New Hampshire Report 2017 Spotted Wing Drosophila

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<u>SWD</u> (*Drosophila suzukii*) populations were earlier this year than we experienced in 2015 and 2016. We used the Trece lures and traps with the bait/drowning fluid called Suzukii Trap. To make it easier and faster in the field, we only counted the males. We had 64 SWD traps, on 15 farms, in three counties during 2017 growing season. All of the farms were in the southern part of New Hampshire.

This year the first adult was trapped June 18 (three to four weeks earlier than previous years). The buildup was roughly two weeks earlier than what we expected, with a major jump in numbers about August 13th, 20th, 27th and September 3rd. Because it was earlier, we experienced [for the first time] a threat to cherries and June-bearing strawberries. Malwina was a strawberry cultivar that was significantly attacked. Malwina is a late maturing cultivar.

This year we posted the SWD catch numbers on our SWD monitoring page on the web. We thought this would be more informative for many growers than the brief verbal summary that Alan wrote and recorded each week for the Fruit Pest Update telephone 603-862-1734 that runs continuously from April 1 through mid-September each year.

The impacts of this year's SWD infestations were summarized after conducting the annual end-of year interviews with the growers participating in our trapping (monitoring) program.

Crop Trapped	Percentage of NH Percentage of N		
	Growers Trapped	Crop Acres Trapped	
Blueberry	4.67%	9.40%	
All bramble	6.60%	6.45%	
June Strawberry	6.15%	19.57%	
Grapes	3.28%	1.60%	
Cherry	18.18%	82.50%	
Peach	6.82%	20.37%	
Plum	6.45%	13.64%	

Growers were asked: "Did you change your management or spraying decisions, as a result of the trapping results?" 13 out of 15 growers that participated said yes (86.67%). Growers were asked what they changed:

%	Change to management or spraying decisions
66.67%	Sprayed based on trap catches
33.33%	Spray decisions report based by IPM Scout/Extension Field Specialist
26.67%	Added sugar to tank mix
26.67%	Improved cultural practices
20.00%	Product choice/avoid resistance
20.00%	End harvest per high trap catches
6.67%	Began control earlier than expected

All 15 growers were confident in the spray recommendations.

Growers were asked: "How did this program financially impact their farm this year?"

%	Financial impact
53.33%	Positive impact
46.67%	Increased profitability
33.33%	Minimized losses
20.00%	Continued growing raspberries
13.33%	No SWD crop loss
6.67%	Lengthened crop.
6.67%	Saved money
6.67%	Saved sprays

Growers were asked: "What management practices did you use to reduce SWD losses?"

%	Practiced Used
93.33%	Synthetic insecticides
66.67%	Pruning to open the canopy
60.00%	Adjust spray equip to improve coverage
46.67%	Add sugar to spray tank
40.00%	Remove alternate hosts
40.00%	Culling or removing infested fruit
33.33%	Educate customers about SWD & post-harvest handling
33.33%	Organic Insecticides
33.33%	Mow Rows
20.00%	Traps
20.00%	Good Weed Control
20.00%	Refrigerate immediately
6.67%	Bought new sprayer
6.67%	Perimeter trapping
6.67%	For Tunnel Strawberries - Left greenhouse cover off until increase in trap
	catches/then put cover back on

Growers were asked: "In % of crop, what were your SWD losses this year?" Responses are based on only the 15 growers who participated in the IPM SWD Trapping (monitoring) Program.

Crop	% Loss	# Farms	# Acres
Blueberry	4.27%	12	24.25
Summer Raspberries	4.50%	6	5.25
Fall Raspberry	12.10%	5	5.50
Day-Neutral Strawberry	3.00%	1	0.25
June Strawberry	0.71%	7	25.25
Grapes	10.00%	2	1.50
Cherry	0.00%	4	3.30
Peach	0.60%	5	27.50
Plum	1.66%	3	1.50