Aphids 1676 infesting potatoes in Canada:

a field guide





Agriculture Canada

Digitized by the Internet Archive in 2012 with funding from Agriculture and Agri-Food Canada – Agriculture et Agroalimentaire Canada

Aphids infesting potatoes in Canada: a field guide

M. E. MacGillivray Research Station, Fredericton, N.B.

PUBLICATION 1676/E, available from Communications Branch, Agriculture Canada, Ottawa K1A 0C7

[®]Minister of Supply and Services Canada 1979
Cat. No. A53-1676/1979E ISBN: 0-662-10487-0
Printed 1979 Reprinted 1987 2.5M-6:87

Également disponible en français sous le titre Les pucerons nuisibles de la pomme de terre au Canada: guide d'identification.

This pocket guide has been prepared for those who have been instructed in the identification of aphids infesting potatoes in Canada or who have access to more detailed field keys. Consult publication 1678, Aphids infesting potatoes in Canada: Life cycle and field key.

In this guide, features easily seen with a 6× hand lens are used to distinguish each species. The colored illustrations show the species enlarged in proportion to each other.

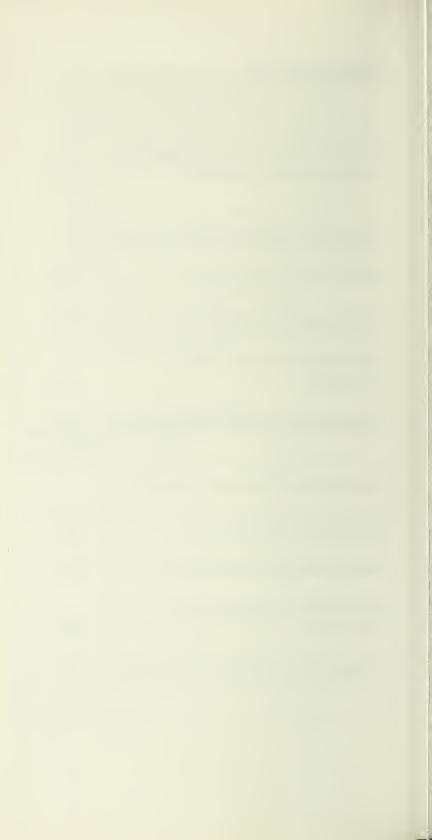
G. B. Anderson, Research Station, Fredericton, provided the colored transparencies from which the illustrations have been reproduced.

DATE DUE

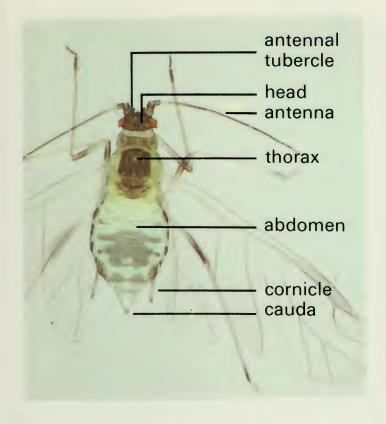
FEB	1 4 2009	

CONTENTS

Features used to distinguish potato-infesting aphids	7
GUIDE TO WINGLESS FORMS	
Myzus persicae (Sulzer)	8
Aphis nasturtii Kaltenbach	10
Macrosiphum euphorbiae (Thomas)	12
Aulacorthum solani (Kaltenbach)	14
GUIDE TO WINGED FORMS	
Myzus persicae (Sulzer)	16
Aphis nasturtii Kaltenbach	18
Macrosiphum euphorbiae (Thomas)	20
Aulacorthum solani (Kaltenbach)	22



Features used to distinguish potato-infesting aphids



GREEN PEACH APHID (wingless)

SHAPE

Body (1) egg-shaped, almost same width from thorax to bases of cornicles, then gently rounded to meet the cauda abruptly.

Head (2) with prominent inward-pointing antennal tubercles.

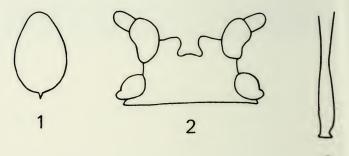
Cornicles (3) slightly swollen on apical half.

Cauda short.

COLOR

Body light green to almost translucent, sometimes deep pink or peach.

Cornicles same shade as body.



S

GREEN PEACH APHID (wingless)



Myzus persicae (Sulzer)

BUCKTHORN APHID (wingless)

SHAPE

Body (1) egg-shaped, flat.

Head (2) without prominent antennal tubercles; front of head slightly convex, almost flat.

Antennae always much shorter than body.

Cornicles (3) cylindrical, only slightly longer than cauda.

SIZE

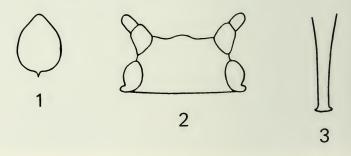
Smallest of potato-infesting aphids.

COLOR

Body lemon yellow to green.

Cornicles pale yellow to light brown, with dusky tips.

Cauda same color as base of cornicles.



Aphis nasturtii Kaltenbach

BUCKTHORN APHID (wingless)



Aphis nasturtii Kaltenbach

POTATO APHID (wingless)

SHAPE

Body (1) elongate, wedge-shaped.

Head (2) with prominent outward-sloping antennal tubercles.

Antennae about as long as body.

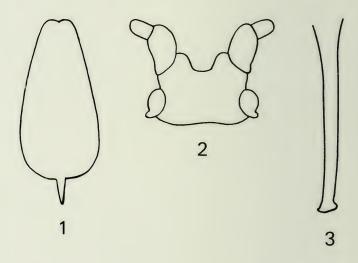
Cornicles (3) cylindrical, longer than distance between their bases, with the end portions slightly curving.

SIZE

Largest of potato-infesting aphids.

COLOR

Body some shade of yellow, green, or pink, with a darker dorsal ridge.



Macrosiphum euphorbiae (Thomas)

POTATO APHID (wingless)



Macrosiphum euphorbiae (Thomas)

FOXGLOVE APHID (wingless)

SHAPE

Body (1) pear-shaped, globular, widest just ahead of cornicles.

Head (2) with prominent almost parallel straight-sided antennal tubercles.

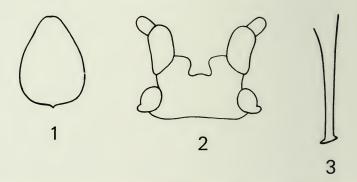
Cornicles (3) slightly tapered, with prominent flanges on tips, and much longer than cauda.

COLOR

Body light yellow-green to dark green, shiny, sometimes brownish, usually with darker areas around bases of cornicles.

Cornicles with dark tips.

Legs and antennae with dark joints.



Aulacorthum solani (Kaltenbach)

FOXGLOVE APHID (wingless)



Aulacorthum solani (Kaltenbach)

GREEN PEACH APHID (winged)

COLOR

Head and **thorax** dark brown to black.

Abdomen green, pink, or dull reddish, with a conspicuous blackish almost solid central dorsal patch broken by a pale space or "window" just behind the cornicles.

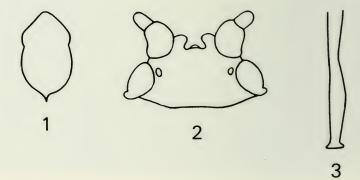
Cornicles about same shade as abdomen; tips darker.

SHAPE

Body outline of immature winged form (1) modified by presence of wing pads.

Head (2) with prominent inward-pointing antennal tubercles.

Cornicles (3) slightly swollen.



Myzus persicae (Sulzer)

GREEN PEACH APHID (winged)



Myzus persicae (Sulzer)

BUCKTHORN APHID (winged)

COLOR

Head and **thorax** dark brown to black.

Abdomen yellow to yellow-green, with a dark strip behind each cornicle.

Cornicles and **cauda** light to dark brown; tips of cornicles darker than bases.

SHAPE

Body outline of immature winged form (1) modified by presence of wing pads.

Head (2) with inconspicuous outward-sloping antennal tubercles.

Cornicles (3) much shorter than body, slightly longer than cauda.

BUCKTHORN APHID (winged)



Aphis nasturtii Kaltenbach

POTATO APHID (winged)

COLOR

Head and **thorax** light yellow-brown or green-brown to dark brown.

Abdomen green, or sometimes pink to magenta.

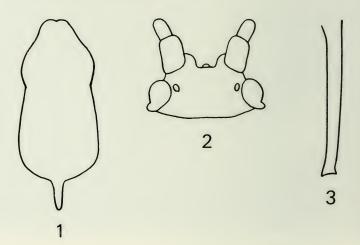
Cornicles usually same shade as body, with tips sometimes darker.

SHAPE

Body outline of immature winged form (1) modified by presence of wing pads.

Head (2) with prominent outward-sloping antennal tubercles.

Antennae at least as long as body. Cornicles (3) cylindrical, with insignificant flanges.



Macrosiphum euphorbiae (Thomas)

POTATO APHID (winged)



Macrosiphum euphorbiae (Thomas)

FOXGLOVE APHID (winged)

COLOR

Head and **thorax** light yellow-brown or green-brown to dark brown.

Fore wings with distinctly darker anal and cubital veins.

Abdomen usually some shade of green to yellow-brown, with dark bars and spots.

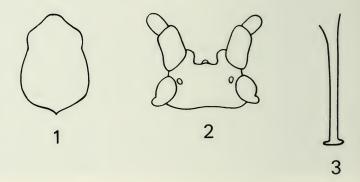
Cornicles with dark tips.

SHAPE

Body outline of immature winged form (1) modified by presence of wing pads.

Head (2) with prominent almost parallel straight-sided antennal tubercles.

Cornicles (3) straight, with prominent flanges on tips.



Aulacorthum solani (Kaltenbach)

FOXGLOVE APHID (winged)



Aulacorthum solani (Kaltenbach)

