Powdery Mildew

White powdery growth on leaves and shoots can be a sign of powdery mildew.

This disease affects many plants, and one of several fungi can cause it. Manage powdery mildew by using resistant plant varieties and altering the growing environment. In some situations, fungicide treatments might be required for susceptible plant species.

Symptoms can vary by plant species.

- White powdery spots develop on both leaf surfaces and expand as the infection grows.
- Leaves turn yellow or brown and fall off, exposing the plant or fruit to sunburn.
- Leaves or shoots can twist or distort.
- The fruiting parts of vegetables are usually not affected, but apples, grapes, and stone fruits can develop weblike russet scars or corky areas.

Powdery mildew is common in warm, dry conditions.

- Unlike many diseases, powdery mildew doesn’t require moist conditions to grow.
- Moisture during the spring inhibits growth.
- Moderate temperatures (60° to 80°F) and shade encourage the disease.

Alter the growing environment to make plants less susceptible.

- Grow plants in sunny locations.
- Provide good air circulation by pruning excess foliage.
- Don’t overfertilize with nitrogen because lush foliage and shade encourage the disease.

Consider nonchemical methods.

- Wash spores off with overhead sprinkling. To prevent other disease problems, do this midmorning so moisture dries rapidly.
- Prune out small infestations, and remove infected buds during the dormant season. Quickly remove infected materials so you don’t spread spores.

What about pesticides?

- Some infections may require fungicides.
- Control mild to moderate infections with horticultural oil or with plant-based oils, such as neem oil. Do not use oils if you have applied sulfur or if the temperature is above 90°F.
- Prevent infections with sulfur products, especially ready-to-use products with soaplike surfactants. These products are not effective after the disease appears. Repeat applications might be necessary.
- Other fungicides are available. Many must be applied before you see the first sign of disease.

What you do in your home and landscape affects our water and health.

- Minimize the use of pesticides that pollute our waterways and harm human health.
- Use nonchemical alternatives or less toxic pesticide products whenever possible.
- Read product labels carefully and follow instructions on proper use, storage, and disposal.

For more information about managing pests, visit ipm.ucanr.edu or your local University of California Cooperative Extension office.