

Wisconsin Fertilizer, Aglime & Pest Management Conference 2007

Soil-borne Pathogen Testing in Wisconsin

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Soil-borne Pathogen Testing in WI

Available Soil Tests

- Aphanomyces Race Test
- Verticillium Analysis
- Nematode Identification



Soil-borne Pathogen Testing in WI

Aphanomyces Race Test

■ Aphanomyces Root Rot

- Chlorosis
- Stunting
- Reduced yield

■ Two Races of *Aphanomyces euteiches*

- Survey of WI and SE MN
- Race 2 more prevalent now than race 1



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Aphanomyces Race Test

■ Test Details

- Soil bioassay
- 31 day test
- 2 – 3 gallons soil
- Cost: \$100



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Verticillium Analysis

■ Verticillium Wilt

- Wilting
- Plant death
- Potato Early Dying



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Verticillium Analysis

■ Test Details

- 4 weeks
- 2 – 3 cups soil
- Cost: \$30
- Cost with Nematode Analysis: \$45



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Nematode Testing

■ Nematodes

- Microscopic worms
- Plant parasites

■ Symptoms

- Chlorosis
- Stunting
- Patchy symptoms



Soil-borne Pathogen Testing in WI

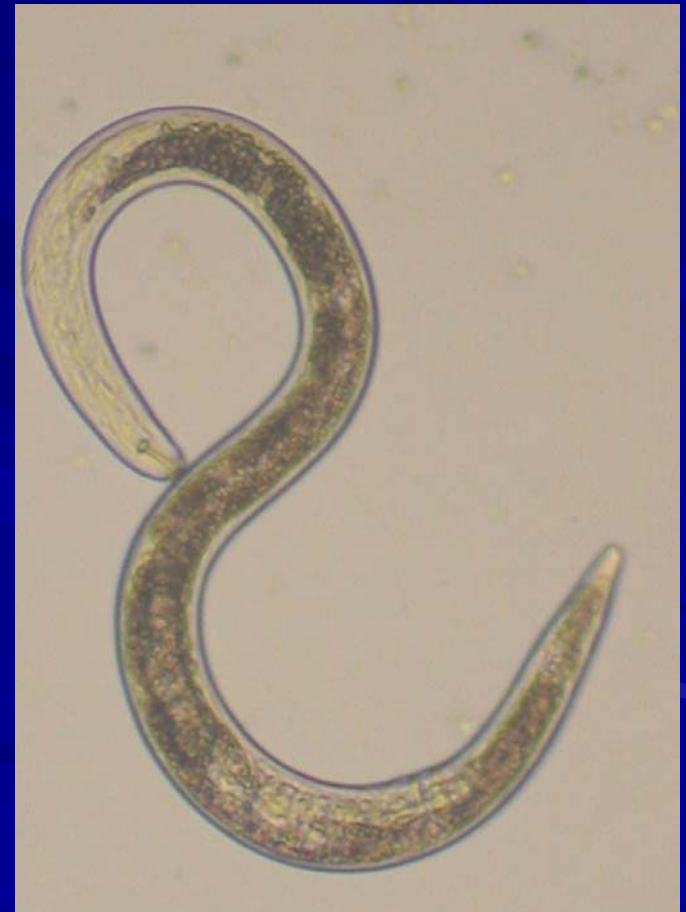
General Nematode Test

■ Plant-pathogenic Nematodes

- Root-knot nematode
- Root-lesion nematode
- Corn needle nematode

■ Test Details

- 1-2 weeks
- 1-2 cups soil
- Include roots!!
- Cost: \$22



Soil-borne Pathogen Testing in WI

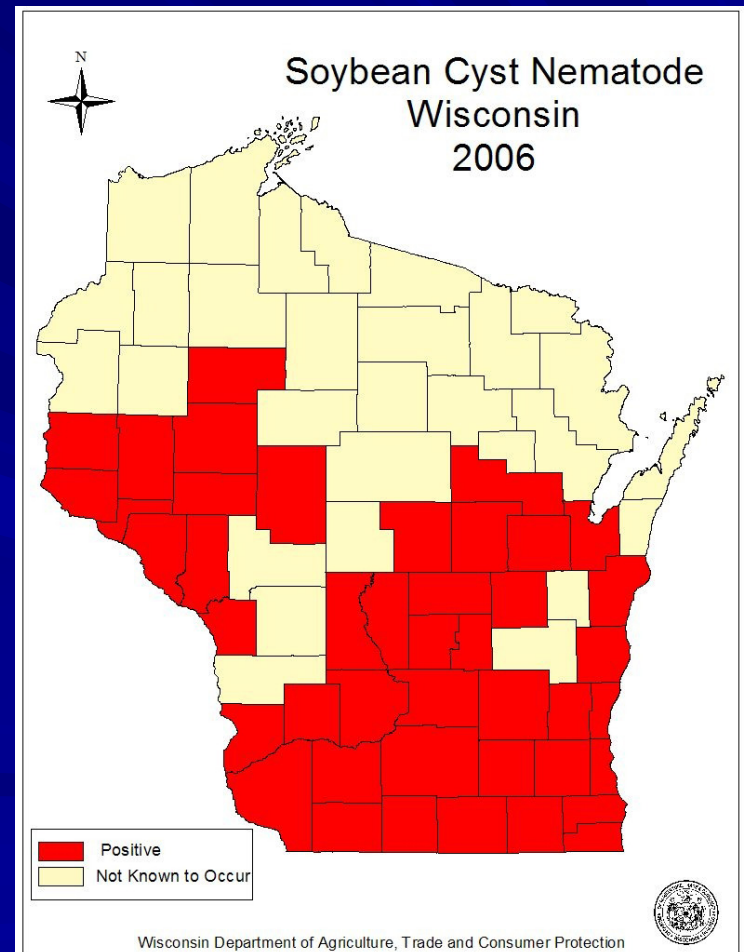
Soybean Cyst Nematode Test

■ Soybean Cyst Nematode

- Yield loss
- Identified in 43 counties in WI
- Resistant varieties of soybean available

■ Test Details

- 1-2 weeks
- 1-2 cups soil
- Cost: \$22



Soil-borne Pathogen Testing in WI

Soybean Cyst Nematode Test

■ WSGB Program

- Possible free testing in 2007
- Test kit



Soil-borne Pathogen Testing in WI

Soil Testing

■ For More Information on Soil Testing:

- Plant Disease Diagnostics Clinic
 - 608-262-2863
 - ajg@plantpath.wisc.edu
 - <http://pddc.wisc.edu>
 - Mail Samples to:
Plant Disease Diagnostics Clinic
1630 Linden Drive
Madison, WI 53706
- WI SCN Website
 - <http://www.plantpath.wisc.edu/soyhealth/scn.htm>