

Downy Mildew of Impatiens in Home Gardens



Photo courtesy of University of Florida

BACKGROUND

Downy mildew of impatiens is a new disease for BC gardens. Caused by a fungus-like pathogen (*Plasmopara obducens*) it was first observed on garden impatiens (*Impatiens walleriana*) in the United Kingdom in 2002. Prior to that, it was identified as early as 1897 on wild impatiens (jewelweed) in Vermont. In 2011, there were outbreaks of this disease in many US states.

There are many different types of downy mildew and they tend to be host specific, so the downy mildew that affects garden impatiens will not spread to any other plants.

WHAT ARE THE HOST PLANTS?

Susceptible hosts include standard garden impatiens, double impatiens and mini-impatiens and any hybrids of *Impatiens walleriana*. Fortunately, New Guinea impatiens (*Impatiens hawkeri*) types are not susceptible to this disease nor are other shade loving bedding plants.

WHAT ARE THE SYMPTOMS?

Early symptoms include yellowing or yellow spotting of the leaves. This is accompanied by a downward cupping of the upper leaves which makes the plants look wilted. A fine white coating may also be visible on the underside of the leaves. Over time the flowers and leaves will drop, leaving bare stems with only a few small leaves at the top. Finally, the stems completely collapse and the plant dies.

ARE THERE WAYS TO PREVENT OR CONTROL DOWNY MILDEW?

- Once plants are infected, they will not recover.
- Infected plants should be completely removed (including leaf debris and roots), bagged and disposed of immediately. Do not compost diseased plant material. If infected plants are left in the garden or compost pile there is a high risk that the fungal spores will overwinter in the soil and affect future plantings.
- If you have had impatiens downy mildew in your garden, plant alternative “non-host” bedding plants for the next one to two growing seasons.

If you have not had impatiens downy mildew in your garden and choose to plant impatiens, the following preventative measures should be taken:

- Clean up all garden debris at the end of the previous season.
- When planting impatiens space plants appropriately so that leaf surfaces can dry quickly.
- Water deeply and less often, at soil level. Do not water in the evening and avoid overhead irrigation.
- Plant impatiens later in the spring, when temperatures increase and the chance of extended periods of rain decreases.

Note: there are no fungicides available to home gardeners that will control downy mildew on impatiens.

WHAT CAN I PLANT INSTEAD OF IMPATIENS?

Impatiens alternatives include begonias, coleus, New Guinea impatiens and many more colourful shady annuals. A perennial garden that includes shade loving hostas, brunnera, ferns in combination with annuals for splash of summer colour is also a great option.

See reverse for more alternatives.

Annuals for Shade or Part Shade

WAX BEGONIAS: (*Begonia x semperflorens-cultorum*) are best planted in partial shade. Choose from bronze or green-leaved varieties that bloom in shades of pink, red and white.

TUBEROUS BEGONIAS: (*Begonia x tuberhybrida*) produce large showy flowers in a variety of colours and forms. They prefer shade most of the day, but their delicate flowers need protection from wind. All of these begonias like moist, well-drained soil and are somewhat deer-resistant.

BROWALLIA: Browallia hybrids, or sapphire flower, have vibrant purple/blue flowers from early spring until fall frost. A great plant for cool or coastal gardens, given partial shade or an eastern exposure, it will consistently grow well.

COLEUS: A classic shade loving annual foliage plant. Available in an astonishing variety of colours often with spectacular variegation.

FUCHSIA: While most people think of them for containers or hanging baskets, upright fuchsia cultivars do very well planted in the landscape. Flowers can be solid or a bicolor with colour combinations varying from red, purple, pink, or white.

IPOMOEA: The sweet potatoes you use in full sun are also suitable for part shade. Darker foliage colours are best with more sun so in dense shade, the chartreuse options are best.

MIMULUS: Quick to flower and prefers a slightly cooler position in dappled shade, mimulus will flower from early spring through late summer.

NEW GUINEA IMPATIENS: A shade-tolerant plant known for intensely coloured flowers. The New guinea impatiens are easy growing, low maintenance flowering plants ideal for hanging baskets and window boxes, for edges and flower borders, and for massing beneath taller shrubs.

LOBELIA: Also called cardinal flower this plant prefers partial shade. Spreading varieties have blue, pink, or white flowers whereas upright varieties often have red or white flowers.

THUNBERGIA: Black-eyed Susan vine or clock vine, is a quick-growing vine that boasts many open-faced flowers. Great for baskets or containers, anywhere you need a trailing plant. Afternoon shade is fine as long as the area receives adequate morning light.

Summer Interest Perennials for Shade

HEUCHERA AND HEUCHERELLA: These two genera have seen an explosion of foliage colours introduced in recent years. Yellows, oranges, pinks, peaches, reds, and purples are all available. They look terrific massed and make stunning additions to mixed containers.

WOODLAND PHLOX: Offers violet blue flowers in part to full shade that are fragrant and hardy.

ASTILBE: Showy flowers top glossy, fern-like foliage on this great perennial for moist shade. These plants thrive in tubs or mixed containers and make excellent cut flowers.

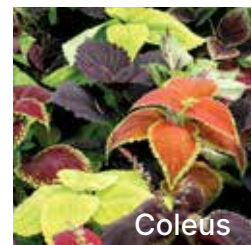
PULMONARIA: lungworts are among the most dependable and showy spring-blooming perennials and many types have attractive foliage throughout the season. The clusters of tiny, bell-shaped flowers are an added bonus from mid-April to late May. Once the delicate-looking blossoms fade, lungworts continue to display attractive foliage through summer until frost.

HOSTAS: Valued for colourful foliage and in some cases summer flowers too! These hardy, adaptable and easy to grow plants come in sizes from dwarf to giant, and will thrive in the shade. The variety of colours runs from greens to blues and also includes countless variegations with yellows, cream and white.

Other shade tolerant perennials to consider are bletilla or ground orchid, brunnera (the Jack Frost cultivar was the Perennial of the Year for 2012), and the shade-loving *Epimedium grandiflorum* or Bishop's hat which has dainty pink flowers and foliage that turns bronze in the fall.



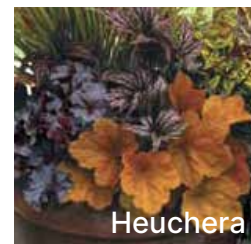
T. Begonia



Coleus



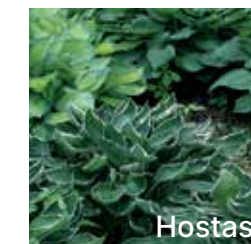
Fuchsia



Heuchera



Astilbe



Hostas