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2019 Pesticide Safety - Insect Update (Scale and Weevil)

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Insect update
Anne Averill
Winter moth will likely not be a problem in 2019

- Earliest spring caterpillars (a spanworm)
  - Already hatched
  - Experts suggest populations are being regulated by an introduced parasitic fly

- Did you see a flight of brown moths in late November-December?
Larvae almost impossible to detect

Recommendation = prophylactic spray of Sevin, Avaunt, Delegate, Intrepid, Orthene
Gypsy moth
Gypsy moth

• Experts are unsure if this will be a problem in 2019

• Keep sweeping with an eye out for the black caterpillars
Fungus attacks gypsy moth

• Thought to be the most important factor holding down populations

• *Entomophaga maimaiga*: The caterpillar killer
Weather determines fungus activity

• Moist and cool conditions favor the fungus
• Drought limits fungus

• So keep posted and sweep
Use the i>clicker

Press the orange button
AA will appear on screen
Wait for READY to appear on ccreen
Select the correct multiple choice answer
USE YOUR CLICKER

What caused this injury?

A. cranberry weevil
B. false blossom disease from leafhopper feeding
C. scale insects
D. a dyetest
E. upright dieback
One year vine injury - Spring

USE YOUR CLICKER
What caused this injury?

A. cranberry weevil
B. false blossom disease from leafhopper feeding
C. scale insects
D. a dyetest
E. upright dieback
Extensive scale injury across bed when treatment missed
Scale management

• Has grown to an industry-wide issue
  – Over 100 beds infested

• Growers have had success identifying and managing infestations
  – Full recovery of injured beds
  – Requires accurate spray timing
    – Diazinon most common spray choice
Putnam scale

- The majority of infestations are Putnam scale
- In heavy infestation, scales form crust on vine
Armored scale
Under sealed cover, likely cannot be hit by spray
Adults are blobs under wax cover
Egg hatches to crawler stage
Beginning of scale life cycle
Crawler stage is management target

Crawler settles, begins feeding, and produces a white cover in couple days
New for 2018: really bad infestation leads to scales on fruit
USE YOUR CLICKER

Do you know the current management recommendation for scale insects?

A. Sand the whole bog
B. Hold water in spring for a week
C. Hold late water for 4 weeks
D. Chemigate Diazinon with careful timing
E. Either C or D
Do you know the current management recommendation for scale insects?

A. Sand the whole bog
B. Hold water in spring for a week
C. Hold late water for 4 weeks
D. Chemigate Diazinon targeting crawlers
E. Either C or D
Cranberry weevil: problem in 2018
USE YOUR CLICKER

Did you use Avaunt for spring 2018 cranberry weevil?

A. Yes, & it worked
B. Yes, & it did not work
C. I used Actara for spring weevil, & it worked
D. I used Actara for spring weevil & it did not work
D. I did not treat for weevil
Are we seeing Avaunt failure (insecticide resistance) for spring cranberry weevil management?

• For us, jury is out: lab and field data suggest Avaunt may still be active
Possible conclusion:
Avaunt may need the right conditions

- Sprays may need warm, sunny, and calm days – when weevils are actively feeding and bathing in the stuff

- Keep posted and sweep
USE YOUR CLICKER

• Have you done a dyetest in the last 5 years?

  A. Yes
  B. No