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PRESS

Impatiens downy mildew alternatives display helps “little garden” have big impact

MSU Extension’s Grand Ideas Garden in Kent County plants seeds for the Smart Gardener with displays of impatiens downy mildew alternatives.

Rebecca Finneran, Michigan State University Extension

Since 2004, the Michigan State University Extension “Grand Ideas Garden” located at 775 Ball Ave. in Grand Rapids has become a site of inspiration and learning for thousands of visitors including hundreds of Michigan State University Extension Master Gardeners from around the state.

Planting seeds for the Smart Gardener, ideas for an outdoor classroom germinated shortly after the Kent County MSU Extension office was notified they would be moving to a new location in Grand Rapids. A group of enthusiastic Master Gardener volunteers went to work visioning garden concepts and fund raising for the site that now encompasses two small city lots. With some expert help, plans were drawn for a system of pathways and garden spaces to support multiple educational uses.

Downy mildew makes its mark

Now in its 10th season, the Grand Ideas Garden philosophy has been when something goes wrong, as it does in every back yard, “make lemonade out of lemons.” During August 2012, a large planting of impatiens (*Impatiens walleriana*) was infected with downy mildew (*Plasmopara obducens*) that quickly took over the bed. Knowing that the inoculum of the disease would carry on for some time, thought was given to a new palette of plants to replace the once colorful garden entrance. In an enthusiastic moment, it was decided to just try them all – that is, trial them all!

With the help of local garden centers and commercial greenhouses, dozens of cultivars including begonias, New Guinea impatiens, coleus, colorful tropical plants and ferns now make up the display that helps visitors get ideas for their own gardens. With the help of MSU Department of Horticulture’s Bridget Behe, signage featuring a QR code directs Grand Ideas Garden guests to use their smart phone to “vote” for their favorite plant.

Throughout the impatiens alternative display, plants are displayed in colorful container combinations as well as in the ground. Each grouping is designated by plant labels depicting the plant name and cultivar where appropriate.



The 2013 Downy Mildew Alternative display shows off a wide range of shade-tolerant plants.

Rebecca Finneran

Smart Gardening

Want to know more about impatiens downy mildew? Read [Impatiens downy mildew: A curse and opportunity for your garden](#) from Michigan State University Extension.



Rise and shine!

For many, plants seen in the downy mildew demonstration are familiar favorites such as wax begonias or polka dot plant. However, there are several that are rising to the top as shining stars with brilliant colors and flashy textures. Big-leaved begonias including one called 'Whopper' are topping the list for pure performance. Whether displayed in containers or in the ground, these texturally inspiring plants look good even when they aren't blooming, which is almost never. Blooms literally "drip" off of stout stems that are brilliant pink or red. Foliage can be tinged with bronze color or completely green. They have performed during heat and cool weather this summer.

Another dazzler is the 'Divine' impatiens. This New Guinea hybrid is stout and floriferous. The brilliant colored blooms are eye-catching and have kept producing all summer. Both are sure to be on my shopping list next spring!

Learn about Smart Gardening when you visit

The small garden also shows off thousands of different annuals, perennials, trees, shrubs and vines



A New Guinea hybrid, this impatiens cultivar is both colorful and compact.



The interactive display features signage with a QR code, allowing guests to "vote" for their favorite.



Containers are labeled for easy identification.

that are both native and exotic. It also encompasses a turf trial, mulch display, beautiful waterfall garden and container display. The plantings and methods of care are intended to help gardeners adopt earth-friendly, sustainable practices. Throughout the garden, interpretive signage and plant labels help visitors get current information about the latest plants, gardening tips and techniques. Visitors can enjoy the garden during daylight hours, seven days a week.

The MSU Extension Grand Ideas Garden will celebrate their 10th birthday next season. Some might say that if a candle was lit for every idea generated, the cake would surely collapse!



Big leaved begonias have hit the market that "drip" with color. This cultivar 'Whopper' has pink blooms with a slightly bronze leaf.

Tools to help the Smart Gardener understand weather and pest-related stresses in the landscape

Enviro-weather online tools help provide answers to statewide landscape problems.

Bob Bricault, Michigan State University Extension

A call came into the MSU Extension state garden hotline (888-678-3464) in late April 2012. A woman from Kent County was worried that a disease caused her Japanese maple to wilt overnight. When it was explained to her that this was likely the result of a hard spring frost the night before, she refused to believe it had gotten that cold. A quick check of weather conditions through the Michigan State University [Enviro-weather website](#) showed that local temperatures in Kent County dropped to 25 degrees twice over a three-day period. Sharing the recorded temperatures with the caller provided data that helped her realize the Japanese maple was damaged by freezing temperatures.

MSU Extension garden hotline volunteers and staff have found the Enviro-weather website (www.envioweather.msu.edu) a valuable tool for answering questions from homeowners across the state. Tools at this site include information on temperatures, rainfall, degree days and weather forecasts. You can compare weather conditions from previous years and even predict when an insect hatch will occur for different areas of the state. The usefulness of this management tool lies in the large number of weather stations across the state providing information on local conditions.

A Washtenaw County resident contacted MSU Extension two years ago to better understand the timing of pesticide controls for an insect killing the top leader of his pines. The culprit was a small beetle

called a white pine weevil. He wanted a date when he could spray each year to control this pest. Because pest development is based on temperatures, the date adult weevils begin to lay eggs on pines can vary from mid-March to mid-April. He was directed to the Enviro-weather website where he monitored the development of the weevil based on growing degree days (GDD). Local weather stations helped him monitor when the degree days reached 25,

which is the point when adult weevils are actively feeding and laying eggs on the pines. He now uses this site each year to monitor for the correct timing of control measures based on GDD and has achieved great results.

A small backyard fruit grower in Livingston County was able to follow forecast and temperature information on the Enviro-weather website to determine if he needed to use sprinklers through the night to protect his fruit trees from a late spring freeze in 2012.

These tools are useful to everyone and easily

relate to needs in the home landscape. Whether monitoring degree days to determine the hatch of a crawler stage of euonymus scale or evaluating temperature and rain conditions from across the state, the Enviro-weather site gives a means of precisely managing insect pests and diseases.

For a more in-depth look at the Enviro-weather site, see the article, "[Accessing growing degree days with Enviro-weather](#)" by Beth Bishop, Enviro-weather coordinator.



MSU's Enviro-weather at www.envioweather.msu.edu.

Tune up your compost pile by turning it over

Turning your compost pile adds heat, moisture and air to speed up decay and generate new soil.

Gretchen Voyle, Michigan State University Extension

Compost piles work at a snail's pace to break down, but there are ways to speed the process and get your black gold earlier. Those magic ingredients to speed decay involve heat, moisture and air. This was a wet growing season, especially when compared to the last several years, but the rains have let up for much of Michigan and compost piles are drying out. This is a very good time to flip and mix your compost. It's also a good time to check that bottom layer to see if some is ready for action somewhere else in your garden. This is more than just turning the pile.

Pull out anything that is too woody or coarse and save it for the very bottom of the heap. If parts of the pile are too wet, it can be mixed with the more-dry materials that were on the top or sides, or it is possible

to incorporate shredded paper to plump up the pile. Ink is now all soy-based, so the worry of ink with lead in it is no longer a concern. Just don't compost the shiny newspaper because it is coated with clay to give it that slippery appearance. Mix and add, and when finished, water the pile so it is as damp as a rung-out wash cloth or a squeezed-out sponge.

What's the buzz on pollination?

You won't want to miss this engaging webinar presentation by one of the country's leading pollination experts! Get the buzz on how to positively affect Michigan's native bee populations and help them thrive in your own backyard with Dr. [Rufus Isaacs](#) of Michigan State University. [View the webinar.](#)



Making a manure sandwich: Adding compost manure to garden beds

No, it's not what it sounds like. But this is a sandwich Smart Gardeners can make that garden beds will really enjoy.

Gretchen Voyle, Michigan State University Extension

In the fall when some of the frantic garden work is done, smart gardeners take some time to decide which flower, shrub or tree beds could use some attention. Check the paper for a local ad stating "Free manure – we load," and give them a call. This is a good time of year to haul manure because late fall rains have not soaked the manure, making it heavier, and rain has not saturated the soil so that after loading your truck, it sinks to the frame. The tow truck will cost more than buying the manure.

Rake your mulch out of your chosen bed. Besides removing the mulch, this loosens the bed after

spending the summer cementing together. Make sure the soil does not need gentle raking to loosen the soil. Then, add 2 to 3 inches of composted manure to the soil surface. Put the mulch back over the top. This is your manure sandwich. The soil on the bottom and the mulch above will keep the compost damp and make thousands of earthworms and other soil insects giddy with excitement. By spring, the pile will have settled as earthworms have turned it into your soil. A fresh infusion of slow-release nutrients will cheer plants and critters alike.

Have a manure sandwich, you'll like it.

Smart water gardening to prevent the spread of aquatic invasive species

State law prohibits and restricts possession of exotic aquatic species including popular water garden and aquarium plants and animals.

Jane Herbert and Linda Whitlock, Michigan State University Extension

Does your landscape contain a water garden or ornamental pond? Many water garden plants and animals have the potential to become invasive – outcompeting and destroying the rich diversity of native aquatic species.

When non-native plants or animals are introduced into waterways they can become invasive due to an absence of natural controls (predators, disease, climate, etc.) that would normally keep them in check. Exotic, non-native plants and animals have proven over and over again their ability to adapt to colder environments and water temperatures. These non-native invaders of our waterways are called aquatic invasive species (AIS). They not only negatively impact the aquatic environment, but they create negative recreational and economic impacts for individuals, businesses and communities. The cost of trying to control these aquatic invasive species in the United States is more than \$100 billion per year, approximately \$1,100 per household according to the national Habitattitude campaign (www.pijac.org/habitattitude).

Habitattitude encourages enjoyment of your water features **and** protection of natural waterways by offering responsible solutions to the disposal of dead, dying or unwanted aquatic plants and animals. If you are a successful water gardener, you know that plants can grow so successfully that they take over your pond. When autumn arrives, freezing temperatures may turn water garden plants unsightly. **Do not release** these plants and animals into the environment where they may become AIS.

Safe and proper disposal of plants and animals that you've purchased at a garden center early in the summer and nurtured all summer can be emotionally difficult. Caution and careful thought are needed in deciding what to do with unwanted plant and animal species. Releasing any aquatic organism into the environment is **not** an accepted practice and may even be punishable by law.



European frogbit is a popular water gardening plant that appears on Michigan's prohibited species list.

What can water gardeners do to help prevent the spread of AIS? For starters, find out if a plant or animal is native to Michigan when deciding which to purchase. Never assume a plant or animal is harmless or benign. Understand that retail names and descriptions of plants and animals can be misleading. Disposal options include:

- Contacting retailer for proper handling advice or for possible returns.
- Giving or trading with a water gardener.
- Donating to a local aquarium society, school or aquatic business.
- Sealing aquatic plants in plastic bags and disposing in trash to be landfilled.
- Contacting veterinarian or pet retailer for guidance about humane disposal of animals.

Smart Gardening

DO NOT RELEASE water garden animals and plants into the outdoor environment, even if they appear to be dead.

Habitattitude also offers tips for thoughtful planning of your water feature to avoid stress, heartache and the spread of AIS. Before purchasing non-native plants and animals, know which aquatic species are prohibited and restricted according to Part 413 of Michigan's Natural Resources and Environmental Protection Act 451 of 1994 (<http://1.usa.gov/13061uQ>). It is illegal to be in possession of, sell, offer to sell or introduce into the environment

Giant hogweed not widely spread in Michigan

Giant hogweed in Michigan continues to get lots of attention from the press. Is there a reason to worry? Get the facts here:

- [Giant hogweed: Not widely spread in Michigan](#)
- [Giant Hogweed, YouTube video](#)



Stay up-to-date with resources and news for home gardeners by signing up at <http://bit.ly/MSUEDigestSignup> to receive MSUE Home Gardening Production Digests via email.

prohibited plants and animals and hefty fines may be incurred. Michigan's prohibited aquatic plant list includes popular water garden and aquaria plants such as European frogbit, fanwort, parrot's feather, yellow floating heart, water chestnut and others along with many fish and snails.

Although not on the Michigan prohibited aquatic plant list, there are two plants that are popular with water gardeners that are on the federal list of prohibited aquatic species: water hyacinth and water lettuce. As a result, care should be exercised when growing these water plants also.

Looking for more?

For more information on a wide variety of **smart gardening** topics, or to find out about smart gardening classes and events, visit www.migarden.msu.edu. Don't forget these smart gardening tips:

- Mow at the highest setting to promote deep roots, avoid grub damage and crowd out weeds.
Tipsheets: [Mow high](#), [mulch leaves](#), and [smart watering](#)
- Select native or well-adapted plants, trees and shrubs to simplify meeting the plant's needs.
Tipsheets: [Native plants](#), [lakefront plants](#), and [trees and shrubs](#)
- Don't guess, soil test to ensure an effective balance of nutrients.
Tipsheets: [Soil test](#), [fertilizer basics](#), and [reducing phosphorus](#)

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