

WEED 'EM AND REAP

THE NEWSLETTER OF THE DELAWARE COUNTY MASTER GARDENER ASSOCIATION | JULY 2022

EXECUTIVE BOARD

Sarah Kreps

President
sjkreps14@gmail.com

Sylvia Finney

2nd Vice President
sylviafinney1@outlook.com

Paula Sampson

Secretary
psampson@bsu.edu

Dottie Kreps

Treasurer
dkreps1918@gmail.com

Julie Mason

Historian
m.julie.mason@gmail.com

Chris Allen

Member-at-Large
ccallen1@gmail.com

Debbie Cowan

Member-at-Large
debbiecowan14049@gmail.com

QUESTIONS?

Contact the helpful staff of the Delaware Co. Extension Office
100 W. Main Street, Room 202
Muncie, IN 47305-2879
Phone: 765.747.7732

NEWSLETTER SUBMITTALS

To submit an article for the upcoming newsletter or to report an error in the publication, please email kdkoger@gmail.com by the 15th of each month.

Upcoming Meeting



Join us **Wednesday, July 27** at Wasson Nursery for our next organization meeting! Wasson's Seasonal Color Manager, Marnie Tupling, will provide a brief presentation on plant propagation. Social time and light refreshments will be provided at 6:30 PM. The presentation will follow at 7. We look forward to seeing you there!

August is National Picnic Month!

August 7-13: National Farmers Market Week

August 3: National Watermelon Day

August 8: National Sneak Some Zucchini
on Your Neighbor's Porch Day

August 20: World Honey Bee Day

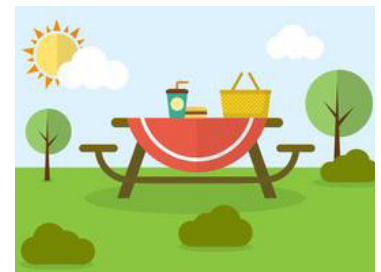



Image: Vecteezy

 Follow us on Facebook!
[@DelcoMGAssociation](https://www.facebook.com/DelcoMGAssociation)

Remember to report your volunteer and educational hours at
www.purdue.edu/hla/sites/master-gardener



Stay connected with the DCMGA by visiting delcomastergardener.org to learn more about upcoming activities, view photos from recent events, and read the latest edition of the newsletter.

It is the policy of the Purdue University Cooperative Extension Service that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regards to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue University is an Affirmative Action institution. This material may be available in alternative formats.

Monthly Gardener Checklist

August 2022

– written by Rosie Lerner, Extension
Consumer Horticulturist, Purdue University

HOME (Indoor plants and activities)

- Take cuttings from annual garden plants such as impatiens, coleus, geraniums and wax begonias to overwinter indoors. Root the cuttings in media such as moist vermiculite, perlite, peat moss or potting soil, rather than water.
- Order spring-flowering bulbs for fall planting.
- Cut flowers from the garden to bring a little color indoors, or dry for everlasting arrangements.

YARD (Lawns, woody ornamentals & fruits)

- Check trees and shrubs that have been planted in recent years for girdling damage by guy wires, burlap or twine.
- Don't fertilize woody plants now. It stimulates late growth that will not have time to harden off properly before winter.
- Hand-prune and destroy bagworms, fall webworms and tent caterpillars.
- Pears are best ripened off the tree, so do not wait for the fruit to turn yellowish on the tree. Harvest pears when color of fruit changes — usually from a dark green to a lighter green — and when the fruit is easily twisted and removed from the spur.
- Prune out and destroy the raspberry and blackberry canes that bore fruits this year. They will not produce fruit again next year, but they may harbor insect and disease organisms.
- If the weather turns dry, keep newly established plants well-watered. New plants should receive 1-1.5 inches of water every 7 to 10 days.
- Begin seeding new lawns or bare spots in established lawns from mid-August through mid-September.

GARDEN (Flower, vegetables, & small fruits)

- Keep the garden well-watered during dry weather and free of weeds, insects and disease..
- Complete fall garden planting by direct-seeding carrots, beets, kohlrabi, kale and snap beans early this month. Lettuce, spinach, radishes and green onions can be planted later in August and early September. Don't forget to thin seedlings to appropriate spacing as needed.
- Harvest onions after the tops yellow and fall, then cure them in a warm, dry, well-ventilated area. The necks should be free of moisture when fully cured in about a week's time.
- Harvest potatoes after the tops yellow and die. Potatoes also need to be cured before storage.
- Pick beans, tomatoes, peppers and squash often to encourage further production.
- Harvest watermelon when several factors indicate ripeness: the underside ground spot turns from whitish to creamy yellow; the tendril closest to the melon turns brown and shrivels; the rind loses its gloss and appears dull; and the melon produces a dull thud, rather than a ringing sound when thumped.
- Harvest sweet corn when kernels are plump and ooze a milky juice when punctured with your fingernail. If the liquid is watery, you're too early; if the kernels are doughy, you're too late.
- Keep faded flowers pinched off bedding plants to promote further flowering and improve plant appearance.

Treasurer's Report

Dottie Kreps, Treasurer



PURDUE EXTENSION
MASTER GARDENER PROGRAM

Date of Report: 7/15/22		01/05/22	01/31/22	02/28/22	03/31/22	04/30/22	05/31/22	06/30/22	Total
Balance Brought Forward		\$15,119.16	\$15,129.16	\$15,129.29	\$15,129.41	\$15,029.54	\$14,892.95	\$19,690.94	
Income		\$10.00	\$0.13	\$20.12	\$20.13	\$0.12	\$5,447.99	\$477.93	\$5,976.42
Expenses				\$20.00	\$120.00	\$136.71	\$650.00	\$330.00	\$1,256.71
Balance On Hand		\$15,129.16	\$15,129.29	\$15,129.41	\$15,029.54	\$14,892.95	\$19,690.94	\$19,838.87	
Income	Goals								
Annual Master Gardener Dues	\$600.00	\$10.00		\$20.00	\$10.00				\$40.00
Garden Walk	\$0.00								\$0.00
Growing Through Gardening	\$1,000.00								\$0.00
Kids Camp ~ Future MG									\$0.00
Kids Camp ~ Mini MG									\$0.00
Plant Sale	\$3,000.00						\$4,197.85	\$277.77	\$4,475.62
Walmart Volunteer Grant	\$1,000.00								\$0.00
Wassons Sponsorship~Take Out Gardens	\$500.00								\$0.00
Bank Interest			\$0.13	\$0.12	\$0.13	\$0.12	\$0.14	\$0.16	\$0.80
Donations /Grants					\$10.00		\$650.00		\$660.00
Miscellaneous & Clearing Acct							\$600.00	\$200.00	\$800.00
Total	\$6,100.00	\$10.00	\$0.13	\$20.12	\$20.13	\$0.12	\$5,447.99	\$477.93	\$5,976.42
Expenses	Budget								
Bucket Community Garden	\$0.00								\$0.00
Childrens Museum	\$200.00								\$0.00
Community Garden-Maring Hunt	\$0.00								\$0.00
Community Garden-Red Tail	\$100.00								\$0.00
Farm Fest	\$100.00				\$100.00	\$25.71			\$125.71
Farmers Market	\$200.00								\$0.00
Garden Fair	\$100.00						\$50.00	\$10.00	\$60.00
Garden Walk	\$0.00								\$0.00
Growing Through Gardening	\$1,000.00								\$0.00
Kids Camp ~ Future MG	\$650.00								\$0.00
Kids Camp ~ Mini MG	\$650.00								\$0.00
Plant Sale	\$600.00					\$100.00			\$100.00
Scholarship ~ MG Training	\$400.00								\$0.00
Scholarship ~ State Conference	\$275.00								\$0.00
Tree Planting Event	\$0.00								\$0.00
Washington Street Festival	\$150.00								\$0.00
New Events	\$200.00								\$0.00
Association Expenses	Budget								
Banquet	\$500.00								\$0.00
Board Expenses	\$100.00								\$0.00
Booklets	\$150.00								\$0.00
Donations & Sponsorships	\$150.00					\$11.00			\$11.00
Fall Potluck	\$150.00								\$0.00
Hospitality	\$100.00								\$0.00
Insurance	\$350.00								\$0.00
Marketing & Event Supplies	\$500.00								\$0.00
*Marketing ~ Take Out Gardens	\$500.00								\$0.00
Meeting Facilities & Speakers	\$800.00			\$20.00	\$20.00			\$120.00	\$160.00
Postage	\$100.00								\$0.00
Printing & Copies	\$50.00								\$0.00
Purdue Extension Expenses	\$150.00								\$0.00
Website Hosting & Maintenance	\$275.00								\$0.00
Miscellaneous & Clearing Acct							\$600.00	\$200.00	\$800.00
Total	\$8,500.00	\$0.00	\$0.00	\$20.00	\$120.00	\$136.71	\$650.00	\$330.00	\$1,256.71

Herb Society of Central Indiana
**August Meeting:
Salads in Pots**
Monday, August 1 | Indianapolis



There is something particularly lovely about using fresh greens and herbs in your salads. Join Herb Society members as they learn how to grow greens and herbs in containers to make great salads to enjoy throughout the spring, summer, and early fall. Society member Julie Iverson will talk about containers, soil, sun and the right plants to be a successful container salad gardener.

Herb society meetings are open to the public. The presentation begins at 6:30 pm. A brief business meeting will follow the presentation. Meetings are held at the John W. Hensel Government Center on 10701 N. College Avenue, Indianapolis.



Garfield Park Conservatory
**Honey Bee
Appreciation Day**
Wednesday, August 3 | Indianapolis



Come get the buzz on bees! Learn about these interesting insects and why they're so great for our gardens. Sample some honey and make a buzz-worthy craft.

The program begins at 2:00 pm. Cost is \$5. Registration is required and limited! Visit https://apm.activecommunities.com/indyparks/Activity_Search/nature-honey-bee-appreciation-day-garfield-conservatory/23229 to reserve your spot. Garfield Park Conservatory is located at 2505 Conservatory Drive, Indianapolis.

Indianapolis Bonsai Club
**August Meeting:
Deadwood**
Wednesday, August 3 | Indianapolis

Learn how to create, shape, and preserve dead wood on living bonsai trees with the Japanese Jin and Shari techniques at the Indianapolis Bonsai Club's August meeting. Meetings are held at the Garfield Park Conservatory, 2505 Conservatory Dr, Indianapolis. Meetings are open to members and begin at 7:00 pm. Learn more at indybonsai.org.



Indianapolis Hosta Society
**August Meeting:
Redbuds**
Monday, August 8 | Indianapolis

Join Chad Franer, Director of Horticulture at Newfields, for a presentation on redbuds. Chad has been a part of Newfield's horticulture staff since 1998. His responsibility includes the development, management, and maintenance of all aspects of the 52-acre museum campus.

All are welcome to attend. Meetings are held at the Holliday Park Nature Center, 6363 Spring Mill Road, Indianapolis.



Garfield Park Conservatory
Gather in the Garden
Saturday, August 27 | Indianapolis

Join the Garfield Park naturalist as she leads visitors through various tasks of caring for the Conservatory's raised bed gardens. Participants will learn about seasonal garden care and maintenance through this hands-on program. Children are welcome to join in on the gardening fun and or make a craft to take home. Come ready to work and learn! This program is drop-in, so no registration is required. All ages are welcome.

Garfield Park Conservatory is located at 2505 Conservatory Drive, Indianapolis.

Red-tail Land Conservancy's
Volunteer Workday
Sat., September 24 | Munsee Woods

Join the Red-tail Land Conservancy at Munsee Woods from 10:00 AM to 12:00 PM to eradicate invasive Asian bush honeysuckle. Attendees are encouraged to wear a long sleeve shirt, pants, and sturdy work shoes. Disposable gloves and tools will be provided.

Munsee Woods is located at 5701 S C.R. 475 E., Muncie. Direct questions to (765) 288-2587 or info@fortheland.org.



Indiana State Fair
Fun at the Speed of Summer
"Celebrating Indiana's Automotive Excellence"

July 29 - August 21, 2022
closed Mondays and Tuesdays



Indiana Native Plant Society's
Annual Conference
Saturday, October 22 | Carmel



photo: INPS

Mark your calendars for the 2022 Annual Conference, which will take place on Saturday, October 22 at the 502 Event Center in Carmel, Indiana. The annual conference features a keynote lecture, presentations by professional ecologists, botanists, and gardeners, lunch, and the INPS's annual business meeting. Attendees will also have the opportunity to visit the booths of several vendors and non-profit organizations, purchase garden books, and connect with other gardeners from across the state.

Visit the INPS website, indiananativeplants.org, for more information and to learn how to register.

Rinard Orchid Greenhouse
BSU Welcome Weekend
Saturday, August 20

The greenhouse will be hosting an open house from 10:00 AM to 3:00 PM for new and returning students, families, and community members. Guided presentations on tropical plants will be given throughout the day.



Hancock Co. Master Gardener Association
Tour of Newfield Gardens
Thursday, August 4 | Indianapolis

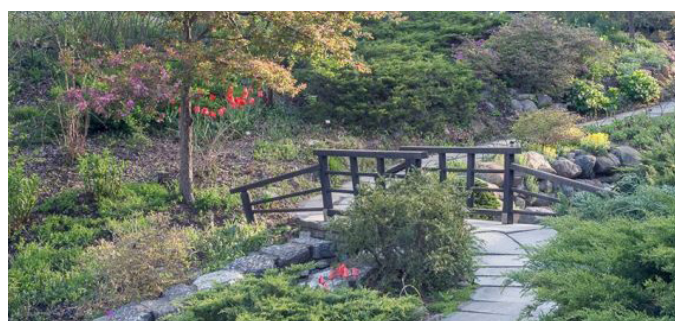


photo: Newfields

Join the Hancock County Master Gardeners for a tour of Newfields on Thursday, August 4. Located along banks of the White River the 152-acre campus is the home of the Indianapolis Museum of Art, Lilly House, and the Virginia B. Fairbanks Art & Nature Park. Attendees will have the opportunity to partake in a guided tour of the lush and dynamic museum grounds, including the Dickinson Four Seasons Garden, Rapp Ravine Garden, and the R.D. Wood Formal Garden.

Attendees will need to purchase tickets to the museum to participate in this event. Simply visit <https://discovernewfields.org/Checkout>. Click on the 'General Admission' option, select the appropriate date (8/4/22) and time, and proceed to checkout. Admission fees will be waived to the museum since this event coincides with Newfields' free First Thursday promotion.

The 1.5 hour tour will begin at 6:15 pm. Meet the tour guide, Darlene Trusty, at the garden entrance.

Newfields is located at 4000 N. Michigan Road, Indianapolis. Call the Purdue Extension Hancock County office at 317-462-1113 with any questions.



Upcoming Events and Programs

Peach Celebration

Visit the orchard from August 1 through August 20 for various peach-themed treats in the café and farm store. Individuals may pre-order South Carolina Freestone peaches for pickup. Freestone peaches are a late-season variety that are known to be slightly larger, juicier, and easier to remove from the pit than other varieties. Half bushel is \$53.99; a peck is \$27.99.

Freeze and Can Corn

Learn how to freeze and corn – either as the whole cob or as kernels. Participants will be provided with some tasty recipes too! Classes are available August 4 (5:30-6:30 pm) and August 6 (9:30-10:30 am). Cost to participate is \$10 per person. Visit shop.indianapolisorchard.com to register.

Peach Canning Workshops

Learn how to easily can and preserve peaches, apricots, and nectarines in 10 simple steps. Classes are available August 6 (11 am - 12 pm) and August 11 (5:30 – 6:30 pm). Cost to participate is \$10 per person. Visit shop.indianapolisorchard.com to register.

Caramel Apple Festival

Join Tuttle Orchards on Saturday, September 10, 17, and 24 for a day filled with fall-themed event and activities. Family-friendly activities include u-pick apples in the orchard, a corn maze, hayride, and the Tractor Town Adventure Farm. Enjoy delicious caramel apple treats in the café and farm store. Admission is free, but a small fee may be charged for some activities.

Tuttle Orchards is located at 5717 N CR 300 West, Greenfield. Classes that do not meet the minimum requirement of 10 participants may be cancelled.

Indy Urban Acres \$1 Native Plant Sale Saturday, July 23 | Indianapolis

Take this opportunity to snag a great deal on nearly 125 varieties of native grasses, flowering perennials, and groundcovers! The plants are left over from the Indy Urban Acre (IUA) spring Plant Sale. IUA is offering these plants one more time to the public at a discounted price before throwing them in the compost bin.

The sale will be held at the IUA farm at 7700 E 21st Street, Indianapolis. Your purchase will directly benefit Indy Urban Acres and their mission to empower, educate, and provide equitable access to free, high-quality produce in the Indianapolis area.



Garfield Park Conservatory Salsa Garden Thursday, August 11 | Indianapolis



Did you know that in a small garden bed or a couple of containers, you can grow everything you need to make salsa? Come learn how to grow and care for the plants that go into making salsa and learn various ways to prepare it. You will get to make some salsa of your own to take home. Recipes and tips will also be provided. The program begins at 6:30 pm. Cost is \$5. Registration is required and limited! Visit <https://apm.activecommunities.com/indyparks/ActivitySearch/nature-evening-garden-series-salsa-gardens-garfield-con/23222> to reserve your spot.

Garfield Park Conservatory is located at 2505 Conservatory Drive, Indianapolis.

photo: Ugaoo / Shutterstock

2022 DCMGA Children Camps

"Eat The Rainbow"

It has been a busy summer for many Extension Master Gardeners. Over the past two months, the Delaware County Master Gardener Association has hosted six children camps at various locations throughout Delaware County. Through these camps we were able to interact with and teach over 140 children.

YMCA Summer Day Camps

Our first two camps were held at Westview Elementary and Grissom Elementary on Tuesday, June 7 and Wednesday, June 8 in partnership with the local YMCA. The Director of the YMCA Summer Day Camps, Kelsey Buck, said that the children had so much fun last year that she wanted the Extension Master Gardeners to return and teach this year.

Volunteers worked with kindergarteners through fifth-graders at each camp. The children learned about growing herbs. We brought over 15 types of herbs for the children to touch, smell, and taste. In addition, they learned how herbs have been used throughout history in various countries. Children were able to decorate pots, plant herbs, and take them home to grow. We also made a dip that was made from blending dried herbs.



Above: A child gets her picture taken.
Below Left: Children participate in a scavenger hunt within Maring-Hunt Public Library's community garden.
Below: A girl paints a terra cotta pot.



Mini-Master Gardener Camps

The annual Delaware County Mini-Master Gardener Camp was cancelled in 2020 due to the effects of the COVID-19 pandemic. In 2021, we went virtual offering a half-day Saturday workshop on Zoom. This year, we returned to an in-person format, but decided to host multiple half-day camps at various locations throughout the county. Our goal was to reach more children throughout the local communities by partnering with various organizations. We partnered with the Ross Community Center, Maring-Hunt Public Library, the Town of Yorktown, and Eaton Public Library.

The theme for the children camps was, "*Colors of the Garden: Planting, Growing, and Eating the Rainbow*". Camps were held on Wednesday, June 15 at the Ross Community Center, Saturday, June 25 at Maring-Hunt Public Library, Saturday, July 9 at Civic Green in Yorktown, and Saturday, July 16 at the Eaton Public Library.



The kids enjoyed learning about why it's important to think about planting different colors, how to read a seed packet when planting a garden, what colors attract pollinators, and how to eat fruits and vegetables from every color of the rainbow. Children were able to paint and plant pots, take home pumpkin seeds to plant, and partake in a nature walk scavenger hunt where they were asked to look for the colors of the rainbow in the plants that surrounded them. Students also

(continued on next page)



Top: Extension Master Gardeners look on as they help children plant colorful flowers in pots.
Above: Children hold plants and pose for a photo on lawn at Yorktown Civic Green.



collected leaves, twigs, flower petals, and grass clippings to make a sun catcher.

The last activity included “eating” the rainbow. Children learned the importance of eating a variety of foods and how various colored fruits and vegetables affect their health. Each camp attendee received a plate full of berries, peppers, watermelons, carrots, broccoli, and cauliflower. It was a delight to see the children’s reactions when they learned that watermelon can also be yellow and cauliflower also comes in hues of purple.

I want to personally thank Barb Medler for providing beautiful flowers each week for the campers to plant in their pots. I also want to thank the many volunteers who helped at each camp. Thank you to Sylvia Finney, Sarah Kreps, Sandy Kreps, Julie Mason, Karen Ford, Deanna Hines, Victoria Linssen, Chris Allen, Ted Williams, Laurie Lunsford, Andrea Long, Paula Sampson, Barb Rudicel, Joyce Baker, and Judy Turley. Without your help, the camps would not have been a success and a great time for the children.

Finally, I would like to thank the local Tri Kappa sorority for providing us with a \$650 grant to help pay for supplies and materials.

Extension Master Gardeners are encouraged to start brainstorming ideas for next year’s camps. We hope to reach more children and teach them the joy of gardening.

Respectfully,

Dottie Kreps, Chairperson

Did You Know?

The United States produces 70% of the world’s peppermint and spearmint supply, but you may be surprised to learn that Indiana is the 4th leading producer of mint in the U.S.

The “muck” soils of northwest Indiana, which are high in organic matter and loosely textured for good root growth, make it ideal for growing peppermint, native spearmint, and Scotch spearmint.

Most of Indiana’s crop is distilled to make mint oil to flavor products like gum, candy and dental products. The oil is intensely flavored and goes a long way — one pound of mint oil flavors approximately 40,000 sticks of gum!



Source: Purdue University College of Agriculture. Web. ag.purdue.edu/news/2022/06/indianas-in-mint-condition.html

KEEP HONEYLOCUST TREES FROM BECOMING A PEST NIGHTMARE

by Cliff Sadof | June 21, 2022
Purdue Landscape Report 22-09

Trees need to be tough to survive the abuse we put them through in cities. Often planted in parking lots and on streets, they are stressed by drought in the summer and de-icing salts in the winter. Honeylocust trees are a great choice for cities because in addition to their pleasing shape and fall color, they are remarkably tolerant to salt. Moreover, their thin canopy allows grass to grow and simplifies the cleanup of leaves in the fall. Despite these attributes, these trees are highly susceptible to a wide range of insect pests. Tree health and appearance can be maintained through careful planning and attentive management.

Active in May and June honeylocust plant bugs (HLPB) can distort and disfigure young, expanding leaves when they suck on leaf tissue. Although these insects can be found every year, they rarely cause enough damage to significantly thin tree canopies. As such, control is rarely needed. This is fortunate because effective products like foliar pyrethroids (bifenthrin, permethrin, etc.) and soil applied neonicotinoids (imidacloprid, dinotefuran) will kill beneficial insects that keep other pests under control.



photo: Fort Wayne Trees

With two generations a year (June and August), the mimosa webworm caterpillars will fold leaves and cover the canopy with brown, unsightly webs. Wandering caterpillars dangling on silk strands in late summer can be a nuisance on city streets. Defoliation can weaken the tree but is unlikely to kill it. Focus management efforts on the first generation to reduce the number present in the second generation. If few webs are present and within reach, it is possible to prune out injury. When webs are too numerous or out of reach insecticide may be needed to avoid unsightly injury. Foliar applications require the services of a professional with spray equipment that can reach the canopy. See the reference at the end of the article for a list of bio-rational products that can be used to protect trees without killing beneficial insects. In sites where foliar sprays are not possible, trees can be protected with injections of emamectin benzoate or soil applications of acephate.

Soft scale insects can threaten the health of honeylocust trees when they suck out plant sap and excrete copious amounts of liquid excrement (aka honeydew) on branches, leaves, and creating a sticky mess the ground below. When the honeydew gets covered with black sooty mold, the tree and the cars parked beneath them appear to be covered in soot. Water stress and heat generated by paved surfaces make trees in parking lots and streets especially susceptible to these pests. Control these pests by applying a foliar spray of an insect growth regulator, like pyriproxyfen, when the insects are in the crawling stage in late May. See the reference on scale insects at the end of the article for details.

Spider mites are not insects, but in the absence of predators can cause enough damage to defoliate trees in mid-summer. Mites live and feed on leaves by piercing leaf tissue and lapping up the liquid that bubbles up from the wounds. With multiple generations, they can grow from an egg to an egg laying female in about a week during the heat of the summer. Early season applications of broad-spectrum insecticides, like the neonicotinoids (imidacloprid, Spinosad) and pyrethroids often set the stage for mite problems. Although miticides are to reduce mite populations available (See reference at end of article), it is best to avoid the problem by using the tips described to reduce pesticide use against scale insects, mimosa webworms and honeylocust plant bugs.

Finally, when possible, avoid over planting honeylocust trees by planting them in small groups rather than lining entire streets. In this way, it is more difficult for pests to infest and spread between trees. ~

Source: www.purduelandscape.org/article/keep-honeylocust-trees-from-becoming-a-pest-nightmare/

Tour of Rinard Orchid Greenhouse

On Wednesday, June 22, twenty-five Extension Master Gardeners congregated at the recently completed Dr. Joe and Alice Rinard Orchid Greenhouse Expansion near Christy Woods on the Ball State University campus. Key features of the expansion project included an increased conservatory that will host tropical plants, a new education classroom with kitchen, and an inviting entry courtyard with a hand-hewn timber bench dedicated to former greenhouse curator, Cheryl LeBlanc. The education classroom, which can be reserved and used by the public, features exposed timber columns, handcrafted mosaics embedded within the polished concrete floor, wildlife silhouettes and other artwork created by local community members pinned to the walls, a beehive-shaped display shelf, a frog tank, box turtle enclosure, and beehive frame.

Erica Oliver, Environmental Education Program Coordinator, provided the group a brief overview of the Rinard Orchid collection and the indigenous orchids of Indiana. Following the presentation, Master Gardeners were able to take a self-guided tour of the facility. Light refreshments were enjoyed afterwards.



Orchids of Indiana Fast Facts

200 native orchids found in North America

43 orchid species are native to Indiana

13 native orchid species are considered at risk at the state or federal level

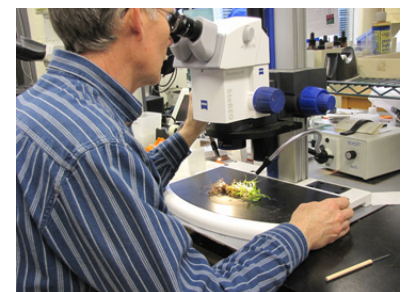
Most native orchids bloom between **June and July.**

Orchids can be found in many eco-communities including dry upland forests, wet-mesic floodplain forests, mesic prairies, swamps, bogs, and fens.

PURDUE PLANT & PEST DIAGNOSTIC LAB

Did you know that the Purdue Plant and Pest Diagnostic Lab (PPDL) can help gardeners identify plants, insects, and diseases? Physical samples or digital photos can be submitted to the lab for analysis. Test results are generally returned within 3 business days. A small \$11 processing fee for in-state residents (\$22 for out-of-state) is required and can be paid via check for each sample. To submit a physical specimen for diagnosis, complete and mail payment, the specimen, and the form (PPDL-1-W) found on the following page to:

Plant and Pest Diagnostic Lab
Purdue University
915 W State Street, LSPS 116
West Lafayette, IN 47907-2054



Digital photos may be submitted using the online form: ag.purdue.edu/department/btny/ppdl/submit-samples/digital-submission.html

Plant & Pest Diagnostic Laboratory

LSPS - Room 116, Purdue University
915 W. State St, West Lafayette, IN 47907-2054
765-494-7071 FAX: 765-494-3958
Email: ppdl-samples@purdue.edu
Website: <http://www.ppdl.purdue.edu>



(PPDL-1-W)

Office Use Only:
Date received: _____
Sample #: _____
Account #: _____

Submitter's Name _____ **Client, Check if same as submitter.**
Business _____ Client Name/Business _____
Address _____ Address _____
City _____ State _____ City _____ State _____
Zip _____ County _____ Zip _____ County _____
Phone _____ Phone _____
Email _____ Email _____

<p>Please include a check or money order (payable to Purdue University) \$11 per sample (\$22 out-of-state)</p> <p>WE DO NOT ACCEPT CREDIT CARDS DO NOT SEND CASH!</p>	<p>_____ Perform only routine diagnosis (\$11 in-state/\$22 out-of-state)</p> <p>_____ Please notify submitter if additional fees for advanced testing are needed</p> <p>_____ Perform additional advanced testing if necessary (up to \$50)</p>	<p>Email reply to: _____ Submitter _____ Client</p> <p>Surface mail to: _____ Submitter _____ Client</p> <p>Send invoice to: _____ Submitter _____ Client</p> <p>_____ Copy Extension Educator</p>
---	--	--

Information about Submitter/Client (please check one each for submitter & client)				Check information desired:	
Submitter	Client	Submitter	Client	_____ Problem identification	
_____	_____	_____	_____	_____ Specimen identification	
_____	_____	_____	_____	_____ Control recommendations	
_____	_____	_____	_____	_____ Other _____	
_____	_____	_____	_____		

Plant and Pest Information

Plant/Host: _____ **Cultivar/Variety:** _____ **Field ID:** _____

Location (choose one):			Degree of Damage (choose one):	Insect Problem? (choose one):
_____ In dwelling	_____ Greenhouse	_____ Field/Farm	_____ Heavy	_____ Damaging plant
_____ Tree/Shrub	_____ Nursery	_____ Aquatic	_____ Medium	_____ Biting/Stinging
_____ Orchard	_____ Animal/Human	_____ Other _____	_____ Light	_____ Infesting food
_____ Stored grain/Food product	_____ Flower/Vegetable Garden			_____ Nuisance

**Turf/Lawn and Golf Course samples use form PPDL-5-W

for Plant/Weed Identification Only

Plant type:	Plant size:	Flowers:	Fruits:	Plant age:
_____ Tree	_____ Deciduous	_____ Height	_____ Color	_____ Annual
_____ Shrub	_____ Evergreen	_____ Width	_____ Month(s)	_____ Perennial
_____ Groundcover	_____ Herbaceous	_____ Size	_____ Size	(# years _____)

Unique features (bark, leaves, odor, thorns, etc.): _____
Date planted: _____ % of plants affected: _____ Date first noticed problem: _____
Chemicals/fertilizers applied (past 2 years; include rates): _____

Describe the problem (Include symptoms, plant parts affected, pattern of occurrence, etc. Attach separate sheet if necessary)

Your tentative diagnosis/ID: _____

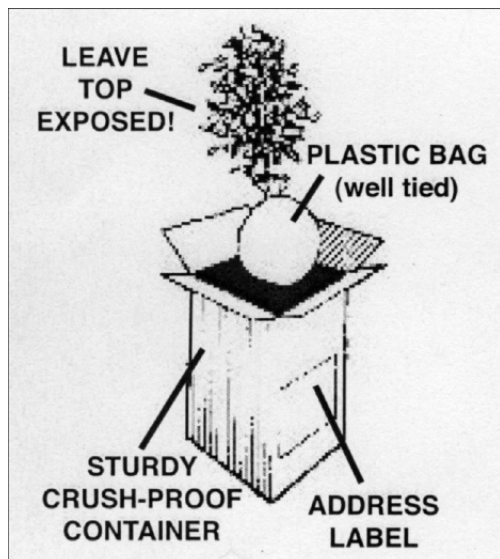
Print Form

USDA Permit # P526P-18-02771

Reset Form

Email Form

(If no access to printer)



FILLING OUT THE FORM

1. Complete the form on the reverse side to the best of your ability. Give complete information pertinent to the sample, including background information.
2. State the problem clearly and indicate specific information desired.
3. Photographs or digital images of the problem site are helpful.
4. Attach an additional sheet if further explanation is necessary.
5. Submit form in separate zip lock bag along with the specimen.

HOW TO COLLECT AND SHIP SPECIMENS

1. Collect fresh specimens. Send an ample amount of material, if available.
2. Ship in crush-proof container immediately after collecting. If holdover periods are encountered, keep specimen cool. **MAIL PACKAGES EARLY IN THE WEEK TO ARRIVE BY THURSDAY.**
3. Incomplete information or poorly selected specimens may result in an inaccurate diagnosis or inappropriate control recommendations. Badly damaged specimens are often unidentifiable and additional sample requests can cause delays.

SUBMITTING PLANT SPECIMENS FOR DISEASE/INJURY DIAGNOSIS

1. **HERBACEOUS PLANTS:** for general decline/dying of plants, send **WHOLE PLANTS**, showing **EARLY SYMPTOMS**, with roots and adjacent soil intact. **DIG UP PLANT CAREFULLY.** Send several plants. Bundle plants together and wrap roots in a plastic bag. Wrap the entire bundle of plants in newspaper and place in a crush-proof container for shipment. **DO NOT ADD WATER.**
2. **TREE WILTS:** collect branches 1/2 to 1 inch in diameter from branches which are actively wilting but **NOT** totally dead. Wrap in plastic to retain moisture. Collect a handful of feeder roots and place in a plastic bag.
3. **LEAVES/BRANCHES/FLESHY PARTS:** when localized infections such as cankers, leaf spots and rots are involved, send specimens representing early and moderate stages of disease. For cankers include healthy portions from above and below diseased area. Press leaves flat between heavy paper or cardboard. Wrap fleshy parts in dry paper.
4. **TURF:** Please use form [PPDL-5-W](#) for all turf samples. Instructions and new charges are listed on form.

SUBMITTING PLANT SPECIMENS FOR IDENTIFICATION

1. Include a 6-10 inch sample of the terminal (tip) portion of the stem with side buds, leaves and flowers in identifiable condition.
2. Place the sample flat between a layer or two of **DRY** newspaper, paper toweling or similar absorbent material. Try to prevent excessive folding of the leaves and place flowers so that you are looking into the center of the flower.
3. Pack the wrapped bundle in plastic, preferable with a piece of cardboard to keep the sample flat.
4. **NEVER PLACE ANY FRESH PLANT SAMPLE DIRECTLY IN PLASTIC!**
5. **NEVER ADD WATER TO THE SAMPLE.**
6. Shake excess water from **AQUATIC WEED SAMPLES** and place in plastic bag.
7. Wrap whole, uncut fruit specimens in paper, place in a strong box, and pack with additional paper to prevent crushing.
8. Package in sturdy crush-proof container and pack with additional paper to prevent shifting.

SUBMITTING INSECT SPECIMENS

Care should be taken to package insects so that they arrive unbroken. Be sure to separate and label the insects if two or more are included in the same package and provide appropriate information on each.

1. **TINY AND/OR SOFT-BODIED SPECIMENS:** such as aphids, mites, thrips, caterpillars, grubs, and spiders should be submitted in a small leakproof bottle or vial of 70 percent alcohol. Rubbing (isopropyl) alcohol is suitable and readily available. Do not submit insects in water, formaldehyde or without alcohol as they will readily ferment and decompose.
2. **HARD-BODIED SPECIMENS:** such as flies, grasshoppers, cockroaches, wasps butterflies and beetles can be submitted dry in a crush-proof container. Do not tape insects to paper or place them loose in envelopes.

QUESTIONS ABOUT THIS FORM

1. If you have any questions about this form or need to contact the lab please email us at ppdl-samples@purdue.edu.
2. If you have photos of your physical submission the above email address should also be used. Please state in your email that you are sending a physical sample.