

Cherry Powdery Mildew: Management & Fungicide Resistance

Winter pruning

1. *Bring the tree height down*
2. *Open up the canopy to allow for more air flow*

Spring

1. *Remove root suckers*
2. *Remove sprouts near trunk and crouches*
3. *Look for mildew on young leaves approximately three weeks after bud break*
4. *First mildew shows up **UNDERSIDE** of the young leaves mostly near trunk splits*

Summer

1. *Nitrogen management- avoid excessive vegetative growth*
2. *Avoid excessive shading, discourage humidity*

Fungicide control

1. *Be proactive on mildew sprays- mildew **WILL COME BACK***
2. *Become familiar with FRAC groups*
3. *Rotate between different FRAC groups*
4. *No more than three times in a season, no more than twice sequentially (3.2 rule)*
5. *Record non-efficient fungicides: if they are not effective, they will never be!*



Fungicide resistance

1. *Synthetic fungicides tend to develop resistance- fungus wins the war!*
2. *Over-used fungicides will become ineffective- resistance prone materials may include myclobutanil (Rally), strobilurins (Abound, Cabrio, Gem)*
3. *Our research focus on presence and extent of fungicide resistance in the Pacific Northwest for FRAC group 3, 7, 11, 13, 19 and others.*
4. *We are collecting mildew across the state of WA and OR*
5. *Mildew are being tested for their sensitivity against FRAC group 3, 7, 11, 13, 19 and U8 using bioassay and lab-based PCR techniques*
6. *Preliminary evidence suggests widespread mildew resistance against group 3 (e.g. Rally) and 11 (e.g. Gem)*

Spray coverage

1. *Spray must cover entire canopy*
2. *Pay attention to top branches, they receive least coverage*
3. *Determine appropriate spray volume*
4. *Spray volume may need to be adjusted to cover fruits, especially before the harvest*

Use pesticides with care. Apply them only to plants, animals, or sites listed on the labels. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

YOU ARE REQUIRED BY LAW TO FOLLOW THE LABEL. It is a legal document. Always read the label before using any pesticide. You, the grower, are responsible for safe pesticide use. Trade (brand) names are provided for your reference only. No discrimination is intended, and other pesticides with the same active ingredient may be suitable. No endorsement is implied.

Questions?

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Sampling

- Detach young leaves with mildew
- Place in zip lock bags, add a small moist paper keep samples humid
- Send it via overnight delivery

Shipping

Send samples to:

Prashant Swamy

24106 N. Bunn Road,

Prosser, WA 99350