Diagnostic Updates

Diagnostics Subcommittee Update

Karen L. Snover-Clift Committee Chair Cornell University Department of Plant Pathology and Plant-Microbe Biology

The NPDN diagnostics subcommittee held a conference call on July 17, 2008. During this meeting a number of issues were addressed. Please refer to the diagnostics subcommittee web page of the NPDN web site for complete minutes of this meeting (login and password required).

Topics of discussion included:

- Finalization of fall Beltsville-NPDN diagnostician training plans.
- Lab accreditation progress.
- National meeting update.
- NPDN events at APS.
 - Operations committee meeting.
 - Townhall meeting.
 - Informational booth.
- IT-Diagnosticians Meeting.
- Release of Elicitin realtime PCR protocol.

The next conference call will be held on Thursday, August 21, 2008.

Diagnostic Tip of the Month: Tool to Ease SCN Egg Extractions

Nancy Pataky Plant Clinic Director University of Illinois

Many diagnostic labs are involved in nematode extractions and population counts of plant parasitic nematodes. Soybean cyst nematode (SCN) is of major concern in the Midwest, so many soil assays in the Midwest involve SCN. In recent years the SCN population assessment has grown to include SCN egg counts, along with traditional cyst counts. Here is a tip to help ease the pain of manually grinding cysts for numerous samples.

A drill press has become a standard tool in plant clinics, not for wood working, but to help grind tissue quickly and effortlessly.

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A drill press is transformed to aid in grinding cysts of Soybean Cyst Nematode. Photo Nancy Pataky

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A wonderful little device, available through Agdia, Inc, can be attached to the drill press in a slot where the drill bit would otherwise be attached. The device has bearings on the end that is used to macerate tissue. Many of you are probably familiar with this device. A similar device, used to crush SCN cysts, is available through David Soh at Iowa State University. He has produced a simple rubber stopper grinder with a stem that fits into a drill press. He also makes a 60 mesh PVC sieve that fits the grinder. The image shows the stopper and the sieve next to the Agdia device, which is attached to a drill press.

The first step in grinding cysts is to recover cysts from the soil through wet sieving. These cysts are washed into the PVC sieve and ground with the rubber stopper over a 500 mesh sieve to catch the eggs that wash through the PVC sieve. Staining and counting eggs follows. This stopper is only \$15.00 and the sieve is \$20.00. Contact David Soh at dsoh@iastate.edu to place an order and to confirm current pricing.

Chrysanthemum White Rust Webinar

Diagnostic Tip of the Month

Washington, D.C. ANLA and SAF join
Yoder Brothers, Inc., Ball Horticultural
Company and GroLink, the major U.S.
propagation and breeding companies, in
presenting an important opportunity for
growers - a free, 30-minute educational
Webinar on Chrysanthemum White Rust
(CWR).

CWR is a quarantine-significant pest, so it's particularly important for growers to be aware of the steps they can take to avoid the disease in their fall chrysanthemum crops.

The session includes excellent photographs that teach growers how to recognize the symptoms of the disease. It also offers important advice on how to avoid White Rust in 2008 mum crops.

The Webinar will be held on several different days, at either 10:00 a.m. or 2:00 p.m., so that growers can choose a session that best fits their schedule.



Chrysanthemum white rust pustule on mum. Photo John W. Dooley, USDA-APHIS-PPQ, <u>www.ipmimages.org</u>.

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