**Plant Disease Management**

**Definition**
- Anything that you can do to reduce the impact of disease
- Integrated with other types of management

**Plant Disease Management**

**Diagnosis**
- First step in successful management
- Recognition that something is wrong
- Detective work to figure out what happened and why something happened

**Plant Disease Management**

**R-E-P-E-A-T**
- Using a plant’s natural ability to fend off disease
- Resistance
- Exclusion
- Protection
- Eradication
- Avoidance
- Therapy

**The Disease Triangle**
- Susceptible Host
- Pathogen
- Favorable Environment
Resistance is NOT universal!

Resistance is NOT immunity!

Resistance can depend on plant “age” and plant part!

Resistance effectiveness can depend on the weather!

Resistance may not be equally effective in all locations!

Resistance is sometimes NOT forever!
### Plant Disease Management

#### Resistance
- Resistance is not everything you may need in a plant!

#### Exclusion
- Preventing introduction of pathogens into your garden
- Buy healthy plants!
- Buy healthy seeds!
- Limit soil movement!
Plant Disease Management

Exclusion

• Limit other pathogen introductions!

Decontaminate, decontaminate, decontaminate!

Plant Disease Management

Protection

• Applying materials to prevent infections by pathogens from occurring

Use as a last resort!
• Read pesticide labels!
• Use proper rates!
• Apply at the right times!
• Wear appropriate clothing!
• Alternate active ingredients!
• Get training!

Plant Disease Management

Eradication

• Getting rid of pathogens once they have arrived in your garden

Do good fall clean-up!
### Plant Disease Management Eradication

- Prune diseased branches!
- Remove entire plants!
- Control alternate hosts!
- Control weeds!
- Rotate, rotate, rotate!
- Decontaminate, decontaminate, decontaminate!
Manipulating how you grow your plants to prevent conditions favorable for disease

- DO NOT plant susceptible plants where a known disease exists!

- DO NOT plant too early or too deeply!

- DO NOT plant too densely!

- DO NOT water too much!

- DO NOT use sprinklers to water!
**Plant Disease Management**

**Avoidance**

• DO NOT water, heat or nutrient stress plants!

**Therapy**

• Eliminating pathogens from infected plants

**Putting It All Together**

• Figure out what diseases you have
• Figure out what management techniques work
• Integrate your disease management with other management needs
• DO NOT expect perfection
• Enjoy your garden (including the diseases)

**Where to Go for Help**

Plant Disease Diagnostics Clinic  
Department of Plant Pathology  
University of Wisconsin-Madison  
1630 Linden Drive  
Madison, WI 53706-1598  
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