

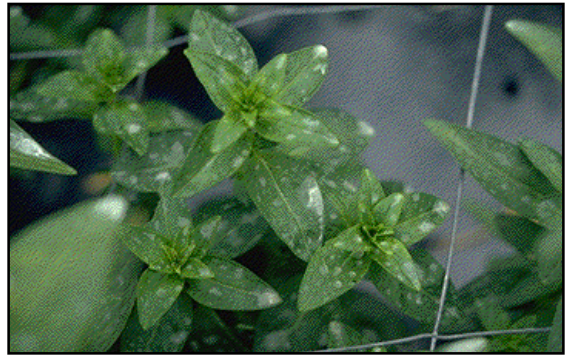
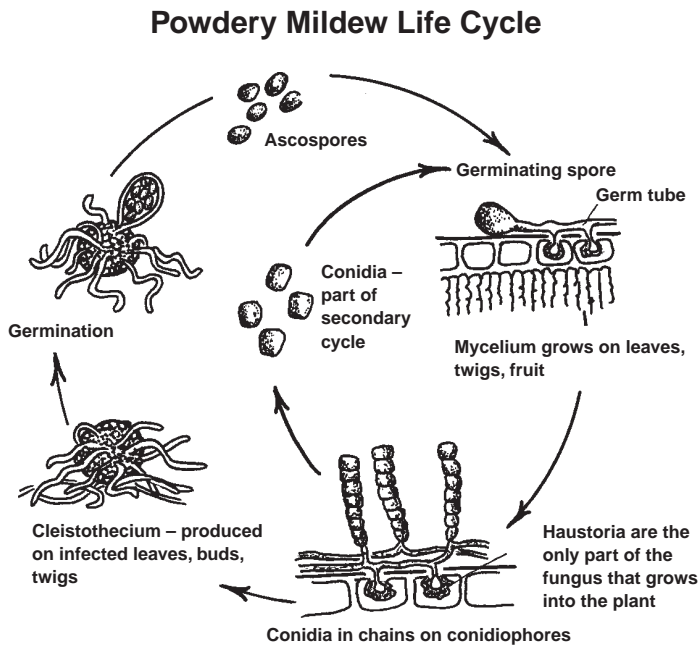
POWDERY MILDEW

There are hundreds of species of powdery mildew with one or more occurring on almost every known flowering plant. They form a white or light-coloured growth on leaves that resemble a chalky residue. The powdery fungus may cover both the upper and lower surfaces of the leaves. Infections cause distortion, chlorosis, senescence, and browning of the foliage.

Life Cycle

Unlike other fungal diseases, powdery mildew spores don't require free water to germinate. They may even be inhibited by rain or by spraying water on the leaves. High humidity favours spore production, and lower humidity favours spore maturation and release. In a greenhouse situation, frequent fluctuations in humidity as well as warm days and cool nights will favour the fungus. It generally tends to affect lush new plant growth; therefore, it has multiple disease cycles in a growing season as new growth continually appears. Once the infection has started, it continues to spread regardless of weather conditions.

In outdoor settings, various natural parasites (hyper-parasites) may help to limit the severity of powdery mildew outbreaks.



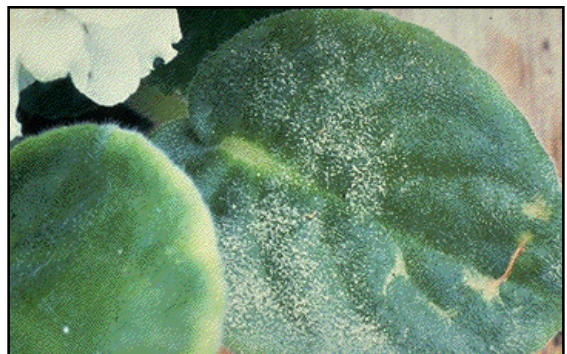
Powdery Mildew on *Antirrhinum*



Powdery Mildew on *Chrysanthemum*



Powdery Mildew on *Phlox*



Powdery Mildew on *Saintpaulia*

Principal Hosts

<i>Achillea</i>	<i>Malus</i>
<i>Antirrhinum</i>	<i>Nandina</i>
Azalea	<i>Nicotiana</i>
<i>Begonia</i>	<i>Phlox</i>
<i>Calendula</i>	<i>Rhododendron</i>
<i>Chrysanthemum</i>	<i>Rosa</i>
<i>Clematis</i>	<i>Saintpaulia</i>
<i>Corylus</i>	<i>Scabiosa</i>
Cucurbits	<i>Senecio</i> (cineraria)
<i>Cuphea</i>	<i>Syringa</i> (lilac)
<i>Dahlia</i>	<i>Tagetes</i>
<i>Gerbera</i>	<i>Verbena</i>
<i>Hydrangea</i>	<i>Viburnum</i>
<i>Kalanchoe</i>	<i>Viola</i>
<i>Lathyrus</i>	<i>Zinnia</i>
<i>Lobelia</i>	

***Antirrhinum* (*Oidium* spp.)**

A white, powdery coating forms on upper leaf surfaces and on stems. This fungus does not require water to germinate, but rather, favours fluctuations in humidity. Warm days and cool nights are ideal conditions for fungal growth.

Powdery Mildew of *Antirrhinum*Powdery Mildew of *Antirrhinum*

Gerbera (*Oidium* spp.)

A white, powdery coating forms on upper leaf surfaces and on stems. This fungus favours fluctuations in humidity. Warm days and cool nights are ideal conditions for fungal growth.

Rosa (*Spaerotheca pannosa* var. *rosae*)

Initially slightly raised blister-like areas appear on upper surfaces of young leaves, which appear purplish. White growth forms on leaves, stems, flower necks, and flowers, eventually causing them to become twisted and distorted. The under surface of leaves often shows red to purple spotting where the upper surface is affected.



S. T. Koike

Powdery Mildew on *Gerbera* Flower



J. Matteoni

Powdery Mildew on *Rosa*



Powdery Mildew on *Rosa*



S. T. Koike

Powdery Mildew on *Gerbera*



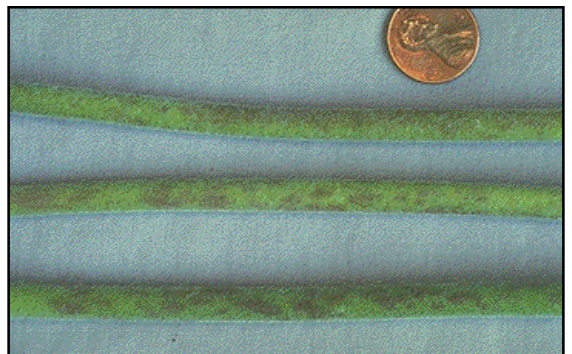
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Powdery Mildew on *Gerbera*



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Powdery Mildew on *Gerbera* Leaves



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Powdery Mildew on *Gerbera* Stems