

**2014 Wisconsin  
Fresh Fruit & Vegetable Conference**

**Diagnosing Vegetable Diseases**  
(How to Use the Plant Disease Diagnostics Clinic)

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**Diagnosing Vegetable Diseases**  
**Why Get a Professional Diagnosis?**

- *Proper diagnosis of a disease provides the basis for successful management*
  - Resistance
  - Cultural control
  - Biological control
  - Chemical control

**Diagnosing Vegetable Diseases**  
**Why Get a Professional Diagnosis?**

- *Misdiagnosis can be costly*
  - Wasted time, effort, money
  - Unsuccessful management
  - Negative environmental impact
  - Negative effect on future disease management

**Diagnosing Vegetable Diseases**  
**Why Get a Professional Diagnosis?**

- *Diagnosing plant diseases isn't easy*
  - There are many diseases
  - Symptoms can look alike
  - Often laboratory testing is needed
    - Microscopic assessment
    - Incubation techniques
    - Culturing techniques
    - Serological and DNA-based techniques
    - Bioassays

**Diagnosing Vegetable Diseases**  
**Why Use the PDDC?**

- *The PDDC's goal is to be unbiased*
- *Use of the PDDC links you with a network of resources*
  - PDDC staff
  - Other UW-Madison/Extension experts
  - UW-Extension county staff
  - Other diagnosticians nationwide (NPDN)
  - Other private diagnostic labs

**Diagnosing Vegetable Diseases**  
**How Do I Collect a Sample?**

- *Collect whole plants when possible*
- *Always dig, never pull plants*
- *Collect more than one plant*
- *Keep the sample as fresh as possible*
- *Keep foliage free of soil*

### *Diagnosing Vegetable Diseases How Do I Collect a Sample?*

- *Collect and provide other information*
  - *Plant information*
  - *Symptomology*
  - *Environmental conditions*
  - *Crop management information*
- *Consider providing supplemental photos*

### *Diagnosing Vegetable Diseases How Do I Get a Sample to the PDDC?*

- *In person delivery*
  - *Rm. 183, Russell Labs*  
*1630 Linden Drive, Madison, WI*
  - *Regular hours: M-F, 8:30 am – 4:30 pm*
  - *Other times by appointment*
  - *After hours drop-off*
  - *Submission form available online and outside the clinic*

### *Diagnosing Vegetable Diseases How Do I Get a Sample to the PDDC?*

- *Mail delivery*
  - *Package samples properly*
    - *Whole plants*
    - *Roots*
    - *Leaves*
    - *Seedlings*
    - *Fleshy fruits and vegetables*
  - *Mail early in the week*
  - *Mail for overnight delivery if possible*

### *Diagnosing Vegetable Diseases When/How Will I Get Results?*

- *Processing time*
  - *Depends on the sample and problem*
  - *Most samples require 1-2 weeks*
  - *Virus tests and bioassays take longer*
- *Results*
  - *Include report, supplemental materials, referrals*
  - *Delivered via snail mail, email, and/or phone*

### *Diagnosing Vegetable Diseases How Much Does a Diagnosis Cost?*

- *Some tests are free (late blight)*
- *Digital diagnosis: (\$20)*
- *Most testing: \$20-25*
- *Virus testing: starting at \$30*
- *Pea/bean root soil bioassay: \$75*
- *General nematode testing: \$35*  
*(through the Nematode Diagnostic Lab)*

### *Diagnosing Vegetable Diseases Questions?*

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