

# SOUTH PLAINS HORTICULTURE

*For the most recent updates, straight from the source*



WELCOME TO OUR

## SUMMER NEWSLETTER

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**Find out more about the NEW Horticulture Show at the South Plains Fair [HERE](https://www.southplainsfair.com/p/competitions/horticulture):**

<https://www.southplainsfair.com/p/competitions/horticulture>



LUBBOCK COUNTY EXTENSION OFFICE

For more information, contact [christina.reid@ag.tamu.edu](mailto:christina.reid@ag.tamu.edu) (806) 775-1740



earth-wise guide to

# Lawn Care

AG

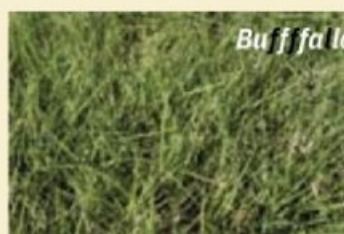
chat

## In this Fact Sheet:

- Starting a New Lawn
- Choosing Turf
- Irrigation
- Mowing, Aerating and De-thatching
- Fertilizing
- Weeding



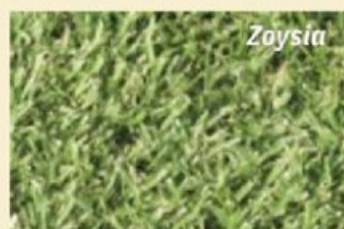
Bermuda



Buffalo



St. Augustine



Zoysia

grow green encourages the use of native and adapted, drought-resistant plants and grasses. These plants conserve water and protect water quality by requiring fewer pesticides and fertilizers.

## Starting a New Lawn

### •Minimize your total lawn

**area.** Consider lawn alternatives such as plant beds, mulched areas, wildflowers and native grasses to reduce water and fertilizer needs

- Test your soil** to know how to prepare it for your new lawn. Look for soil test bags in the Grow Green display or contact the Cooperative Extension office at 854-9600
- Six inches of soil is the minimum necessary to grow a healthy lawn.
- Prepare the soil by removing perennial weeds and tilling in at least 2" of compost
- Level your lawn area to avoid low spots where water will pool

- Consider sun, shade and water needs in choosing the best grass for your location—look at the chart below for some suggestions

- Choose between seed, plugs, or sod, then keep soil moist until the lawn becomes established

- Avoid overwatering newly seeded lawn to prevent grass seed from washing away

## Caring for an Established Lawn Irrigate Efficiently

- Water in the early morning to help prevent fungal diseases
- Water more deeply and less frequently to encourage deeper roots
- Water so that the soil is wet to a depth of 4-6 inches. This takes 1/2 to 1 inch of water, depending on your soil type. To check on the amount applied, collect water from sprinklers in a small can or rain gauge

Grass	Drought Tolerance	Mowing Height	Sun Requirements	Start-up
Buffalo	Very High	(Mowing optional) 2-3"	Full sun to partial shade	Seed or sod
Common Bermuda	High	1.5 - 2"	Requires full sun	Sod or plugs
St. Augustine	Medium	2.5" (sun), 3 - 3.5" (shade)	Best for shady spots	Sod or plugs
Zoysia	Medium	2 - 3"	Full sun to partial shade	Sod or plugs

- Because water is more likely to run off clay soils and sloping lots, it may be necessary to irrigate slowly or in multiple short cycles to prevent water run-off
- Allow soil to dry out between waterings
- Watering is seldom necessary during the dormant season (December-February)

### Mow Properly

- Mow grass frequently enough so that no more than 1/3 of the leaf blade is removed at one time
- Mow when the grass is dry to prevent spread of turf diseases
- Cut the grass higher in the summer to help establish a deeper root system
- Sharpen mower blades regularly, sharp blades do less damage to grass
- **Do not bag your grass clippings** and use a mulching mower if possible — cut grass left on the lawn returns 60% of the nitrogen and 100% of the phosphorus to the soil

### How much fertilizer do you need?

**All soil in Austin is high in phosphorus and potassium, therefore fertilize based ONLY on nitrogen needs.**

Soil test results:	Application Rate:	Application time:
Low to Very Low Nitrogen	1/2 pound of nitrogen per 1000 square feet of lawn area applied TWICE per year (total of one pound per 1000 square feet per year)	mid-spring AND fall
Moderate Nitrogen	1/2 pound of nitrogen per 1000 square feet of lawn area applied ONCE per year (total of 1/2 pound per 1000 square feet per year)	mid-spring
High Nitrogen	DO NOT FERTILIZE! Excess nitrogen promotes shallow rooting and some disease and insect problems	

### Maintaining a Healthy Lawn

- Aerate your lawn at least once a year to improve drainage and bring more oxygen to the soil
- Moisten your soil the day before aerating to make the job easier and more effective
- Use a hollow-tined aerator that removes the plugs to increase water and oxygen to the soil
- After aerating, apply compost for added nutrients (Call 972-1954 for information on Dillo Dirt, an organic compost produced by the City of Austin's Water and Wastewater Utility.)
- De-thatch your lawn every 1-2 years by raking up matted grass in excess of 1/2" (do not use a vertacutter or dethacher on St. Augustine)

### Don't Fertilize or Apply Herbicides Automatically

- Do not use "weed and feed" products; the time to use herbi-

cides and the time to fertilize are different and many herbicides are harmful to the environment

- Test your soil (see above) and base your fertilizer purchase on the results

### Look for...

Natural or certified organic fertilizers with low phosphorus\* (8-2-4, 6-2-4, 9-1-1, 6-1-1)

### Buy the Right Type of Fertilizer

- Choose natural or certified organic fertilizers that are low in phosphorus
- Utilize natural compost and fertilizer instead of synthetic fertilizer to improve soil pH, texture and fertility, and cause less leaching to groundwater
- Choose fertilizers based on the needs of your soil. Most lawns in Austin have more than enough Phosphorus (P) and Potassium (K), but are low in Nitrogen (N)
- Use the chart on the to calculate how many pounds of fertilizer you need.
- Save any excess fertilizer until the next proper time to fertilize. Never use more than you need "just to finish off the bag."

### Apply Fertilizers Properly

- To improve BOTH soil texture and soil nutrient levels, apply 1/4" compost to the top of your lawn INSTEAD of fertilizer
- Sweep any fertilizer granules that land on sidewalks and driveways back onto your lawn
- After fertilizing, carefully water

the area to help fertilizer soak in, but avoid over-watering and washing fertilizer off of your lawn

- NEVER FERTILIZE BEFORE A RAIN

### Avoid combined products...

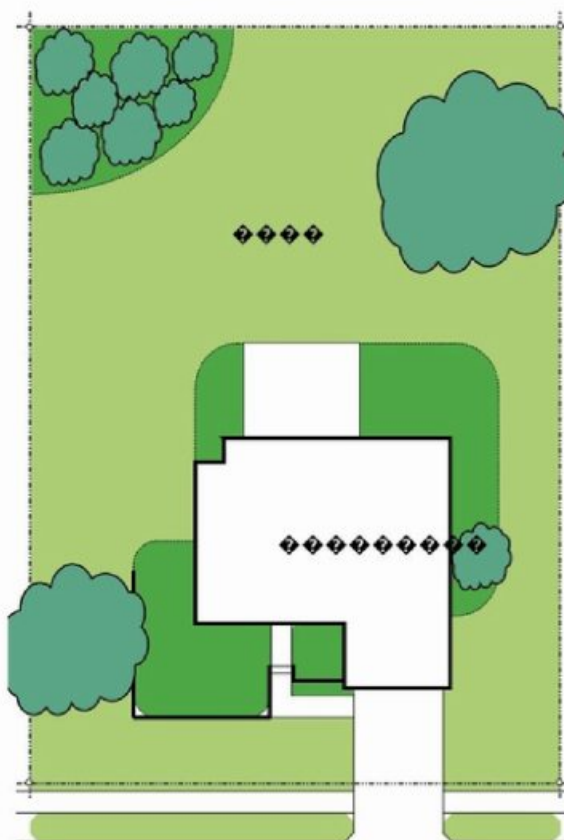
such as weed and feed. They do not necessarily target specific problems at the appropriate time

### Weed Appropriately

- Tolerate low levels of weeds; as you develop a dense, healthy turf most weed problems will go away
- Avoid using herbicides. The most effective, least toxic way to remove weeds is pulling them by hand
- Do not let weeds bloom and release their seeds! One plant can send hundreds of seeds into your yard
- Fill in bare spots in your lawn with grass plugs or seed
- If you decide to treat chemically:
  - Identify your weeds to ensure that you choose the most effective product
  - Start with the least toxic product (for product ratings, see the back page of this factsheet)

### did you know?

Chemicals commonly found in lawn care products are found in most of the springs in the Austin area.



When calculating how much fertilizer to apply, be sure to take into account only the lawn areas that you will be treating. Subtract house, driveway, walkways, and beds from the total area of your property.

If you have left-over or banned chemicals in your garage, please take them for safe disposal to a household hazardous waste facility. In Austin call 974-4343 for information.

This chart shows how many pounds of fertilizer to apply per thousand square feet of lawn area, based on the percentage of nitrogen in the product at an application rate of 1/2 pound nitrogen per thousand square feet.

Fertilizer Ratio: Fertilizer Analysis:		To apply 1/2 pound of nitrogen, apply the following amounts:
Comparison of Nitrogen (N) to Phosphorus (P) to Potassium (K)	Percentage of each ingredient in the product (%N-%P-%K); this is the number written on the bag	
21-0-0 →	21-0-0	2.5 lbs./1000 sq ft.
4-1-2 →	8-2-4 * 16-4-8 20-5-10	6 lbs./1000 sq ft. 3 lbs./1000 sq ft. 2.5 lbs./1000 sq ft.
3-1-2 →	6-2-4 * 12-4-8 15-5-10 21-7-14	8 lbs./1000 sq ft. 4 lbs./1000 sq ft. 3 lbs./1000 sq ft. 2.5 lbs./1000 sq ft.
9-1-1 →	9-1-1*	5.5 lbs./1000 sq ft.
6-1-1 →	6-1-1*	8 lbs./1000 sq ft.
*best choices for Austin's soils		

# LAWN CARE

## CONT.

### product toxicity comparisons\*

(not for endorsement purposes)

**Toxicity/Threat:** ○ low ○ low to moderate ● high ● highest  
N/Not applicable ? unknown toxicity

**Hazards:**

	human toxicity acute	human toxicity chronic	aquatic life	birds, bees, pets mobility	soil	environmental persistence
CedarCide Lawnsafe Chemical Free Weed and Feed (corn gluten)	○	○	○	?	?	○
Concern® Weed Prevention Plus™ (corn gluten)	○	○	○	○	?	?
Concern® Fast Acting Weed Killer™ (ammoniated soap of fatty acids)	○	?	○	○	○	○
EcoEXEMPT™ HC (2-phenethyl propionate, eugenol)	○	○	?	?	?	?
CedarCide Ridaweed (acetic acid/horticultural grade vinegar)	●	○	○	○	○	○
BurnOut (acetic acid/horticultural grade vinegar)	●	?	○	○	○	○
Green Light® Com-Pleet® Systemic Grass & Weed Killer (glyphosate)	○	?	○	○	○	●
Round-Up Weed and Grass Killer (glyphosate)	○	?	○	○	○	●
Scythe® (peracetic acid)	○	●	○	?	?	○
Hi-Yield® MSMA Weed Killer (MSMA)	○	●	○	○	○	●/○
Hi-Yield® POAST® (sethoxydim)	○	?	○	○	○	○
Hi-Yield® Crabgrass Control (bentazone, trifluralin)	○	○	○	○	○	○
Scotts® Turf Builder® with Plus 2™ Weed Control (2,4-D and mecoprop/MCPP)	○	○	○	○	○	○
Vigoro® Weed & Feed (2,4-D, mecoprop/MCPP, dicamba)	○	○	○	○	○	○
Uniflour Turficide® 10% Granular (PCNB)	○	○	○	○	○	○
Image® Weed and Grass Killer (imazaquin)	○	?	○	○	○	○
Ortho® Brush-B-Gon® Ready to Use (triclopyr)	○	?	○	○	○	○
Green Light® WIPE-OUT® Broadleaf Weed Killer (mecoprop/MCPP, 2,4-D, dicamba)	○	○	○	○	○	○
Ortho® Weed-B-Gon® Weed Killer2 concentrate for Northern and Southern lawn grasses (mecoprop/MCPP, 2,4-D, dicamba)	○	○	○	○	○	○
Ortho® Weed-B-Gon® Lawn Weed Killer Ready-to-Use (mecoprop/MCPP, 2,4-D, dicamba)	○	○	○	○	○	○
Green Light® Grass & Weed Killer (sodium cocodylate, dimethylarsinic acid)	○	○	○	○	○	○
Hi-Yield® Atrazine (atrazine)	○	○	○	○	○	○
Vigoro® Ultra St. Augustine Weed and Feed w/ Atrazine 29-3-5 (atrazine)	○	○	○	○	○	○

\* Texas Cooperative Extension and the City of Austin provide this information as a comparative reference only. Listing of a specific product trade name does not constitute an endorsement of its use. Many pesticides and pesticide products other than those listed in these tables are available and may be suitable for use.

Products rated by the Washington Toxics Coalition. Contact Philip Dickey at 206-632-1545 for rating information, or see the Grow Green Products fact sheet.

[www.growgreen.org](http://www.growgreen.org)

**Grow Green encourages least toxic solutions**



**Watershed Protection  
Development Review**

854-9600

974-2550

08/03



We are starting a YouTube Channel! Head over to YouTube and look up Lubbock AgriLife Extension Horticulture as we post videos on current topics and tutorials for all your horticultural needs.



Be sure to subscribe and click the bell to get notifications of the latest videos!

## SOW & GROW

Are you in need of seeds for this growing season? Check out the Lubbock Public Libraries to make use of the Sow & Grow Seed Library programs. Each library has a variety of seed packets free of charge to the community! Seed donations are also appreciated.

**NEW**

## ASK THE AGENT + MORE!

Ask Texas A&M Extension Horticulture Agent Christina Reid any questions on horticulture, urban landscapes, home gardens + MORE!

Phone: (806) 775-1740

Email:

[christina.reid@ag.tmau.edu](mailto:christina.reid@ag.tmau.edu)



## HAVE YOU HEARD?

Lubbock County Extension brings you the latest ag news every day to your local radio station! Tune in to 105.7, the Red Dirt Rebel, between 1:45 and 2:00 p.m. every day. Be sure to give us a listen!





## CHOOSING FLOWERS TO WELCOME A DIVERSITY OF POLLINATORS



We might like to think that flowers were placed on this Earth to please us, but there's a purpose behind their beauty. The great variety in shape, size, color, fragrance, patterns, timing of bloom, and other flower characteristics is the result of plants' close association with their main pollinators.

Because most plants are rooted in place, they can't go chasing after a mate. Flowers are the way many plants attract the insects, birds, and other organisms they depend on to move pollen from one flower to another, or between plant parts within the same flower. Successful pollination results in fertilization and the subsequent formation of seeds. For many plants, their flowers' ability to attract suitable pollinating organisms is vital to the plants' long-term survival.

When the pollen is transferred within a flower, it's called self-pollination and the offspring are genetically similar to the parent plant. Although that can be a successful survival strategy, it doesn't create the genetically diverse offspring that result from cross-pollination between two distinct parent plants. Inheriting genes from both parents results in the genetic diversity that keeps plant populations healthy and is critical if plants are to adapt over time to challenging or changing circumstances.

## FLOWER FEATURES

Plants have evolved ways to lure bees, butterflies, and other pollinators, often with the promise of sugary nectar as a reward. Pollinators stop by for a sip, and then move on to other flowers, inadvertently transferring pollen.

Pollinators vary in their preference for flower shape. Here are some common flower shapes.

### BOWL-SHAPED FLOWERS



Bellflower



Poppy

SOURCE:

Choosing Flowers to Welcome a Diversity of Pollinators from [kidsGardening.org](https://kidsGardening.org)



# CHOOSING FLOWERS TO WELCOME A DIVERSITY OF POLLINATORS



## FLAT FLOWERS



Dianthus

## LIPPED FLOWERS



Salvia

## TUBULAR FLOWERS



Columbine

## TRUMPET FLOWERS



Oriental Lilies

## POLLINATOR PREFERENCES

Choosing plants in a range of these flower shapes will attract the most pollinators. Although, shape preferences of some familiar pollinators, as well as other characteristics like color and scent that attract them.

SOURCE:

Choosing Flowers to Welcome a Diversity of Pollinators from [kidsGardening.org](http://kidsGardening.org)

# THE DROP OF LIFE

## Water Weekly

For the week of 07/01/24

### Water conditions

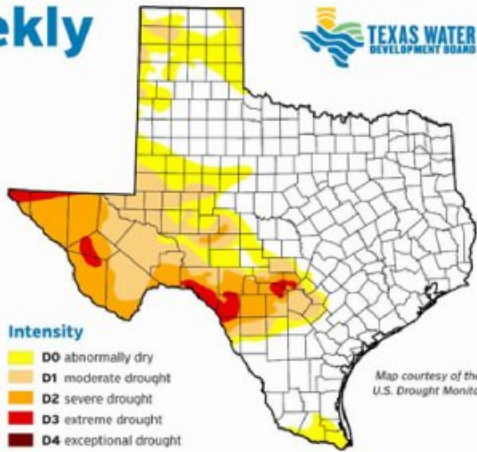
The latest drought map for conditions as of June 25 shows a large area of improvement in South Texas compliments of Tropical Storm Alberto, which made landfall in Mexico on June 20. Rains associated with Alberto brought Texas our largest one-week decrease in drought area in five months.

### Drought conditions

**25%** now  
**30%** a week ago  
**24%** three months ago  
**24%** a year ago

### Intensity

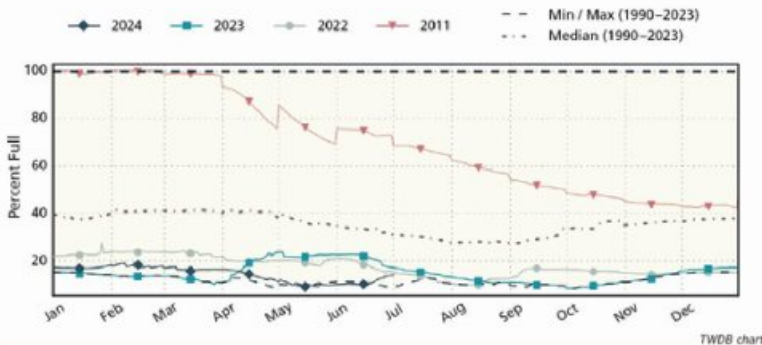
**D0** abnormally dry  
**D1** moderate drought  
**D2** severe drought  
**D3** extreme drought  
**D4** exceptional drought



Map courtesy of the U.S. Drought Monitor

### Lake Falcon storage

Moisture from Tropical Storm Alberto helped storage in Lake Falcon in South Texas increase 3.5 percentage points in the last two weeks, the largest two-week increase since April 2023. However, the lake needs more help because storage remains almost 20 percentage points less than normal for the time of year.



TWDB chart

By Dr. Mark Wentzel, Hydrologist, Office of Water Science and Conservation

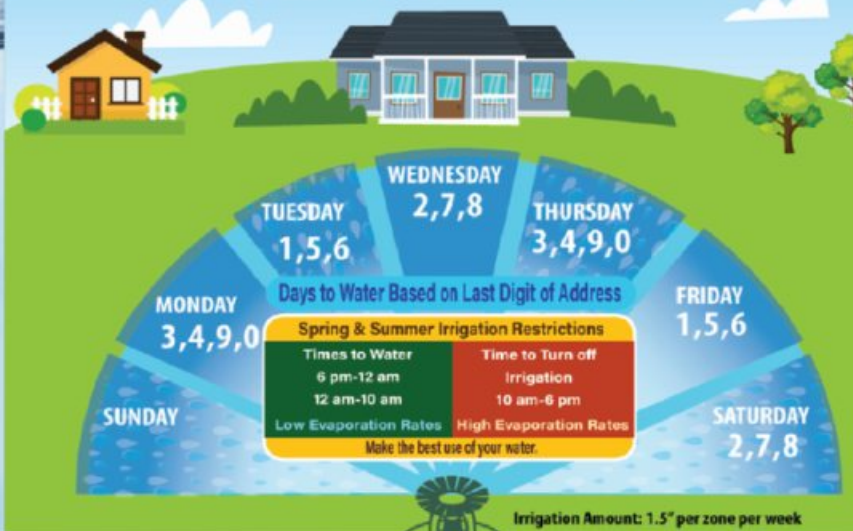
Kellen McMurry, Government Relations | Kellen.McMurry@twdb.texas.gov | 512-475-1589  
 Media Relations | MediaRelations@twdb.texas.gov | 512-463-5129

[www.twdb.texas.gov](http://www.twdb.texas.gov)



## Spring & Summer Watering Days & Times

IRRIGATION FROM APRIL 1<sup>ST</sup> - SEPT. 30<sup>TH</sup>



## MINDFUL WATERING

**Water is limited.  
Save some today!**



**Run only a full load to maximize water savings!**

Answer on other side in gallons (one gallon = a milk jug!)

**How much water do you think watering a 1,000 sq ft lawn an inch deep uses?**

**Water in the morning and plant Texas natives!**

Answer on other side in gallons (one gallon = a milk jug!)

Dripping faucet  
1 to 8 gallons  
 Brushing teeth  
4 gallons

**Texas Water Development Board**  
[www.twdb.texas.gov](http://www.twdb.texas.gov)

## Getting Involved

around the community



The Hub City Garden Tour in Lubbock offers a self-guided exploration of six diverse garden settings, showcasing both new and established residential gardens bursting with plant and design inspiration. This year's tour includes the LMGA demonstration garden, providing valuable insights for gardening in West Texas. Whether you're a novice or a seasoned gardener, there's something for everyone to enjoy. Tickets are \$20 for adults (children under 13 are free), available online. Garden locations will be emailed to ticket holders on September 7th and publicized for on-site ticket purchases. Start your tour at any garden, view them in any order, and receive a guidebook with a map at your first stop. Lubbock Master Gardeners will be present to offer guidance and answer questions, making it an enriching experience for all garden enthusiasts. Tickets available here:

[https://lmga.ticketspice.com/2024-hub-city-garden-tour?fbclid=IwZXh0bgNhZW0CMTAAR0SPSar-coMQGIARXnhLqtX9fWUF5vJlc05Nqzl4okIwxK7lqi-XEqMxTM\\_aem\\_\\_SdOr4vsZ0PBEccdfgF2FQ](https://lmga.ticketspice.com/2024-hub-city-garden-tour?fbclid=IwZXh0bgNhZW0CMTAAR0SPSar-coMQGIARXnhLqtX9fWUF5vJlc05Nqzl4okIwxK7lqi-XEqMxTM_aem__SdOr4vsZ0PBEccdfgF2FQ)

# TREE OF THE MONTH!

The Bur Oak, also known as the Mossycup Oak (*Quercus macrocarpa*), is a large deciduous tree native to Texas. It boasts a slow growth rate and requires moderate water, thriving in various conditions including salty soil, drought, and alkaline soils with pH levels above 7.5. This resilient tree offers reliable fall foliage and produces attractive seeds that are a favorite among wildlife. The Bur Oak is recognized for its distinctive leaf shape and large acorns, which are enclosed in fuzzy caps. Despite its benefits, the tree's abundant acorns and leaves can necessitate significant cleanup efforts. It is also noted for its rough-textured bark and is considered firewise, making it a valuable addition to diverse landscapes.



## AGGRESSIVE INVADERS

### What is an invasive species?

An invasive species is one that establishes itself in a new area outside its native range, causing harmful economic and environmental effects. These species thrive due to favorable conditions and the absence of natural predators, competitors, and diseases that would typically keep their populations in check. For an invasive species to successfully establish itself, it not only needs to survive in its new environment but also reproduce and outcompete native organisms. The lack of natural controls in the new habitat allows invasive species to spread rapidly, posing threats to biodiversity and ecosystem stability.

### Why be concerned?

Invasive species represent a form of biological pollution that significantly impacts biodiversity and ecosystem stability. They threaten native plants and animals, disrupt essential ecological processes such as nutrient cycling and fire regimes, and can hybridize with local species, leading to genetic dilution. As biologist E. O. Wilson emphasized, invasive species rank alongside habitat destruction as major drivers of biodiversity loss globally. Beyond ecological harm, invasive species impose substantial economic burdens, jeopardizing agricultural productivity by contaminating crops, damaging machinery, and spreading diseases among livestock and humans. Controlling these species involves substantial financial and labor costs, with annual expenses in the United States alone estimated in the tens of billions of dollars.

# SHRUB OF THE MONTH!

## AGARITA

The agarita shrub (*Mahonia trifoliolata*) is a resilient native plant found primarily in the Southwestern United States, particularly in Texas. Known for its adaptability to harsh conditions, this evergreen shrub features holly-like leaves that are hued with a bluish-green tint, creating an attractive contrast in the landscape. Its small, bright yellow flowers bloom in early spring, providing a source of nectar for pollinators. Later in the season, the flowers give way to clusters of red berries that are edible and highly prized for making jams, jellies, and wines. The agarita shrub is valued not only for its ornamental appeal but also for its ability to thrive in poor soil conditions and its tolerance of drought and heat. It serves as a valuable component in xeriscaping and wildlife habitats, attracting birds and other wildlife with its nutritious berries.



**Maintenance:** Prune lightly to fit garden space. Heavier pruning will produce thicker growth. Prune no later than fall as February bloom and berries that follow will be affected. Selectively prune leaves away from sidewalks or patios due to prickly leaves.

**Blooms February-April.** Fast growing, evergreen shrub with bluish-green, holly-like foliage. The prickly leaves are not pedestrian friendly but provide excellent nesting for birds. Has fragrant early spring flowers. Birds love the berries. Replaces Invasives: Nandina, Heavenly Bamboo



# PERENNIAL OF THE MONTH!

WINECUP  
(PURPLE POPPY  
MALLOW)



The winecup plant, known scientifically as *Callirhoe involucrata*, is a charming native perennial that graces the prairies and open woodlands of North America with its delicate beauty. Its distinctive deep wine-colored cup-shaped flowers, which give the plant its name, bloom profusely from spring through summer. These flowers, nestled among lobed, palmate leaves, attract pollinators such as bees and butterflies, enhancing local biodiversity. The winecup plant thrives in well-drained soils and prefers full sun, where it can spread gracefully via trailing stems. Its low-maintenance nature and striking appearance make it a favorite among gardeners seeking to add a splash of color and natural elegance to their landscapes.



**Maintenance:** Likes good drainage. **Native Habitat:** open woods and on rocky hills in shrublands and thickets. Will go dormant in summer without supplemental water. Cut back to rosette in winter. Winecup is susceptible to a rust during wet seasons.

**Propagation:** Seed, Softwood cuttings, Tuber division.

Blooms January-December, depending on region. Sprawling plant great for filling in garden spaces. Rounded, hairy leaves are deeply lobed. The purple flowers have a white spot at the base of their five, maroon petals. Flowers close in the evening, open in the morning and remain closed after pollination.

# CHERRY TOMATOES

HARVEST OF THE MONTH  
JULY



**Cherry tomatoes** are small, bite-sized tomatoes. Most are red, but some are yellow, green or black. Some are small as thumb tips while others are the size of golf balls. They grow best in warm weather and love to sun bathe. Cherry tomatoes grow on vines but farmers usually use trellises or fences to support their weight. Believe it or not, the tomato is technically a fruit. Most people think of them as a vegetable since they're commonly used in savory (not sweet) dishes.

## DID YOU KNOW?

Tomatoes continue to gain weight after they are picked because they ripen from the inside out and produce more juice. If you place a tomato in the fridge the ripening process will stop.

## FUN FACT

Tomatoes are thought to come from Peru, where their Aztec name translated to "plump thing with a navel."



CHERRY TOMATO  
GROWING REGIONS

1. East Texas

2. Rio Grande Valley



TEXAS DEPARTMENT OF AGRICULTURE  
**COMMISSIONER SID MILLER**

This product was funded by USDA. This institution is an equal opportunity provider.

