

Section III: Field Crop Pests

EFFORTS TO CONTROL EUROPEAN ASPARAGUS APHID IN ORGANIC ASPARAGUS

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European asparagus aphid is the single biggest pest of asparagus that growers can attempt to control (Fusarium may be a worse pest, but there is no control for it.) All Washington asparagus is treated for this pest. No or poor control of this pest is synonymous with loss of a high value, perennial crop. Anyone wishing to grow organic asparagus must control this pest. Because of the inability to control aphid, there are only two growers of organic asparagus in eastern WA. They grow organic asparagus by raising asparagus conventionally, then go through a 3 year transitional period, and then produce the asparagus organically. Soap is applied during the transitional and organic period, but the asparagus starts to die out during the transition period and only a year or two of organic production is obtained.

There is huge demand for organic asparagus but there is practically no production of organic asparagus due to the inability to control this aphid. However, due to the demand, the acreage of organic asparagus in Washington doubled in 2007. Grower prices for conventional asparagus is 67 cents a pound, organic asparagus sold for \$1.50 a pound.

The Washington asparagus industry has made finding an organically acceptable solution for control of aphids in asparagus a priority. A small trial was supported to conduct an efficacy trial in a five year old certified organic asparagus field that was one acre in size.

Each insecticide was applied three times at a seven day interval starting on September 7th.

				7-Sep		10-Sep		14-Sep		17-Sep		21-Sep		28-Sep		Cumulative	
Days After First and Last Application →				0	0	3	3	7	7	10	3	14	7	21	7		
Trt	Treatment																
No.	Name	Rate	Rate Unit	1		2		3		4		5		6		7	
1	Check			0.5	a	2.8	a	5.0	a	8.8	a	6.5	a	0	a	23	a
9	PestOut	1	% V/V	0.3	a	1.3	b	1.8	bc	1.8	b	1.3	b	0	a	6.0	b
2	M-PEDE	2	% V/V	0.3	a	0.5	bc	2.0	b	0.8	b	1.0	b	1.3	a	5.5	b
6	SAFE-T-CIDE	2.5	FL OZ/GAL	0.8	a	1.3	b	1.0	bc	1.0	b	1.0	b	1.0	a	5.3	b
5	TRILOGY	2	% V/V	0.5	a	0.3	bc	1.0	bc	1.5	b	1.5	b	0	a	4.3	bc
10	SucraShield	1	% V/V	0.5	a	0.5	bc	1.0	bc	0.8	b	1.8	b	0.3	a	4.3	bc
8	PYGANIC	2	QT/A	0.5	a	0.8	bc	0.8	bc	1.3	b	1.0	b	0	a	3.8	bc
			FL OZ/100														
8	SAFE-T-CIDE	500	GAL														
3	AZA-DIRECT	2	PT/A	0.3	a	0	c	0.5	bc	1.8	b	0.8	b	0	a	3.0	bc
7	PYGANIC	2	QT/A	0.8	a	0.8	bc	0.3	bc	1.0	b	0.8	b	0	a	2.8	bc
4	NEEMIX	7	FL OZ/A	0.5	a	0	c	0	c	1.0	b	0.3	b	0.3	a	1.5	c

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)