



Soil Testing

As the end of our warm season lawn's growing season begins to wind down as the days become shorter and temperatures begin to drop, even though it doesn't really feel like it right now, and we look toward the dormant period for our lawn, now is a great time to take a soil test to determine what deficiencies our soil may have so we can make adjustments or plans for the upcoming year. Depending upon the species of turfgrass you are growing, lime may need to be applied to raise the pH of your soil. This is typically recommended to be done over the dormant period as it can take time to adjust the pH and this allows for the adjustment to be completed by the time the turf begins growing in the Spring.



When submitting a sample for testing, it is best to take multiple, small samples compiled together to get a representation of the area being tested rather than one large sample from the area. This helps even out any irregularities within the sample and represents the area better that may have small differences in soil type, drainage, or management practices. It is recommended that if there are major, known differences in any of these, then separate samples be submitted for those areas. The more samples you submit the more detailed you can make your management practices. This can be a good first step in helping identify possible differences in plants that are healthy and thriving vs those that may be struggling a bit.

A good sample depth is typically within the rootzone of the crop being grown (Ex. 3-5 inches for lawns). Submitting your test now gives you the ability to lay out and organize a plan for next year so you aren't caught off guard by a possibly early spring. You can get any needed fertilizer materials over the coming months as opposed to rushing to get them at the last minute once the growing season begins.

Please contact your local county Extension Agent if you would like assistance interpreting your soil test results.



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Herb Garden

Herbs are a unique group of plants valued for their flavors and fragrances. Many of the culinary herbs used in cooking and teas can be successfully grown in Mississippi gardens. Most herbs thrive in full sun, though a few will tolerate partial shade. They grow best in well-drained soil of moderate fertility with a pH between 6.0 and 7.0, and benefit from an organic mulch during the summer months.

In Mississippi, herbs may be annuals planted each year, biennials that are seeded in fall and bloom the following season, hardy perennials that return year after year, or tender perennials that may survive mild winters but often need protection from freezing or must be grown as annuals.

Many popular herbs can be started from seed, while perennial varieties are often propagated by stem cuttings, layering, or crown division. Nurseries and garden centers frequently sell annual and perennial herb plants, and both seeds and plants are widely available through mail-order companies.

Since herbs are typically used in small amounts, just a few plants of each type will usually be sufficient. However, if you want to harvest large quantities, such as basil for making pesto, it's best to plant them directly in the vegetable garden. Otherwise, a dedicated herb bed allows you to enjoy their beauty as well as their fragrance.

Herbs are relatively free of pests, which is helpful since few pesticides are labeled for use on them. If herbs are planted within the vegetable garden, care should be taken to protect them from pesticide applications meant for vegetables.

When transplanting, it's best to use container-grown herbs to avoid disturbing their roots. Some herbs, such as borage and dill, do not transplant well when bare-rooted. These are best direct-seeded into the garden or started in containers.

The distinctive scents and flavors of herbs come from oils within the plant tissues. Conditions such as heavy fertilization, too much moisture, or excessive shade reduce oil content, leading to weaker flavors. In most herbs, oil concentration is at its peak just before flowering begins.



Garden Calendar: September

Get Ready

- ♦ Make sure you've ordered daffodils and other spring bulbs for October planting.
- ♦ Build or buy compost bin in anticipation of autumn leaves.



Plant

- ♦ Plant cool season leafy root vegetables: Carrots, Beets, Turnips, Lettuce, and Spinach.
- ♦ Sow hardy annuals: Sweet Alyssum, Calendula, Annual Pinks, Snapdragon, and Sweet Peas.
- ♦ Sow rye grass seed in winter lawns.

Fertilize

- ♦ Stop feeding mums when the buds start showing color.
- ♦ Acidify Azaleas and Camelias.



Water

- ♦ Slow down watering of Azaleas and Hydrangea to allow them to harden against winter freezes.
- ♦ Spray foliage of Camelias in anticipation of their bloom.
- ♦ Water potted plants and hanging baskets frequently.

Prune

- ♦ Disbud Camellias, Dahlias, and Chrysanthemums to produce specimen blooms. It is generally not a good idea to prune this late in the year, because new growth will be more susceptible to winter freezes.

Miscellaneous

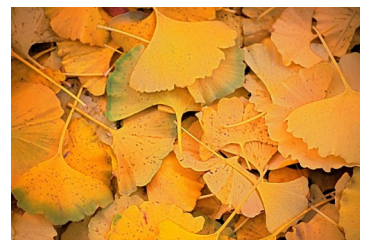
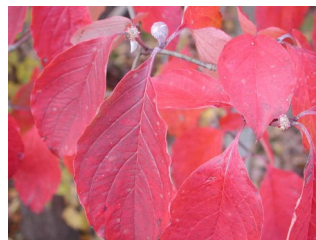
- ♦ Turn compost pile.
- ♦ Propagate by layering. Scrape underside of a strong branch, bend down to ground, cover with soil and weigh down with a brick. Water from time to time and end of branch will put out new growth; becoming a new plant.
- ♦ Pick flowers in bloom and dry for future arrangements. Bundle flowers together and hang upside down in a dry, sheltered area.
- ♦ Repot houseplants. Prune away damaged foliage and give a good dose of food.

In Bloom

- ♦ Canna, Cosmos, Copper Plant, Marigolds, Periwinkle, Plumbago, Crape Myrtle, Althea, Four-o'clocks, Salvia, Ageratum, Coleus, Lycoris, Aster, Begonia, Celosia, Chrysanthemum, Coral Vine, Ginger Lily, Gladiolus, Jacobina, Liriope, Morning Glory, Petunia, Phlox, Rattle Box, Rose, Spider Lily, Torenia, Vinca, White Zephyranthes Lily, Zinnia, Buddleia, Franklin Tree.

Fall Color

- ♦ Flowering Dogwood with showy, drooping red leaves.
- ♦ Ginkgo leaves turn pure yellow.





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Garden Myth-Busting: Separating Fact from Fiction

Gardeners are passionate people, and with passion comes advice. We take it and we give it. Over the years, a surprising number of “garden tips” have taken root, even when science tells us otherwise. While some of these myths are harmless, others can lead to wasted effort, poor plant health, or unnecessary costs. Let’s debunk a few of the most common myths so you can garden with confidence.

Myth #1: Gravel Improves Drainage in Pots

It seems logical that adding gravel at the bottom of a container would help water flow out more quickly. In reality, it has the opposite effect. Water tends to sit above the gravel in the saturated layer of soil, which actually keeps roots wetter for longer. Why? because water does not move easily from a layer of fine-textured material to a layer of coarse-textured material. The best way to ensure good drainage is to use a high-quality potting mix or add amendments such as perlite or pumice to improve the soil. Oh, and make sure your container has a hole or two for drainage at the bottom.

Myth #2: Watering in Full Sun Scorches Leaves

Many gardeners avoid watering midday for fear that droplets will act like magnifying glasses and burn the leaves. However, water droplets evaporate quickly in the sun, long before they could cause damage. The real reason to avoid watering during the heat of the day is efficiency, more water is lost to evaporation. After all, it’s fairly common around here to have an early afternoon shower interrupt a hot, sunny day ...and we welcome it! If you see your plants are in serious need of water at 2 PM, then water them, don’t wait until morning. But yes, for best results, water in the early morning when plants can absorb moisture before the day warms up and, we do want to avoid late-evening watering to help reduce the potential for disease pathogens that may develop on wet leaves left over night.

Myth #3: Newly Planted Trees Need to Be Staked Tightly

Staking a young tree too rigidly may seem protective, but it actually hinders development. Trees strengthen their trunks and root systems when they can sway naturally in the wind. This is why trees are wider at the base than further up the trunk. Unless a tree is in a very windy site or has a weak trunk, staking isn’t necessary. If you do stake, tie the trunk loosely to allow some flexibility and remove the supports within a year. Using an old bicycle innertube, burlap, canvas strapping, or other nonabrasive material is much better to use for support around a tree than wire or rope.

Myth #4: More Fertilizer Means Better Growth

It’s easy to believe that feeding plants more will result in faster, healthier growth. Unfortunately, over-fertilizing can “burn” roots, disrupt soil biology, and even wash excess nutrients into waterways. The amount of fertilizer plants need also depends on the type of plant. For example: different lawn grasses have different fertilizer requirements; adding too much nitrogen to tomatoes can result in more shoot growth and less tomatoes. Plants thrive best with slow, balanced feeding and, most importantly, healthy soil. Getting your soil tested is a good start to see how much you need to apply to your specific crop and apply only the recommended rate(s).

Myth #5: Epsom Salt will Change the Color of Hydrangeas

Epsom salt is magnesium sulfate that contains, obviously, magnesium and sulfur. We use sulfur or sulfur-based products in the form of sulfates to lower the pH in soils but, these sulfate products serve other purposes as well. The flower color of hydrangeas is determined by soil pH. The less acidic soils will promote pink flowers but, more acidic soils (below 5.5) will promote blue flowers. How? It’s aluminum in soils that promote the color change from pink to blue in hydrangea flowers since aluminum availability increases at a pH below 5.5. Using Epsom salt will not lower the pH enough because magnesium has a neutral effect on pH. So, if you want to change the color from pink to blue, use Alum (aluminum sulfate) not Epsom salt (magnesium sulfate).

Myth #6: Organic Pesticides Are Always Safe

The word “organic” often gives the impression of harmlessness, but even natural pesticides can negatively impact pollinators, beneficial insects, and the environment if used incorrectly. When one uses the word “poisons” when referencing pesticides keep in mind, the dose makes the poison. It’s as safe as the user applies them. Any pesticide product over-used or over-applied can become a “poison” ...organic or not. Neem oil, insecticidal soaps, and pyrethrins can be effective tools, but they must be applied carefully, in moderation, and according to the label.

Gardening is full of tradition. We’ve gotten and given a lot of advice handed down over the years and, some of it holds true. But separating fact from folklore can save time, money, and even your plants. So, the next time you hear a bit of “garden wisdom,” take a moment to ask, is this fact or fiction? Do some research and rely on factual, research-based information. Your plants will thank you.



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Wildlife Food Plots: Planting With a Purpose!

We are about a month away from the official start of Fall, which is a great time to begin preparing food plots for the upcoming hunting seasons. Food plots not only increase the chances of success for hunters but also benefit wildlife. There are many ways to go about this task but, I will outline the steps that I believe have the greatest return on investment, both time and money.

Site selection is the most important step in establishing productive plots. Selecting sites that have adequate soil texture and drainage. Avoiding wet, bottomland areas will allow you to get the most out of your soil amendments and improve plant performance. Consider sunlight exposure. Long narrow plots are popular due to their increased edge habitat but can also have limited sunlight. These types of plots are best when oriented from East to West to leverage maximum sun exposure. Next, select a food plot location in close proximity to natural wildlife habitats such as cutovers and other bedding grounds, as well as travel corridors. Food plots come in all shapes and sizes and should be determined on a case-by-case basis. It is recommended to plant plots at least one acre in size with easy equipment access to the site for fertilization, planting, and other needed maintenance.

Once you have selected your food plot location the next steps are choosing forage varieties to plant, soil testing, and site preparation. It's helpful to know which plant varieties you are going to utilize when completing the soil testing process, since soil test recommendations are based on plant species' individual nutrient requirements. You will need to select plant varieties that are adapted to your area and are desirable for the species of wildlife you wish to attract. Clover and cereal grain varieties are among the most popular plant species utilized in Mississippi. One of the most common mistakes I see clients make is not soil testing and applying 13-13-13 at some random rate with their food plot seed mix. To optimize soil fertility and plant performance follow the lime and fertilizer recommendations from the soil test.



Site preparation involves clearing the plot site of any undesirable vegetation commonly achieved through the application of herbicides or by using mechanical methods such as disking or tillage. Having a well-prepared seedbed is paramount to seed germination and plant performance. Remember that seeding rates are based on pure live seed, so make sure to take that into account when planting your plot. Planting depths and seed coverage are equally as important as every other step so make sure you follow the planting guidelines for your chosen plant species.

Planting time is crucial for success. It is imperative that you plant when soil moisture and temperature is favorable for seed germination. For most seeds the ideal soil temp is between 65-80 degrees. Watch the weather forecast and try to plant when there is at least a half of an inch of rain expected. Good luck and happy hunting, or watching, whichever you prefer!

Some examples of mixtures that work well in a single plot*.

Mixes	Planting Dates
Deer & Turkey	
Corn & Iron-Clay Cowpeas or Wildlife Soybeans	May 1 – June 1
Alfalfa & Deer Jointvetch	May 1 – June 15
Arrowleaf [®] & Crimson Clovers, Oats, Wheat, Austrian Winter Peas, Brassicas	Sept. 1 – Nov. 1
Ladino White Clover, Oats, Wheat, Chicory	Sept. 1 – Nov. 1
Bobwhite Quail	
Kobe Lespedeza & Partridge Pea	March 1 – April 1
Mix of Corn or Egyptian Wheat & Quail Haven Soybeans	April 1 – June 1
Wheat & Birdsfoot Trefoil	Sept. 1 – Oct. 15



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Composting

September is a great time to buy or build a compost bin. Cooler months bring many fallen leaves that are ideal for adding to your compost pile or for starting a new one. For most home garden composting, compost bins should be at least three feet wide by three feet high. The pile needs to be big enough to maintain heat and moisture for microorganisms. Compost piles can vary in size depending on how much organic waste is available. Make sure to turn compost piles at least twice a month to ensure there is enough oxygen present.

What to add:

- Leaves
- Pine straw
- Fresh grass clippings
- Fruit and vegetable peelings and scraps
- Egg shells (do not compost eggs, only shells)
- Coffee grounds
- Tea bags



What NOT to add:

- Diseased plants or plant materials
- Weedy plants that have gone to seed. Putting these seeds back into the garden can cause many weeds to regrow.
- Grease, fats and oils, meat scraps, or bones. These may attract dogs or other animal and insect pests, and they may cause an offensive odor.
- Sawdust or wood shavings from preserved wood. These may contain harmful chemicals.

To learn more about composting, visit <https://extension.msstate.edu/publications/composting-for-the-mississippi-gardener> for MSU Extension publication 1782: *Composting for the Mississippi Gardener*.

Table 2. Troubleshooting composting problems.

Symptom	Problem	Solution
Bad odor	Not enough air	Turn the materials in the pile; add dry material if too wet
Center of pile is dry	Not enough water	Moisten and turn pile
Compost damp and warm only in the middle	Too small; cold weather	Collect and add more material; turn pile to aerate
Pile is damp and sweet-smelling but will not heat up	Lack of nitrogen	Add nitrogen source, green material, or nitrogen fertilizer
Interior looks or smells charred	Extremely high temperature	Pile is too large; reduce size, add water

Calendar of Upcoming Events

DATE	EVENT
Sept. 4th	Pine Belt Beekeepers Association Meeting The Pine Belt Beekeepers Association meeting will be held at the Lamar County Extension office beginning at 6:00 PM.
Sept. 4th	Pine Belt Master Gardeners Annual Fall Garden Day Lamar County Multipurpose Center in Purvis beginning at 8:00 AM. See flyer below for more details.
Sept. 5th	Fall Garden Workshop Forrest County Extension office, 952 Sullivan Dr., Hattiesburg beginning at 9:00 AM. To preregister call 601-545-6083. See flyer for more details.
Sept. 6th	Pearl River County Beekeepers Association Meeting The PR County Beekeepers Association will meet at the PR County Extension office at 7:00 PM. Curtis Waites will speak on "Why are my bees crashing?". See flyer for more details.
Sept. 19th & 20th	Crosby Arboretum's Bugfest 2025 The event is open to school groups on Sept. 19 from 9:30 a.m. to 12:30 p.m. for an educational field day. All school groups can preregister by calling The Arboretum at 601-799-2311, ext. 0. Admission is \$3 for students, \$6 for adults and free for teachers. The public is invited to attend Friday afternoon from 12:30 p.m. to 3 p.m. and Friday evening from 6:30 pm to 8:30 pm. Evening events include an expert-led crayfish tour and using black lights to draw beetles and moths. These are no-kill activities. Bring your flashlight! The event again opens to the public on Sept. 20 from 9 a.m. to 2 p.m. The BugFest Photo Competition awards will be presented at 1 p.m. Admission is \$3 for children 12 and under and \$6 for adults. See attached flyer for registration and more details.



SAVE THE DATE!

MSU PINE BELT MASTER GARDENERS ANNUAL FALL GARDEN DAY TURNING A NEW LEAF

Saturday, October 4th

Lamar County Multipurpose Center
99 Central Industrial Row, Purvis

Guest Speakers, Plant Sales,
Door Prizes, and More!

FREE ENTRY!





Fall Gardening Workshop

Friday September

5th 9:00 am

Forrest County Extension Office
952 Sullivan Dr., Hattiesburg, MS
39401

**Call our office to
register: 601-545-6083**

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Protecting Pollinators, Supporting Nature

PEARL RIVER COUNTY BEEKEEPING ASSOCIATION MEETING

Date: Saturday, September 6, 2025
7:00 p.m.

MSU PRC Extension Office
835 Highway 26 West, Poplarville, MS

Doors open at 6:30
p.m. for a time of
friendship and
fellowship

The meeting starts
promptly at 7:00 p.m.

Speaker: Curtis Waites
Topic: Why are my bees
crashing?

For more information, contact Dr. Eddie M. L. Smith at 601-403-2280 or
eddie.smith@msstate.edu

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BugFest 2025

BEETLEMANIA!

THE BEETLES



Insect Exhibits, Experts, Ambassador Wildlife, Bat Trail, Bug Brigade Fashion Show, The Fab Four, Racing Cockroaches, Bess Beetle Athletes, Photo Awards...and more!
A celebration of "the little things that run the world." - E.O. Wilson

FRIDAY – Sept. 19

9:30 a.m. to 3:00 p.m.

Field Day for School/Homeschool groups

Please call to pre-register

Students \$3 - Teachers Free - Adults \$6

12:30 p.m. to 3:00 p.m.

Students and Public – Everyone is Welcome!

FRIDAY EVENING

6:30 p.m. to 8:30 p.m. – EVERYONE!

Crayfish tour/ Black lighting for bugs with Experts

No-kill event - Bring a Flashlight!

SATURDAY – Sept. 20

9:00 a.m. to 2:00 p.m. – EVERYONE!

10:00 & 12:30 p.m. – Bug Brigade Fashion Show with

The Fab Four

1:00 p.m. – Photo Awards!

The Crosby Arboretum

370 Ridge Road – Picayune, MS

601-799-2311 ext. 0

crosbyarboretum.msstate.edu

Admission: Children 12 and under \$3; Adults \$6



For information on the
BugFest Photo Competition see:
<http://msuext.ms/25bugfest>

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BugFest 2025

Photo Competition

Featuring Arthropods & Highlighting...

THE BEETLES



The Crosby Arboretum

601-799-2311 ext. 0

www.crosbyarboretum.msstate.edu

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Photo Competition 2025 Subjects



Arthropods: Insects, spiders, scorpions, centipedes, millipedes on land, crayfish, shrimp, lobsters, and barnacles in water.

This year we are highlighting Beetles
for the "Best in Show" award!

OPEN TO ALL AGES – NO ENTRY FEE – AWARDS

REGISTRATION IS OPEN!

For more information, to register, and to submit photos:

<http://msuext.ms/25bugfest>

Entries accepted until 11 p.m. CST, Friday, Sept. 5



BugFest 2025 – BeetleMania!

A celebration of "the little things that run the world."
- E.O. Wilson

September 19 & 20 (Fri / Sat)

The Crosby Arboretum • 370 Ridge Road, Picayune, MS



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Mississippi Pesticide Safety Education Program

Extension delivers new, EPA-mandated training for private pesticide applicators

Applicators who use restricted-use pesticides are **required** to complete a new training to **renew or obtain** certification.

In-person and online trainings are available. Applicators must pay \$60 and score at least **70%** on the 55-question competency exam.

5 hours of video modules will introduce new

- safety procedures.
- environmental protection requirements.
- pesticide application methods.

Scan here
or visit <http://msuext.ms/dkp8h> to sign up for
in-person training or to begin online training.



Online training requires a laptop or desktop computer with a camera, microphone, and valid photo ID. Neither the modules nor the exam is available on mobile devices.

M2478 (07-25)

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