Summer Fruit Insect Pests

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Commercial Apple Production in Kentucky

- 6.9 million lbs in 2008
- Up > 17X from 2007
- Avg. price $0.54 per lb
- Down $0.022 per lb from 2007
- Total value $3.73 million in 2008
- Weather 2007 (Easter freeze)
Apple Insect Pests

- Redbanded Leafroller
- Oriental Fruit Moth
- Tarnished Plant Bug
- Rosy Apple Aphid
Commercial Peach Production in Kentucky

- 1,600 tons in 2008
- Up 80X from 2007
- Avg. price $1,630/ton
- Down $930 per ton from 2007
- Total value $2,608,000 in 2008
- Weather 2007 (Easter freeze)
Peach Insect Pests

Peachtree Borer  
Oriental Fruit Moth  
Plum Curculio
Peach Insect Pests

- Tarnished Plant Bug
  - Adult
  - Nymph
  - Scarring injury

- Stink bugs
  - Cat-facing injury

- Green Peach Aphid

- Rosy Apple Aphid
Japanese Beetle
Blackberry Pest Insects

- Thrips
- Spider Mites
- Green and Brown Stink Bugs
- Japanese Beetle
- Strawberry Weevil
- Red Necked Cane Borer
- Raspberry Crown Borer
- Sap beetle
Grape Insect Pests

Japanese Beetle

Green June Beetle
Grape Insect Pests

Grape Phylloxera

Grape Root Borer
Grape Insect Pests

Grape Berry Moth
Beneficial Insects
Blackberry Beneficial Insects

Assassin Bug  Damsel Bug  Minute Pirate Bug  Soldier Beetle

Syrphid Fly  Tachinid Fly  Trichogramma wasp
Minute Pirate Bug (*Orius insidiosus*)

- **Adult**
- **Nymph**
Syrphid Fly (*Eupeodes americanus*)

- **Adult**
- **Egg**
- **Larva**
Green Lacewing

Egg, larva and adult
Lady Beetles
Managing Insect Pests

**Integrated Pest Management (IPM)** of Insects, Mites, and Diseases

IPM is a systematic way to **use multiple techniques** to manage orchard costs, avoid economic damage, and minimize environmental damage. It includes the use of **cultural and mechanical practices** to prevent pest outbreaks, **biological control** to encourage the pest’s natural enemies to survive and attack pests; and selective use of **chemical control** when cultural and biological controls are inadequate (only OMRI approved chemicals for organic production).
Scouting

• Time consuming
• Obtain very accurate information regarding pests present, stages, damage
Disease and Insect Control Programs for Homegrown Fruit in Kentucky Including Organic Alternatives

R.E. Durham, J.G. Strang, Horticulture; J.R. Hartman, Plant Pathology; R. Bessin, Entomology
Questions???