Vancouver (UBC), Jun 24/81, Jul 16/81.
Schefflera octophylla: Vancouver, May 25/81.

CRACCIVORA Koch, APHIS

Picea sp.: Surrey, Aug 23/82.

CRATAEGARIUS (Walker), OVATUS

Origanum vulgare: Vancouver, Dec 7/81.

CYNOSBATI Oestlund, KAKIMIA

Ribes divaricatum: Vancouver (UBC), Apr 30/82, May 8/78, May 13/82.
Ribes lacustre: Vancouver (UBC), Apr 26/82, May 28/82.

DAPHNIDIS Börner, MACROSIPHUM

Daphne x burkwoodii 'Somerset': Vancouver (UBC), June 24/80.
Daphne laureola: Vancouver (UBC), Jan 18/80, Mar 13/81, May 4/79, May 22/81, Jun 16/81, Jul 16/79, Aug 12/80.

EQUISETI Holman, SITOBIOM

Equisetum arvense: Vancouver, Jun 21/83.

EUPHORBIAE (Thomas), MACROSIPHUM

Asparagus densiflorus 'Sprengerii': Vancouver (CDA), Jun 21/83.
Asparagus officinalis: Vancouver (CDA), Jun 21/83.
Beta vulgaris: Vancouver (CDA), Jun 21/83.
Brassica oleracea acephala group: Vancouver (CDA), Aug 15/83.
Capsella bursa-pastoris: Vancouver (CDA), Aug 15/83.
Citrus maxima: Vancouver (CDA), Jun 21/83.
Cucumis sativa: Vancouver, Aug 15/82.
Fragaria vesca 'Semperflorens': Vancouver (CDA), Jun 21/83.
Hordeum vulgare: Vancouver (CDA), June 21/83.
Lycopersicon lycopersicum: Vancouver (CDA), Jul 15/82.
Rosa 'Beauty Secret': Vancouver (CDA), Jun 20/83.
Verbena 'Ideal Florist': Vancouver (CDA), May 20/83.
Verbesina encelioides: Vancouver (CDA), Jul 16/83.

FABAE Scopoli, APHIS

Apocynum androsaemifolium: Vancouver (UBC), Jun 23/81.

***FABAE MORDVILKOI** Börner & Janisch, APHIS

Pseudotsuga menziesii: Surrey, Aug 23/82.

FARINOSA Gmelin, APHIS

Salix acutifolia 'pendulifolia': Vancouver (UBC), Jul 22/81.

FRAGARIAE (Walker), SITOBIOM

Bromus ciliatus: Vancouver (UBC), Jul 3/79.
Poa pratensis ssp. *agassizensis*: Vancouver (UBC), Jun 13/79.

GALEOPSIDIS (Kaltenbach), CRYPTOMYZUS

Ribes nigrum: Cloverdale, May 19/83.

GENTNERI (Mason), FIMBRIAPHIS

Crataegus laevigata 'Paul's Scarlet': Vancouver, May 30/83.

HELICHRYSI (Kaltenbach), BRACHYCAUDUS

Erigeron speciosus var. *speciosus*: Vancouver (UBC), May 8/81.

HUMULI (Schrank), PHORODON

Humulus lupulus: Vancouver, Jun 21/83.

LACTUCAE (Linnaeus), HYPEROMYZUS

Sonchus arvensis: Vancouver, Aug 22/80.

RONICERAE (Siebold), RHOPALOMYZUS

Dactylis glomerata: Cloverdale, Aug 27/82; Surrey, Aug 23/82.

***LUDOVICIANAE** (Oestlund), MACROSIPHONIELLA

Moericka yellow pan water trap: Summerland, Jul 2/76.

MAIDIS (Fitch), RHOPALOSIPHUM

Zea mays: Vancouver (CDA), Aug 18/83.

***MUSAE** (Schouteden), RHOPALOSIPHUM

Dactylis glomerata: Surrey, Aug 23/82.

NERVATA ARBUTI (Davidson), WAHLGRENIELLA

Paxistima myrsinites: Vancouver (UBC), Jul 6/81.

***OBLIQUUS** (Cholodkovsky), MINDARUS

Picea sp.: Surrey, Aug 23/82.

ORNATUS Laing, MYZUS

Arnica chamissonis: Vancouver (UBC), May 26/81.

Parahelle catarractae: Vancouver (UBC), May 26/81.

PADI (Linnaeus) RHOPALOSIPHUM

Ginkgo biloba: Agassiz, Sep 21/82.

Zea mays: Vancouver (CDA), Aug 18/83.

PERSICAE (Sulzer), MYZUS

Calendula officinalis: Vancouver (UBC), May 8/81.

Lactuca sativa: Cloverdale, Aug 9/82, Aug 24/82.

Rumex obtusifolius spp. *obtusifolius*: Vancouver (CDA), Jun 25/82.

PISUM (Harris), ACYRTHOSIPHON

Robinia pseudoacacia: Vancouver (UBC), Jun 14/79.

POMI de Geer, APHIS

Crataegus laevigata 'Paul's Scarlet': Vancouver, May 30/83.

Sorbus aucuparia: Vancouver, Jul 2/81.

RHAMNI (Clarke), SITOBIOM

Rhamnus purshiana: Vancouver (UBC), Jun 17/83.

***RHOKALAZA** (Tissot & Pepper), ILLINOIA

Leucothoe fontanesiana: Vancouver (UBC), Jul 15/81.

RIBISNIGRI (Mosley), NASONOVIA

Hieracium scouleri var. *scouleri*: Vancouver (UBC), Aug 21/82, Oct 1/82.

Lactuca sativa: Abbotsford, Aug 8/82.

ROSAE (Linnaeus), MACROSIPHUM

Rosa 'Golden Showers': Vancouver (UBC), Nov 12/80.

Rosa 'Handel': Vancouver (UBC), Nov 12/80.

Rosa 'Lichtkonigin Lucia': Vancouver (UBC), Nov 12/80.

***RUBICOLA** (Oestlund), ILLINOIA

Rubus idaeus ssp. *melanolasius*: Terrace, Jul 31/24 (MacGillivray 1958).

RUMEXICOLENS (Patch), BRACHYCAUDUS
Rumex obtusifolius ssp. *obtusifolius*: Abbotsford, Jun 23/82.

***SCHLINGERI Hille Ris Lambers**
GLABROMYZUS

Carex capitata ssp. *capitata*: Vancouver (UBC), Jul 22/78.
Carex leporina: Vancouver (UBC), Jul 22/78.
Carex limosa: Vancouver (UBC), Jul 22/78.
Juncus effusus var. *pacificus*: Vancouver (UBC), Jul 22/78.
Luzula arctica ssp. *latifolia*: Vancouver (UBC), May 25/79.
Luzula nivea: Vancouver (UBC), May 13/81, May 22/79, May 29/79, May 30/81, Jun 11/79, Jun 21/79, Jul 26/79.

SOLANI (Kaltenbach), AULACORTHUM

Apocynum androsaemifolium: Vancouver (UBC), Jun 2/81, Jun 24/81.
Lactuca sativa: Cloverdale, Jun 14/82.
Liquidambar styraciflua: Vancouver (UBC), May 22/81, Jun 2/81.
Tricyrtis hirta: Vancouver (UBC), Sep 13/78.

SONCHI (Linnaeus), UROLEUCON

Lactuca sativa: Abbotsford, Aug 8/82.

SPIRAECOLA (Patch), ILLINOIA

Spiraea thunbergii: Vancouver (UBC), Apr 3/18, Jun 22/79.

STANLEYI Wilson, MACROSIPHUM

Sambucus racemosa ssp. *pubens* var. *arborescens*: Vancouver (UBC), Jun 27/83, Jul 15/83.

STAPHYLEAE (KOCH), RHOPALOSIPHONINUS

Apocynum androsaemifolium: Vancouver (UBC), Jun 24/81.
Brassica pekinensis: Vancouver (CDA), Aug 18/83.
Yucca sp.: Vancouver, Aug 21/83.

***STELLARIAE Theobald, MACROSIPHUM**

Apium graveolens: Vancouver (CDA), Oct 1/81.
Beta vulgaris: Vancouver (CDA), Aug 15/83.
Capsella bursa-pastoris: Vancouver (CDA), Oct 14/82.

Dianthus alpinus: Vancouver (UBC), Jun 9/80.
Dianthus barbatus: Vancouver (CDA), Aug 15/83.

Dianthus 'Scarlet Luminette': Vancouver (UBC), Aug 31/82, Oct 2/81.

Dianthus sp.: Vancouver (UBC), Jun 10/80, Jun 15/81, Aug 13/82.

TARAXACI (Kaltenbach), UROLEUCON

Taraxacum officinale: Vancouver (UBC), Sep 14/79.

TESTUDINACEUS (Fernie), PERIPHYLLUS

Aesculus hippocastanum: Vancouver, May 31/79, Jun 14/79; Vancouver (UBC), May 25/79.

***ULMI (Linnaeus), ERIOSOMA**

Ulmus americana: Kelowna, Aug 22/81.

URTICA Essig, AMPHOROPHORA

Urtica dioica ssp. *gracilis* var. *lyallii*: Ladner, Jun 6/81.

UTRICULARIA (Passerini), GEOICA

Gramineae: Wilson Creek, Jun 4/81, Jul 3/81, Jul 9/81, Jul 27/81.

WOODSIAE Robinson, SITOBION

Woodia scopulina var. *scopulina*: Vancouver (UBC), Jul 7/81.

*Aphid species not in the previous lists.

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