

Impatiens Downy Mildew in Home Gardens & Landscapes

Buy locally grown!



Impatiens downy mildew *Plasmopara obducens* is a new disease for home gardeners in Massachusetts. Impatiens downy mildew was first diagnosed on *Impatiens walleriana* in landscapes in Massachusetts in 2011. The disease was widespread in 2012.

WHAT DOES IMPATIENS DOWNY MILDEW LOOK LIKE?

- Symptoms on *Impatiens walleriana* typically start with a few leaves that appear yellow or off color (not to be confused with lack of fertilizer), and become completely yellow over time.
- A white, downy-like growth develops on the underside of leaves.
- Eventually the leaves and flowers drop, resulting in bare stems with only a few tiny, yellow leaves remaining. These stems can become soft and the plant dies.

WHICH PLANTS GET THIS DISEASE?

This disease **only** affects garden impatiens (*Impatiens walleriana*), including double impatiens and mini-impatiens. It reportedly also affects some native

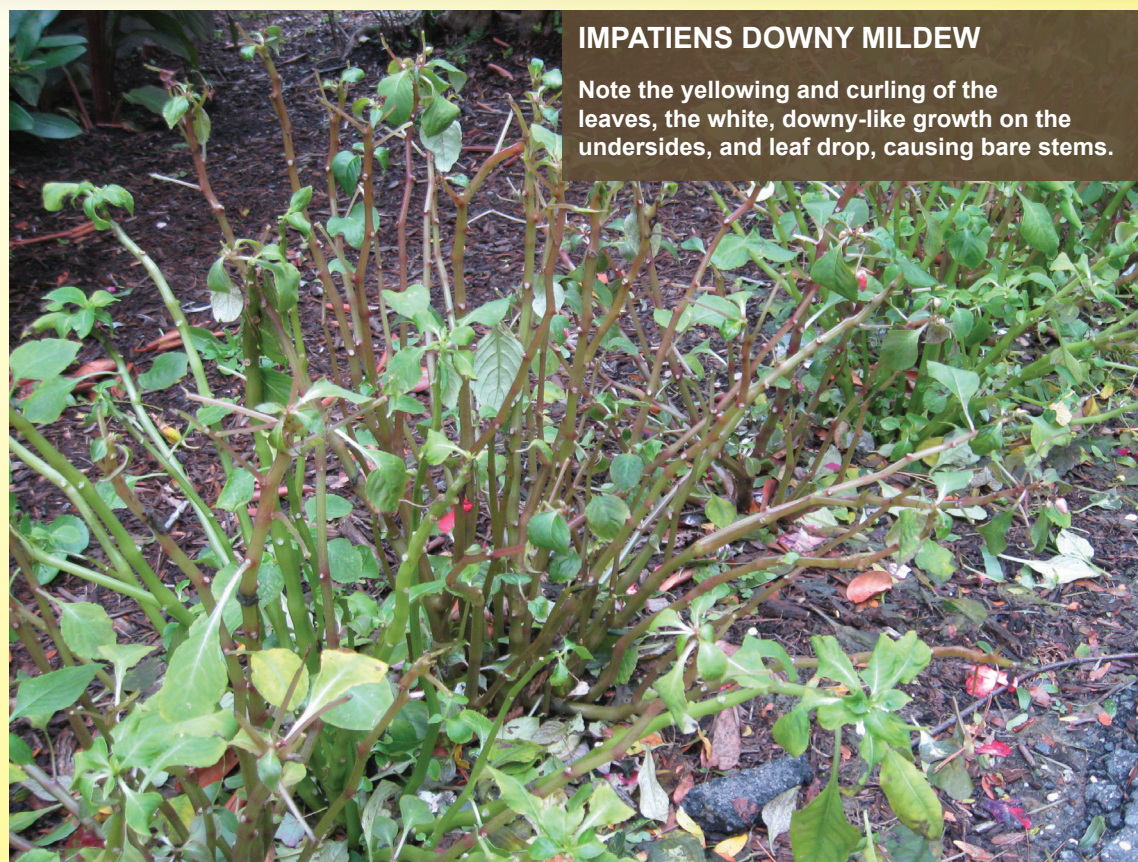
wild impatiens, *I. pallida* and *I. capensis*, known as jewelweeds. New Guinea impatiens (*Impatiens hawkeri*) including hybrids and all other bedding plants are **not affected**.

FAVORABLE ENVIRONMENTAL CONDITIONS

Wet foliage (rain, condensation), cool temperatures (especially at night), and moist air are ideal conditions for disease development.

Impatiens downy mildew tends to be worse in:

- Locations where leaves stay wet for extended periods of time (4 hours or longer).
- Very dense plantings—plants spaced close together.
- Gardens receiving overhead irrigation, because the foliage does not dry quickly.



IMPATIENS DOWNY MILDEW

Note the yellowing and curling of the leaves, the white, downy-like growth on the undersides, and leaf drop, causing bare stems.

HOW IT SPREADS

Impatiens downy mildew can be spread short distances by water splashing from infected plants and greater distances by windborne spores from infected plants.

Two types of spores are produced that can initiate disease infection:

- Short-lived (dispersal) spores produced in the white downy-like growth on the undersides of infected leaves. These spores will not overwinter but will spread the disease by blowing in wind currents.
- Resting (survival) spores produced inside infected stems and leaf petioles (part that attaches to the stem). Resting spores release into the soil from infected plant debris where they can survive and initiate new

infections on *Impatiens walleriana* planted into the same garden beds for many years.

Impatiens downy mildew can occur in beds with no history of the disease if wind-dispersed spores blow in from other locations.

CAN INFECTED PLANTS BE SAVED?

No. Once plants are infected they will not recover. Fungicide applications by home gardeners are not recommended.

WHAT TO DO WITH INFECTED PLANTS

Remove entire plants, roots, soil and debris, bag them and destroy. Do not compost or depend on fungicides. If left in the garden, there is a high risk that this disease will overwinter and infect impatiens in future years.

FUTURE PLANTINGS

Impatiens walleriana

replanted into beds with a history of impatiens downy mildew are at a higher risk of infection than *Impatiens walleriana* planted into beds with no history of the disease. This disease attacks only *Impatiens walleriana*; therefore, it is safe to plant other flowering or foliage plants in affected beds next season.

Alternative shade-loving plants can be safely planted: New Guinea impatiens (*Impatiens hawkeri*), all types of begonias, lobelia (upright and trailing) and torenia. Shade annual plants with colorful foliage include, caladium, begonias, coleus, hypoestes and iresine.

UMass
Extension

CENTER FOR AGRICULTURE

www.extension.umass.edu/landscape