

SPH

# SOUTH PLAINS HORTICULTURE

ISSUE 4 • JANUARY 2022

TEXAS A&M  
AGRI LIFE  
EXTENSION

Texas A&M AgriLife Extension Lubbock County presents

## 2022 COMMERCIAL TURF & ORNAMENTAL WORKSHOP

FRIDAY, FEBRUARY 18, 2022 | 8:30AM - 3:00PM | \$50.00  
5 TDA CEUS | LUNCH PROVIDED  
TEXAS A&M RESEARCH CENTER 1102 E FARM TO MARKET  
RD 1294 LUBBOCK

Registration Required by Friday, February  
11, 2022 by calling (806) 775-1740

Detach and mail preregistration to:  
Lubbock County Extension, PO Box 10536, Lubbock, TX 79408  
Make checks payable to AgriLife Extension Acct. 272113 (No credit cards)

Name on CEU Certificate: \_\_\_\_\_

Pesticide Applicator License#: \_\_\_\_\_

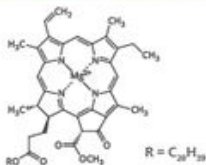
Ph. Number: \_\_\_\_\_

Email: \_\_\_\_\_

### HOW DO EVERGREEN TREES STAY GREEN?

Many trees drop their leaves in the fall, but others stay green even in the depths of winter. Here, we look at the ways in which some trees accomplish this and how they handle the cold.

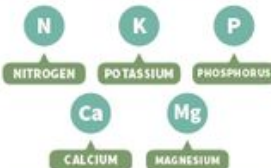
#### CHLOROPHYLL



Chlorophyll gives leaves and needles their green color and is essential for photosynthesis. In the fall, low light levels and temperatures reduce production of chlorophyll (type a shown). In deciduous trees, it then breaks down, allowing the yellow, orange, and reds of carotenoid and anthocyanin pigments to become visible before the leaves fall off.

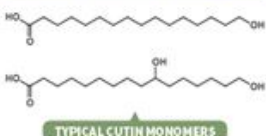


#### WHY STAY GREEN?



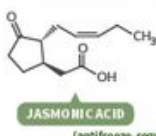
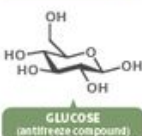
Coniferous trees stay green in winter to conserve nutrients (key ones shown above) in their needles. This is especially important in the nutrient-poor environments where these trees tend to grow. By keeping their needles, the trees can continue to make small amounts of energy through photosynthesis during winter.

#### STAYING ALIVE



Cutin, a waxy polyester composed of fatty acids, coats evergreen needles and prevents water loss. As winter begins, the water in the needles migrates out of the trees' cells and into the spaces between the cells. In some species, cells with viscous contents vitrify (form an icy glass) rather than freezing, avoiding damage.

#### EVERGREEN ANTIFREEZE



Evergreen trees can also protect their needles from ice damage using their own brand of antifreeze. During winter, sugars (such as glucose) and other compounds become more concentrated within the cells of the needles, depressing the freezing point of water. In addition the trees produce antifreeze proteins, which bind to ice crystals and inhibit their growth. These proteins force crystals to take on a hexagonal shape as opposed to the needlelike structures that damage cells. Calcium and hormones such as ethylene and jasmonic acid have been shown to regulate plant antifreeze activity.

## TEXAS A&M AGRI LIFE EXTENSION INSIDE THIS ISSUE

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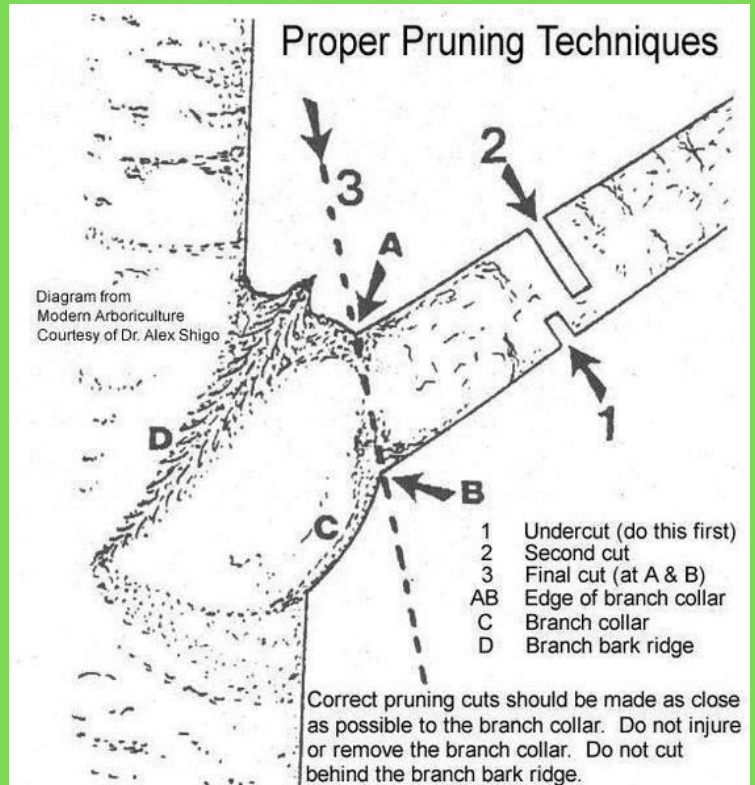
# PRUNING SEASON

Crape Myrtle is one of the most common, toughest, and showiest plants on the South Plains. Crape Myrtles come in many varieties, colors, and sizes making them an excellent choice for nearly everyone! Unfortunately, there has been this horrible "ritual" of butchering them every year put into practice.

Topping Crape Myrtles causes permanent scars and makes a profusion of smaller branches resulting in a lack of proportion. All trees have a characteristic shape. It just so happens that crape myrtles have one of the most beautiful. Topping does create larger blooms, though fewer of them. Unfortunately, these larger blooms on new young shoots tend to flop over and droop after summer rains or break in high winds.

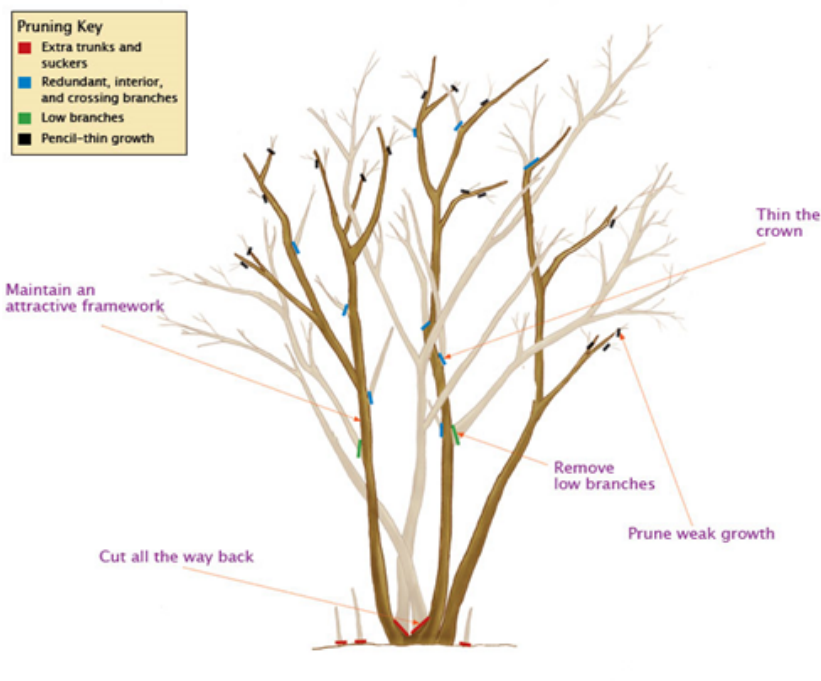
The only real pruning crape myrtles require is to thin out the trunks on young trees leaving somewhere around 3 to 7 permanent trunks/canes. Odd numbers are always best. The fewer you have, the more you can admire their shape and smooth texture. Each year around early spring, all you do is remove any new suckers that appear from the ground. Make sure to cut suckers back all the way to the soil line. Removing dried pods during the winter doesn't promote any more bloom during the summer. Removing them during the summer does promote faster re-bloom, however. This "old saying" of pruning back to pencil size wood comes from recommendations from the 1960's and is antiquated.

Occasional pruning to remove weakened, broken or low branches can also be needed throughout the growing



Above: Shows how to properly prune a large or heavy tree branch. Remember to paint all pruning cuts.

Below: The Winterhur Museum, Delaware dried flowers Christmas tree.



Above: Proper Crape Myrtle pruning diagram.

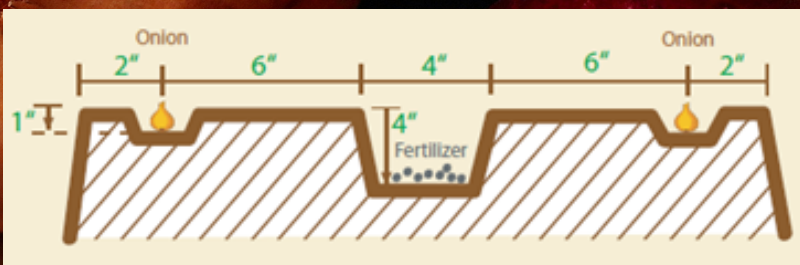
# PLANT SOON FOR SPRING HARVEST

## Onions

### What You Need To Know

- Start looking for onion sets (as opposed to seeds) now for onion planting in February.
- The size of the onion bulb is dependent upon the number of green leaves at the time of bulb maturity. For each leaf, there will be a ring of onion.
- Onions are characterized by day length:
  - long day" onion varieties will quit forming tops and begin to form bulbs when daylight reaches 14 to 16 hours (better in states north of the 36th parallel)
  - short day" onions will starting making bulbs at 11 to 12 hours of daylight (better in states south of the 36th parallel)

Short day (11–12-hour day length)	
Yellow	Chula Vista, Cougar, Jaguar, Legend, Linda Vista, Mercedes, Prowler, Safari, Sweet Sunrise, TX 1015Y, Early Grano 502, Granex
White	Cirrus, Marquesa, TX Early White, Crystal Wax
Red	Red Bone, Rio Santiago, Sakata Red, Red Burgandy
Intermediate day (12–13-hour day length)	
Yellow	Caballero, Cimarron, Riviera, Utopia, Yula
White	Alabaster, Mid Star, Sierra Blanca, Spano
Red	Fuego
Long day (14–16-hour day length)	
Yellow	Armada, Capri, Durango, El Charo, Ole, Seville, Sweet Perfection, Valdez, Vaquero, Vega
White	Blanco Duro, Sterling, White Spanish Sweet
Red	Tango



Above: Shows proper trench and onion planting.

Left: Shows onion tops flopped over signaling time to harvest.



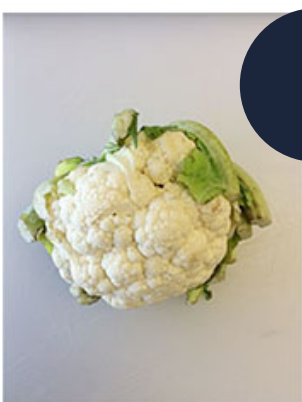
- Onions grow best in full sunlight and well draining soils.
  - Work the garden soil only when it is dry enough to not stick to garden tools.
  - Soil should be loose and crumbly 8 to 10" deep.
  - Remove all rocks. If your soil is compacted, work in compost to improve aeration and drainage.
- Onions prefer soil with a pH between 6.2 and 6.8.
- Apply fertilizer (10-20-10) 2-3" below sets at planting time.
- Plant the onions 6" from the edge of the trench on both sides of the trench at 1" deep 3" apart. Do not plant the onions in the trench! Leave a 2" margin between the onions and the outside edge of the bed.
- Water thoroughly after planting, and regularly thereafter. If leaves develop a yellow tinge, cut back on watering. The closer to harvest time, the greater the need for water. However, when the onion tops start falling over, stop watering and let the soil dry out before harvesting.
- When caring for the onions during the season, do not allow weeds to mature near onions.
- Nutritional needs are different during the growing season.
  - Every 2 to 3 weeks after planting, fertilize with ammonium sulfate (21-0-0) in alkaline soils. Water the onions after every application. Stop fertilizing when the onions start to bulb.
- When the tops of the onions turn brown and fall over, it's time to harvest. Ideally, the plant will have about 13 leaves at this point.

# VEGGIE PREPARATIONS

# CAULIFLOWER

TIPS ON PROPERLY WASHING, HANDLING, CUTTING AND PREPARING VEGGIES

1



- Wash 1 crown of cauliflower, and cut away the large stems.



- Cut the cauliflower into small florets as shown.



2

Fun to make with children!

## H. Easy Cauliflower and Broccoli



**Prep time:** 15 minutes  
**Cook time:** 10 minutes  
**Serves:** 8  
**Serving size:** 1/2 cup

**Utensils needed**  
 Knife  
 Cutting board  
 Large skillet with lid  
 Measuring cup  
 Measuring spoon

### Ingredients

- 4 cups of cut cauliflower florets
- 4 cups of cut broccoli florets
- 1/2 cup of water
- 4 ounces of fat-free cream cheese, cubed
- 1/2 cup of plain low-fat yogurt
- 1/4 cup of skim or 1 percent milk
- 1 1/2 cups of shredded, reduced-fat, sharp cheddar cheese
- 10 crackers, crushed (about 1/3 cup)
- 3 tablespoons of grated Parmesan cheese

### Directions

1. Wash your hands and clean your cooking area.
2. Rinse the broccoli and cauliflower. Cut the florets into small "bite-size" pieces.
3. Place the vegetables and 1/2 cup of water in a large skillet. Cover the skillet with a lid and allow the vegetables to steam over high heat for 3 minutes or until they are tender.
4. Add milk to the skillet. Reduce the heat to low.
5. Cut the cream cheese into cubes and add them to the skillet. Allow the cream cheese to melt. Stir it occasionally.
6. Add the yogurt to the skillet. Stir to coat it.
7. Sprinkle the shredded cheddar cheese over the vegetables and allow it to melt.
8. Mix the cracker crumbs and Parmesan cheese; sprinkle the mixture over the vegetables.

### Nutrition Facts

Serving Size 1/2 cup	
Servings Per Container 8	
Amount Per Serving	
<b>Calories 110</b>	<b>Calories from Fat 45</b>
% Daily Value*	
<b>Total Fat 5g</b>	<b>8%</b>
Saturated Fat 2.5g	<b>13%</b>
Trans Fat 0g	
<b>Cholesterol 15mg</b>	<b>5%</b>
<b>Sodium 290mg</b>	<b>12%</b>
<b>Total Carbohydrate 8g</b>	<b>3%</b>
Dietary Fiber 2g	<b>8%</b>
Sugars 3g	
<b>Protein 9g</b>	
<b>Vitamin A 20%</b>	<b>Vitamin C 80%</b>
<b>Calcium 35%</b>	<b>Iron 4%</b>
*Percent Daily Values are based on a diet of 2,000 calories.	
Your daily values may be higher or lower depending on your calorie needs:	
Calories	2,000    2,500
Total Fat	Less than 65g    80g
Saturated Fat	Less than 20g    25g
Cholesterol	Less than 300mg    300mg
Sodium	Less than 2,400mg    2,400mg
Total Carbohydrate	300g    375g
Dietary Fiber	25g    30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

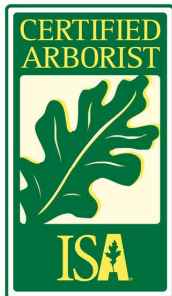
[www.jmgkids.us/LGEG](http://www.jmgkids.us/LGEG)

### Kitchen math and science

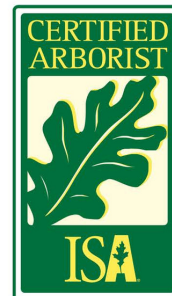
1. What parts of the cauliflower and broccoli are edible (Circle two)?  
 Roots    Stems    Leaves    Flower    Fruit    Seeds
2. Look at the nutrition label for this recipe. If you eat one serving (1/2 cup), how many calories will you have eaten? \_\_\_\_\_
3. How many calories would be in 2 servings? \_\_\_\_\_
4. What is the first step in this recipe? \_\_\_\_\_
5. Which is more: 3 tablespoons or 1/2 cup? \_\_\_\_\_



**How the children can help:** Wash the produce, measure the ingredients, crush the crackers, mix the crushed crackers with the Parmesan, and sprinkle the cracker mixture over the vegetables

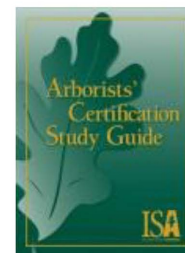


# CERTIFIED ARBORIST TRAINING



## Benefits of this training:

- **18 hours of focused training from experts**
  - Divided into two sessions
    - February 10 and 11 2022
  - Time: 8:00 a.m. to 5:00 p.m. (Lunch and Snacks provided)
  - Location: Texas A&M AgrLife Research Center,  
1102 E Farm to Market Road 1294 Lubbock, 79403  
(Large Auditorium)
- **Cost includes a full study guide which will prepare you for the ISA Certified Arborist exam. Please read before class.**



FREE with registration! Arborist Certification Study Guide (\$125 value)

## To register:

- Cost: \$300 per person, Registration required by Thursday, January 13, 2022 to (806) 775-1740
- Mail check to Lubbock County Extension PO Box 10536 Lubbock, TX 79408 payable to Agrilife Extension Acct. 272113 (no credit cards)

The tree care profession has experienced rapid growth over the past decade and there is a significant amount of knowledge required to perform at the highest level. International Society of Arboriculture (ISA) credentials help consumers identify qualified, knowledgeable tree care professionals. <sup>1</sup>

This course will help prepare professional arborists to take the **ISA Certified Arborist examination**.

**Topics include:** Tree Biology, Identification, Water Management, Tree Nutrition, Tree Selection and Pruning, Plant Health Care, Tree Assessment, Trees and Construction, Urban Forestry, & more!

<sup>1</sup> International Society of Arboriculture (ISA). <<http://www.isa-arbor.com/certification/benefits/index.aspx>>

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(806) 775-1740





# RED GRAPEFRUIT

HARVEST OF THE MONTH  
JANUARY

**Red grapefruit** is the state fruit of Texas. It was discovered growing on a pink grapefruit tree in Texas' Rio Grande Valley. It has a tangy, sweet taste and can be juiced, sliced in half or divided into several sections. Texas citrus fruits grow in places with lots of sunshine and soft ground. Varieties like Rio Star, Flame and Ruby Sweet can be found in supermarkets from October through May.



## DID YOU KNOW?

A grapefruit has lots of vitamins A and C, so eating a ruby Texas red grapefruit or drinking its juice helps keep your skin and your eyes healthy, and helps protect your body from getting a cold or the flu.

## FUN FACT

Grapefruit got its name from growing in bunches just like grapes.



RUBY RED  
GRAPEFRUIT  
GROWING REGIONS

Rio Grande Valley



TEXAS DEPARTMENT OF AGRICULTURE  
COMMISSIONER SID MILLER

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

