



Common Diseases in Lake Erie Vineyards

Black Rot



Daniel Molitor

Morningagclips.com

- Fungal infection of grapes caused by the species *Guignardia bidwellii*
- Affects grapes during hot and humid weather
- Presents as round orange/ brown lesions with small black specks on leaves and grapes
- Infected grapes shrivel and turn into “mummies” capable of spreading infection via fungal spores released with rainfall
- Several commercial pesticides available for controlling this disease

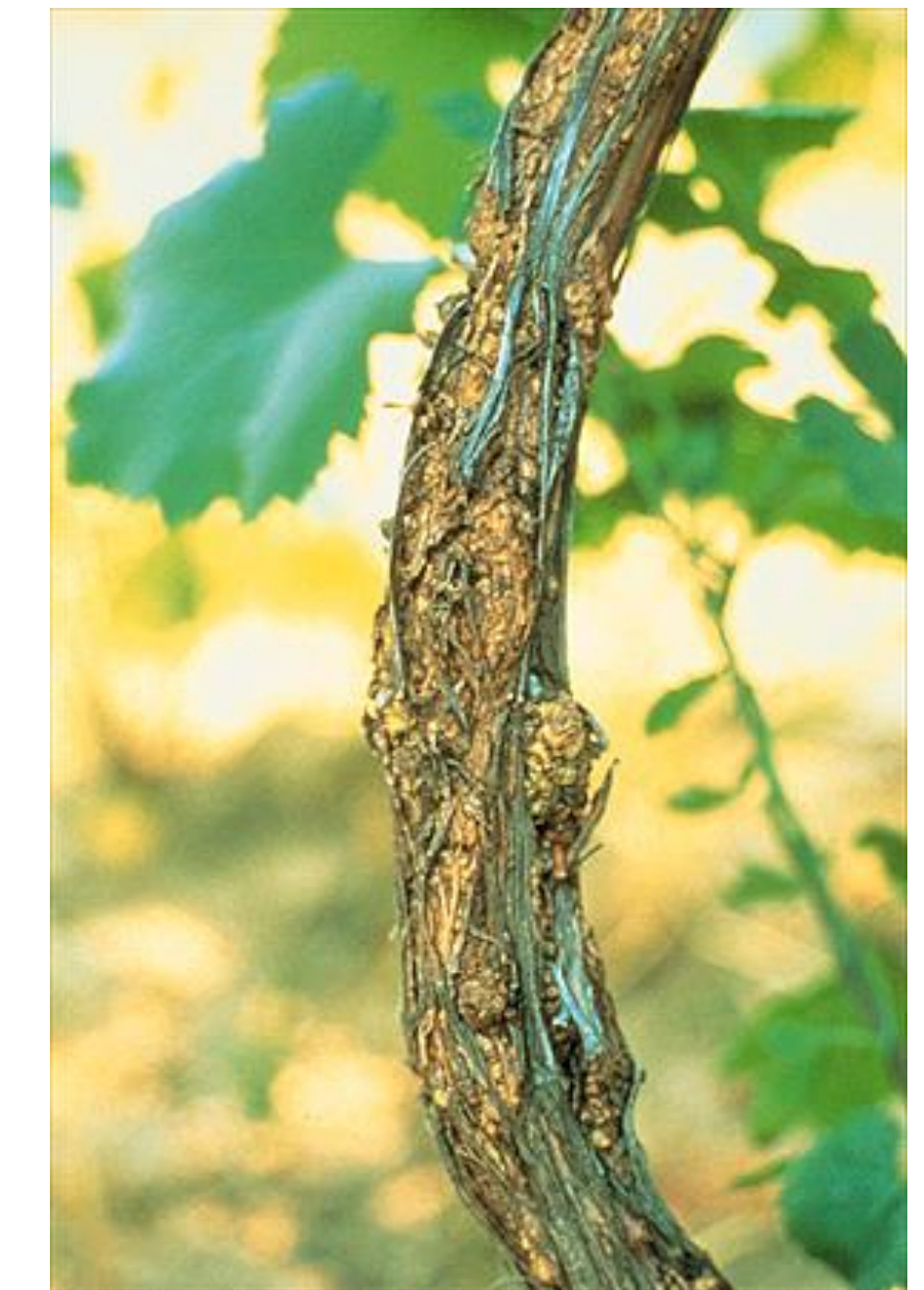
Downy Mildew



Penn State Extension

- Appear first on the underside of leaves as a blueish grey mold; yellow spots present on upper side of leaf
- Especially common in cooler climates with high humidity
- Infected plant material should be removed and disposed of in order to prevent spread of disease

Crown Gall



apsnet.org

- Crown gall is identified based on the presence of overgrowths appearing as galls on the vines or canes of grape plants. Often appear fleshy and detachable.
- *Agrobacterium tumefaciens* is the bacteria known to cause this disease.
- Plants injured by mechanical stress or frost are most susceptible to contracting crown gall as lesions provide an opportunity for bacteria to enter the plant.

Phomopsis



Turner Sutton, NCSU

- Phomopsis is a fungal infection that initially presents as small, black, elliptical lesions and can occur on any green portion of the vine.
- Infected fruit will turn brown and become soft and shriveled.
- Dormant pruning and disposal of infected plant tissues can greatly reduce the spread of this pathogen. Canopy management aids in reduction of moisture among leaves, preventing the spread of phomopsis.
- Many fungicides effective at fighting black rot are also effective in treating phomopsis.

Botrytis (Bunch Rot)



Damon Smith, Oklahoma State University

- Botrytis cinerea is a necrotrophic fungus that causes dull green spots on leaves that turn red as the tissue dies. Infected berries will have a grey sporulating mold on their surfaces.
- Botrytis symptoms are usually most severe in plants with very tight berry clusters.
- Dormant pruning and disposal of infected plant tissues can greatly reduce the spread of this pathogen. Canopy management aids in reduction of moisture among leaves, preventing the spread of botrytis.