PEACH INSECT PESTS

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Peach Insect Pests
• Oriental fruit moth
• Lesser peachtree borer
• Stink bugs
• Plum curculio
• Japanese beetle
• Spotted wing Drosophila
• San Jose scale
• Green peach aphids
• Mites (European red mite
• Spotted lanternfly

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Peachtree borers

- Overwinters at larvae under bark
- Pupate in spring
  - 18-30 days before emerging as adults
- Eggs laid in small clusters in cracks near wounds
  - From ground to 8 feet
  - Large hatch in 8-10 days
- Two generations per year
  - Adults in May and June
  - August and September

Peachtree borer damage

- Previously infested and/or young trees are very vulnerable
- Focus on lower 10-12 inches of trunk and extending underground

Lesser peachtree borer damage

- Older trees
- Scaffold limbs, branches, and trunk
- Under bark
- Oozing of gum

Peachtree borer control

- Key to control is killing newly hatched larvae before they bore into the tree
- Applying trunk spray at the right time of year
Peachtree borer control
- Pheromone traps
- Second generation moth flight peaks late August to early September for low borer activity
- High borer activity, sprays at first generation too.
- Remove larvae by hand

Peachtree borer control
- Pyrethroids (Asana, Baythroid, Danitol, Mustang Maxx, Permethrin, Proaxis, Warrior II)
- Venom
- Sevin
- Rimon

Stink bugs
- Overwinter as adults
- Emerge in April through June
- Mate multiple times
- Five nymphal stages
- One to two generation per year

Stink bugs
- Damage to fruit
- Corky, pithy areas from feeding

Stink bugs
- Insecticides
  - Pyrethroids (Azera, Baythroid, Brigade, Danitol, Mustang Maxx, Warrior II)
  - Neonicotinoid (Actara, Venom)
  - Be very careful with these around bees
- Attract and kill
Plum Curculio

- Overwinters as an adult
- Migrate into orchard in spring
- Lays eggs in fruit
- Larvae hatch 5 days
- One generation per year

Plum curculio damage

- Adults
  - Egg laying causes crescent shaped damage
  - Surface feeding scars
- Larvae
  - Premature drop of fruit

Plum curculio control

- Shake infested trees
- Clean up fallen fruit
- Insecticides at shuck-split
- Insecticides for adults
  - Pyrethroids (Asana, Baythroid, Danitol, Mustang Maxx, Permethrin, Proaxis, Warrior II)
  - Neonicotinoid (Actara, Assail, Belay)
    - Be very careful with these around bees
- Apta
- Avaunt
- Exirel

Japanese beetle

- Overwinter as grub
- Adults emerge in June
- Feeding damage beginning in late June
- Adults lay eggs in soil, 40-60
- Grubs take 10 months to develop
Japanese beetle damage
- Feed on leaves, flowers and overripe or wounded fruit
- Skeletonized leaves
- Beetles attract more beetles

Japanese beetle control
- Japanese beetle traps
  - Often attract way more beetles than are caught
- Physical removal
  - Shake plants early in the morning
- Insecticides
  - Pyrethroids (Danitol, Proaxis, Warrior II)
  - Neonicotinoids (Admire Pro, Assail)
  - Sevin
  - Diamides (Exirel, Verdepryn)

Spotted wing Drosophila (SWD)
- Lay eggs in undamaged ripening fruits all season
- Overwinter as adults
- Lay eggs in spring, summer, and fall
  - Up to 300 eggs
- Eggs hatch in 2 to 72 hours
- Up to 10 generations per year
- Can result in very high populations at end of season

SWD control
- Good sanitation
- Monitoring traps to determine if you have SWD
- Control should be based on host susceptibility (peaches are starting to ripen)
- Insecticides
  - Pyrethroids (Baythroid, Danitol, Mustang Maxx)
  - Spinosyns (Delegate, Entrust)
  - Exirel
San Jose scale

- Overwinter as immature scales on tree
- In spring, adults emerge and mate
- Females give birth to crawlers, no egg stage
- Crawlers move around settle down and secrete scale covering
- Two generations per year

San Jose scale damage

- Sucking insect
- Injects toxin in plant causing localized discolorations
- Kills limbs or entire tree in a few years

Green peach aphids

- Up to 30 generations per year
- Life cycle 12 days

Green peach aphids

- Foliage feeder
- Honeydew
- Sooty mold
- Fruit damage
Green peach aphid control
• Conserve and introduce natural enemies
  • Commercially available predators and parasitoids
• Avoid broad-spectrum insecticide applications to conserve natural enemies
  • Lady beetles
  • Lacewings
  • Syrphid flies
  • Parasitoids

Green peach aphid insecticides
• Superior oil
• Proaxis
• Neonicotinoid (Actara, Admire Pro, Assail, Belay)
  • Be very careful with these around bees
• Apta
• Beleaf
• Closer
• Movento
• PQZ
• Sivanto Prime
• Versys Inscalis

Mites (European Red Mite)
• Overwinter as eggs in bark
• 6-8 generations per year, 14 days
• Can be difficult to control

Mites (European Red Mite)
• Infest leaves and damage fruit
• Reduce tree growth, yield
• Bud formation

Mites (European Red Mite)
• Conserve and introduce natural enemies
  • Commercially available predators
• Avoid broad-spectrum insecticide applications to conserve natural enemies
  • Insecticides tend to cause secondary outbreaks
• Use horticultural oil as a delayed/dormant application
• If previous season had heavy outbreaks, apply oil just before bud break

Spotted lanternfly
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