



Apple Disease – Powdery Mildew

What is Powdery Mildew of Apples?

Powdery mildew (*Podosphaera leucotricha*) is a fungal disease of apples and pears. The white clusters of mycelium and spores produce its “powdery” appearance. The disease affects apple tree buds, leaves, twigs, blossoms and fruits. In order to develop, powdery mildew relies on temperatures between 19-22°C. The disease can grow in both moist and dry humidity.

What is the Damage Caused?

Powdery mildew (PM) is economically damaging by causing blossom abortion, reduced vigor, stunted growth, and poor fruit appearance.

How to Manage PM in Apples?

Cultural Management: If possible choose apple cultivars with natural resistance to powdery mildew. Delicious varieties are the least susceptible. Common cultivars most susceptible to PM are: Braeburn, Jonathan, Rome, Newtown, and Granny Smith. Small orchards may add limited control by pruning and destroying infected shoots during dormancy or early spring.

Fungicide Treatment Options:

Preferred timing is an application at pink bud stage. If PM continues to be a problem, apply additional treatments until terminal growth ceases.

- Trifloxystrobin (Flint*) at 140-175 g/ha (2-2.5 oz/acre). Maximum two consecutive applications before rotating to a fungicide with a different mode of action. Do not apply more than 770 g/ha (11 oz/acre) in a season. Do not apply within 14 days of harvest. Wait 12 hours after application before reentering the orchard. Trifloxystrobin is also effective against apple scab.
- Fenarimol (Rubigan*) 1EC at 650-875 ml/ha (9-12 fl. oz/acre). Rotate with fungicides with different modes of action. Do not apply more than 5880 ml/ha (84 fl. oz/acre) in one season. Do not apply within 30 of harvest. Wait 12 hours after application before reentering the orchard.

For more treatment options visit www.ipm.ucdavis.edu

*Commercial name. The authors make no endorsement towards commercial brands mentioned in this document nor are the absence of other brand names an implication of our disapproval

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References: Statewide IPM Program, Agriculture and Natural Resources, University of California <http://www.ipm.ucdavis.edu/index.html>

Kearneysville Tree Fruit Research & Ed. Ctr., West Virginia University <http://www.caf.wvu.edu/Kearneysville/pathology.htm>

Jay W. Pscheidt, Extension Service, Oregon State University <http://plant-disease.ippc.orst.edu/disease.cfm?RecordID=52>

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New shoots and buds infected with PM¹



The fungus leaves a streaked finish on mature fruits²

For more information visit: International Programs: <http://ipm.ucdavis.edu>

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