



Ornamental Horticulture Program Research Project Sheet

<http://ir4.rutgers.edu/Ornamental/ornamentalProjectInformationSheets.cfm>

Project Name: Leafminer Efficacy

New		Ongoing	X	Completed		Duration if ongoing or completed:	2009, 2014-2015
------------	--	----------------	---	------------------	--	--	-----------------

Project Description:
 Efficacy for *Lyriomyza sp.* leafminers was a regional priority in 2009 and again in 2014-2015. Very few products are available to manage these pests and populations tolerant to Avid have developed.

Research Project Abstract (if available):

Target Species (Phytotoxicity, or common and Latin name of arthropod, pathogen, weed):
Lyriomyza sp.

Target Crops (list tested crops if ongoing or completed project)
 Transvaal Daisy (*Gerbera sp.*)

Target Product(s) (list tested products or numbered compounds if ongoing or completed project)

Arena 50WDG	Hachi-Hachi SC	Rycar
Avid 0.15EC	IKI-3106	Safari 20SG
AzaGuard	Kontos	Safari 2G
Distance	Mainspring 200SC	Xpire 40WG

Product Registration and Research Status

	Fully Screened (also includes standards)	Partially Screened through IR-4 ¹	Need Data Across Species ?
Labeled Generally & Commercialized	Avid AzaGuard	Safari 20SG Safari 2G	
Labeled Generally But NOT Commercialized			
Labeled for Specific Insects & Commercialized	Distance		
Labeled for Specific Insects but NOT Commercialized			
Not yet registered or Labeled		Hachi Hachi IKI-3106 Kontos Mainspring Rycar Xpire	
No longer available for development		Arena	

* IR-4 Data contributed to registration decision – either adding pest to label or not pursuing further research

1 At least one species screened fully

Project Pros	Project Cons
1 Very few products are currently registered for leafminer management 2	1

IR-4 Efficacy Trials to Date

Average rating on a scale of 1 – 5 with 1 = 0 to about 50% efficacy and 5 = 100 efficacy or equivalent to non-inoculated control; minimum to maximum rating; number of trials. For product/insect combinations that are blank, IR-4 has not screened this combination.

A rating of 2 or lower is considered unacceptable efficacy (*red text*). A rating of 3 or higher is considered commercially acceptable and those with more than 3 trials are complete (*green text*). 'Labeled' indicates that IR-4 generated data in at least one trial and that this insect species or genera is listed on the label. For insect/product combinations that are blank, IR-4 has not screened this combination.

Product (Active Ingredients)	Liriomyza Leafminers (<i>Liriomyza sp.</i>)
Arena 50WDG (Clothianadin)	3.0 (3 - 3) n2
Avid 0.15EC (Abamectin)	3.5 (3 - 4) n2 Labeled
AzaGuard (Azadirachtin)	4.0 (4 - 4) n1 Labeled
Distance (Pyriproxyfen)	<i>1.0 (1 - 1) n1</i>
Hachi-Hachi SC (Tolfenpyrad)	<i>1.0 (1 - 1) n1</i>
IKI-3106 (Cyclaniliprole)	<i>1.0 (1 - 1) n1</i>
Kontos (BYI 8330 240SC) (Spirotetramat)	<i>1.0 (1 - 1) n5</i>
Mainspring (A20520A) 200SC (Cyantraniliprole)	4.0 (4 - 4) n2
Rycar (SP3009/NNI-0101) (Pyrifluquinazon)	<i>1.0 (1 - 1) n1</i>
Safari 20SG (Dinotefuran)	3.0 (1 - 5) n2 Labeled
Safari 2G (V-10112 2G) (Dinotefuran)	3.0 (1 - 5) n2 Labeled
Xpire (GF-2860) 40WG (Spinetoram + sulfoxaflor)	<i>1.0 (1 - 1) n1</i>