

ANTHRACNOSE

A group of fungal diseases that often start as leaf spots or fruit rots but may also move into petioles, twigs and branches, ultimately causing cankers or blighting. They are characterized by having asexual spores produced in an acervulus.

Causes: Fungi, including *Apiognomonia* spp., *Colletotrichum* spp., *Gnomonia* spp., *Kabatiella* spp., and *Stegophora* spp.



Sycamore anthracnose. Pathogen has spread from leaves into branch. Note small canker.



Hosta anthracnose invading from unpigmented leaf margin.



Ivy anthracnose. This spreading leaf spot is producing erumpent pustules that produce thousands of spores to spread the disease.



Beech anthracnose. Note small circular leaf spots and spreading diamond-shaped lesions on the midvein.

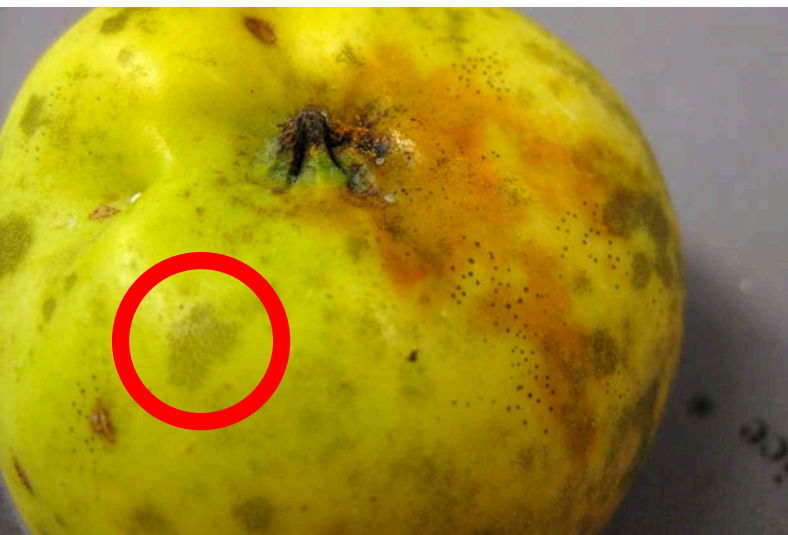
BLOTCH

Large and irregularly shaped spots or lesions.

Causes: Commonly due to fungal or bacterial disease.



Guignardia leaf blotch of buckeye.



Sooty blotch (circled in red) and flyspeck of apple.

WITCHES' BROOM

An abnormal, brush-like growth of many weak shoots.

Causes: insects (aphids, adelgids, etc.); fungi (rusts); bacteria (phytoplasmas), viruses.



Witches' broom caused by aphids.



Witches' broom caused by the aster yellows phytoplasma.



Witches' broom on blackberry caused by a gall wasp; *photo by Crystal Van Pelt.*