



Vegetables: Diseases

Garden vegetables can be attacked by a wide range of fungi, bacteria, viruses, and nematodes. Since no single control measure is effective against all diseases caused by these microscopic pests, gardeners must rely on a well-balanced defense to keep diseases in check.

One of the first steps in setting up a disease control program is correct identification of disease problems—the earlier the better. With quick action, you can control leaf spots, blights and mildews within the same season. Other disease problems may not be treatable this season, but correct disease identification allows you to take preventive disease control measures next year.

Many garden vegetable diseases are easy to identify. Others may need the advice of someone more experienced, such as an Extension agent or plant pathologist. Disease is best identified on plants that are less than 50 percent damaged. Do not use dead plants.

If the Extension agent is unable to identify the disease, he or she can have a plant pathologist diagnose the diseased specimen for a fee of \$10.00. The pathologist at Mississippi State will identify the disease and send you a report on how to control and prevent the disease.

Additional information on diseases and nematodes that attack garden vegetables is available at your county Extension office.

Diseases take their toll in Mississippi gardens every year, but adequate planning and following recommended disease controls will keep losses to a minimum.



Powdery Mildew



Septoria Leaf Spot

INSIDE THIS ISSUE:

| | |
|--|---|
| Liming to Correct Soil Acidity | 2 |
| Garden Calendar | 3 |
| Summer Farm Tour | 4 |
| Basic Backyard Wildlife Habitat | 5 |
| Crosby Arboretum Programs and Events | 6 |
| U.S. FDA to Update Guidelines on Antibiotic Use in Animals | 7 |
| Events | 8 |

CONTACT INFORMATION

Forrest County
Phone: (601) 545-6083
Email: mtt52@msstate.edu

George County
Phone: (601) 947-4223
Email: h.steede@msstate.edu

Hancock County
Phone: (228) 467-5456
Email: ext-hancock@lists.msstate.edu

Harrison County
Phone: (228) 865-4227
Email: tim.ray@msstate.edu

Jackson County
Phone: (228) 769-3047
Email: sls534@msstate.edu

Lamar County
Phone: (601) 794-3910
Email: rosso@msstate.edu

Perry County
Phone: (601) 964-3668
Email: b.odum@msstate.edu

Pearl River County
Phone: (601) 403-2280
Email: eddie.smith@msstate.edu

Stone County
Phone: (601) 928-5286
Email: hbj4@msstate.edu



**Eddie Smith, Ph.D., C.A., Co. Coordinator & Extension Agent
MSU-ES Pearl River County
Phone: (601) 403-2280 E-mail: eddie.smith@msstate.edu**



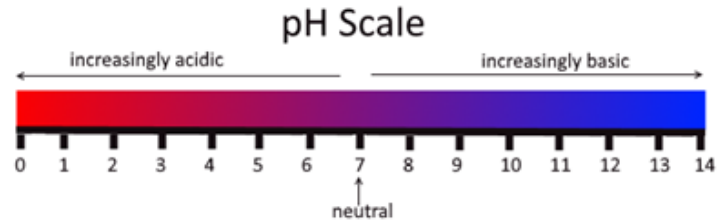
Tim Ray, C.A., Co. Coordinator & Extension Agent
MSU-ES Harrison County
 Phone: (228) 865-4227 E-mail: tim.ray@msstate.edu

Liming to Correct Soil Acidity

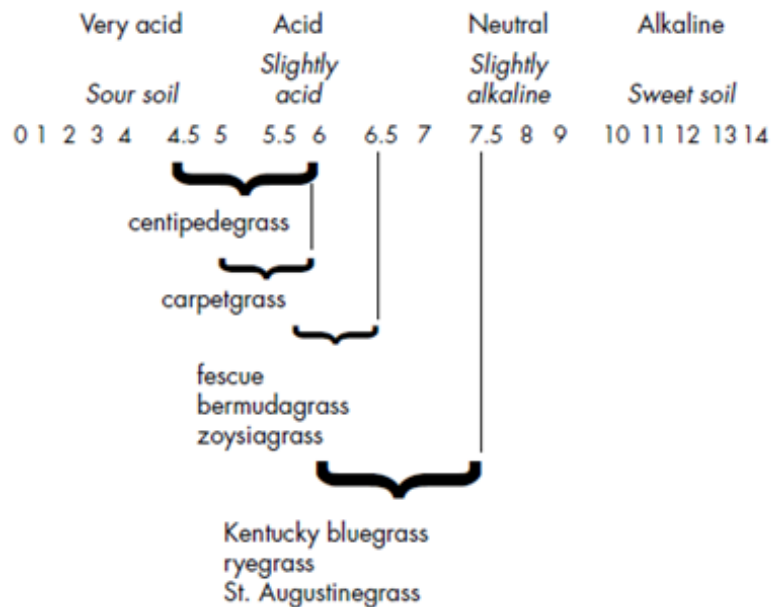
Many of the soil test results that come through my office recommend adding lime to increase the soil pH. Soil pH (potential hydrogen) is an indicator of acidity on a scale of 1-14 with 7 being neutral and above 7 being alkaline. Positively charged hydrogen ions (H⁺) may be added to the soil by decomposition of plant residues and organic matter, or because nitrification of ammonium occurs when fertilizer or manure are applied. This can result in an increase of acidity (lower pH) due to the increase of hydrogen ions. When soil pH is too low (or too high) some nutritional elements aren't available to the plant. Therefore, it's a good practice to maintain the proper soil pH.

When soil tests indicate the need for lime, be sure to follow the recommendations carefully. You can apply lime any time in the year, but, you should apply no more than can be dissolved and absorbed at a given time. For lawns, apply no more than 50 pounds per 1,000 square feet to actively growing turf; therefore, several applications may be necessary to apply the total amount recommended by the soil test report. Is there an ideal time to apply lime? Yes. In general, lime takes a few to several months to break down enough to change the pH so allow yourself plenty of time for this transition. So, if you get your garden soil tested in February or March, it's going to be a while before the plants can reap the benefits of a liming application unless it's for a fall garden. Likewise, lime your pasture this year for next years' forage crop.

Two common sources of lime are calcitic lime (ground agricultural lime containing calcium) and dolomitic lime (dolomite containing magnesium). Calcitic lime is the most widely used because of its easiness to apply and is beneficial in most situations. Dolomitic lime is used most often when there is a magnesium deficiency, which can occur in more sandy soils. Maintaining a proper pH for your lawn, garden, or pasture is more important than just adding fertilizer itself, since nutrient availability depends on it. A soil test will provide you with recommendations for liming application depending on your soil type, but remember it takes time for the liming application to work. For more information, contact your local Extension Service.



The pH scale is an indicator of soil acidity. The lower the number, the more acidic.



Acceptable pH ranges for turfgrass.

Garden Calendar: June

Planting

- Plant Crape Myrtles in bloom to be sure of color.
- Replace turf in deep shade with ground cover: Liriope, Ajuga, or Jasmine. Set out Caladiums in shady areas.
- Plant summer annuals: Ageratum, Cockscomb, Impatiens, Marigolds, Sunflowers, Four-o'clocks, and Periwinkle.
- Plant Tomatoes late this month to insure harvest late into fall. Cherry Tomatoes are a choice that are heat tolerant.
- Choose Daylilies now that they are in bloom for planting in your garden.
- Divide and replant Iris, cut leaves back to 6 inches after transplant.
- Plant Zinnias and Marigolds now for a second crop of flowers.
- Plant Snapbeans, Lima beans, Cucumbers, Eggplants, Peppers, Squash, and Tomato plants.
- Gladiolus planted now will give lovely fall blooms.



Fertilizing

- Fertilize Camellias with Azalea-Camellia fertilizer if not done earlier in the year.
- Fertilize Bermuda and Zosia grass. Fertilize Tomatoes, Cucumbers, and Zuccinis monthly with 5-10-10.
- Fertilize annuals and perennials.

Pest Control

- Mow lawn in the morning to reduce the chance of starting Brown Spot (fungus).
- Remove Zinnias with powdery mildew and replant.



Pruning

- Prune Oleander after blooming ends. Pinch Dahlias and Mums to assure a compact growth habit.
- Remove blackberry fruiting canes after harvest. Prune new canes to encourage side branching.
- Faded flowers should be removed from Daisy, Daylily, and other summer flowers.
- Prune out dead and damaged wood from trees and shrubs.

In Bloom

- Ageratum, Althea, Balloon Flower, Bee Balm, Begonia, Blackberry, Butterfly Weed, Coreopsis, Cornflower, Feverfew, Funkia, Gladiolus, Hollyhock, Japanese Iris, Lily, Nicotiana, Petunia, Phlox, Rose Scabiosa, Shasta Daisy, Sweet Pea, Verbena, Butterfly Bush, Golden-rain Tree, Hypericum, Mimosa, Stewartia, Sourwood, Vitex, Yucca, Jasmine, Crape Myrtle, Daylily, Geranium, Hibiscus, Hydrangea, Impatiens, Lantana, Morning Glory, Oleander, Plumbago, Portulaca, Purslane, Salvia, Veronica, Dusty Miller, Four O'clock, and Zinnia



summer



Farm Tour

June 7, 2023 at 9 a.m.

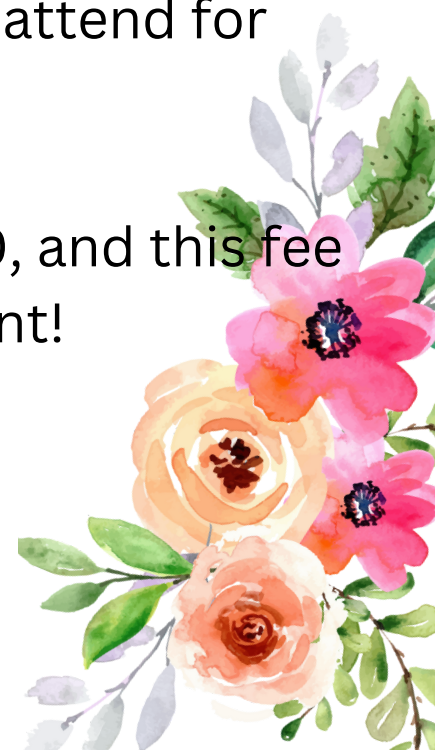
Flower Farm Cottage & Flower Growers of MS

Donna Yowell
1041 Frank Hall Road
Bolton, MS

First 25 MWA Members to Register attend for
FREE!

Registration for all other guests is \$20, and this fee
will be collected at the event!

Follow this QR code to the
online registration portal!





Tim Ray, C.A., Co. Coordinator & Extension Agent
MSU-ES Harrison County
 Phone: (228) 865-4227 E-mail: tim.ray@msstate.edu

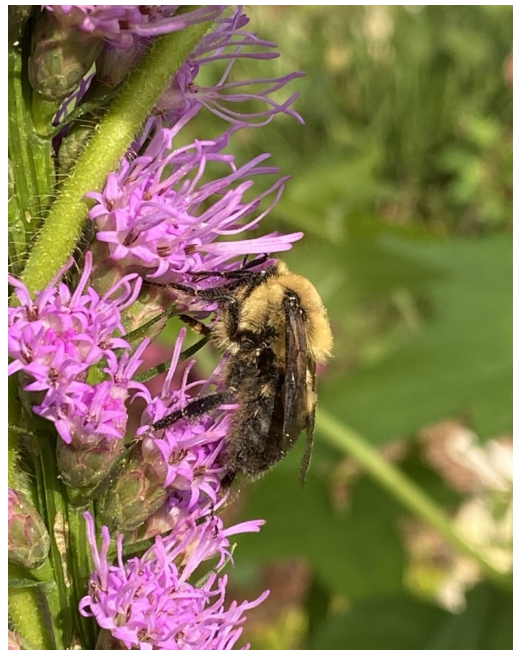
Basic Backyard Wildlife Habitat

Creating your backyard habitat can be very easy once you understand that wildlife, just like people, have three basic needs. These needs, food, water, and cover, promote use and provide the lifecycle needs of wildlife. A successful backyard habitat must include all three needs. It takes only a small investment of time to make your yard or garden “wildlife friendly” by adding these essentials.

You can provide food in two ways, artificial feeding - bird feeders, squirrel feeders, etc. and the preferred, natural vegetation - planting a variety of native trees, shrubs, grasses, and flowering plants that provide nuts, seeds, nectar, fruit, and other sources of nourishment. It provides a seasonal approach that is enjoyable from a gardening and recreational wildlife standpoint. This will encourage a wider range of creatures already used to using these plants. Using natural vegetation, compared to providing artificial feed, is less costly over time and is easier to maintain. Remember, including plants that provide foraging opportunities in the winter offers an almost year-round supply of food.

Providing water for both drinking and bathing is vital to wildlife. You can include it by having birdbaths, drippers, or small ponds. Garden ponds that are large enough to include water animals (fish, frogs, toads, salamanders, snails), as well as water plants, add beneficial elements that complement most backyard habitat settings. Surrounding the pond with plants adds to the attraction for wildlife. Be sure the water source is dependable year-round.

Nesting and shelter areas where wildlife are protected from the weather and predators are essential. Providing a diversity of plant material that includes evergreen and deciduous trees, vines, shrubs, herbaceous plants, grasses, and ground covers lets wildlife select the right areas for their feeding, nesting, and shelter needs. Ideal habitats include plants of various sizes, densities, and types. Evergreens are particularly valuable for winter cover. Grouping plants close to sources of food and water provides the cover wildlife need to feel safe while feeding or drinking. Of course, proper selection of plants includes those that provide food as well as good cover and nesting. Living plants are only one way to provide shelter and nesting areas. Using bat houses, bird houses, toad houses, and other artificial shelters is an easy way to meet this basic need.





Beaumont Horticultural Unit Annual Field Day

June 1, 2023
Registration 8:00 a.m.
Program 8:30-Noon



478 Hwy. 15N, Beaumont, MS 39423

Pre-registration is not required.



Crosby Arboretum Events

NATIVE POLLINATOR PLANT SALE!

June 2 & 3 (Fri / Sat), 10:00 a.m. to Noon
(Members enter at 9:00 a.m. each day)

This early summer sale features native pollinator plants for your yard and garden. Most are in small container sizes for quick planting. Enjoy browsing these hard-to-find species and enjoy talking with Pearl River County Master Gardeners and other plant professionals about how to choose the plants best suited for your property's unique environmental conditions. Free admission. Sale will be on the loop drive. Use our Service Entrance (across from Cycle Shack). **Call 601-799-2311 for more information.**

FAMILY WORKSHOP: Introducing Children to Plant Propagation & Planting Gardens for Pollinators

Friday, June 23, 10 a.m. to Noon

Children will learn about gardening for pollinators and other purposes and receive an introduction to propagating plants by cuttings and seeds in this fun hands-on workshop led by Pearl River County Extension Agent Dr. Eddie Smith. Participants will take home some seeds and cuttings. Reservations required. Limited to 25 persons. Children must be accompanied by parent or guardian. Adult members and children free. Non-member participants pay site admission (\$5 for adults and \$2 for children under 12). **Call 601-799-2311 to register.**



Brad Jones, Co. Coordinator & Extension Agent

MSU-ES Stone County

Phone: 601-928-5286

E-mail: hbj4@msstate.edu

U.S. FDA to Update Guidelines on Antibiotic Use in Animals

Beginning on June 11, 2023 the U.S. FDA will initiate its next step in fundamental changes for how medically important antibiotics are used in animals. This is being done in an effort to prevent antimicrobial resistance. The intent is to promote the judicious use of medically important antibiotics in an educated fashion.

For the past 7-9 years these changes have been being discussed and implemented. In 2017 Veterinary Feed Directives were initiated to require a valid veterinary / client relationship for antibiotics mixed in animal food or water.

This next step will now require that many, if not all, over the counter antibiotics for animal use will require veterinary oversight through either a prescription or Veterinary Feed Directive. This will apply to food animal production and companion animals.

As this is implemented it is highly encouraged for all animal owners to become more educated. If you don't currently have a relationship with a veterinarian as a client, now is the time to develop that.

This does not mean that products that you have been able to purchase over the counter will cease to be sold. The change is that they will now require veterinary oversight / involvement for purchase and use.

For more information please contact your local Extension office, reach out to a local veterinarian or check out this link from the American Association of Extension Veterinarians:

<http://www.extvets.org/resources.asp>



Events

PEARL RIVER COUNTY BEEKEEPING ASSOCIATION



Date: Saturday, June 3, 2023

**Location: MSU Pearl River County
Extension Service Office
204 Julia Street
Poplarville, MS 39470**

**Doors will open at 6:30 p.m. for a time
of friendship and fellowship.
The meeting will start promptly
at 7:00 p.m.**

**Our guest speaker is beekeeper, Carroll Hill. Carroll is a
retired Medical Doctor and will be presenting a
program on the use of honey in a holistic approach to
medicine.**

Mark your calendars and plan to attend!

Call 601-403-2280 to RSVP for meeting.

Online Private Applicator Certification Program

A private applicator is a certified applicator who uses or supervises the use of restricted-use pesticides to produce an agricultural commodity on his or her own land, leased land, or rented land or on the lands of his or her employer. Private applicators must be at least 18 years old.

In response to limited face-to-face training during the COVID-19 situation, the Mississippi Department of Agriculture–Bureau of Plant Industry has approved an online private applicator certification program developed by the MSU Extension Service. Persons needing to obtain or renew their private applicator certification can complete the online training (two video training modules and a competency exam) by using the following link: <http://extension.msstate.edu/content/online-private-applicator-certification-program>. The fee for training and testing is \$20, payable online by credit card, debit card, or eCheck.

MISSISSIPPI STATE UNIVERSITY™
EXTENSION

Private Applicator

TRAINING AND TESTING ONLINE

Watch the training modules, pass the exam, and receive your private applicator certification from MDAC Bureau of Plant Industry.

\$20 COST

Visit <http://msuext.ms/agmes>
or contact your local MSU Extension office for info on how to register.