

BLUEBERRY TIP MIDGE

2013 update



symptoms
life history
ecology
damage potential

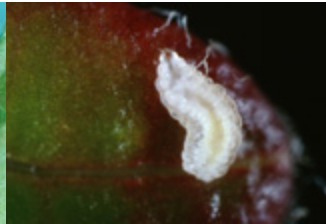
Symptoms



look like thrips...but leaf curls are not as red, not as tightly curled, pock marked, AND curls are ONLY found on terminal leaves



Life stages of the BEAST



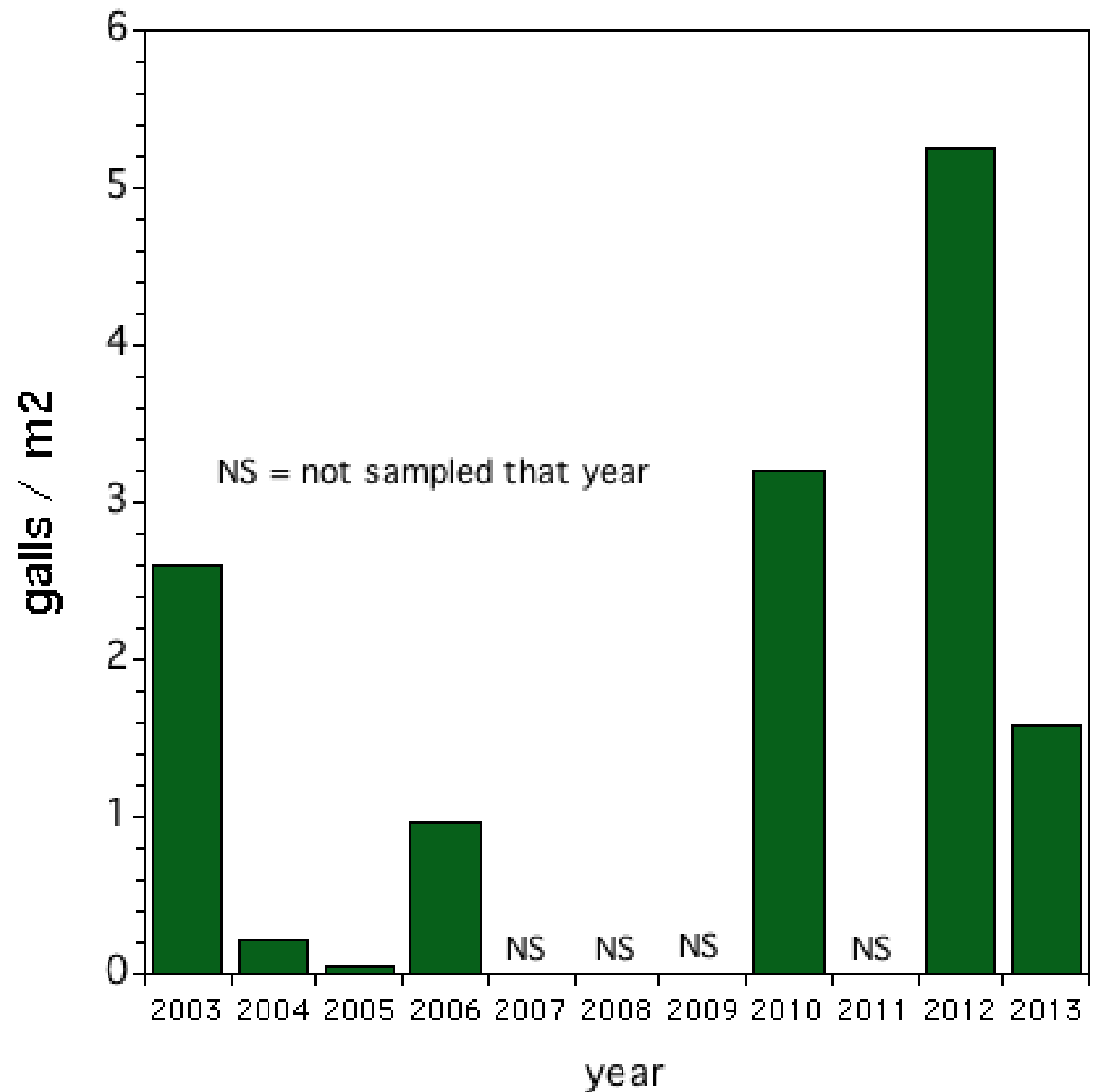
Hypothesized life cycle of *Dasineura oxycoccana* aka “ blueberry tip midge ”

- pupae overwinter in **duff layer**
- adult flies emerge mid-May - early June (live 4-6 days)
- flies lay eggs singly on top terminal leaves
- eggs hatch in a few days (temperature dependent)
- larvae go through three larval instars (7- 10 days)
- pupae stay in soil a week before adults emerge
- several generations / yr ... in cranberry, but blueberry?
Only appears to be ONE generation.

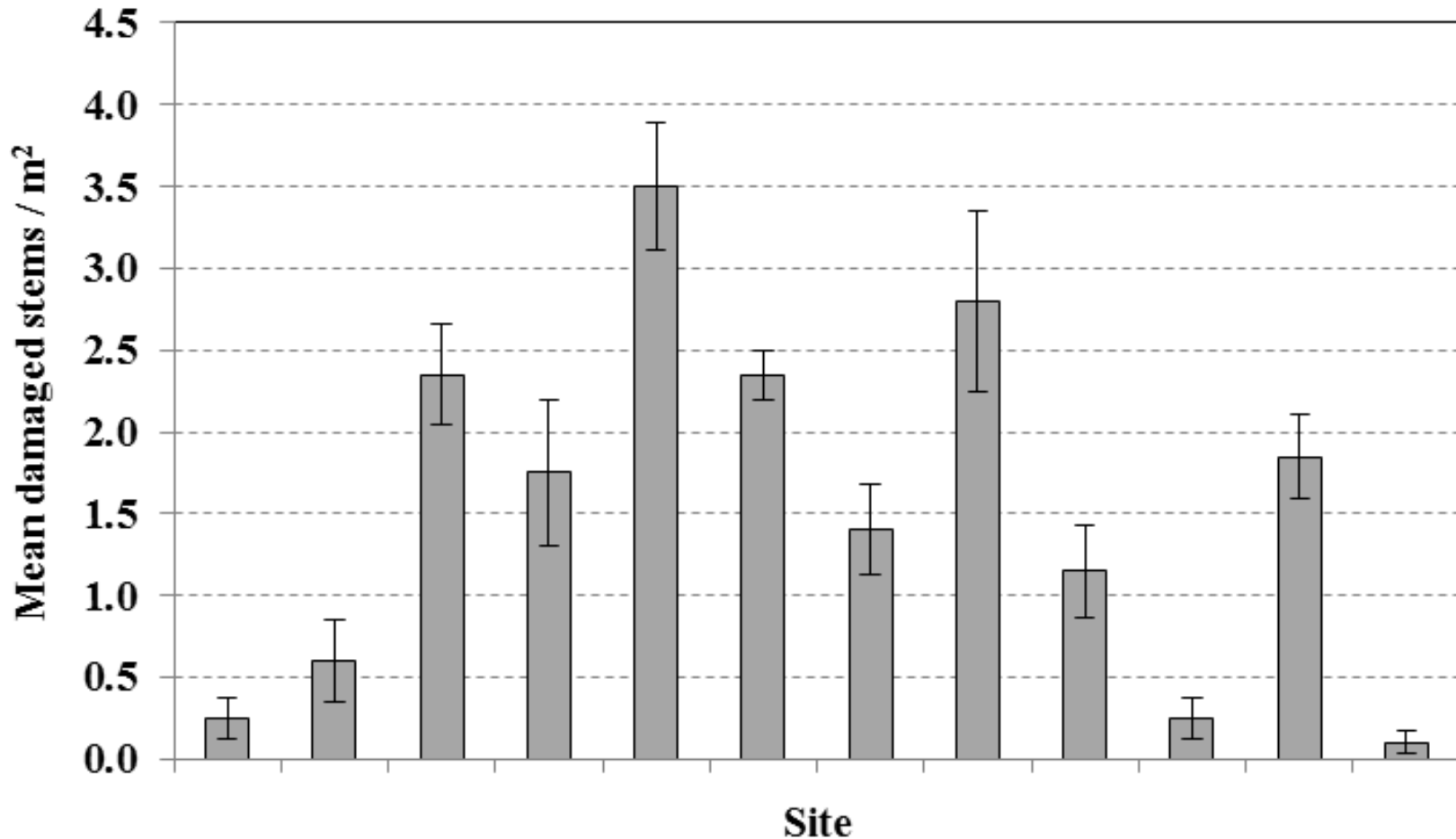
damage
over time –

quite varied

density of blueberry tip midge
2003-2013
(n=10 to 20 fields / year)

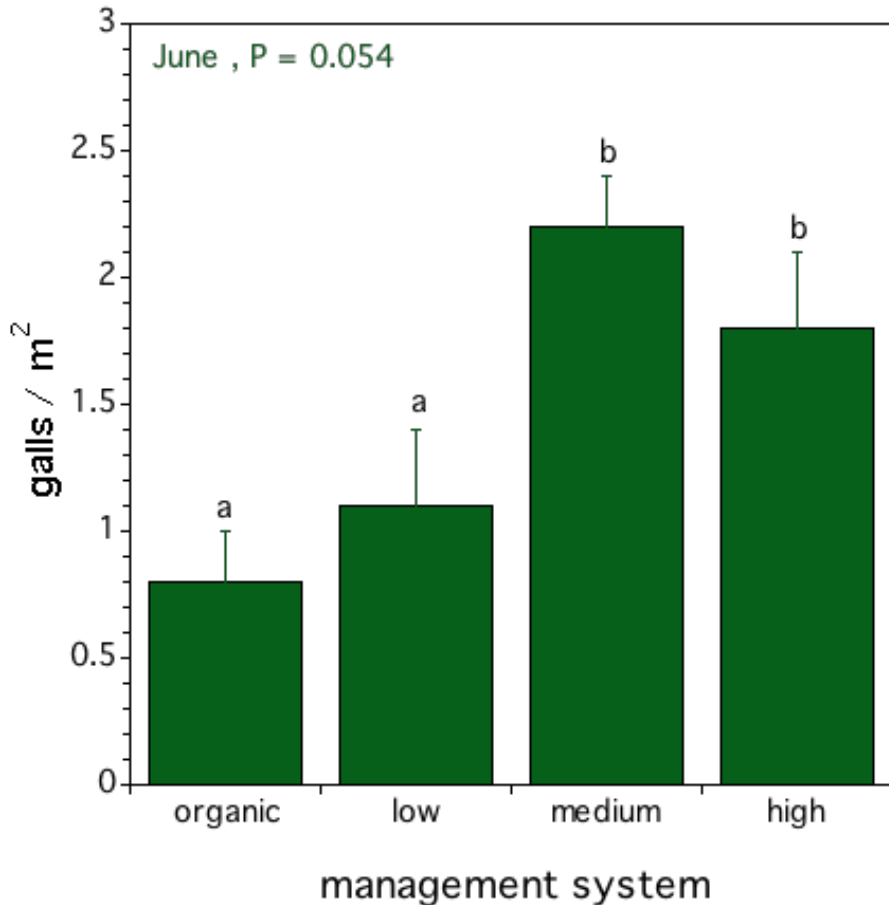


2013 survey of blueberry tip midge damage in lowbush blueberry fields – quite variable field to field

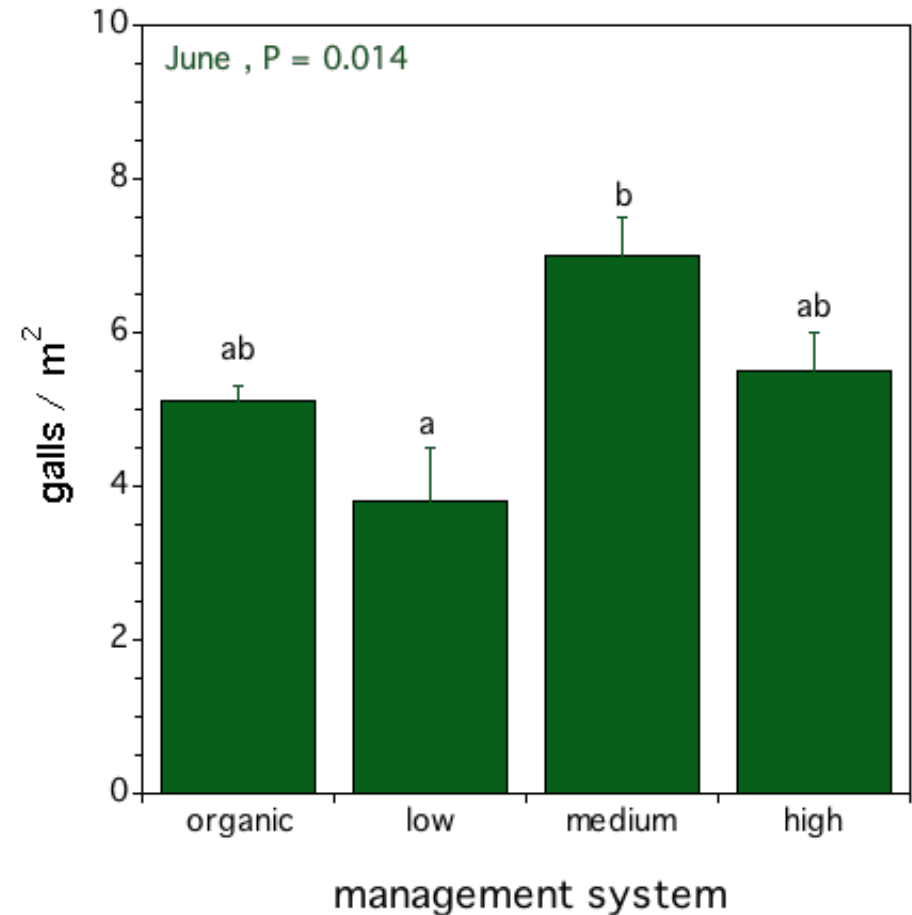


Effect of management system

2010
(n = 12 fields / sample)

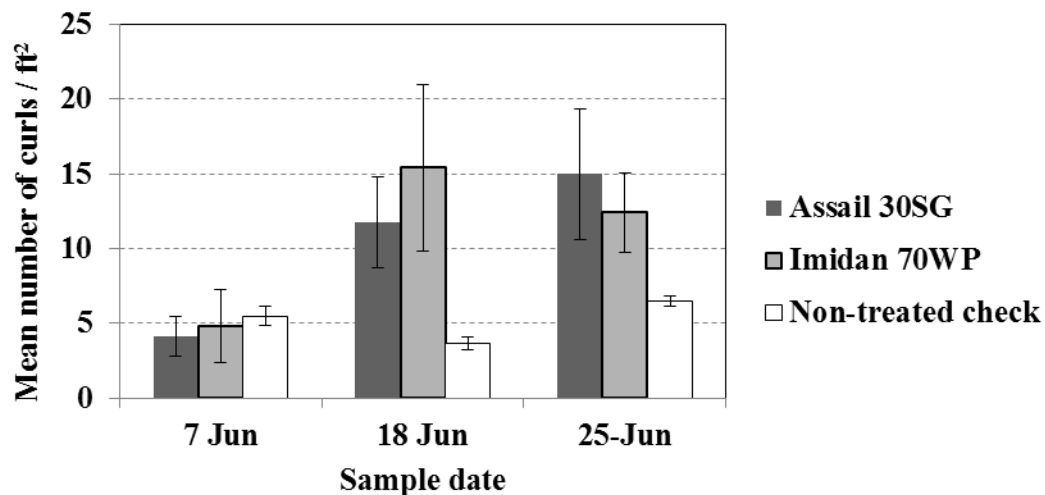


2012
(n = 16 fields / sample)

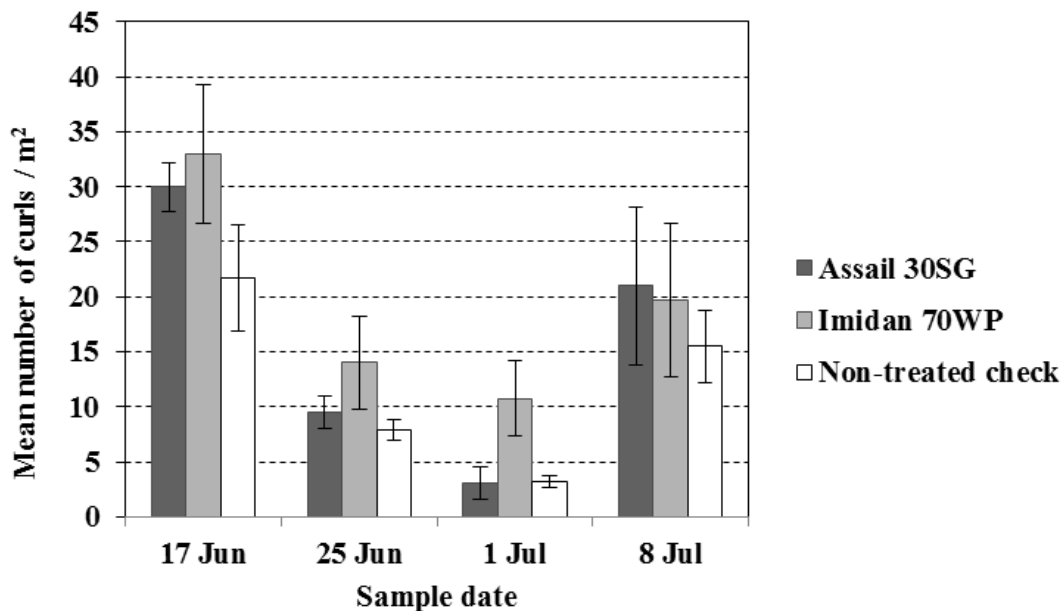


Blueberry tip midge control with foliar insecticides

2012



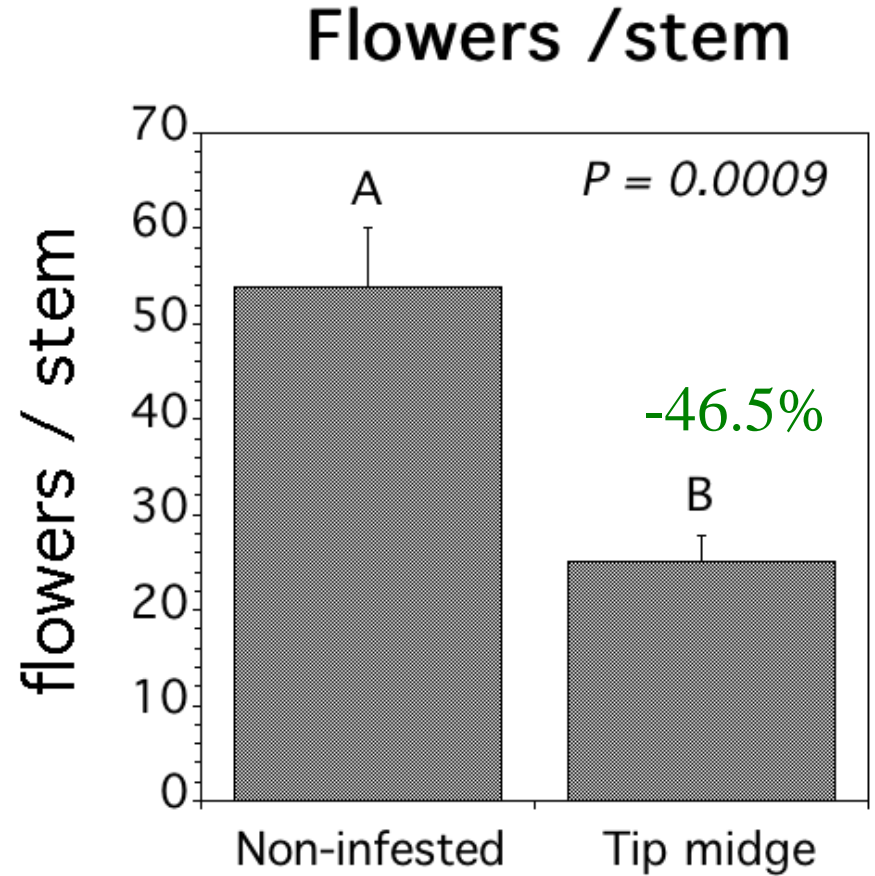
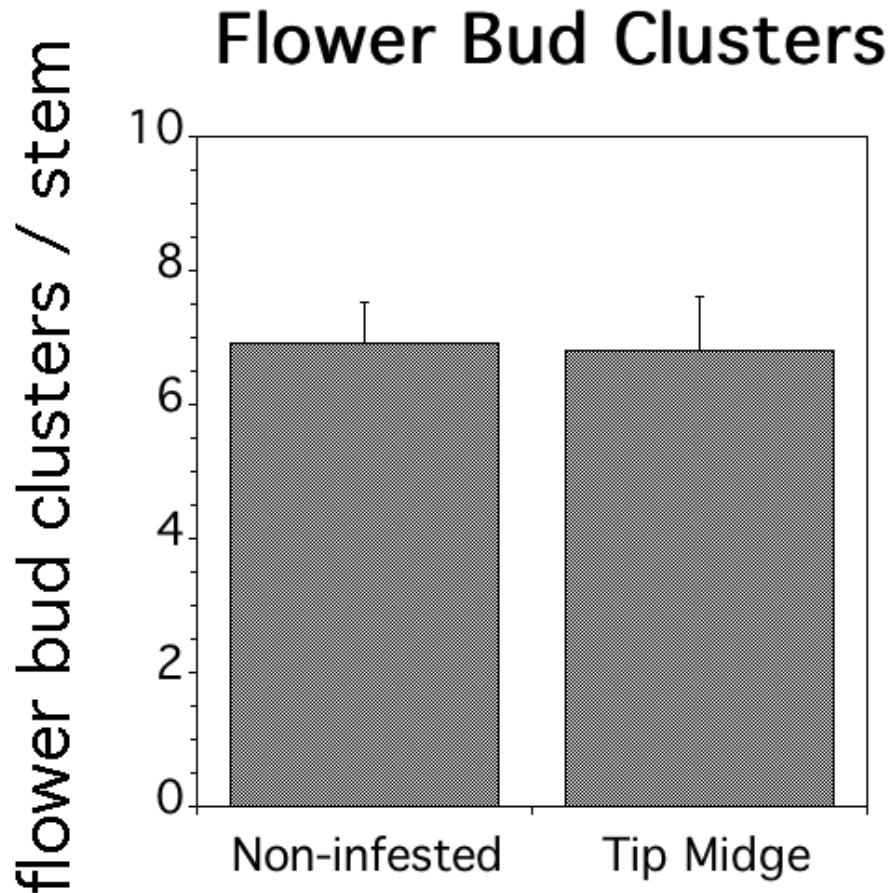
2013



Potential damage

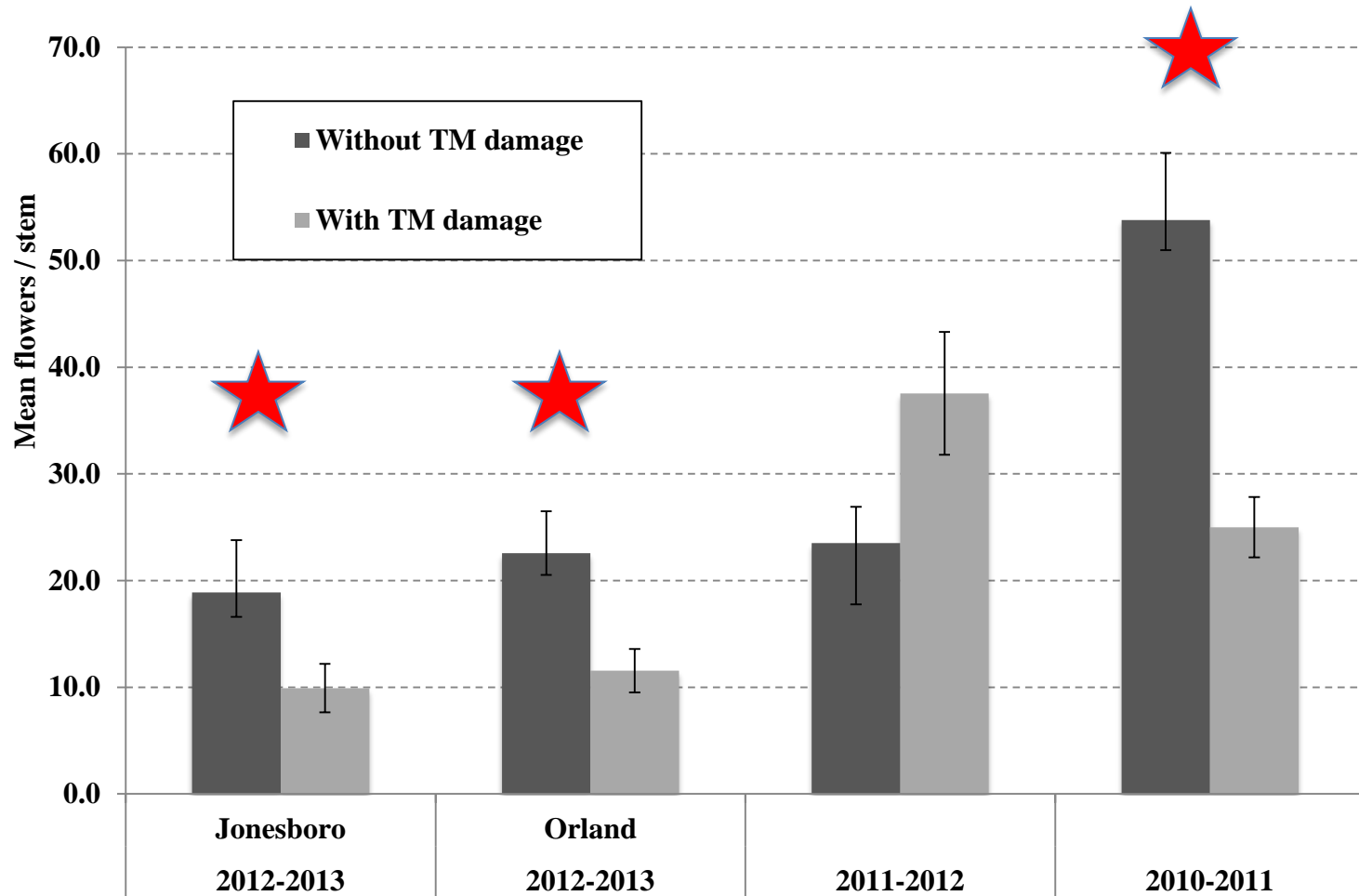
- **blueberry (a minor pest in lowbush?)**
 - **reduction of flower buds the following year**
 - **non-viable flowers**
 - **less branching**

Damage potential 2010 - 2011



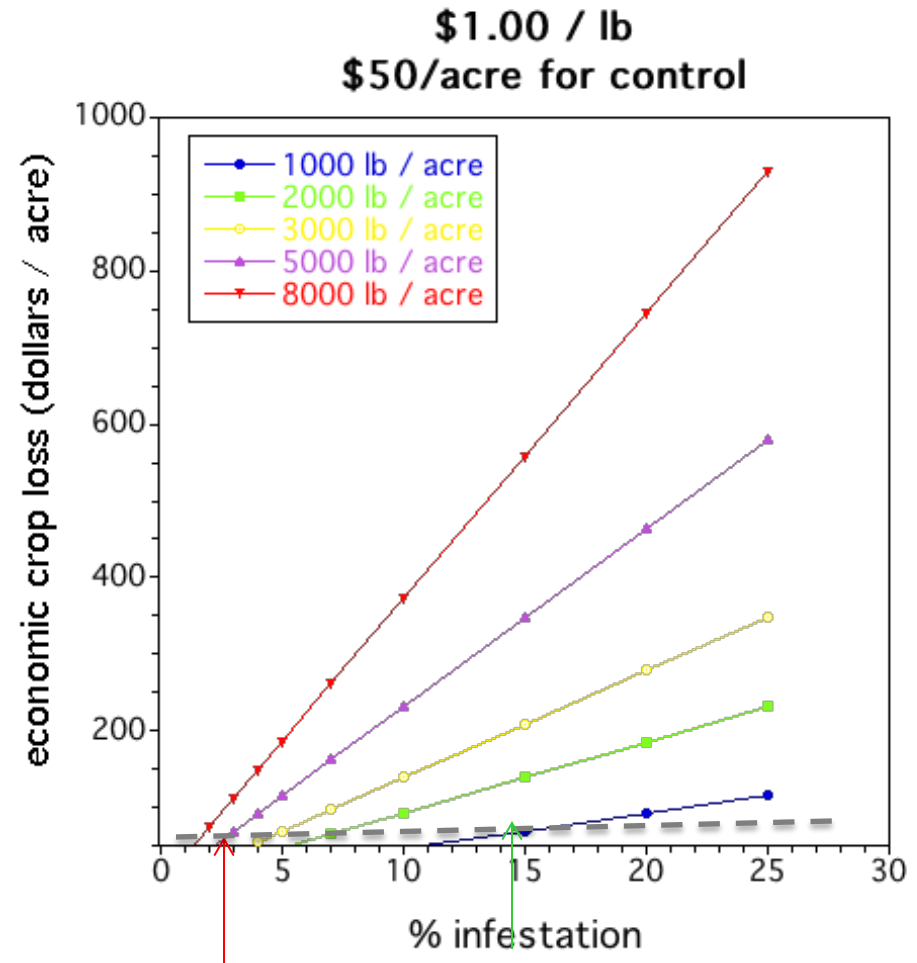
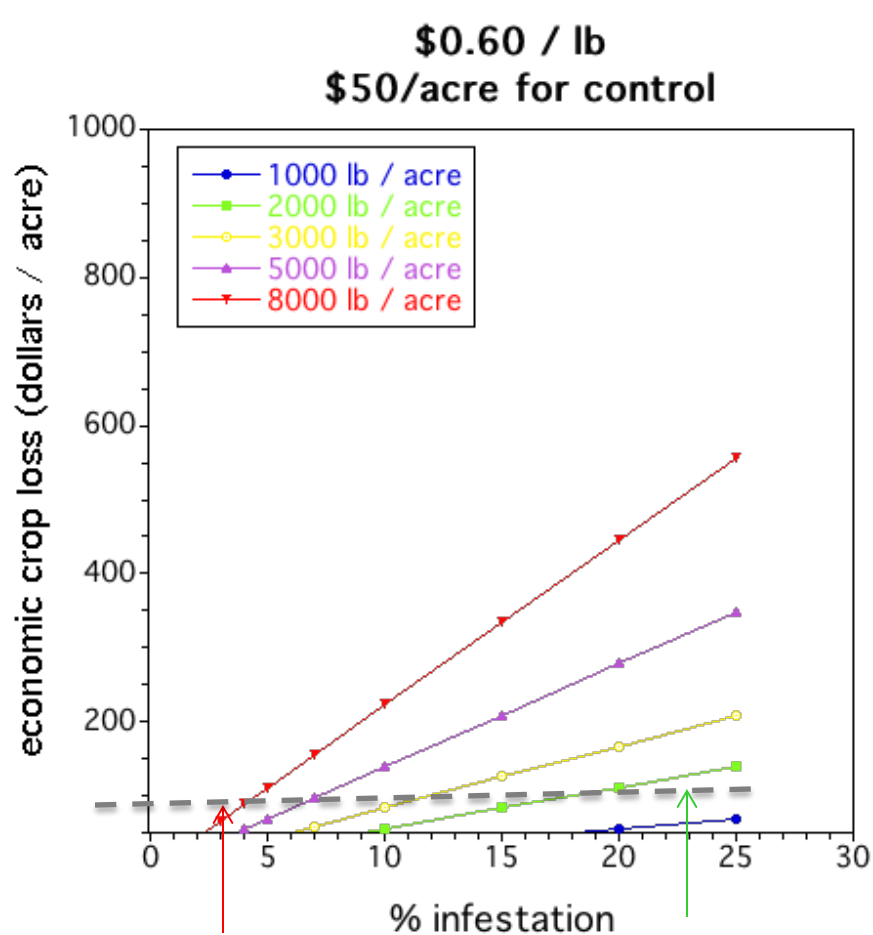
Damage

(3 in 4 trials...50% decrease in flowers)



Economic thresholds

IF 46.5% damage is typical



Future research

- Continue to survey...is it increasing in severity?
- Develop an integrated pest management program
 - monitor midges with yellow bowl traps for time of attack
 - test more insecticides, but a focus on growth regulators: Dimlin, Rimon and their timing
 - delayed burn management



Questions ?

