#### BMSB and Small Fruit



Updates from 2012

Funding



**United States** Department of Agriculture

National Institute of Food and Agriculture

Specialty Crop Research Initiative Grant #2011-01413-30937

PENNSTATE

Collaborating Institutions









Center

















# Objective 3.1 & 3.2: Crop Specific IPM Programs (Small Fruit)



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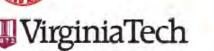


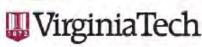














# Spotted Wing Drosophila – A New Threat to Small Fruit Crops



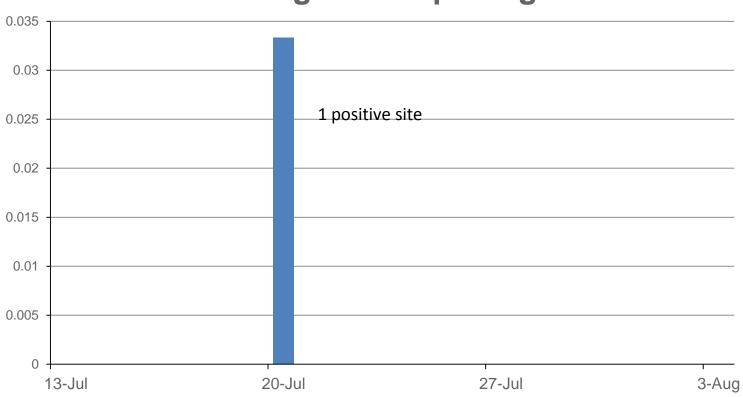
# Spotted Wing Drosophila – A New Threat to Small Fruit Crops

- 2008 First US detection in California
- 2010 No reports in the Northeast
- 2011 First found in the Northeast
- 2012 Widely spread in Mid-Atlantic and Northeastern states

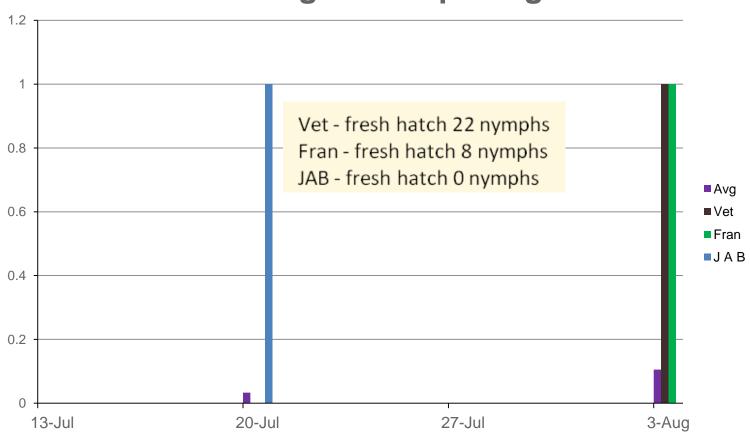
#### Adult BMSB/3 Min - 30 sites During Fruit Ripening



#### BMSB Nymphs/3 Min - 31 sites During Fruit Ripening



# BMSB Egg Masses/3 Min - 31 sites During Fruit Ripening



### Management Tools for BMSB

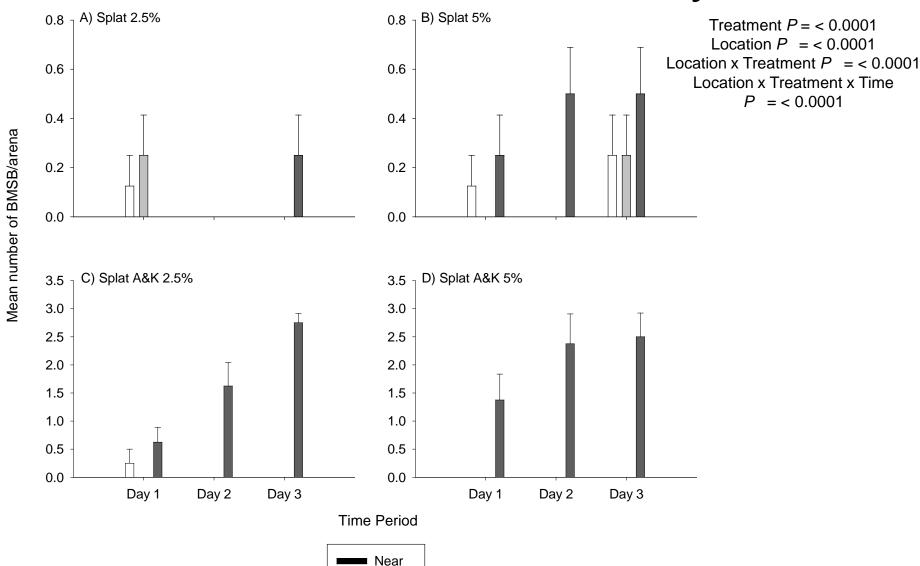
SPLAT attract and kill bioassays

### **SPLAT Bioassays**

- Treatments
  - SPLAT for attraction of BMSB (2.5%)
  - SPLAT for attraction of BMSB (5%)
  - SPLAT for A&K of BMSB (2.5%)
  - SPLAT for A&K of BMSB (5%)
  - SPLAT control
- 1 g dollop per arena
- 5 3<sup>rd</sup> or 4<sup>th</sup> instar nymphs
- 4 replications/treatment
- Recorded
  - mortality every 6 and 12 hours for 3 days
- All arenas contained green beans, carrots, sunflower seeds and water



## Results. SPLAT Bioassays



□ Touch■ Dead