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A Preliminary List of the Aphids in Manitoba

by

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A PRELIMINARY LIST OF THE APHIDS OF MANITOBA

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Abstract

A preliminary list of 211 species of aphids, with their host plants, is presented for Manitoba.

INTRODUCTION

The Province of Manitoba covers an area of 246,512 square miles near the centre of the land-mass of North America. The climate is continental, with severe cold in winter and hot, dry summers (Kendrew and Currie 1955).

The central and northern parts of the Province are covered with coniferous forest, in which black spruce, Picea mariana (Mill.) B.S.P., is the principal tree. Close to the northern boundary the trees are small, scattered, and interspersed with tundra. Aspen parkland and open plains on which wheat and other cereal grains are grown comprise most of the southern and western portions of Manitoba. Groves of trembling aspen, Populus tremuloides Michx., and in some areas, bur oak, Quercus macrocarpa Michx., are characteristic of the parkland. Manitoba maple, Acer negundo var. interius (Britt.) Sarg., green ash, Fraxinus pennsylvanica Marsh var. subintegerrima (Vahl) Fern, and white elm, Ulmus americana L., are the principal trees on the flood plains of the rivers. Along the southeastern boundary a western extension of the Great Lakes Forest occurs, in which the eastern white pine, Pinus strobus L., and the red pine, Pinus resinosa Ait., reach the western limits of their ranges (Rowe 1959, Bird 1961).

Both authors have collected aphids in the southern part of the region for several years, and the second author has received a large number of aphid specimens from all parts of the Province through the help of the Canadian Forest Insect and Disease Survey.

No list of the aphids that occur in Manitoba has been published to date. In answer to requests for such a list, the following is offered, though there is still much unworked material in the aphid collections already assembled, and many more species yet to be found. The list contains 211 species arranged alphabetically by genera, followed by the names of the host plants on which they occur.

- Acyrthosiphon brevis Richards. Spiraea sp.
- Acyrthosiphon caraganae (Cholodkovsky). Caragana arborescens.
- Acyrthosiphon dirhodium (Walker). Avena sativa, Festuca pratensis, Hordeum vulgare, Lolium perenne, Phalaris arundinacea, Rosa spp. Triticum aestivum.
- Acyrthosiphon pisum (Harris). Lathyrus odoratus, Medicago sativa, Melilotus alba, Melilotus officinalis, Pisum sativum.
- Acyrthosiphon sibiricum (Mordwilko). Urtica dioica.
- Acyrthosiphon solani (Kaltenbach). Pelargonium sp. (Geranium house plant).
Salvia sp.
- Acyrthosiphon scariolae (Nevsky). Lactuca scariola.
- Amphorophora crataegi (Monell). Crataegus sp.
- Amphorophora laingi Mason. Matteuccia struthiopteris.
- Amphorophora nabali (Oestlund). Prenanthes alba.
- Amphorophora ribiella (Davis). Ribes aureum.
- Amphorophora rubi (Kaltenbach). Rubus spp.
- Anoecia graminis Gillette and Palmer. Hordeum jubatum (roots).
- Anoecia oenotherae Wilson. Oenothera biennis (roots).
- Anoecia querci (Fitch). Suction trap.
- Anoecia setariae Gillette and Palmer. Equisetum laevigatum (roots).
- Aphis armoraciae Cowen. Achillea millefolium, Artemisia frigida, Artemisia sp., Taraxacum officinale (all on roots).
- Aphis asclepiadis Fitch. Ascleplas sp.
- Aphis ceanothi Clarke. Ceanothus ovatus.
- Aphis corniella Hille Ris Lambers. Cornus stolonifera.
- Aphis fabae Scopoli. Arctium minus, Aster sp., Cirsium arvense, Dahlia sp., Gladiolus sp., Lilium sp., Philadelphus sp., Rhubarb, Tropaeolum majus, Viburnum spp., Zinnia sp.
- Aphis farinosa Gmelin. Salix spp.
- Aphis gossypii Glover. Cucumis sp.
- Aphis helianthi Monell. Cornus stolonifera, Helianthus sp.
- Aphis heraclella Davis. Cicuta maculata, Heracleum lanatum, Sium sp.
- Aphis knowltoni Hottes and Frison. Taraxacum officinale (roots).
- Aphis maculatae Oestlund. Populus spp., Populus tremuloides.
- Aphis monardae Oestlund. Monarda fistulosa.
- Aphis nasturtii Kaltenbach. Alisma sp., Polygonum sp., Rhamnus cathartica, Rumex sp., Sagittaria sp.
- Aphis neogillettei Palmer. Cornus stolonifera.
- Aphis neomexicana (Cockerell). Ribes sp.
- Aphis oenotherae Oestlund. Epilobium angustifolium, Oenothera biennis.
- Aphis oestlundi Gillette. Oenothera spp.
- Aphis pomi DeGeer. Malus spp. Sorbus sp.
- Aphis ribiensis Gillette and Palmer. Ribes sp.
- Aphis rubifoliae Thomas. Rubus spp.
- Aphis spiraecola Patch. Cosmos sp., Cotoneaster acutifolia, Spiraea sp., Zinnia sp.
- Aphis spiraeaphila Patch. Spiraea spp.
- Aphis varians Patch. Ribes alpinum.
- Aphis viburniphilla Patch. Viburnum spp.

- Aphthargelia symphoricarpi (Thomas). Symporicarpos albus.
Asiphonaphis pruni Wilson and Davis. Prunus virginiana.
Asiphum rosettei Maxson. Populus tremuloides.
Aspidaphis adjuvans (Walker). Polygonum aviculare.
Betulaphis quadrituberculata (Kaltenbach). Betula papyrifera.
Brachycaudus helichrysi (Kaltenbach). Chrysanthemum, Gloxinia, Gynura,
Matricaria (house plants).
Brachycaudus rociadae (Cockerell). Delphinium sp.
Brachycolus atriplicis (Linnaeus). Chenopodium album.
Brachycolus tritici Gillette. (in yellow pan trap).
Brevicoryne brassicae (Linnaeus). Cabbage, cauliflower, turnip.
Calaphis betulaecolens (Fitch). Betula papyrifera.
Calaphis granovskyi-viridipallida grp. Betula papyrifera.
Capitophorus elaeagni (Del Guercio). Cirsium arvense, Elaeagnus commutata,
Shepherdia argentea.
Capitophorus hippophaes (Walker). Elaeagnus commutata, Polygonum sp.,
Shepherdia argentea.
Capitophorus pseudoglandulosus Palmer. Artemisia frigida.
Capitophorus xanthii (Oestlund). Xanthium strumarium.
Cavariella aegopodii (Scopoli). Anethum graveolens, Apium graveolens, Salix
spp., Sium suave.
Cepegillettea betulifoliae Granovsky. Betula gladulosa.
Chaetosiphon fragaefolii (Cockerell). Rosa spp.
Chaetosiphon scalaris Richards. Potentilla sp.
Chaitophorus nigrae (Oestlund). Salix spp.
Chaitophorus populincola (Thomas). Populus spp., Populus tremuloides.
Chaitophorus populifolii (Essig.). Populus spp.
Chaitophorus stevensis Sanborn. Populus spp.
Chaitophorus viminalis Monell. Salix spp.
Cinara abieticola (Cholodkovsky). Abies balsamea.
Cinara banksiana Pepper and Tissot. Pinus banksiana.
Cinara bogdanowi (Mordvilko). Picea glauca.
Cinara braggi (Gillette). Picea glauca.
Cinara gracilis (Wilson). Pinus banksiana.
Cinara coloradensis (Gillette). Picea glauca; P. mariana.
Cinara curvipes (Patch). Abies balsamea.
Cinara fornacula Hottes. Picea glauca; P. mariana.
Cinara harmonia Hottes. Pinus resinosa.
Cinara hottesi (Gillette and Palmer). Picea glauca; P. mariana.
Cinara juniperi (deGeer). Juniperus communis.
Cinara laricifex (Fitch). Larix laricina.
Cinara manitobensis Bradley. Juniperus horizontalis.
Cinara obscura Bradley. Picea glauca.
Cinara ontarioensis Bradley. Pinus banksiana.
Cinara palmerae (Gillette). Picea glauca.
Cinara pergandei (Wilson). Pinus banksiana.
Cinara petersoni Bradley. Juniperus horizontalis.
Cinara pinea (Mordvilko). Pinus sylvestris L.

- Cinara piniradicis Bradley. Pinus banksiana.
Cinara pinivora (Wilson). Pinus banksiana.
Cinara rara Bradley. Picea mariana.
Cinara saskensis Bradley. Picea glauca.
Cinara spiculosa Bradley. Larix laricina.
Cinara strobi (Fitch). Pinus strobus.
Cinara subterranea Bradley. Larix laricina.
Colopha ulmicola (Fitch). Ulmus americana.
Coloradoa absinthii (Lichtenstein). Artemisia absinthium.
Coloradoa artemisiae (Del Guercio). Artemisia absinthium.
Cryptaphis poae (Hardy). Bromus inermis.
Cryptomyzus galeopsidis (Kaltenbach). In flight.
Cryptomyzus ribis (Linnaeus). Ribes spp.
- Dactynotus ambrosiae (Thomas). Ambrosia trifida. Solidago spp.
Dactynotus cirsii (Linnaeus). Cirsium arvense.
Dactynotus erigeronensis (Thomas). Erigeron canadensis.
Dactynotus hieracicola Hille Ris Lambers. Hieracium umbellatum.
Dactynotus nigrotuberculatus Olive. Solidago spp.
Dactynotus paucosensoriatus Hille Ris Lambers. Aster sp.
Dactynotus pseudambrosiae Olive. Lactuca scariola.
Dactynotus richardsi Robinson. Grindelia squarrosa.
Dactynotus rudbeckiae (Fitch). Rudbeckia laciniata.
Dactynotus russellae Hille Ris Lambers. Anaphalis margaritacea
Dactynotus taraxaci (Kaltenbach). Taraxacum officinale.
Drepanaphis acerifoliae (Thomas). Acer negundo.
Drepanaphis spicatum Smith. Acer spicatum.
Dysaphis tulipae (Boyer de Fonscolombe). Iris and tulip in greenhouse.
- Epameibaphis frigidae (Oestlund). Artemisia frigida.
Eriosoma americanum (Riley). Ulmus americana.
Eriosoma crataegi (Oestlund). Crataegus sp.
Eriosoma lanigerum (Hausmann). Ulmus americana.
Euceraphis punctipennis (Zetterstedt). Betula papyrifera.
- Forda formicaria Heyden. Roots of Agropyron repens and Poa spp.
Forda marginata Koch. Roots of Agropyron repens and Poa spp.
Fullaway hughii MacGillivray. Populus tremuloides.
Gypsoaphis oestlundii (Hottes). Lonicera spp.
- Hamamelistes spinosus Shimer. Betula papyrifera.
Holcaphis frequens (Walker). Agropyron repens.
Hoplochaitophorus quercicola (Monell). Quercus macrocarpa.
Hyadaphis foeniculi Passerini. Sium suave.
Hyalopterus pruni (Geoffroy). Phragmites communis, Prunus nigra.
Hysteronoea setariae (Thomas). Prunus nigra, Prunus pumila,
Triticum aestivum.
Kakimla essigi (Gillette and Palmer). Aquilegia sp.
Kakimla robinsoni Richards. Delphinium sp.

Lachnus montanus (Wilson). Quercus macrocarpa.
Lipaphis pseudobrassicae (Davis). Brassica sp., Thlaspi arvense.
Longistigma caryae (Harris). Tilia americana.

Macrosiphoniella absinthii (Linnaeus). Artemisia absinthium.
Macrosiphoniella frigidicola (Gillette and Palmer). Artemisia abrotanum,
Artemisia biennis.
Macrosiphoniella ludoviciana (Oestlund). Artemisia ludoviciana.
Macrosiphoniella pennsylvanica (Pepper). Achillea millefolium.
Macrosiphoniella tanacetaria (Kaltenbach). Tanacetum vulgare.
Macrosiphum avenae (Fabricius). Aegilops sp., Agropyron cristatum, Agropyron intermedium, Agropyron repens, Agropyron trachycaulum, Agropyron trichophorum, Agrostis scabra, Agrostis stolonifera, Alopercurus pratensis, Andropogon gerardi, Avena fatua, Avena sativa, Bromus inermis, Elymus sp., Elymus junceus, Elymus striatus, Hordeum vulgare, Panicum miliaceum, Pleum pratense, Secale cereale, Setaria sp., Setaria italica, Setaria viridis, Sorghum sudanense, Triticum aestivum, Typha latifolia.
Macrosiphum californicum (Clarke). Salix sp.
Macrosiphum coryli Davis. Corylus sp.
Macrosiphum euphorbiae (Thomas). Althaea rosea, Amaranthus retroflexus, Brassica sp. (rapeseed), Cucurbita sp. (pumpkin), Fragaria sp., Gladiolus sp., Iris sp., Iva xanthifolia, Lactuca sativa, Lactuca scariola, Linum sp., (flax), Papaver sp., Peony, Phaseolus sp. (garden bean), Polygonum aviculare, Portulaca oleracea, Rosa spp., Solanum tuberosum, Spiraea sp., Tulipa sp., Verbena sp., Zinnia sp.
Macrosiphum geranii Oestlund. Geranium sp.
Macrosiphum manitobensis Robinson. Cornus stolonifera.
Macrosiphum pseudorosae Patch. Agrimonia triata, Aster sp., Chenopodium album, Cicuta maculata, Gladiolus sp., Lysimachia sp., Oenothera sp., Ranunculus sp.
Macrosiphum ptericolens Patch. Pteridium aquilinum.
Macrosiphum rosae (Linnaeus). Rosa spp.
Macrosiphum valerianae (Clarke). Epilobium spp.
Maculolachnus sjipkensi Hille Ris Lambers. Rosa spp.
Masonaphis (Ericobium) alni Mason. Alnus sp.
Masonaphis (Ericobium) grindeliae s. sp. palmerae MacGillivray, Grindelia squarrosa.
Masonaphis (Oestlundia) rubicola (Oestlund). Rubus spp.
Masonaphls (Ericobium) spiraecola (Patch). Spiraea sp.
Masonaphis (Ericobium) wahnaga (Hottes). Convallaria majalis.
Microsiphoniella artemisiae (Gillette). Artemisia ludoviciana.
Mindarus abietinus Koch. Abies balsamea, Picea glauca.
Mordvilkoja vagabunda (Walsh). Populus spp.
Myzocallis (Neomyzocallis) discolor (Monell). Quercus macrocarpa.
Myzocallis (Neomyzocallis) punctata (Monell). Quercus macrocarpa.
Myzus cerasi (Fabricius). Prunus pennsylvanica, Prunus virginiana.
Myzus ornatus Laing. House plant.

Myzus persicae (Sulzer). Amaranthus retroflexus, Antirrhinum sp., Brassica spp., Calceolaria sp., Capsella bursapastoris, Chrysanthemum sp., Crocus sp., Dentura sp., Lilium sp., Oleander sp., Petroselinum hortense, Saintpaulia sp., Thlaspi arvense, (mostly in greenhouses or on house plants.

Nasonovia lactucae (Linnaeus). Ribes spp., Sonchus oleraceus.

Nasonovia pallida Hille Ris Lambers. Ribes spp., Sonchus oleraceus.

Nearctaphis bakeri (Cowen). Crataegus spp.

Nearctaphis crataegifoliae (Fitch). Crataegus sp.

Nearctaphis (Amelancheria) sensoriata Gillette and Bragg. Amelanchier sp.

Neoceruraphis viburnicola (Gillette). Viburnum spp., V. lentago, V. opulus.

Neomyzus circumflexus (Buckton). Resting on oak leaves.

Neoprociphilus attenuatus (Osborne and Sirrine). Smilax herbacea.

Oestlundella flava (Davidson). Alnus rugosa.

Paraprociphilus tessellatus (Fitch). Alnus sp.

Paraschizaphis scirpicola Hille Ris Lambers. Scirpus sp.

Pemphigus balsamiferae Williams. Roots of Beta vulgaris (sugar beet), Chenopodium album, Lactuca sativa.

Pemphigus monophagus Maxson. Populus balsamifera.

Pemphigus populicaulis Fitch. Populus sp.

Pemphigus populitransversus Riley. Populus sp.

Periphyllus negundinis (Thomas). Acer negundo.

Phorodon humuli (Schrank). Humulus lupulus.

Pleotrichophorus gnaphalodes (Palmer). Artemisia ludoviciana.

Prociphilus aceris (Monell). Acer negundo.

Prociphilus americanus (Walker). Pinus sylvestris.

Prociphilus fraxinifolii (Riley). Fraxinus sp.

Pseudocercidis rosae Richards. Rosa spp.

Pterocallis alnifoliae (Fitch). Alnus rugosa.

Pterocomma bicolor Oestlund. Salix spp.

Pterocomma populifoliae (Fitch). Populus balsamifera.

Pterocomma salicis (Linnaeus). Salix sp.

Pterocomma smithiae (Monell). Salix spp., Populus tremuloides.

Rhodobium porosum (Sanborn). Rosa sp.

Rhopalomyzus lonicerae (Siebold). Lonicera spp.

Rhopalosiphum cerasifoliae (Fitch). Prunus virginiana.

Rhopalosiphum enigmæ Hottes and Frison. Typha sp.

Rhopalosiphum fitchii (Sanborn). Cotoneaster acutifolia, Crataegus spp., Malus spp., Sorbus americana. Cultured in greenhouse on wheat, oats and barley.

Rhopalosiphum maidis (Fitch). Agrostis stolonifera, Alopecurus pratensis, Avena sativa, Bromus inermis, Echinochloa crusgalli, Elymus striatus, Festuca pratensis, Hordeum jubatum, Hordeum vulgare, Phalaris arundinacea, Phalaris canariensis, Phleum pratense, Poa pratensis, Setaria sp., Setaria italica, Setaria viridis, Zea mays.

Rhopalosiphum nigrum Richards. Alisma sp., Zizania aquatica.

Rhopalosiphum nymphaeae (Linnaeus). Alisma sp., Ceratophyllum sp., Prunus virginiana.

Rhopalosiphum padi (Linnaeus). Aegilops sp., Agropyron cristatum, Agropyron repens, Agrostis stolonifera, Alopecurus aequalis, Alopecurus pratensis, Avena sativa, Bromus inermis, Echinochloa crusgalli, Elymus striatus, Festuca pratensis, Hordeum jubatum, Hordeum vulgare, Phalaris arundinacea, Phleum pratense, Poa pratensis, Prunus padi, Prunus virginiana, Secale cereale, Setaria italica, Setaria viridis, Triticum aestivum, Zea mays.

Rhopalosiphum rufulum Richards. Crataegus sp.

Schizaphis graminum (Rondani). Aegilops sp., Agropyron intermedium, Agropyron repens, Agropyron trachycaulum, Agropyron trichophorum, Agrostis stolonifera, Alopecurus pratensis, Avena fatua, Avena sativa, Bromus inermis, Dactylis glomerata, Danthonia sp., Echinochloa crusgalli, Elymus sp., Elymus junceus, Festuca pratensis, Hordeum jubatum, Hordeum vulgare, Lolium perenne, Panicum miliaceum, Phalaris arundinacea, Phleum pratense, Poa pratensis, Secale cereale, Setaria viridis, Triticum aestivum.

Schizolachnus piniradiatae (Davidson). Pinus resinosa.

Sipha agropyrella Hille Ris Lambers. Aegilops sp., Agropyron cristatum, Agropyron repens, Agropyron trachycaulum, Agropyron trichophorum, Agrostis stolonifera, Bromus inermis, Hordeum jubatum, Hordeum vulgare, Phleum pratense, Setaria viridis, Triticum aestivum.

Sitomyzus (Glabromyzus) rhois (Monell). Rhus glabra.

Stegophylla quercicola (Monell). Quercus macrocarpa.

Symydobius americanus (Baker). Betula papyrifera.

Tetraneura ulmi (Linnaeus). Poa pratensis (roots).

Thecabius affinis (Kaltenbach). Populus balsamifera.

Thecabius populiconduplifolius Cowen. Populus balsamifera.

Thecabius populimonilis (Riley). Populus balsamifera.

Therioaphis riehmi (Börner). Melilotus alba, Melilotus officinalis.

Tinocallis (Melanocallis) ulmifolia (Monell). Ulmus americana.

Trama rara Mord. Taraxacum officinale (roots).

Tuberolachnus salignus (Gmelin). Salix spp.

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