THE PURDUE August 4, 2020 LANDSCAPE REPORT

In This Issue

- Purdue Landscape Report: Virtual
- Don't Touch Those Wires!
- Jolly Hollyhock Rust

Purdue Landscape Report: Virtual

(Kyle Daniel, daniel38@purdue.edu)

The Purdue Landscape Report Team began a new, free online series that will continue Wednesday (Aug. 5th) and follow the day after the newsletter every two weeks at noon (Eastern time zone). The topics and speakers will vary each session, so check out the newsletter every two weeks to find out what follows the next day. You'll have two ways to attend each session, which you can find below. During each session you'll be able to interact with the speakers by asking questions to the speakers on Zoom and Facebook Live.

We look forward to continuing this series and hope you will join us Wednesday at noon!

Tomorrow we'll be talking about the following:

Janna Beckerman will offer a challenge of 'Stump the Chump'
Cliff Sadof will be discussing the red-head flea beetle.
Lindsey Purcell will be covering tree inspections
Rosie Lerner will be presenting dwarf spruce reversions

Here is the link to participate via Zoom: https://purdueextension.zoom.us/j/91636649797

Here is the link to follow along on Facebook Live: https://www.facebook.com/PurdueLandscapeReport/

Don't Touch Those Wires!

(Lindsey Purcell, lapurcel@purdue.edu)

Homeowners can easily become injured – often fatally – while attempting to trim trees near overhead electrical wires. Though it is tempting to try to save money with this "do-it-yourself" approach, the potential for electrocution is not worth the risk. It is important to recognize when to call a professional arborist.

Issue: 20-13

Terrible accidents can happen when a homeowner uses any type of cutting tools and/or ladders when attempting to trim backyard trees and shrubs. Overhead wires are often unnoticed and is touched by directly or indirectly, causing injury or death.

Examples include:

- A homeowner climbed a ladder to trim a tree branch that was dropping leaves into his above ground swimming pool and causing a nuisance. A branch came in contact with the power line, shocking the man with a jolt of electricity and sending him into cardiac arrest. He fell 20 feet to the ground but was revived by medics at the scene.
- MATTHEWS, N.C. A man trimming trees in a neighborhood was shocked Wednesday morning after a limb fell on power lines, authorities said. Nearby resident Margie Owens knows the man and said he does odd jobs around the neighborhood. According to officials, after the limb fell from pruning, the tree continued to be energized by the power line, leaving the man stuck.
- A Charlotte County man was electrocuted trimming trees in a backyard. The victim was part of a landscaping crew and came in direct contact with a utility line.

Preventable Accidents

Tree limbs can conduct electricity. When trees grow near overhead wires, they can contact the wires and become energized. Trees and wires are dangerous, full of electrical power that can injure or kill humans. How do we know which lines are energized? WE DON'T! Assume all are carrying dangerous electrical current and should be avoided when working around them.

A common house switch carries 120 volts, but the electric flow is usually limited to 10, 15 or 20 amps. A common "house drop" (service wire) contains 240 volts and up to 20 amps or more. Given the right set of circumstances, even the shock a person gets from a common light switch can kill, but at the same time, it is easier to break electrical contact while standing inside a house.

If a person is climbing a ladder or is in the tree, it may be more difficult to break contact with the energized wire. This means that the service line over a typical yard could easily kill a person.

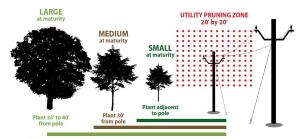


Trees growing into utility lines should be pruned by a qualified arborist.



These powerlines could be "energizing" the tree creating a potential shock hazard for anyone touching the tree. Notice the burning on the new growth.

RIGHT TREE RIGHT PLACE



maintain 20' clearance near power lines

Utility service providers can help select a tree which is compatible with nearby lines and reduce the need for excessive pruning to maintain safety and reliability.

Here are a few tips to avoid trees in wires:

 Look for power lines before pruning trees and large shrubs. If lines are anywhere near the tree within 10 ft. don't attempt any tree work. Tree care professionals have the training and equipment needed to perform these tasks

- safely.
- Never climb a tree in order to prune it. Even if the wires aren't currently touching the tree, remember that the tree's branches will shift once you begin climbing or removing limbs.
- Don't move ladders or long-handled pruning tools around the yard without first looking up. Always read and heed ladder-use safety labels.

Find a professional

Be sure to always hire an insured, tree care professional, preferably and ISA Certified Arborist with the experience, expertise, and equipment to safely take down or prune trees in wires. Require proof of liability insurance to protect yourself as well.

Another easy way to find a tree care service provider in your area is to use the "Locate Your Local Tree Care Industry Association Member Companies" program. For more information refer to the publication Trees and Utilities at the Purdue Education Store.

Find a certified arborist in your area by going to www.treesaregood.org

Jolly Hollyhock Rust

(Janna Beckerman, jbeckerm@purdue.edu)

Hollyhock (*Alcea spp.*), an anchor plant for the back of the cottage garden, bloom mid-summer with numerous flowers on tall spikes, providing beauty for us, and food for bees, hummingbirds and butterflies. The most common varieties are biennial, taking two years to complete their lifecycle, although some persist as short-lived perennials. Fortunately, they are prolific self-seeders.



Figure 1. Upper leaf surface, showing yellow-orange spots.



Figure 2. Underside, showing orange sporidia and brown teliospores.

Symptoms and Signs

DUKE ENERGY.



Figure 3. Skeletonization due to rust, Japanese beetles and other pests!

Unfortunately, to some unenlightened folk, they are susceptible to rust, a disease caused by the fungus, *Puccinia malvacearum*. In June, the initial symptoms of hollyhock rust are small, yelloworange spots ($\sim \frac{1}{16}$ to $\frac{1}{14}$ inches in diameter) on the upper leaf surface. Two weeks later, as the disease progresses, turning the leaf over reveals red-orange to brown pustules on the undersides of leaves directly beneath the yellow-orange spots appearing on the upper leaf surface. Early rust infections are often unnoticed until the outbreak becomes severe. Lesions may also develop on stems and buds. In many gardens, it is a competition between rust and Japanese beetle to see what skeletonizes the leaves first.

Disease Cycle

The hollyhock rust fungus overwinters on dead tissues infected with rust the previous year. From these overwintering sources, the rust fungus produces a great number of spores in the spring, infecting young seedlings nearby. Spores are also easily distributed by winds and rains. Warm and humid temperatures favor the growth of the fungus. Unlike many rust fungi, hollyhock rust is autoecious, meaning its entire life cycle occurs on just the hollyhock, or other susceptible members of the Malvaceae, including other garden annuals and perennials [flowering maple (Abutilon spp.); checkerblooms (Sidalcea spp.)(Fig. 4); rosemallow (Lavatera spp.)(Fig. 5), and common weeds, like cheeseweed (Malva spp.)].



Figure 4. Sidalcea with hollyhock rust.



Figure 5. Lavatera with hollyhock rust.

Management

Remove any cheeseweed that can serve as a source of inoculum. In the fall, remove all hollyhock debris to eliminate overwintering inoculum. Do not save or use seeds from infected plants. Inspect any volunteers or new hollyhock transplants for rust symptoms and rogue out infected individuals. If purchasing plants, some less susceptible varieties include the 'fig-leaf hollyhock (A. ficifolia) and hybrids of it, including Antwerp Mix', 'Happy Lights', 'Las Vegas', and 'Old Fashioned Mix'. The lemon yellow Russian hollyhock (A. rugosa) is also reported to be resistant, but in my experience, is similar to the fig-leaf hollyhocks, and is only less susceptible.

On of the biggest drivers of hollyhock rust is poor airflow and wet foliage. Avoid planting hollyhocks too densely to improve air circulation, reduce humidity, and promote quicker drying of foliage. Avoid overhead watering and fertilize only if needed. This disease can be easily prevented through the use of any FRAC Code 3 fungicide, examples of which include propiconazle, myclobutanil, or tebuconazole, and are available to formulations for homeowners and professionals.

Alternatively, you can simply plant hollyhocks in the back of the garden, let it get infected and live with it. Overtime, you may learn to enjoy those orange spots and the added biodiversity they bring to the flower bed.

It is the policy of the Purdue University that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue is an Affirmative Action Institution. This material may be available in alternative formats. 1-888-EXT-INFO Disclaimer: Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.

Purdue Landscape Report © Purdue University - www.purduelandscapereport.org
Editor: Kyle Daniel | Department of Horticulture and Landscape Architecture, 625 Agriculture Mall Dr., West Lafayette, IN 47907