

# SWD in stone fruit in NY

- SWD can infest plum, peach, nectarine, tart cherry, and sweet cherry
- Depends on when SWD arrives; harvest firmness; spray program; and possibly cultivar
- In 2017, tart cherry blocks near Lake Ontario were infested; loads rejected; and fruit dumped



# 2013 survey of SWD in cherry

Carroll, Agnello and Fargione

All NY	Trap Before	Trap After
Infested Before	1	2
Infested After	1	10

Lake Ontario	Trap Before	Trap After
Infested Before	1	1
Infested After	0	10

Hudson Valley	Trap Before	Trap After
Infested Before	0	1
Infested After	1	0

Number of orchards in each of four categories.

Trap Before = SWD caught in traps before harvest → risk of infestation

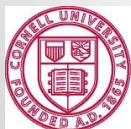
Trap After = SWD caught in traps after harvest → no warning?

Infested Before = SWD reared from fruit before harvest → bad

Infested After = SWD reared from fruit after harvest → OK

In 2 (sweet cherry) orchards, SWD was caught in traps before harvest.

In 3 (one tart and two sweet cherry) orchards, SWD was reared from sampled fruit before harvest.



# Tree fruit growers were asked in Feb 2016...

## Which crop...?

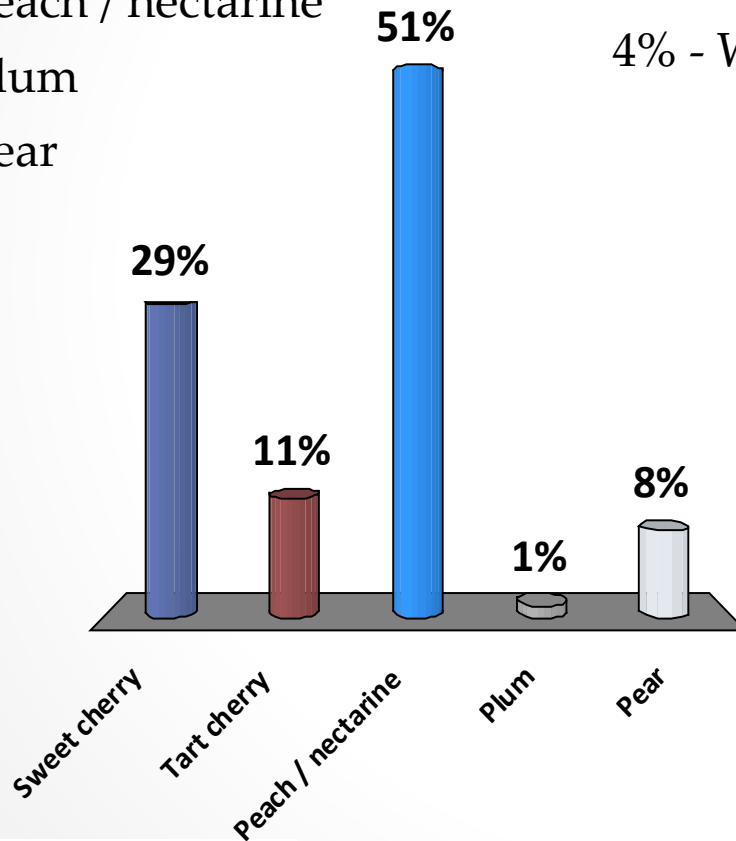
29% - Sweet cherry

11% - Tart cherry

51% - Peach / nectarine

1% - Plum

8% - Pear



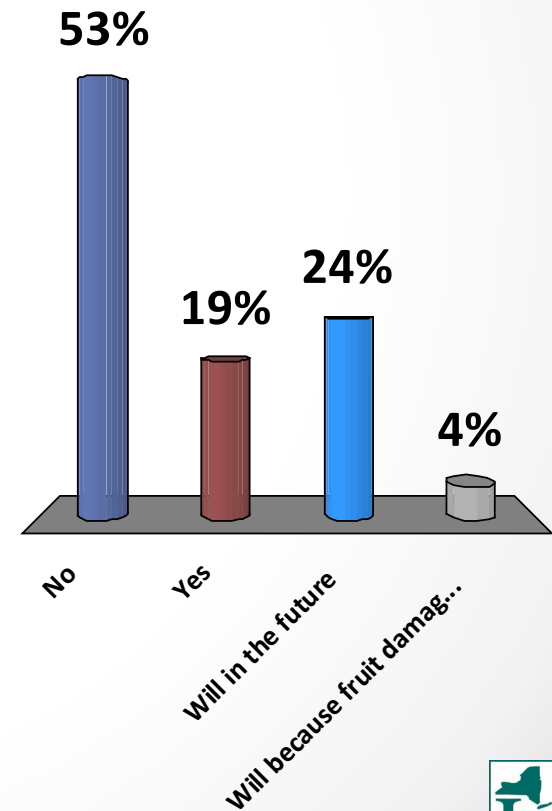
## Have you changed your spray program...?

53% - No

19% - Yes

24% - Will in the future

4% - Will because fruit damage seen in 2015



Cornell University  
Cooperative Extension

SWD in stone fruit in NY, Juliet Carroll, NYS IPM Program

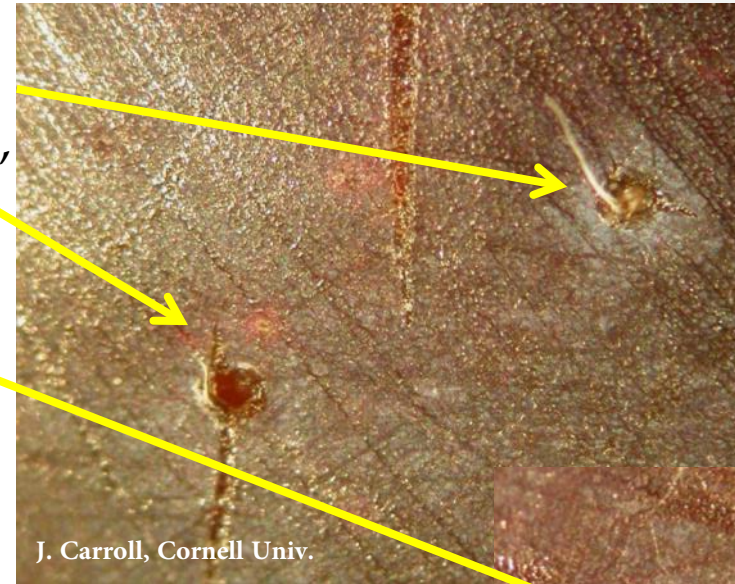


# Findings in plum (2013) and peach (2017)



In plum,  
egg breathing tubes,  
larval breathing hole,  
larva breathing

In peach,  
egg breathing tubes



Cultivar	Collected	eggs	larvae	SWD
PF5	8/8/2017	0	0	4
PF8	8/8/2017	0	0	2
PF12	8/8/2017	0	0	0
PF9	8/16/2017	2	0	5
PF13	8/16/2017	1	0	0
PF17	8/22/2017	0	0	0
PF20	8/22/2017	0	0	0
Jon Boy	8/22/2017	0	0	0
PF19	9/5/2017	0	0	0
PF24	9/5/2017	0	0	0
Coral Star	9/5/2017	0	0	0
Bounty	9/5/2017	0	0	0

cv - % SWD	Wk 1	Wk 2
Rosy Gage	10	0
Castleton	10	100
NY101	30	60
Damson	8	0

In 5 cultivars -  
no SWD found



Cornell University  
Cooperative Extension

SWD in stone fruit in NY, Juliet Carroll, NYS IPM Program



# SWD in tart cherry in 2017

## **Doesn't bode well for the industry.**

Orchards in Lake Ontario's microclimate have later harvests, ~2 weeks.

Use of Imidan in final spray may protect fruit.

Research in Michigan tart cherries:

- Mowing
- SWD movement
- Alternate hosts

