Cranberry Station Extension meetings

Spring 5-6-2020

2020 Bogside May 6: Disease Management

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Cranberry Disease Management Guidelines

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May 6\textsuperscript{th}, 2020
Upright Dieback

Phomopsis vaccinii

Fusicoccum putrefaciens

Synchronoblastia crypta
Avoid heat stress. Prolonged periods of drought worsens the damage caused by this disease.

Coppers and Chlorothalonil fungicides are registered.

eg: Champ DP, Champ Flowable, Champ WG
    Bravo Ultrex, Bravo Weather Stik, Equus DF

Timing of applications: (April 25th to May 15th)

Early applications at bud break and/or bud expansion are known to provide excellent control.
Phytophthora Root Rot - *Phytophthora cinnamomoi*

*P. megasperma*  *P. dreschleri*

Root symptoms
Phytophthora Root Rot Rot Management

- Improve **drainage** of the low areas of the bed.
- Tile, stones or other materials can be utilized, and new ditches can be dug.
- **Sand the affected areas** to get them up to grade with the remainder of the bed.
- **Stressed plants** on the margins of dieback areas should be given **extra dose of fertilizers to stimulate root growth**.
Phytophthora Root Rot Management

- After improving drainage, fungicides should be applied.
- Foliar application of Phosphonate fungicides (eg: Rampart, Phostrol) or Soil application of Phenylamide fungicides (eg: Ridomil Gold SL, Ridomil Gold GR) are recommended.
Phytophthora Root Rot Management

- **Timing of fungicide applications:**

  1\textsuperscript{st}: between April 25\textsuperscript{th} to May 15\textsuperscript{th}

  2\textsuperscript{nd}: 60-90 days after the first application. (but before harvest)

  3\textsuperscript{rd}: After harvest, prior to November 15\textsuperscript{th}.
Phytophthora Root Rot Management

• Precautions should be taken to avoid the spread of the pathogen from infested beds to uninfested beds.

• Machinery, equipment, footwear etc. should be sterilized using steam, 10% bleach or 70% alcohol.
Anatomy of a typical cranberry fairy ring.
- The pathogen kills vines as it advances across affected fields forming the necrotic zone (Necrotic).
- Inside the necrotic zone, an open area forms that becomes weedy and later fills in with cranberry vines (Recovering).
- Rings may be bordered by an overgrown area that blends into the healthy (Healthy), unaffected part of the field.

Fruit variation in ‘Ben Lear’
A. Fruit from the healthy areas is typically uniform in size, shape, and phenology, such as ripening time.
B. Fruit from fairy-ring-affected areas tends to be variable.

(Oudemans, 2008)
Fairy Ring in Stevens

Fairy Ring in Early Black
Factors affecting Fairy Ring

- **Periods of drought:**
  Damage is worst during prolonged periods of drought;
  Keep vines irrigated.

- **Spread of plant material from infected to healthy beds:**
  Precautions should be taken \textit{to avoid the spread of plant materials} from infested beds to uninfested beds.
Chemicals Recommended for Fairy Ring Management

- Abound/Indar
- Ferbam Granuflo
- Sul-Po-Mag or K-Mag 0-0-22
Fairy Ring Management

Timing of fungicide applications:

**May**: Abound/Indar at Budbreak.

- Irrigate 1-2 hours before and following the application.
- Repeat 2-4 weeks later if necessary.

**June – July**: Ferbam Granuflo 9 lbs/100 gallons.

- 1 gallon of this mixture/square feet area.
- Treat the area 3 feet beyond the advancing line of dying vines.
- Only one application.
- Do not apply after July 31st.

**Mid August through October**: Sul-Po-Mag or K-Mag 0-0-22

- 4000 lbs/acre or 1.5 oz/sq. ft.