

Fruit Disease Identification

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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

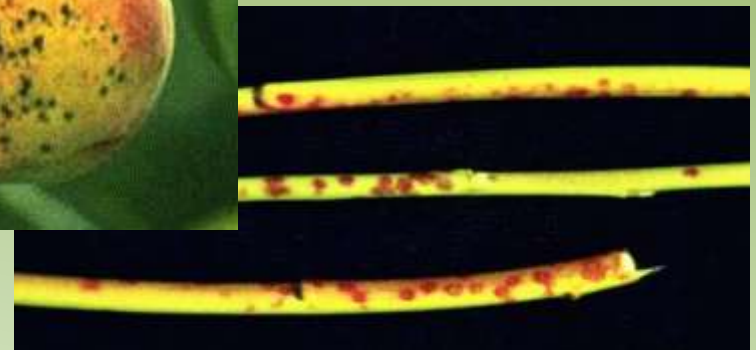
- Bacterial spot= *Xanthomonas pruni* bacterium
- Peach scab = *Cladosporium carpophilum* fungus
- Difficult to differentiate
- cracking and misshapen fruit in severe cases
- Bac. Spot resistant: Redhaven, Belle of Ga
- Control of both- good air flow and sanitation



Bacterial spot



scab



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.