



Growing Herbs

Herbs are a special group of plants used for flavoring and scents. Many herbs used in flavoring foods and teas (culinary herbs) can be grown in Mississippi. Most herbs should be grown in full sun, but a few tolerate light shade. They prefer a well-drained soil of medium fertility with a pH of 6.0 to 7.0. A major cause of failure with herbs is poor drainage of the soil. Planting your herbs in a well-drained bed area, a container or raised bed, will more likely result in success. This is of particular importance for the following herbs that cannot tolerate wet feet: sage, oregano, thyme, lavender, rosemary, French tarragon, and scented geraniums.



Herbs are excellent choices for container gardening. This mixed herb container was made by the Pine Belt Master Gardeners. (Photo by MSU Extension/Gary Bachman)

You can start most popular herbs from seeds. Many of the perennial herbs are propagated by stem cutting, layering, or crown divisions. Annual, and some perennial, herb plants are sold at nursery and garden centers, and seeds and plants are offered by many mail order catalog companies.

Because herbs are used in very small amounts, just a few plants of each type may be enough. If you want a large quantity of a particular herb, such as sweet basil for making pesto, plant the herb in the vegetable garden. Otherwise, prepare small containers especially for herbs so that they can be enjoyed for their appearance as well as fragrance.

Herbs have few pests, which is good because there are few pesticides approved for use on these plants. When planting herbs in the vegetable garden, protect them from pesticides used on vegetables.

The flavors and scents of herbs are caused by oils in the plant tissue. High fertilization, excess moisture, and shade result in low oil content and weak flavor. The oil content in many herbs is at its highest just before the plants begin to flower.



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Events for March 2020

<u>Hancock County Events</u>	
11	Growing Plants from Cuttings — 8:30-10:30 a.m. Lloyd Hall, USM Gulf Park Campus. This program, included as part of the Oschner Lifetime Learning Institute, will include information on making and growing cuttings from common plants in the home and home landscape. Presenter is Dr. Christian Stephenson, Hancock County Extension Agent. There is a \$40 fee for registration in the OLLI program, which can be paid at https://www.usm.edu/lifelong-learning/join-today.php .
14	Pine Hills Nursery Gardening Seminar — 10:00 a.m. - 12:00 p.m. Pine Hills Nursery, 7434 Cuevas Rd, Pass Christian, MS. Come learn about spring gardening with topics including building good soil, vegetables and herbs for coastal Mississippi. Presenter is Dr. Christian Stephenson, Hancock County Extension.
14	Hancock County Jr. Master Gardener Meeting — 9:00 a.m. Bay St. Louis Community Garden.
18	Beginning with Beekeeping — Pass Christian Public Library. 2:00 p.m. Learn about how to get starting keeping bees including where to purchase your first bees, equipment needed, and solutions to common problems faced by beekeepers. Presenter is Dr. Christian Stephenson, Hancock County Extension.
<u>Harrison County Events</u>	
4	Hancock/Harrison Forestry and Wildlife Association monthly meeting — 11:00 a.m. until Noon. Sherry's Country Kitchen located at 20180 Highway 53 in Gulfport, MS. All Hancock/Harrison CFWA members are welcome to attend.
<u>Jackson County Events</u>	
9	Jackson County Master Gardener Monthly Meeting — 10:00 a.m educational program and business meeting at 11:00 a.m. Gautier Public Library.
23	Private Applicator Training — 1:00 p.m. at the Jackson County Extension Office. Pesticide applicator certification is a legal requirement for persons using restricted-use pesticides to produce and agricultural crop on their property. Cost of course is \$20.
30	Home Gardening Program — 11:30 a.m. at the Ina Thompson Moss Point Library. Extension Agent Evan Ware will present tips for growing blueberries and blackberries on the Gulf Coast.
<u>Lamar County Events</u>	
2	Beginner Beekeeper Series — 6:30 p.m. on March 2nd, 9th, 16th, 23rd at the Lamar County Extension Office, Purvis with a Hands-on field day scheduled for March 21st beginning at 10:00 a.m.
5	Pine Belt Beekeepers Monthly Meeting — 7:00 p.m. at the Lamar County Extension Office.
<u>Pearl River County Events</u>	
3	Pearl River-Stone County Forestry Association Meeting — 12:00 noon. The Sawmill Restaurant, 2205 Highway 49, Wiggins, MS.
4	Private Applicator Training — 9:00 a.m. at the Pearl River County Extension Office. Pesticide applicator certification is a legal requirement for persons using restricted-use pesticides to produce an agricultural crop on their property. Cost of course is \$20 payable by check or money order. Call 601-403-2280 to RSVP for the training.
6	Pearl River County Master Gardener Meeting — 12:30 p.m. at the IHop in Picayune.
6	Container Vegetable Gardening — 10:00 a.m until 11:00 a.m. The Crosby Arboretum, Picayune, MS. You can grow many varieties of vegetable in containers. Learn some tips to help you be successful at growing vegetables in containers with Dr. Eddie Smith, MSU Pearl River County Coordinator/Extension Agent. Call 601-799-2311 to register for the program.
9	Technology After you Pass — 11:00 a.m. at the Senior Center of South Pearl River County. Dr. Eddie Smith, County Coordinator/Extension Agent. What happens to your social media accounts after you pass? Learn how to allow loved ones to manage you social media accounts after you pass.

Garden Calendar: March

Planting

- Plant new roses before March 15.
- Broad-leaved Evergreens such as Magnolia and Holly can be set out at this time.
- Plant cold weather annuals: Sweet William, English Daisies, Pansies, and Calendulas.
- Divide Mondo Grass and Liriope. Divide Cannas, Chrysanthemums, Coreopsis, Phlox, and Obedient Plant.
- Start seeds for Tomatoes, Bell Peppers, and Eggplant. Set out Thyme, Lemon Balm, Oregano, Chives, Sage, and Winter Savory.
- Sow seeds of Johnny Jump-ups, Sweet Peas, Larkspur, Forget-me-nots, and Baby Blue Eyes.
- Flowering shrubs may be moved at this time. Larger shrubs should be moved with a ball of dirt and smaller shrubs may be moved bare-rooted.
- This is the best month to move Crape myrtles.
- Lawns may be sodded at this time. Plant Gladiolus throughout this month for continuous bloom. Plant Hostas.
- Caladiums can be started in outdoor containers as soon as weather warms.



Fertilizing

- Fertilize all the garden except acid-loving plants.
- Topdress Camellias with azalea-camellia fertilizer.
- Lime Peonies, Clematis, and Boxwoods.



Pest Control

- Spray new rose leaves for black spot weekly.

Pruning

- Prune roses at this time. Remove dead and weak canes. Properly dispose of clippings.
- Prune Crape Myrtles and Altheas.
- Prune evergreens for shape and size as early in the month as possible.
- Cut English Ivy back very hard. It will come back very nicely in the spring.
- Trim Mondo Grass and Liriope with lawn mower set on highest setting (6 inches). Dispose of trimmings.

Mulch

- Replenish mulch around Azaleas and Camellias.

Miscellaneous

- Dispose of fallen Camellia blossoms to prevent blight.
- Rake up seed hulls from under bird feeders. They will smother new growth.
- Remove dead flowers from Tulips and Daffodils. Do not cut foliage before it turns yellow and dies.



In Bloom

Bluebells, Chionodoxa, Daffodil, Hyacinth, early Iris, Pansies, Violet, Carolina Jasmine, Azaleas, Camellias, Forsythia, Pearl Bush, Photinia, Flowering Quince, Spirea, flowering fruit trees (Crabapple, Cherry, Pear, and Peach), Oriental Magnolia, and Redbud.



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Calibrate Before You Spray

Homeowners and landowners alike turn to pesticides to control weed, fungi, and insect pests. Pesticide labels specify an amount to use on target pests and the law requires we follow these label directions. There are reasons for this. When especially dealing with herbicides, applying more than the required rates can create environmental issues or kill desirable plants. Using less than required rates can be a waste of time and money if the target pest is not controlled. So, it's important that you know the exact amount you're applying for each application no matter the target pest.

So how do we calibrate? The object, when spraying turf or pasture, is to figure the gallons per acre or gallons per 1000 ft². There are some simple formulas that can be used when calibrating. When spraying acreage with a boom sprayer we need to determine our speed first. Remember, it's important to maintain a constant speed. We can use the following formula to determine the MPH:

$$MPH = (distance\ in\ feet \times 60) \div (time\ in\ seconds \times 88).$$

One way to determine MPH is to measure 100 ft and drive the distance using a stopwatch. Your phone may have one so there may be no need to purchase one. Let's assume it took us 20 seconds to drive 100 ft. So, according to our formula:

$$(100 \times 60) \div (20 \times 88) = 3.4\ MPH$$

Next, we need to determine the output of each nozzle using water only in our tank for safety. Using a stopwatch, spray into a measuring container for 10 seconds. Let's assume we have 7 nozzles spaced at 20 inches where 3 of them measured 8 ozs each ($3 \times 8 = 24$) and 4 measured 9 ozs each ($4 \times 9 = 36$) for a total of 60 ozs. Now, divide this number by the number of nozzles:

$$60\ ozs \div 7\ nozzles = 8.6\ ozs\ per\ nozzle\ average$$

Since we only measured for 10 seconds, we need to figure the gallons per minute per nozzle. And, since we know there are 60 seconds in a minute, we know that $10 \times 6 = 60$. So,

$$8.6\ ozs \times 6 = 51.6\ ozs\ per\ minute$$

$$51.6\ ozs/min \div 128\ ozs/gal = .40\ GPM\ per\ nozzle$$

Now, we can use the following formula to determine gallons per acre:

$$GPA = (5940 \times GPM/nozzle) \div (MPH \times width\ between\ nozzles\ in\ inches)$$

$$So, (5940 \times .40\ gal/nozzle) \div (3.4 \times 20\ inches) = 34.9\ GPA$$

It's a good practice to calibrate periodically to be sure you're still applying the correct amount. Also, using a 1:10 solution of ammonia to water and soak for two hours will help clean your tank but also run through the lines. Check all parts before calibrating, replacing worn or broken nozzles, nozzle bodies, or filters, and always wear the label recommended Personal Protective Equipment.





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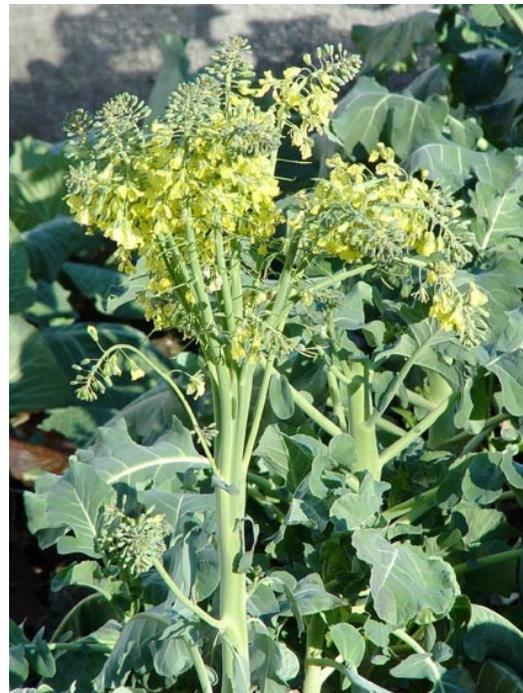
Bolting

One of the most frustrating and confusing things that may happen in a vegetable garden is “bolting”. Also called “running to seed”, bolting is the premature production of flowering stems before the plant is ready to be harvested. The production of these flowering stems diverts the plant’s resources away from vegetative growth, which will lead to a poor quality harvest. Often, plants such as lettuce will also become bitter tasting and have tougher leaves once the plant has bolted.

Many different plants are affected by bolting, but it is more common in cool season crops such as lettuces and brassicas including cabbage, turnips and radishes. Basil, beets and spinach also frequently have problems with running to seed. Some biennial plants such as onions and carrots also have a tendency to bolt.

Bolting can be caused by a number of factors. Changes in day length trigger flowering in many plants, and so this may lead to plants bolting. Stress on the plant from insufficient water or nutrients may also cause bolting. The response to stress by the plant is to attempt to produce seed so that it will be able to produce seed before dying. One of the most frequent causes of bolting in South Mississippi is weather warming up following a period of colder temperatures. The colder temperatures “prime” the plant to be ready to produce seed as soon as the weather gets warmer. Ideally this occurs in the spring, however, here in South Mississippi, plants can be excused for being just as confused by the weather as we are.

One of the best ways to prevent plants bolting is to reduce stresses on the plant. Poor growing conditions such as dry soil or poor soil nutrition will make plants far more likely to bolt. While it is impossible to control the weather, protecting plants with covers or in cold frames during cold spells will be helpful. It is also important to choose plant varieties that are resistant to bolting. Plant breeders have produced varieties of many garden plants that are less prone to run to seed. In the case of lettuces, they can be kept from bolting by regularly picking the outer leaves, which prevents them from fully maturing. This can greatly extend the time over which the plant can be harvested. Due to the unpredictability of the weather, it’s a good practice to sow seeds for a few plants every two weeks rather than planting all at one time. This will guarantee that you produce a good crop despite variations in temperature. Also keep in mind that flowers will lead to seed that can be collected for next year’s garden.



2020 St. Tammany Parish Master Gardener Spring Seminar— March 7, 2020, from 8:00 a.m. - 12:00 p.m. Castine Center, Pelican Park, Mandeville, LA. Join the St. Tammany Parish Master Gardeners for a morning of presentations and table talks on sustainable garden practices. Speakers include Will Afton, St. Tammany Parish Agent, Dr. Christine Coker and Dr. Christian Stephenson, MSU Extension. Registration is \$20 and can be paid online at <https://www.stmastergardener.org/events/2020-spring-seminar>.



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Fire Ants

If you want to keep fire ants from taking over your yard this year, or if you want to reclaim your yard from fire ants, spring is the time to act. Knock out fire ants with a one-two punch. Broadcast a granular fire ant bait, like Amdro (ai: hydramethylnon) or Extinguish Plus (ai: hydramethylnon + methopren), over the yard and landscape at the rates stated on the product label. Do this even if you don't see any fire ant mounds. Unless your landscape is infested with Argentine ants or hairy crazy ants, there will be some young fire ant colonies that are just getting started.

The application of fire ant baits is recommended three times per year, with Easter, 4th of July, and Labor Day as your reminders to apply. When you purchase your fire ant bait, also get a can of one of the dry mound treatment products containing acephate or deltamethrin as well to spot treat any visible fire ant mounds. Liquid drench products that are labeled for fire ant mounds in the home lawn are also effective at clearing up any mounds that may pop up in between bait treatments. They are also great if you have a specific event coming up you would like to quickly treat troublesome mounds. Please see Extension publication 2429, Control Fire Ants in Your Yard, for more information on fire ant control and for a more complete list of products available to homeowners for mound control.



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Fruit Tree Site Selection

Fruit trees, and other woody stem perennials, are best planted in early springtime period. While most species are dormant during this period of time, their roots need to be kept moist, and this notoriously wet time of year helps ensure the roots will have adequate moisture. Waiting to late into the spring or early summer can result in poor success of planting as the soil tends to dry out. A few key things to remember before purchasing and planting seedlings are proper site selection, plant selection, and training.

Fruit trees do not tolerate soils that are poorly drained. Soils with a high sand content or a slight slope are preferable as they allow for proper drainage. Slopes also benefit the trees because they typically have good circulation. This helps with reducing frost damage and drying the morning dew which can help with disease control. While fruit trees need full sun, it is particularly important to plant them in an area with good morning sun. This also helps dry the morning dew.

Selecting healthy well-kept plants is an important step to starting your trees off right. Seedlings, whether they are bare root or potted, should have a healthy well developed root system. Avoid buying seedlings with damaged or dry roots. Additionally, potted plants may have been sitting around the nursery to long and the roots may be malformed to the shape of the pot.

Lastly, once the tree is in the ground you may need to begin training it to ensure proper form as it grows larger. Apple trees will need a central leader. Any secondary leaders or weakened and damaged branches should be removed. Peaches and Plums will need to be cut back to 24 inches above the ground. This will stimulate new growth from that cut from which you can select the 4-6 best looking branches to for the open crown of the tree. This bowl shape allows for good air circulation and sunlight penetration.



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Pawpaw – A Native Fruit Tree

At a recent Arbor Day event, the pawpaw tree was one of the most sought-after trees being given away, though many were not familiar with it. The pawpaw tree is a fruit tree native to the Eastern United States. It produces cylindrical fruits with green skin and a pale yellow flesh that some say tastes like creamy banana and pineapple.

While pawpaws grow naturally as an understory tree, make sure to plant yours in partial to full sun as sun is required for fruit production. However, if you have a tree less than 1 ½ feet tall, protect it from the sun for the first year as the young tree is sensitive to sunlight. They should be planted while dormant in the early spring, preferably in well-drained, deep, fertile soil. Pawpaws thrive in slightly acidic soil down to a pH of 5.5 and will need plenty of water, especially during the first year of establishment. Expect seedlings to produce fruit in 7-8 years and grafted trees to produce in 3-4 years. Make sure to plant more than one seedling or cultivar as cross-pollination is required for fruit set. Pawpaw trees bloom in mid-spring before the trees leaf out and can reach up to two inches in diameter. The flowers are rarely visited by bees and are instead pollinated by flies and beetles. Pollinating by hand is labor-intensive but can also greatly increase the amount of fruit produced.

Pawpaw fruit is rich with a custard consistency, very nutritious, and best eaten fresh when fully ripe. Tree-ripened fruit will usually last from 3-5 days at room temperature. Pawpaws can also be used in recipes as a substitute for banana. The seeds within the center of the fruit should not be eaten.

Due to short shelf life, you likely won't see pawpaws in the grocery store. To get a taste of the fruit, plant a few in your garden or make friends with someone who already has a couple trees. Even if the pawpaw ends up not being to your taste, it is a beautiful native tree that will add texture to your garden.



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Basics of Soil Sample Interpretation

Soil sample results can be daunting to look at but are vital in helping to promote healthy plant growth and to help troubleshoot any issues we may be experiencing. My advice to clients seeking help is to read the report line by line, as each section tells us different things.

The first few lines give the basic description of the sample, along with your actual soil analysis. Next to those numbers you may notice a ranking (very low - very high). Those rankings are in relation to the plants/crop you have selected to grow. "Very high" means no response to additional nutrient is expected. "High" means no response would be expected except in stress situations or very high yield expectations. "Medium" means a response would be expected at normal yield levels. "Low" means a response to additional nutrients would be expected at any yield level. "Very low" means the plant would probably not survive because of lack of that nutrient. Any toxically high or low levels will be noted on the report.

Note that nitrogen levels are not tested for. This is for several reasons, primarily costs and the fact that many variables can quickly affect nitrogen available in soils. Our local soils do not hold nitrogen very well so plan accordingly to add nitrogen to your desired plant growth as needed.

The rest of the sample will consist of recommended nutrients to apply, suggested mixes, and dates to apply. Lime recommendations are straight forward and are key in fertility management.

Keep in mind most blended fertilize descriptions start with the amount of N-P-K (Nitrogen-Phosphorus-Potassium) that is in the fertilize. These numbers are based on the content by %. For example, 13-13-13 is 13% of each N-P-K, Urea is 46-0-0 or 46% Nitrogen. Other nutrients such as sulfur, zinc, or sodium are noted on the label when included in a fertilize mix. Most reports will show an amount of nutrients needed and/or a suggested fertilize blend and amount to use. Whether you are applying per square foot or per acre, adjust amounts and percentages to match what fertilize mixes are locally available to you. For example, if your report calls for 2.5 pounds of 0-20-20 at planting you may substitute 2.1 pounds of 8-24-24 to achieve the same P and K application while subtracting the N amount in the 8-24-24 from your overall nitrogen needs. Pay close attention to comments and notes for crop specific details such as split fertilize applications or other suggestions

For more assistance with soil sample interpretation or to have your soil tested, please contact your local MSU County Extension Office.

2020 Landscape & Garden Symposium

Once again it is time for our annual Landscape & Garden Symposium in Stone County. The date is April 11, 2020, at the Stone County Fairgrounds Exhibit Building. Registration begins at 8:30 a.m. and the program will begin at 9:00 a.m. Mark the date and join us. Master Gardener training hours are available. Lunch is included. Program ends about 2:00 p.m. Basic topics include: Rose Care, Mushrooms, Irrigation, Self-Contained Gardens, and Living Wreaths

The fee for the Symposium is \$10.00 and pre-registration is required by March 31, 2020. Check or Money Order should be made payable to the Stone County Master Gardeners and payment should be **mailed to:** Stone County Master Gardeners, 214 N. Critz Street, Suite A, Wiggins, MS 39577.