SWD Trapping in New Hampshire Highbush Blueberries

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0.4 acre highbush blueberry patch, UNH Woodman Farm. Do traps work well enough to predict the need to apply insecticides?





2012

- Picking began about July 14
- Set 2 SWD traps (New Engl. project) July 18
- Counted trap catch weekly
- Changed bait weekly
- •Picked 50 ripe fruit wkly (5/bush x 10 bushes)
- •Held fruit 14 days for emergence in cages, and counted emerging SWD's
- •All remaining fruit were spoiled by 8/26



Picking	Emerged Drosophilids		# SWD's
Date	SWD	Other	in 2 Traps
July 18	0	0	0, 0
July 26	0	0	0, 0
July 31	1	0	0, 0
Aug 8	52	1	0, 0
Aug 14	131	26	0, 0
Aug 22	67	11	30, 81

All emerged drosophilids are examined under a microscope, but only males are counted in traps.



2013 Results

Picking	Emerged	Other	SWD's
Date	SWD	species	in 2 Traps
July 16	0	0	0, 0
July 23	3	8BFF	0, 0
July 30	16	3BFF	3, 3
Aug 6	60	7BFF	8, 17
Aug 13	35	0	0*, 12
Aug 20	178	0	42, 64

^{*}trap disturbance, possibly from raccoon

2014 Results

Picking	Emerged	Other	SWD's
Date	SWD	species	in 2 Traps
July 14			0, 0
July 21			0, 0
July 28			0, 0
Aug 5	0	3BFF	0, 0
Aug 11	6	4 BFF	6, 3
Aug 19	21	2BFF	14, 4
Aug 25	35	1BFF	15, 14
Sept 1	fruiting is over		11, 43

Summary

The 2012 methods were not useful to predict when highbush blueberries need protection.

With the 2013 improvements in trap design, bait and placement, the traps worked pretty well in predicting the need to treat highbush blueberries. In 2014, SWD trap catch began at about the same time, but populations built more slowly, and totals were much lower, statewide.