

The Great Lakes Entomologist

Volume 44

Numbers 1 & 2 - Spring/Summer 2011
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Article 12

April 2011

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Recommended Citation

Williams, Andrew H.; Lagos, Doris M.; and Trager, James C. 2011. "Feeding Records of Aphids (Hemiptera: Aphididae) From Wisconsin, Supplement," *The Great Lakes Entomologist*, vol 44 (1)

Available at: <https://scholar.valpo.edu/tgle/vol44/iss1/12>

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Feeding Records of Aphids (Hemiptera: Aphididae) From Wisconsin, Supplement

Andrew H. Williams¹, Doris M. Lagos² and James C. Trager³

Abstract

Basic to our understanding of any animal and its habitat requirements is knowing what it eats. Reported here are observations of feeding by 24 species of aphids encountered in Wisconsin over 2002-2010.

Knowing what an animal eats is basic to understanding that animal and its habitat requirements. Reported here are observations of feeding by 24 species of aphids (Hemiptera: Aphididae) collected in Wisconsin by Williams from 2002 through 2010.

Aphids were reared in the lab on the same plant species on which they had been found feeding so that both wingless and winged adults could be secured. These were put into 80% or 95% EtOH and sent to Lagos, who determined them using morphological and in some cases genetic characters and deposited the specimens in the collection at Illinois Natural History Survey. Ants tending the aphids were collected, point mounted and sent to Trager, who determined them and returned them for deposition in the Insect Research Collection (IRC) of the Entomology Department at University of Wisconsin - Madison. Predators of aphids were collected, immatures reared out on those same aphids in the lab and adult specimens deposited in the IRC.

These aphid data are presented in Table 1. All insects were collected by Williams. All plants and aphid predators were determined by Williams. Plant nomenclature follows Gleason and Cronquist (1991). Data reported here supplement similar data reported in Williams et al. (2004).

Acknowledgments

Williams' insect research was supported in part by Kohler Trust for Preservation, which provided funding in 2005 and 2006 through a grant to Prairie Biotic Research, Inc., a non-profit with the mission of fostering basic biotic research by individuals in U.S. prairies. I am also grateful to D. K. Young of the Entomology Department of the University of Wisconsin - Madison for providing essential laboratory space and encouragement. I thank several others for assistance: R. A. Christoffel, S. J. Krauth, D. J. Voegtlind and E. Y. Williams.

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Table 1. Observations of aphids feeding on plants, ants tending those aphids and aphid predators.

APHID	PLANT	ANT	NOTES
<i>Anoecia corni</i> Fabricius <i>Cornus racemosa</i>		<i>Formica obscuriventris</i> Mayr	Many winged adults and young on undersides of leaves, especially on veins.
<i>Aphis craccivora</i> Koch <i>Asclepias syriaca</i> <i>Tephrosia virginiana</i>		<i>Myrmica emeryana</i> Cole <i>Forelius prunorum</i> (Roger)	On youngest leaves. On flowers.
<i>Aphis fabae</i> Scopoli			On stems and on undersides of youngest leaves. On pedicels of flowers in umbels. On young leaves.
	<i>Arctium minus</i> <i>Asclepias hirtella</i> <i>Asclepias syriaca</i>		Few, on upper side of youngest leaf of resprout, by midvein.
		<i>Prenolepis imparis</i> (Say)	On stems, especially at bases of young lateral stems. On stems just below flowers.
	<i>Cirsium altissimum</i>	<i>Formica postoculata</i> Kennedy & Dennis	On stems just below flower buds.
	<i>Cirsium discolor</i>	<i>Camponotus americanus</i> Mayr	On stems just below flowers.
	<i>Cirsium muticum</i>	<i>Crematogaster cerasi</i> (Fitch)	On peduncles just below involucres.
	<i>Erechtites hieracifolia</i>	<i>Formica obscuripes</i> Forel	On stems of inflorescence.
	<i>Froelichia floridana</i>	<i>Formica obscuripes</i> Forel	
<i>Aphis helianthi</i> Monell			These aphids, with their young, are often found on the undersides of yellowing terminal leaves and adjacent stem tips only when the plant is beginning its seasonal senescence, all across northern Wisconsin.
<i>Apocynum androsaemifolium</i>	usually tended by ants	<i>Prenolepis imparis</i> (Say)	In small clusters on upper stems, plants now with flower buds.
<i>Cryptotaenia canadensis</i>			

Table 1. Continued.

APHID	PLANT	ANT	NOTES
<i>Aphis nasturtii</i> Kaltenbach		<i>Crematogaster cerasi</i> (Fitch)	On stems and undersides of leaves.
<i>Nepeta cataria</i>			
<i>Aphis oestlundii</i> Gillette	<i>Oenothera biennis</i>	<i>Formica montana</i> Emery	Clustered at shoot tip on youngest leaves.
<i>Aphis pulchella</i> Hottes & Frison		<i>Lasius neoniger</i> Emery	Many together on stems.
<i>Euphorbia corollata</i>			
<i>Alacobrithum solani</i> Kaltenbach	<i>Asclepias purpurascens</i>	----	On youngest leaves.
<i>Brachycaudus cardui</i> (Linnaeus)		<i>Lasius alienus</i> Mayr	On peduncles just below involucres.
<i>Erechites hieracifolia</i>		<i>Formica montana</i> Emery	Many together with young on underside of a leaf adjacent to plant of <i>Cirsium vulgare</i> with more such aphids on undersides of its leaves.
<i>Asclepias syriaca</i>			
<i>Chaitophorus nigrae</i> Oestlund		<i>Formica obscuripes</i> Forel	On upper surfaces of leaves, mostly by midveins, high on plant.
<i>Salix</i> sp.		<i>Formica obscuriventris</i> Mayr	On youngest green twigs.
<i>Chaitophorus populincola</i> Thomas		<i>Crematogaster cerasi</i> (Fitch)	In large hollow galls with gallmaker aphids
<i>Populus deltoides</i>			<i>Mordwilkoja vagabunda</i> (Walsh), terminal on green twigs, ants also inside galls, which have openings by which ants come and go.
<i>Formica glacialis</i> Wheeler			In dense colony encircling green twig near its tip.
<i>Populus tremuloides</i>			On green twigs & leaf petioles.

Table 1. Continued.

APHID	PLANT	ANT	NOTES
<i>Cryptomyzus galeopsidis</i> (Kaltenbach) <i>Galeopsis tetrahit</i>	----		On veins on undersides of leaves.
<i>Glabromyzus</i> sp. <i>Rhus glabra</i>	----		On leaves, prey of larval and adult <i>Harmonia axyridis</i> (Pallas).
<i>Hyperomyzus lactucae</i> (Linnaeus)			
<i>Senecio vulgaris</i>	----		On sides of blooming heads & peduncles with <i>Macrosiphum euphorbiae</i> (Thomas).
<i>Sonchus asper</i>	----		On sides of blooming heads & peduncles with <i>Macrosiphum euphorbiae</i> (Thomas).
<i>Hysteroneura setariae</i> (Thomas) <i>Prunus pumila</i>	<i>Formica dolosa</i> Buren <i>Crematogaster cerasi</i> (Fitch)		On youngest green twigs. On youngest green twigs.
<i>Macrosiphum euphorbiae</i> (Thomas)			On lesser veins on undersides of leaves.
<i>Apocynum androsaemifolium</i>	----		Together on youngest leaves & shoot tips.
<i>Apocynum cannabinum</i>	----		Together on shoot tips & upper & lower surfaces of youngest leaves.
	----		Together on stems at shoot tips.
	----		Together on youngest leaves & shoot tips.
	----		undersides of leaves, prey of larval <i>Chrysopa</i> <i>canea</i> Stephens (reared) and larval coccinellid.

<i>Asclepias syriaca</i>	----	On undersides of mature leaves.
<i>Polygonia nuttallii</i>	<i>Formica subsericea</i> Say	Clustered on stems below inflorescences.
<i>Scrophularia marilandica</i>	----	Generally solitary on young developing seed capsules and their stems.
<i>Senecio vulgaris</i>	----	On sides of blooming heads & peduncles with <i>Hyperomyzus lactucae</i> (Linnaeus).
<i>Sonchus asper</i>	----	On sides of blooming heads & peduncles with <i>Hyperomyzus lactucae</i> (Linnaeus).
<i>Microparsus desmodiorum</i> Smith & Tuatay	----	Very many, feeding on leaves & green loments, prey of many adult Coccinellidae: <i>Coccinella septempunctata</i> (Linnaeus), <i>Cyclonedra munda</i> (Say), <i>Harmonia axyridis</i> (Pallas), <i>Hippodamia variegata</i> (Goese), and <i>Scymnus</i> sp.
<i>Desmodium canadensis</i>	----	In large hollow galls with aphids <i>Chaitophorus populicola</i> Thomas, terminal on green twigs, ants also inside galls, which have openings by which ants come and go.
<i>Mordvilkaja vagabunda</i> (Walsh)	<i>Crematogaster cerasi</i> (Fitch)	
<i>Populus deltoides</i>		
<i>Uroleucon ambrosiae</i> (Thomas)	<i>Formica postoculata</i> Kennedy & Dennis	On stems among flowers.
<i>Ambrosia trifida</i>	----	On flower buds and first open flower.
<i>Sliprium integrifolium</i>	----	On flower buds, pedicels and the sheaths from which they spring.
<i>Sliprium perfoliatum</i>	----	
<i>Uroleucon impatiensicolens</i> (Patch)		On stems just below flowers.
<i>Impatiens pallida</i>	----	

Table 1. Continued.

APHID	PLANT	ANT	NOTES
<i>Uroleucon nigrotuberculatum</i> (Olive) <i>Solidago canadensis</i>		On stem tip. On undersides of youngest leaves, on stem tip & on stems of budded inflorescence.
<i>Solidago nemoralis</i> <i>Solidago rigida</i>		On upper stems. On young leaves & shoot tips.
<i>Uroleucon pseudoambrosiae</i> (Olive) <i>Lactuca canadensis</i>		On branches of inflorescence.
<i>Uroleucon sonchellum</i> (Monell) <i>Lactuca canadensis</i>		On green seedheads.
<i>Uroleucon sonchi</i> (Linnaeus) <i>Sonchus arvensis</i>		On peduncles of flowers & flower buds.

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