SPH

SOUTH PLAINS HORTICULTURE

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Americans consume an average of 980 million cups of coffee per day. Producing this liquid gold generates coffee grounds as waste in the process. A recent trendy phenomenon has sent gardeners flocking to coffee shops requesting to use the waste in their gardens as fertilizer, pest control, compost and mulch, but what does the science say about the use of these sweet smelling grounds?

According to Washington State University Extension (WSU EXT), if the coffee grounds are allowed to decompose outdoors over the course of several months, bacteria and fungi will help nitrogen-rich compounds like proteins and caffeine break down quickly, releasing plant-available nutrients like nitrogen, phosphorus, iron and zinc into the soil especially in alkaline soils. Our Lubbock soils are always in need of nitrogen and are very alkaline! WSU EXT also notes that larger bioconsumers, like earthworms, can use coffee grounds as a food source and help improve soil structure.

Coffee grounds used as mulches or soil amendments can help moderate soil temperature and retain soil moisture like any other good mulch material. The grounds also bind pesticide residues and toxic heavy materials, preventing their movement into the surrounding environment.

Unfortunately, there is no published evidence that coffee grounds repel or kill any garden pests like slugs, cats or invasive weeds. In my personal life, I have a cat that will drink my husband's coffee if he leaves it unattended for very long- i know that rumor is just a myth.

Action Items for Gardeners Using Coffee Grounds:

- Use no more than 20% by volume of coffee grounds in a compost pile. Excessive use in compost can be phytotoxic.

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TEXAS A&M AGRILIFE EXTENSION

INSIDE THIS ISSUE

GARDENING WITH COFFEE

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- Don't assume coffee grounds will make an acidic compost; pH levels will change over time.

- Always work with cooled coffee grounds; heat can kill beneficial microbes and burn your fingers- ouch!

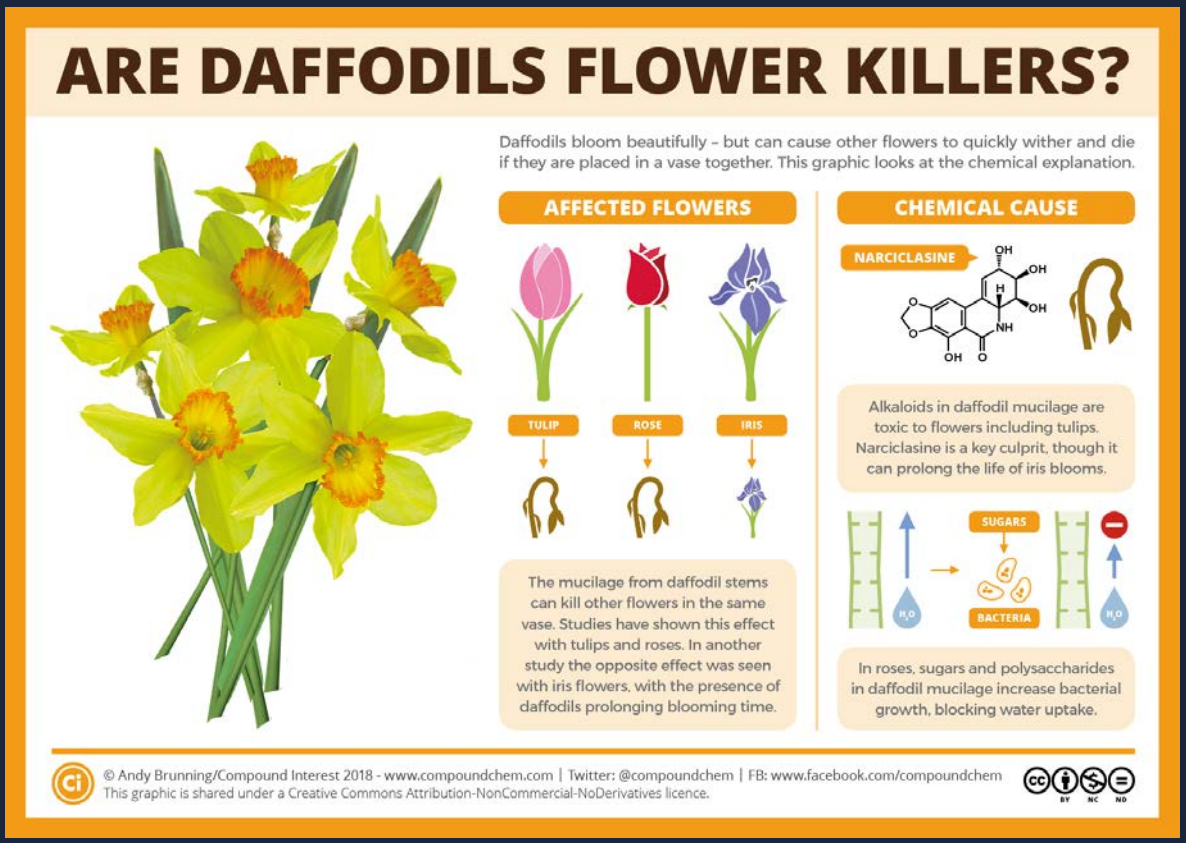
- Avoid adding coffee grounds to vermicomposting bins; they can injure or kill earthworms in confined areas.

- Be sure to have a soil test to determine if your soil requires any additional nutrients or organic material. Excessive nutrients can be harmful to plants and soil health.

- Coffee grounds shouldn't be worked into the soil, but laid on top as a thin mulch layer (1/2") for natural incorporation. Then add a thick layer (4") layer of wood chips or other mulch material on top of the coffee grounds to avoid compaction issues.

Above: An example of used coffee grounds being offered for free to the community.

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

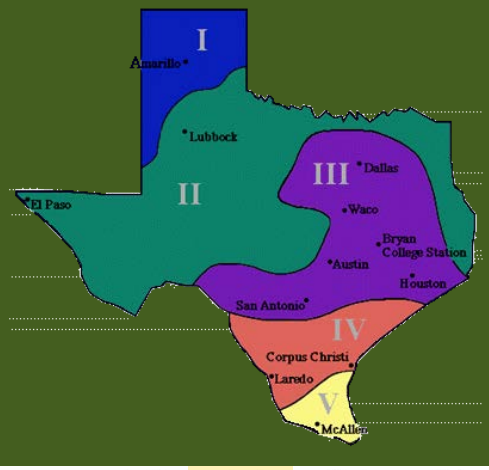


PLANT SOON FOR SPRING HARVEST

Vegetables

What You Need To Know:

We are in gardening region II in Texas. USDA hardiness zone 7 with an average minimum temperature of 0-10 degrees Fahrenheit. Find this info virtually here: https://aggie-horticulture.tamu.edu/archives/parsons/earthkind/ekgarden14.html



Vegetables	Region I	Region II	Region III	Region IV	Region V
Asparagus	After Mar 1	After Feb 15	After Feb 1	After Jan 15	Not Recommended
Beans, snap bush	Apr 15-May 15	Apr 1-May 5	Mar 5-May1	Feb 10-Apr 15	Feb1-Mar 15
Beans, snap pole	Apr 15-May 1	Apr 1-May 1	Mar 5-Apr 15	Feb 10-Mar 15	Feb 1-Mar 15
Beans, Lima bush	May 1-May 15	Apr 15-May 15	Mar 15-Apr 15	Mar 1-Apr 1	Feb 15-Apr 1
Beans, Lima pole	May 1-May 15	Apr 15-May 15	Mar 15-Apr 15	Mar 1-Apr 1	Feb 15-Apr 1
Beets	Mar 1-Jun 1	Feb 15-May 20	Feb 1-Mar 1	Jan 15-Apr 15	Jan 1-Mar 1
Broccoli	Mar 1-Jun 15	Feb 15-Mar 20	Feb 1-Mar 1	Jan 15-Feb 25	Jan 1-Feb 15
Brussels sprouts	Feb 15-Apr 1	Feb 15-Mar 10	Not Recommended	Not Recommended	Not Recommended
Cabbage	Mar 10-Apr 15	Feb 15-Mar 10	Feb 1-Mar 1	Jan 15-Feb 10	Jan 1-Feb 1
Carrots	Mar 10-Apr 15	Feb 15-Mar 10	Jan 15-Mar 1	Jan 15-Feb 10	Jan 1-Feb 1
Cauliflower (transplant)	Mar 1-Apr 15	Feb 15-Mar 10	Feb 1-Mar 1	Jan 15-Feb 15	Jan 15-Feb 15
Chard, Swiss	Mar 1-Jun 1	Feb 15-May 1	Feb 1-Mar 10	Jan 15-Apr 1	Jan 1-Apr 1
Collards	Mar 1-May 1	Feb 15-Apr 10	Feb 1-Mar 25	Jan 15-Mar 15	Jan 1-Mar 15
Corn, sweet	Apr 1-May 20	Mar 15-May 1	Feb 25-May 1	Feb 15-Mar 15	Feb 1-Mar 15
Cucumber	Apr 15-Jun 1	Apr 1-May 15	Mar 5-May 1	Feb 1-Apr 10	Feb 1-Apr 1
Eggplant	May 10-Jun 1	Apr 10-May 1	Mar 15-May 1	Feb 20-Apr 1	Feb 1-Mar 15
Garlic (cloves)	Jan 1-Jan 15	Not Recommended	Not Recommended	Not Recommended	Not Recommended
Kohlrabi	Mar 1-Apr 15	Feb 15-Mar 1	Feb 1-Mar 1	Jan 15-Feb 15	Jan 1-Feb 15
Lettuce	Mar 1-May 15	Feb 15-May 1	Feb 1-Mar 15	Jan 15-Mar 15	Jan 1-Mar 1
Muskmelon (cantaloupe)	May 1-Jun1	Apr 10-May 1	Mar 15-May 1	Feb 20-Apr 15	Feb 1-Apr 1
Mustard	Mar 1-May 15	Feb 15-May 1	Feb 1-Apr 1	Jan 15-Mar 15	Jan 1-Mar 1
Onion (plants)	Mar 1-Apr 15	Feb 15-Mar 10	Feb 1-Mar 1	Jan 15-Feb 10	Jan 1-Feb 1
Parsley	Mar 1-Apr 15	Feb 15-Mar 10	Feb 1-Mar 1	Jan 15-Feb 10	Jan 1-Feb 1
Peas, English	Feb 15-Mar 15	Feb 15-Mar 1	Feb 1-Mar 1	Jan 15-Feb 1	Not Recommended
Peas, Southern	Jay 1-Jun 15	Apr 20-May 15	Mar 25-May 20	Mar 15-Apr 15	Mar 1-Apr 15
Pepper (transplant)	May 10-Jun 1	Apr 10-May 1	Mar 15-May 1	Feb 20-Mar 10	Feb 1-Mar 10
Potato	Mar 15-Apr 7	Mar 10-Apr 1	Feb 15-Mar 1	Jan 15-Feb 15	Jan 1-Feb 1
Potato, sweet (slips)	May 15-Jun 15	Apr 25-May 15	Apr 10-May 15	Mar 15-May 10	Mar 1-Apr 15
Pumpkin	May 15-Jun 1	Apr 25-May 20	Apr 1-Apr 20	Mar 10-May 1	Mar 1-Apr 1
Radish	Mar 1-Apr 1	Feb 15-May 20	Feb 1-May 1	Jan 15-Apr 15	Jan 1-Apr 1
Spinach	Mar 1-Apr 1	Feb 1-Mar 1	Jan 1-Feb 15	Jan 1-Feb 15	Jan 1-Feb 1
Squash, summer	May 1-Jun 1	Apr 10-May 1	Mar 5-May 1	Feb 10-Apr 10	Feb 1-Apr 1
Squash, winter	May 1-May 15	Apr 1-Apr 25	Mar 5-May 1	Feb 10-Apr 10	Feb 1-Apr 1
Tomato (transplant)	May 10-Jun 1	Apr 10-May 1	Mar 15-Apr 10	Feb 20-Mar 10	Feb 10-Mar 10
Turnip	Mar 1-Jun 1	Feb 15-May 20	Feb 1-Mar 10	Jan 15-Apr 15	Jan 1-Mar 1
Watermelon	May 10-May 15	Apr 10-May 1	Mar 15-May 1	Feb 20-Apr 1	Feb 1-Apr 1

VEGGIE PREPARATIONS

SPINACH

TIPS ON PROPERLY WASHING, HANDLING, CUTTING AND PREPARING VEGGIES

1

- If you are using large spinach leaves, cut away and discard the base stems.
- Wash the leaves carefully under cold water.
- Slice the leaves into thin, 1/2 inch long slices, and give each student 1 or 2 strips. Large spinach leaves will be prepared following same steps as the leaf lettuce.

2

Fun to make with children!

C. Spinach Quesadillas

Prep time: 10 minutes
Cook time: 5 minutes
Serves: 4
Serving Size: 1

Utensils needed

Colander
Knife
Cutting board
Skillet/hot plate or electric skillet
Spatula
Measuring spoons
Measuring cups
Paper towel
Plate

Nutrition Facts

Serving Size 1 Quesadilla
Servings Per Container 4

Amount Per Serving	
Calories 300	Calories from Fat 60
	% Daily Value*
Total Fat 7g	11%
Saturated Fat 4g	20%
Trans Fat 0g	
Cholesterol 15mg	5%
Sodium 700mg	29%
Total Carbohydrate 45g	15%
Dietary Fiber 9g	36%
Sugars 2g	
Protein 18g	

Vitamin A 330% • Vitamin C 80%
Calcium 60% • Iron 35%

*Percent Daily Values are based on a 2,000 calorie diet. 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

Ingredients

1½ pounds of fresh spinach
1 tablespoon of water
8 six-inch whole-wheat tortillas
¼ cup of prepared salsa, drained
1 cup of shredded reduced-fat Monterey jack cheese

Directions

1. Wash your hands and clean your cooking area.
2. Place the spinach in a colander in the sink and run water over the greens. Drain them and pat them dry.
3. Chop the washed spinach.
4. Add 1 tablespoon of water to a skillet and sauté the fresh spinach quickly over medium heat until it is soft. Allow the spinach to cool and then press it lightly with a paper towel to remove the extra liquid.
5. Place 4 tortillas on a work surface. Spread ⅛ cup of cheese on each tortilla. Then top the cheese with 1 tablespoon of salsa, followed by ¼ cup of cooked spinach.
6. Add another ⅛ cup of cheese on top of the spinach on each tortilla. Top with the remaining tortillas and press them firmly.
7. Cook each quesadilla in the skillet over medium heat until the cheese melts and the tortillas are crispy and golden brown. This will take about 4 minutes for each side. Use a spatula to turn the quesadillas.
8. Transfer the quesadillas to a plate. Cut each quesadilla into quarters before serving.

Kitchen math and Science

1. What vitamin does spinach have a lot of? _____
2. Draw lines to cut this quesadilla into fourths:
3. How many pieces of the quesadilla above would you and one other family member have if you were splitting it evenly? _____
4. If you have two ¼ sections of a quesadilla, what fraction of a whole tortilla does this represent? _____
5. How many grams (g) of protein are in 1 quesadilla? _____ (Use the nutrition label to find this information.)

How the children can help: Wash the produce; measure the ingredients; spread the cheese, salsa, and spinach on the tortilla; and place another tortilla on top

Texas A&M AgriLife Extenstion 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: _____

RED LEAF LETTUCE

HARVEST OF THE MONTH
FEBRUARY

Red leaf lettuce has large, open leaves and is a reddish-purple color. Lettuce is harvested by cutting the short stem underneath the leafy mass called the "head." Other varieties include romaine, green and butter. Red leaf lettuce is fat-free and offers more nutrients than green lettuce. As one of the world's most popular salad vegetables, lettuce comes in many shapes, sizes and colors. It is usually served cold and fresh although it can be cooked or steamed for a culinary adventure.

DID YOU KNOW?

Red leaf lettuce comes from a big family, including: new red fire lettuce, red sails lettuce, redina lettuce, galactic lettuce and benito lettuce.

FUN FACT

Did you know lettuce is a member of the sunflower family?

RED LEAF LETTUCE GROWING REGIONS

1. The High Plains
2. North Texas
3. East Texas
4. Central Texas
5. Trans Pecos
6. Winter Garden
7. Coastal Blend
8. Rio Grande Valley

TEXAS DEPARTMENT OF AGRICULTURE
COMMISSIONER SID MILLER
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