

IISSISSIPPI STATE UNIVERSITY

# **County Gardeners Extension Express**

**MULTI COUNTY** 

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### **Tomato Wilt**

Tomatoes are in almost everyone's garden and would easily be voted the number one vegetable. However, as much as we love to grow tomatoes, we must admit that it's not always easy to do; in fact, sometimes it's downright heartbreaking.

One of the heartbreaks of growing tomatoes occurs when our plants wilt. Wilt

occurs suddenly or gradually when leaves, shoots or stems droop or collapse. In our part of the world there are six common causes of tomato wilt.

The first two causes of tomato wilt are the most obvious, yet they are very important to mention. They are the lack of water or excess of water. We all understand why leaves droop or plants die from lack of water. However, tomato plants that stand in water for very long wilt. If soils stay saturated plants will die. This is why we recommend planting in well-drained soil or in raised beds.

A third and prominent cause is a disease known as Bacterial Wilt. Many gardeners describe plants with

this disease as looking like they had hot water poured on them. They are fine one day and the next are permanently wilted. Bacteria actually clog the plumbing system of the plant resulting in a virtually drought.

Bacterial Wilt can be diagnosed with a simple test. First, remove the plant from the soil. Rinse the roots and lower stem. Once rinsed, cut a section from the lowest part of the stem, just above the roots, about four inches long. Have a jar of water ready so that the stem section can be suspended in the water, bottom end down. Then, watch the bottom end of the stem for a wispy, cloudy, milky ooze. This is bacterial streaming. The bacterial ooze is almost transparent, but can be seen releasing from the base of the stem.

There isn't much that can be done for Bacterial Wilt except to remove and destroy affected plants. Future plantings should be made in a different location. Tomatoes may be grown in containers, but if roots grow from the bottom of the container into infected soil they may contract the disease. Do not reuse stakes or ties.

Other common causes of tomato wilt include Southern Blight, Fusarium Wilt and Root Knot Nematodes. Nematodes and Fusarium may be avoided by planting tomato varieties that are resistant to both of these pests. Southern Blight, however, is another one of those "overnight" killers like Bacterial Wilt. It can be recognized by white fungal growth at the soil line or by beige "seed pearl" sized balls of white, beige or brown.

If your plants wilted, try to determine the reason so that it can be avoided next time. There may yet be a simple solution to keep your love for tomatoes intact.



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### **Rose Black Spot**

Rose black spot is a common disease of roses caused by the fungus *Diplocarpon rosae*. This disease is one of the most common causes of defoliation in rose plants. Over time, defoliation and limited light interception can result in reduced flowering as well as predispose the plant to attack by insects and other diseases. The disease also negatively impacts the appearance of rose plants.

Rose plants infected with rose black spot develop dark spots on the upper leaf surface in late spring. Black spots often have yellow halos surrounding them. In heavy infections, the entire leaf may turn yellow and drop from the plant. Small purple spots may also be seen on new cane growth in severely affected plants.

The disease cycle usually begins on fallen leaves or canes that were infected during the previous year. Fungal spores are spread by being splashed by rain or sprinkler irrigation. In order for an infection to occur, the spores must remain wet for several hours. Symptoms can be observed in as little as 72 hours after initial infection. The rose black spot pathogen can withstand a wide range of temperatures and continue to affect the plant throughout the season.





Resistant cultivars are the easiest and most effective way to avoid rose black spot. Cultivars with resistance to other pathogens such as Cercospora leaf spot, powdery mildew, anthracnose, and rust should also be chosen particularly if your site has a history of these plant diseases.

Fall sanitation is an important way to reduce problems with rose black spot and other fungal diseases. Remove fallen leaves and dispose of them properly. Do not add diseased leaves to compost as that will not eliminate fungal spores. In the sping, diseased canes should be pruned down to the healthy wood prior to budbreak. Overhead irrigation should be avoided in order to minimize leaf wetting. If it cannot be avoided, plants should be watered in the morning to allow them to dry quickly.

Rose black spot may also be controlled by application of myclobutanil (Spectracide Immunox) or chlorthalonil (Daconil) fungicides. However, chemical control of this disease on susceptible varieties will require applications as frequent as every 7-10 days. Preventing infection is the key to successful management.

# Garden Calendar: May

### Planting

- \* Plant Crape Myrtles when plants are in color.
- \* Plant annuals and perennials early in the month and keep well watered.
- \* Set out Chrysanthemums.
- \* Continue planting Gladiolus. Can also plant Calla Lilies, Ginger Lilies, Tuberose, and Cannas.
- \* Take Hydrangea cuttings and let root in coarse sand.
- \* Plant in shade: Impatiens, Coleus, Sweet Alyssum, Lobelia, and annual Dianthus.
- \* Plant in the full sun: Verbena, Periwinkle, Ageratum, Marigolds, Zinnas, Petunias, Wax Begonia, Clematis, Four-o'clocks, and Portulaca.
- \* Plant these Vegetables and Fruits this month: Cucumber, Tomato, Pepper, Squash, Peas, Beans, Eggplant, Corn, Okra, Parsley, Watermelon, and Cantalope.

#### **Pest Control**

\* Keep an eye on garden pests and diseases: red spiders, thrips, aphids, lacebugs, lacewings, mealy bugs, caterpillars, slugs, snails, mildew, fungus, and crown rot.

#### Pruning

- \* This is the last month to prune Azaleas and Camellias as new buds are formed in June.
- \* Gardenias can be pruned by bringing a bouquet inside to beautify the house.
- \* Cutting bouquets regularly will keep your plants pruned and prolong the blooming season.
- \* Cut in early morning or late afternoon and put into water immediately.
- \* Remove seedpods from bulbs and irises; they sap the plants' strength.

#### Mulch

\* Mulch layer helps maintain moisture and can protect roots from extremes in temperature.

#### Miscellaneous

\* Water deeply during weeks that it does not rain.

#### **Home Accent**

- \* Repot house plants during their active growing period: April through September.
- \* May is a good month to repot and divide overcrowded ferns.

#### In Bloom

Confederate Jasmine, Gardenias, Begonias, Impatiens, Salvia, Geraniums, Roses, Hydrangeas, Magnolias, Azaleas, Clematis, Phlox, Sweet William, Deutzia, Honeysuckle, Golden-Rain Tree, Pomegranate, Mock Orange, and Weigela.

















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### Herbs Make a Great Addition to Your Landscape

If you want to "spice things up" in your landscape, why not choose herbs? With their various leaf shapes and textures, fragrant scents, flowering and food value, herbs are a great addition to your landscape. Herbs grown in Mississippi are annuals, biennials, and perennials. Herbs can be grown in beds that compliment your current plantings or in containers that accentuate your deck or patio. Below are some common herbs and some that I choose for my landscape each year.







**Basil** (left) - White or lavender flowers. Fast growing annual.

**Chamomile** - Perennial grown as annual; flowers used for tea; grow from seed.

**Chervil** - Flowers are small white clusters. Annual. Sow seeds in a moist, partially shaded location.

**Chives** - Lavender pom-pom flower in mid to late spring. Tough, easy perennial. Thrives in rich, well-drained soil. Easily propagated from division. Divide every 3 yrs.

**Cilantro** (left)- Large, coarse plant with white flowers. Cool-season annual. Sow seeds in full-sun area.

**Dill** (right) - Open, umbrella-shaped flower heads. Cool-season annual. If seeds mature and fall, they may come up again next year. **Fennel** - Leaves with licorice flavor. Perennial.

**Lavender** (left) - Lavender flowers during midsummer. Very fragrant aroma from leaves and flowers. Perennial. Prefers slightly alkaline, well-drained soil.

**Lemon Balm** (right) - Heart shaped leaves that give off a lemony aroma when bruised. Spikes of small, white, yellow, or pinkish flowers bloom from summer until fall. Perennial. Easily propagated from root cuttings in spring or fall; requires sandy, moist soil. Prolific re-seeder.





**Mexican Mint Marigold** - Good substitute for French taragon in Southern gardens. Tough perennial with yellow flowers in late summer. Grow in full sun. Easily propagated by seed or cuttings.



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### Herbs Make a Great Addition to Your Landscape



Mint (left) - Spreading, perennial, highly fragrant leaves. Purple or white flowers are borne in clusters on long spikes. Easily propagated by division. Can be a nuisance by spreading roots and stems. Oregano - Very aromatic perennial with mainly pink flowers. Grow in full sun. Easily propagated by division or cuttings.

**Parsley** - Several varieties available. Parsley is a biennial but treat it

as an annual. Compact plant. Curled parsley makes an excellent seasonal border. Sow seeds each spring; slow to germinate. Favors well-drained soil.

**Rosemary -** Perennial, evergreen shrub but reliably hardy; grown for leaves; available in different plant types, upright and creeping; adapted to pot culture; prefers moist, well-drained soil.



**Sage** (left) - Aromatic leaves. Purple to white flowers. Perennial. Grow in well-drained soil in a sunny location. Propagate by cuttings. **Savory, Summer** - Purple and white flowers. Plant this tender annual after frost. Space 6–9".

**Thyme** - perennial, but not reliably hardy; variety of flavors and plant types; grown for leaves; can be propagated; prefers well-drained soil.

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

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### Home Lawn Care



. Fertilization

- . Weed Control
- . Insects and Diseases
  - . Troubleshooting

May 3, 2022

6:00 PM

Lamar County Extension Office 216 Shelby Street Purvis, MS 39475

RSVP to 601-794-3910 prior to 5 pm on April 29

Also available on Zoom if Interested: Call or email for link

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### **Events**

### **Teacher's Conservation Workshop**

If you wanted to teach everything about your profession to a group of school teachers, could you do it in just a single week? That's the mission of the Teacher's Conservation Workshop (TCW). For over 50 years, the TCW has been "bringing the outdoors into the classroom" with active, engaging, and enjoyable activities designed to expose teachers to all aspects of the outdoors, forestry, and of course, conservation.

In the decades that the Mississippi Forestry Association has been sponsoring this workshop thousands of educators have taken advantage of this opportunity to gain insight into one of Mississippi's most important industries: forestry. With over 65% of our state forested, timber generates over \$1 Billion annually in MS. It's vitally important that teachers have an understanding of this industry and the role it plays in all our lives.

The TCW lasts just one week, and in that time, the participating teachers engage in presentations from foresters, landowners, wildlife biologists, and other natural resource professionals. Most of the week, however, is spent outdoors. There are field trips each day to tree nurseries, private and public forests, active logging operations, sawmills, and many other locations. Everything is hands on and designed with two things in mind: learning about forestry and having fun while doing it. At the end of the week, teachers leave with dozens of lesson plans that are adaptable to almost any subject and any grade level. Two week-long workshops are held each year in Hattiesburg (June 5-10), and Booneville (June 19-24). A shorter version of the workshop is held in Jackson and takes place over just three days (July 12-14).

In addition to the knowledge gained, participating teachers also receive 5.0 continuing education credits (CEUs). The course can also be taken for academic credit towards a degree in education. The cost for this workshop is only \$150, and there are many scholarships available, so most teachers end up having to pay nothing out of pocket. For more information, check out <u>https://www.msforestry.net/page/TCW</u> or email Butch Bailey at <u>Butch.Bailey@MSState.edu</u>.

### **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: <u>http://</u><u>extension.msstate.edu/content/online-private-applicator-certification-program</u>. The fee for training and testing is \$20, payable online by credit card, debit card, or eCheck.



or contact your local MSU Extension office for info on how to register.



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## **Algal Leaf Spot**

Algal leaf spot is one of the few plant diseases caused by a parasitic alga (*Cephaleuris virescens*). This pathogen frequently causes disease on southern magnolia and common camellia. The disease usually affects leaves but can occasionally affect twigs of plants as well.

Algal leaf spot starts as a round, green, slightly velvety colony on leaf surfaces. As the spot develops further it with turn reddish-brown. Frequently algal leaf spots will be colonized by a fungus which gives the spot a grey appearance. The fungi that associate with the algae does not harm plants. Symptoms of algal leaf spot first develop in the summer and may become more noticeable through the fall.

Algal leaf spot reproduces through spores which may be spread by both wind and water. Spores are produced when colonies are wet, and spores may spread through the film of water present on leaves. Problems with this disease are more severe following frequent rainfall and windy conditions. The pathogen for algal leaf spot survives through the winter on stem cankers and fallen leaves.

When algal leaf spot occurs at a low level, it may be managed simply by removing leaves which show spots. Algal leaf spot is more severe on plants that are in poor conditions. Trees which are in direct sunlight and are watered excessively are particularly vulnerable. Fallen leaves should be raked to prevent them harboring the algae. Trees should be pruned to improve air circulation and promote the drying of leaves. This disease may also be controlled by the application of copper-containing fungicides.

