Fruit Disease Identification

Sheri B. Crabtree

Land Grant Program
Kentucky State University
Fireblight

- *Erwinia amylovera* bacterium
- Apple, pear, quince
- Infection usually through flowers in wet periods of spring
- Wilting, ‘shepherd’s crook’, shoot dieback
- Choose less susceptible varieties- Honeycrisp, Liberty, Red Delicious
- Remove infected wood (sanitize pruners)
- Spray copper per UK spray guide, Maryblyt
Cedar apple rust

- *Gymnosporangium juniperi-virginianae* fungus
- Life cycle requires juniper/cedar and apple
- Gelatinous gall on cedar, yellow-orange lesions on apple
- Resistant varieties - McIntosh, Liberty, Enterprise
- Eliminate nearby cedar trees
- Fungicide sprays per spray guide
Apple Scab

- *Venturia inaequalis* fungus
- Lesions on leaves and fruit
- Can cause cracking and deformed fruit
- Resistant varieties: Liberty, Prima, Priscilla
- Sanitation and fungicide sprays (see spray guide)
Black Knot

- Attacks many *Prunus* spp. (plums and cherries)
- *Apiosporina morbosa* fungus
- Causes black swelling/knots on branches, tree decline
- Remove and destroy infected plant parts, choose resistant varieties
Peach scab and bacterial spot

- Bacterial spot = *Xanthomonas pruni* bacterium
- Peach scab = *Cladosporium carpophilum* fungus
- Difficult to differentiate
- Cracking and misshapen fruit in severe cases
- Bac. Spot resistant: Redhaven, Belle of Ga
- Control of both - good air flow and sanitation
Phyllosticta

- Fungal disease of pawpaw
- Black lesions on fruit and leaves
- Worse in wet years
- Severe cases cause fruit cracking
- Improve air flow with pruning
Phylloxera

• Insect (*Daktulosphaira vitifoliae*) which feeds on
• Feed on leaves and roots, lay eggs causing galls
• High infestations can cause defoliation, reduced growth/decline, and yield
• Control not usually necessary - use vines on American/hybrid rootstock
• Destroy nearby wild grapevines if a problem
Black Rot

- fungus *Guignardia bidwellii*
- Common grape disease
- Control
  - Sanitation: remove/destroy diseased plant parts
  - Cultural: prune/site selection for good air flow
  - Chemical: fungicide sprays (copper/sulfur)
Blackberry virus

- Yellow blotches or streaks on leaves
- Leads to decreased yields, malformed berries, and death of canes
- May resemble herbicide damage
- Remove and destroy affected plants
Sustainable disease control

• Selecting resistant varieties
• Good sanitation
• Pruning trees for good air flow
• Removing diseased plant parts
• Spray if required with organically approved or synthetic chemicals, consult UK Spray Guide or KSU or UK extension personnel.