

### Integrated Pest Management for Commercial Horticulture

[extension.umd.edu/ipm](http://extension.umd.edu/ipm)

PEST ALERT - 2012

#### Introduction

Severe outbreaks of downy mildew in garden impatiens (*Impatiens walleriana*) were reported last fall on landscape plantings in Europe as well as in the US (Northeast, Midwest). In February, the disease was reported in Florida landscapes and nurseries. In Maryland, the Plant Diagnostic Lab received its first infected sample in early June 2012. If you grow garden impatiens, it is important to be on the lookout for this disease. All varieties of garden impatiens (seed or cutting propagated) are susceptible to downy mildew. New Guinea impatiens (*Impatiens x hawkeri*) are reported to be tolerant of the disease. SunPatiens, a hybrid impatiens developed by Sakata Seeds, is reported to be resistant. The impatiens downy mildew pathogen (*Plasmopara obducens*) does not infect any hosts other than impatiens.

#### Symptoms

Symptoms of this downy mildew can be very subtle – slight chlorosis (yellowing) or mottling of leaves, leaf edges curling downward, and plant stunting are early symptoms, followed by leaf drop. Look for the white to grayish white fuzzy growth on the undersides of the yellow or curled leaves as the key sign of downy mildew infection. If you are in doubt, send a sample to the UMD Plant Diagnostic Lab for diagnosis.



**Slight mottle and leaf curl symptoms of downy mildew on impatiens**  
Photo: Karen Rane, UMD



**Underside of leaf, note white fuzzy sporulation**  
Photo: Karen Rane, UMD

#### Management

Early detection and sanitation are critical parts of a management plan – inspect all new shipments of impatiens for downy mildew symptoms. Discard any symptomatic plants promptly, as well as nearby plants (put plants in plastic bags right at the bench, before carrying them out of the greenhouse, to keep from spreading the spores through the facility). Do not compost diseased plants. Fungicides effective in controlling downy mildew in impatiens include mancozeb (a protectant), and systemics such as mefenoxam (Subdue Maxx), dimethomorph (Stature), fosetyl al (Aliette), fluopicolide (Adorn, must be tank-mixed with another downy mildew product

according to label), and the combination product Pageant (pyraclostrobin+ boscalid). Make sure to alternate products with different modes of action (Group or FRAC codes). Ball Horticulture has released a fact sheet on impatiens downy mildew with detailed information on the disease cycle and management, which can be found at the following link: <http://www.ballhort.com/pdf/ImpatiensDownyMildewGrowerGuidelines.pdf>

Impatiens downy mildew is not a disease that is easily controlled with fungicides in the landscape – once plants are infected, sprays are useless. There are several fungicides that can protect plants from downy mildew infection, but they must be applied preventively. Sanitation is the best option for control since this disease has the potential to overwinter in infected plant debris in the soil.



**Landscape planting with impatiens dying out due to downy mildew**  
Photo: David Clement, HGIC



**New seedlings coming up in the landscape became infected with downy mildew**  
Photo: David Clement, HGIC

## **Downy Mildew on Impatiens**

**by**

Karen K. Rane, Director of the UMD Plant Diagnostic Clinic,  
University of Maryland Extension, College Park, MD, [rane@umd.edu](mailto:rane@umd.edu)

---

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by University of Maryland Extension is implied.

Read labels carefully before applying any pesticides.

---

University of Maryland Extension programs are open to all citizens without regard to race, color, gender, disability, religion, age, sexual orientation, marital or parental status, or national origin.