



Horticulture Diagnostic Laboratory

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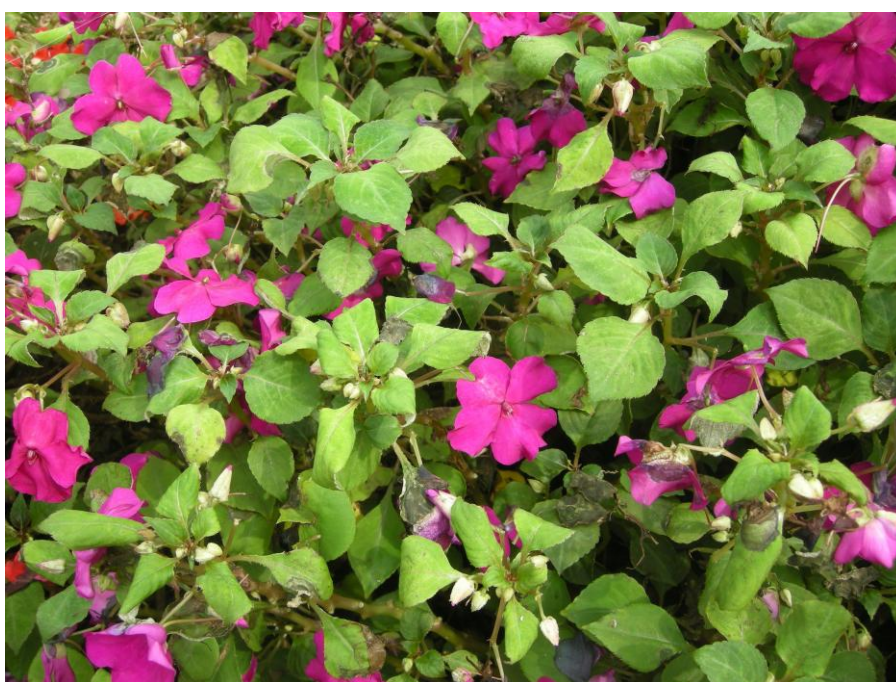
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Impatiens Downy Mildew In The Home Garden

A new disease is threatening garden impatiens. Downy mildew, caused by the fungus-like pathogen *Plasmopara obducens*, begins as a subtle leaf yellowing. These symptoms are followed by leaves flagging or curling downward, sometimes giving the appearance that the plants need to be watered. If infected when young, plants will be stunted. Under humid conditions, you will see a white coating on the undersides of some leaves. Turn over any yellowed or downward curled leaves to look for the white coating of fungus spores: it may be difficult to find. Impatiens with downy mildew will gradually drop their flowers and leaves; eventually even the stems will collapse.



Early symptoms of downy mildew on impatiens; leaf yellowing and curl.



White coating of downy mildew spores on the undersides of infected leaves.

This downy mildew affects *Impatiens walleriana*, the standard bedding plant, as well as double-flowered impatiens, mini-impatiens, and Fusion® and Butterfly® impatiens. Although balsam impatiens (*I. balsamina*) are susceptible, the symptoms are largely limited to yellow leaf spots. New Guinea impatiens, fortunately, are not affected by this disease and no other bedding plants are hosts of this downy mildew. Different downy mildew diseases occur on other plants, but these are fairly host-specific. So you don't need to worry about this downy mildew of impatiens spreading to your sunflowers or your roses, for example.

Impatiens plants can become infected by downy mildew either by spores that overwintered in the garden soil or by spores spread from nearby infected plants via water splash (short distances) or wind (greater distances). Since the pathogen can overwinter in the soil, garden impatiens should not be planted in flower beds where the disease has been previously found. Impatiens plants planted in beds with no known history of the disease or planted in containers are not risk free because they can be infected by airborne spores from infected plants elsewhere. Consider New Guinea impatiens, begonias, coleus, torenia, or alternative plants. See <http://ccesuffolk.org/agriculture/floriculture> for some suggestions for other shade plants. This disease thrives in moist or humid conditions. New infections will occur when there is a thin film of moisture on leaf surfaces for at least a few hours. Rainy periods will encourage disease development and spread, as will overhead irrigation (especially at night), crowded plant spacing or shade. Plants with limited exposure to these conditions will have a better chance at remaining healthy, but may not be completely free of risk.

Once an impatiens plant is infected it will not recover, though how fast the disease damages your plants will depend on environmental conditions. Fungicides labeled for downy mildew management that are available to homeowners might in theory offer some short-term protection of healthy plants, but would need frequent reapplication (as often as every 7 days) and still might not effectively protect plants. Gardeners are encouraged to use alternative plants in high-risk areas.

If impatiens are planted in your garden, watch for symptoms of yellowing foliage or stunting and look for the diagnostic white sporulation on the underside of leaves. If found, entirely remove and dispose of infected plants and replace with another bedding plant.



Early symptoms of downy mildew on impatiens.



Impatiens showing symptoms of leaf drop.

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This fact sheet is available online at: <http://ccesuffolk.org/agriculture/floriculture>



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