DOWNY MILDEW OF IMPATIENS SHOWING UP IN HOME GARDENS

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 undersurfaces 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. This downy mildew affects *Impatiens walleriana*, the standard bedding plant, as well as double-flowered impatiens, mini-impatiens, and Fusion® and Butterfly® impatiens. 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. Impatien plants planted in beds with no known history of the disease or planted in containers are not risk free because they can become infected by airborne spores from infected plants elsewhere. 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 of 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.

**Source:** This information was taken from Cornell Cooperative Extension of Suffolk County. See their factsheet online at [http://ccesuffolk.org/assets/Floriculture/Impatiens-DM/DM-landscape.pdf](http://ccesuffolk.org/assets/Floriculture/Impatiens-DM/DM-landscape.pdf) or call me for a copy of it.
STATE MASTER GARDENER CONFERENCE TO BE HELD IN SPRINGFIELD, MO

The Master Gardeners of Greene County are proud to host this year’s Missouri Master Gardener State Conference, September 20-22, in Springfield. We have what we think is an exciting, educational and very full schedule of events: a Friday social that includes a chef grilling vegetables in our demonstration garden, 22 wonderful gardens on tour Saturday, more than a dozen advanced training opportunities, a nationally-recognized speaker at the Saturday banquet, 28 workshop choices on Sunday, quality vendors and door prizes, and the state's newest Botanical Center to explore at no cost.

Whether you are looking to increase your knowledge, get ideas from gardens, or meet fellow gardeners, this conference is for you! The conference will begin with a social event on Friday at the state’s newest botanical center. You’ll have an opportunity to ride a tram through the many garden areas, wander through the Mizumoto Japanese Stroll Gardens, visit our native butterfly house, enjoy food and music in the beautiful Botanical Center designed to qualify for Silver Level LEED certification, and eat grilled food in the Master Gardener Demonstration Gardens.

Choose from 22 beautiful gardens into a choice of four tours for Saturday. These include gardens that could be on the cover of fine gardening magazine, shade gardens loaded with hostas and Japanese maples, sunny gardens bursting with color, water gardens full of Koi, a Xeriscape garden, specialty gardens of conifers or euphorbia, and novelty gardens of mirth, whimsy, and artwork. All tours are by motor coach. Lunch will be provided.

On Friday, you have a choice of eleven Advanced Training opportunities, including a field trip to the Baker Creek Heirloom Seed Company, the largest heirloom seed company in the world, and additional five Advanced Training selections on Saturday. These classes are approximately three hours long and all incorporate hands-on application.

Our keynote speaker refers to himself as a “Ragin’ Cajun” and a “garden geek.” Dr. F. Todd Lasseigne, president and CEO of the new Oklahoma Centennial Botanical Garden near Tulsa, is a horticulturist who has helped design two other botanical gardens. A plant enthusiast who has visited more than 350 gardens in five countries, he holds three degrees in horticulture, including a Ph.D. from North Carolina State University. He’s knowledgeable, fast-paced, very funny, and will conduct a workshop on Sunday morning also.

The Saturday evening social hour, banquet and workshops on Sunday morning will be held at the beautiful Ramada-Oasis Convention Center in Springfield. The workshops, which we refer to as our Potting Shed University, include 28 options ranging from Miniature Gardening and Designing with Dwarf Conifers to How to Build a Master Gardener-Driven Hotline and Gardening with Chickens in Your Backyard. Your greatest difficulty will be choosing what to attend! And of course no conference would be complete without exciting vendors, wonderful door prizes, and gift bags full of treasures.

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Hello gardeners! I hope your summer is going well. I can’t believe August is here and school will be starting soon. This summer has gone by so fast for me. My family and I have been very busy with ball-games, fishing on Hazel Creek lake, NEMO Fair and a vacation to beautiful southern Missouri right in the heart of the Ozark mountains.

At work numerous calls, emails and walk-ins have come in with various horticulture questions. Statewide there have been reports of trunk splitting and bark peeling. Some of this due to last summer’s drought. Trees lost moisture and the best way to put it is, they shrank. When they received adequate moisture in the fall the trunk expanded causing the tree to split and the bark to peel. Winter injury (also known as Southwest Injury) also causes trunks to split or crack. After the trees are damaged from either winter or drought, they become stressed. Stressed trees attract insects and borers. If you find borer holes, the borers are usually in your tree because it was already damaged. You might also find yellow bellied sapsucker holes. The sapsucker woodpecker tends to find trees that are already stressed. You cannot fix the damage caused by the environment (winter or drought). Some trees may never fully recover. They may hang on for another year or two, and then die. Or, they may not make it another six months or they could live another 5 years, there really is no way to know for sure. Leaves of stressed trees may start turning color, often yellow or red during the summer. In the future if you plant new trees, be sure to water them regularly during dry spells, and during the winter months protect them with a tree wrap. This is a light colored wrap that you can get at garden centers.

I’ve had a report of impatiens not doing well. See the cover article on impatiens. There have also been reports of knockout roses not doing well. I’m not sure what’s going on with them. Most of the ones I see look healthy and beautiful.

Grapes that were not sprayed this spring and early summer may have Black Rot. This is a fungal disease that attacks grapes. It can destroy entire clusters of fruit. You must spray for this disease if we are having a rainy season. I’ve seen solar injury on blackberry this summer. This is a heat stress disorder and causes white or tan drupelets in the berries. Keep plants watered and consider erecting a shade cloth over your berry patch if you can. I’ve seen many samples of Cedar-Apple Rust. If you did not spray for this fungal disease then your trees may have it. Yellow spots will appear on the leaves of the trees. It is too late now to spray.

I’ve seen some blossom end rot in tomatoes and peppers. Be sure to keep your plants watered consistently. Cucumber beetles and squash bugs are making their appearance now. I’ve seen them on pumpkin plants, cucumbers and squash. I used an organic spray made of several oils from herbs, and it didn’t seem to phase them a bit. I didn’t want to use Carbaryl (Sevin), but I might have to. I try to use all natural practices including companion planting, but the organic products just don’t seem to work on the cucumber beetles and squash bugs.

I’ve tried growing eggplant for years in the garden and every year flea beetles are a problem. This year I planted the eggplant in a large container (old cattle mineral container). They are doing very well and I have no flea beetles. They have set fruit and in a few weeks I will have six or more eggplants to harvest. I plan to raise eggplant in large containers from now on. We really like eggplant parmesan. I’ve had some really good sweet corn this summer from a grower I work with, and there seems to be a lot of it. It’s turning out to be a pretty good season for vegetables.

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Early bird registration, open to Master Gardeners and their spouses/partners, is $160 per person for the full conference. Early bird registration ends September 2nd and regular registration for the full conference is $180. Participants may register online or by mail. Master Gardeners who cannot attend the entire conference can register à la carte. All Conference, registration details and lodging information are available at http://missourimastergardener.org. General conference questions may be emailed to info@missourimastergardener.org. Registration specific questions may be emailed to registration@missourimastergardener.org. Additional information is also available by calling (417) 414-0363. Registration will open to the public on September 3rd.

Please consider joining us for a wonderful garden party!
AUGUST GARDENING TIPS

Ornamentals
- Continue spraying roses that are susceptible to black spot and other fungal diseases. Roses should receive no further nitrogen fertilizer after August 15th.
- Divide bearded iris now. Replant so tops of rhizomes are just above ground level.
- Prune to shape hedges for the last time this season.
- Evergreens can be planted or transplanted now to ensure good rooting before winter arrives. Water both the plant and the planting site several days before moving.
- Soak shrubs periodically during dry spells with enough water to moisten the soil to a depth of 8-10 inches.
- Once bagworms reach full size, insecticides are ineffective. Pruning off and burning large bags provides better control.
- Spray black locust trees to protect against damage by the locust borer.
- Watch Scotch and Austrian pines for Zimmerman pine moth damage. Yellowing or browning of branch tips and presence of pitch tubes near leaf whorls are indicative. Prune and destroy infected parts.
- Hummingbirds are migrating through gardens now.
- Monitor plants for spider mite activity. Hose these pests off with a forceful spray of water.
- Second generation pine needle scale crawlers may be present on Mugo pine now.

Vegetables
- Broccoli, cabbage, and cauliflower transplants should be set out now for the fall garden.
- Cure onions in a warm, dry place for 2 weeks before storing.
- Sow seeds of beans, beets, spinach, and turnips now for the fall garden. Spinach may germinate better if seeds are refrigerated for one week before planting.
- Begin planting lettuce and radishes for fall the last 2 weeks of August.
- Pinch the growing tips of gourds once adequate fruit set is achieved. This directs energy into ripening fruits, rather than vine production.

Fruit
- Prop up branches of fruit trees that are threatening to break under the weight of a heavy crop.
- Spray peach and other stone fruits now to protect against peach tree borers. Sprays will be necessary to protect late peaches from oriental fruit moth damage.
- Cultivate strawberries. Weed preventers can be applied immediately after fertilizing.
- Watch for fall webworm activity now.

Turfgrass
- Apply insecticides now for grub control on lawns being damaged by their activity.
- Lawns scheduled for renovation this fall should be killed with Roundup. Have soil tested to determine fertility needs.
- During the last week in August, dormant lawns should be soaked to encourage strong fall growth.

UPCOMING EVENTS

August 21-November 6: Master Gardener Training class in Kirksville. Wednesdays 1-4 p.m. at Adair County Extension Center. Classes will have garden tours. $150. Visit http://tinyurl.com/mzmqgxw for more information or a registration form, or call 660-665-9866 or email schutterjl@missouri.edu.

September 3-November 12: Master Gardener Training class in Mexico. Tuesdays 6-9 p.m. at the Audrain 4-H Center on Rt. D in Mexico. Call 573-581-3231 for more information and to register.

September 6: Clark County Lady Landowner Workshop, Kahoka. Morning sessions and afternoon garden tour. Lunch provided. Call the Clark County Extension Office to register at 660-727-3339.


December 6 & 7: Missouri Livestock Symposium, Kirksville. missourilivestock.com

- Missouri Botanical Garden -