May 2020 Vol. 10 No. 5

Santa Fe Extension Master Gardeners Newsletter

Lettuce bowl. Photo by Jannine Cabossel.

Vegetable Gardening in Containers

by Jannine Cabossel

Whether you're new to vegetable gardening or an experienced grower, it's worth considering growing produce in containers this year. We were all caught off guard with the coronavirus pandemic. For a while the local nurseries were forced to close; they were recently allowed to reopen for pickup and deliveries, but customers cannot roam freely to check out the offerings.

With some know-how, you can still find and grow seeds, seedlings, or larger plants in containers. Tomatoes, peppers, and eggplants are best planted as seedlings around May 15, depending on our last expected freeze. Most veggies like six to eight hours of sun, so find your sunniest location for them. Some cool season vegetables, like lettuce and peas, do better in partial shade. In all cases, when you're growing in containers rather than in the ground, don't forget to water more because the soil will dry out faster.

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Vegetable Gardening in Containers—cont. from page 1

Potatoes growing in a basket container. Photo by Linda Archibald.

Be creative about your containers. You can use any pot-like vessel with holes on the bottom for drainage. If the containers have been used before, sterilize the inside with a solution of two teaspoons bleach in a quart spray bottle of water and rinse well. If pots are new, you don't have to do this. Use bagged potting soil, not garden soil, which may have pathogens. Completely wet the soil until moist like a damp sponge; it is hard to get many potting soils sufficiently moist. I moisten the potting soil in a bucket first and then I put the moistened soil into containers or pots before planting seeds or plants.

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In This Issue

Editor: Sarah Baldwin

Art Director: Jannine Cabossel

Vegetable Gardening in Containers—cont. from page 2

Peas germinating with stick supports. Photo by Jannine Cabossel.

If planting seedlings or plants, place them so the crown, where the leaves come out, is level with the soil; do not cover the crown. When planting tomatoes, however, you can plant about half the length of the plant underground. The hairy stem will grow roots, which makes the plant sturdier. If planting by seeds, follow the depth and spacing on the seed packet.

Where to get seedlings or plants

Besides nurseries, one of the best places to get vegetable seedlings or plants is at the Santa Fe Farmers Market. Many of the farmers there should be offering tomato varieties as well as other vegetable varieties.

Another source is *Vagabond Farmers*. They will be offering many different vegetable seedlings starting in May. To find out what they have on offer and to place an order, email them at thevagabondfarmers@gmail.com.

Where to get seeds

Many seed companies are sold out or behind on orders, but the Santa Fe Seed Library is offering free seeds at mini seed library locations, while they last.

- **Santa Fe County Fairgrounds**, 3229 Rodeo Road, outside the white gate, Saturdays and Sundays, 9 a.m. to 5 p.m.
- **Southside Library**, 6599 Jaguar Drive, under the portal, Saturdays and Sundays, 9 a.m. to 5 p.m.
- **Reunity Resources**, 1829 San Ysidro Crossing, Monday through Friday, 8 a.m. to 4 p.m. and Saturdays from 9 a.m. to noon. Call to confirm: 505-490-1047.
- **La Tienda, Eldorado**, 7 Caliente Road, Monday through Saturday, 10 a.m. to 5 p.m.

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Vegetable Gardening in Containers—cont. from page 3

Vegetables that do well in containers

Beans: Grow "bush" varieties instead of vining ones. Put 1 plant in a 10–12-inch pot. Can been grown by seed.

Cucumbers: Grow bush varieties by seed. 1 to 2 plants can fill a 20-inch pot.

Eggplant: Transplant 1 eggplant seedling into a 10–12-inch container. Grow by plant only, not seeds, which take too long to start.

Kale and chard: 1 plant per 10–12-inch container; in longer containers you can put in several. Can be grown by seed or plants.

Leafy greens: Leafy lettuces are among many greens that you can cut the outer leaves off of to eat and later cut again for another meal. Keep cool-season crops in partial shade. Can plant by seed or seedling. They do not need deep containers.

Peas: Put tall supports in the pot when planting the seeds. I like to use sticks for them to grow up on. Grow many peas 2 inches apart in 10–12-inch pot or a long container. Place container in partial shade.

Peppers: Grow bell peppers and hot peppers from plants only, not seeds, which take too long to start. 1 plant per 10–12-inch pot.

Potatoes: Grow in large grow bags or containers. Put 4 inches of soil in bottom of container. Then put potato "seeds" on top of soil, eyes up, and cover with 3 or 4 more inches of soil. As plant grows, cover plant leaves with soil. Do not trim the leaves but bury them; they will grow through the soil. Continue to cover the leaves as they grow until you reach the top of the container. Then just let the leafy parts grow. The potatoes grow in the soil above the original potato seeds while the roots grow down. Harvest when plant starts to die. The Farmers Market is good source of potato seeds.

Radishes: Short or long containers work will for these crops. Plant seeds 2 to 3 inches apart.

Tomatoes: Grow by plant only, not seeds. Tomato plants need support. Use a tall stake or tomato cage to keep your plants upright. Plant determinate varieties, which typically grow shorter. For each plant use a 5-gallon bucket or equivalent with drainage holes. Plant the stem deep.

Zucchini or summer squash: Plant a bush variety. A single plant can fill a 24-inch pot. Plant by seed into pots.

Message from the President

by Wendy Wilson

2020 SFEMG Board President Wendy Wilson

Let's look at the long game. The March/April issue of *Horticulture* magazine featured an article about planting for the long game. Appropriately, the author writes about seasonal and multi-year planting plans, how the growing season is longer and warmer, and how this requires a bit of trial and error in planting. I feel like that is where we are now—thinking about where we will be in the future. How will our garden projects look, how will our organization look, how will our interns integrate into an organization that is experiencing a literal hiatus?

We are going to look great. Over the past two decades, Master Gardeners have laid down a foundation that is well-built, strong, and ready for the future. The SFEMG board, support board, and project leaders are working to bridge this time of seclusion and looking forward to an upcoming time of action.

On April 24 Susie Sonflieth, Bonnie Martin, Donna Wynant, Deborah Madison, and Christine Salem launched mini seed libraries around town. They placed a selection of seeds from the Santa Fe Seed Library (Southside branch library) at Reunity Resources, La Tienda at Eldorado, the Community Garden, and the Santa Fe County Fairgrounds. Additional seeds have been available at the Food Depot, Tewa Women United, and the New Mexico Acequia Association to support their community food-distribution programs. At the county fairgrounds, the seed container will be placed under the poster each Saturday and Sunday from 9 a.m. to 5 p.m. The important work of feeding our community is beautifully represented through this project. Congratulations to the project leaders on their thoughtful and hard work.

At this time, SFEMG activities continue to be on hold until further notice. As Dr. Servin, manager of the statewide MG program, and Tom Dominguez, our county extension agent, reported at the recent update meeting, NMSU is anticipating a suspension of activities through the beginning of August. We will continue to monitor the situation and will look to both the governor and NMSU for guidance.

In the meantime, plan for the future, but enjoy this beautiful spring. My tulips are fabulous, the alliums are budding up, and I just ordered 12 mums for the fall. I look forward to seeing you all again soon.

Vanessa cardui in a Santa Fe garden. Photo by Sarah Baldwin.

Painted Lady Butterflies

by Sally Roberts

For a few weeks in April people in the Santa Fe area were seeing an abundance of orange and black butterflies, which usually appear at the same time every year. They remind us of monarchs, but when we look more closely, we see that they are smaller and have distinctly different markings. Known as painted ladies, *Vanessa cardui* are from the brush-footed butterfly family, Nymphalidae (order Lepidoptera). Instead of having the strong black linear patterns of the monarchs (*Dannaus plexippus*), they are more spotted overall, and their undersides are not the monarchs' red-orange and black but a complicated pattern of brown, gray, and tan, with white, black, and pink marks and blue eyespots. The species has a fair amount of variation in size and coloration depending on the region in which they are found, desert-bred ones being smaller and paler.

These lovely creatures are widespread across the world and are just now making their annual northward migration, which can last from January to August. In North America their flight is from central Mexico and the U.S.–Mexican border to Canada just south of the Arctic; they disperse throughout the continental United States. They used to be called "cosmopolitan" butterflies, perhaps because they are the most widely distributed butterfly in the world, occurring on every continent but Australia and Antarctica.

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Painted Lady Butterflies —cont. from page 6

Butterfly migrations have been studied, but the reasons for them are not completely understood, and not all painted ladies leave Mexico. It is believed that many of them die out when the weather in northern climates becomes too cold for them to survive, but many start a reverse migration around August. It seems that the major North American population of painted ladies breeds near the U.S.–Mexico border, just after the winter rains, when the plants they prefer to feed and breed on become available. A number of generations can be produced each year, especially in warmer climates.

The monarch is larger than the painted lady and its markings are sharper. Photo via Wikimedia Commons.

Painted ladies feed and lay eggs on a host of plants. They like the pollen of asters and other composite flowers, as well as thistles, malvas, and borages. The caterpillars' preferred food is thistles, but they also eat hollyhock, mallow, and burdock plant leaves. Large outbreaks of these insects can have an impact on gardens and agriculture because their larvae can devastate crops, notably beans, artichokes, and mint.

The underside of painted lady wings. Photo via Wikipedia.

The painted lady is found mostly at lower altitudes, and their habitat is almost everywhere, especially in open fields and gardens, marsh or tundra, desert or dune, and varieties of forests. They often move together in large clusters, and they are especially prevalent after wet winters and springs. We have had more of these butterflies in Santa Fe the last two years, probably for just that reason.

References:

Animal Diversity Web, *Vanessa cardui*, by Rachel Kreiger and Cody Noblitt
Butterflies and Months of North America, Painted Lady: *Vanessa cardui* (Linnaeus, 1758)
Insect Identification for the Casual Observer, Painted Lady Butterfly (*Vanessa cardui*)
Veltkamp, Tatia. Wings of Enchantment Butterfly Farm, Albuquerque, NM. Interview via phone.

Scarlet Gilia (*Ipomopsis aggregata*)

by Lissa Johnson

It is a treat to be hiking in the Santa Fe mountains through piñon-juniper woodlands and glimpse the red flowers of scarlet gilia through the trees along your journey. Also known as skyrocket, this beauty makes its home in a variety of habitats at elevations from 5,000 to 11,000 feet, from southern British Columbia southeast to Montana and then south to northern Mexico. In New Mexico the plant is found nearly statewide. It was originally discovered in the early 1800s in northern Idaho by Lewis and Clark, the famous explorers of the western United States.

The flowers have a tubular trumpet shape ideal for long-tongued insect pollinators and hummingbirds, which especially prefer the red variety. Whiteish-pink flowers are also found; interestingly, both colors can be on the same plant. It has a somewhat unpleasant odor that makes it appealing to moth pollinators, which arrive at dusk and prefer the lighter-colored flowers. Navajo and Hopi peoples have used scarlet gilia in various ways, including as a dye, a laxative, and a treatment for spider bites.

Landscape use: These herbaceous plants work well in a native-style garden that encourages pollinators. The bold red-colored flowers, particularly attractive to hummingbirds, provide a lovely accent when placed in different locations throughout the garden or clustered together for maximum effect. As they spread by seed, they will appear in unexpected locations.

Planting and care: Start these biennials from seed. Planting seeds two successive years in a row is recommended to assure continual blooms from year-to-year and regular reseeding. Early season pinching of growth encourages multiple stems to sprout and thus more blooms. Plants grow in a wide range of well-drained soils.

Propagation: Plants are best grown from untreated seeds.

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Scarlet Gilia—cont. from page 8

Plant type: biennial herb
Bloom time: May or June to September
Size: stems up to 2.5 feet tall; flowers on short stalks along much of the stem
Sun: part shade
Soil: sandy, gravelly, rocky, or silty
Water: low
USDA zones: 4–6

References:

Littlefield, Larry J., and Pearl Burns, *Wildflowers of the Sandia and Manzano Mountains of Central New Mexico* (University of New Mexico, 2015)
U.S. Forest Service, Scarlet Gilia (*Ipomopsis aggregata*), by Walter Fertig
Wildflowers of New Mexico, Skyrocket, Scarlet Gilia, by George O. Miller

Photo via Wikimedia Commons

Urban Agriculture in the United States

by Peggy Rudberg

Over 10,000 years ago, our ancestors began replacing foraging with the cultivation and management of plants. With more predictable food sources, dwellings and plots joined to create settlements. Populations grew and the Earth began its transformation to a cultivated ecosystem.

In the Americas, early colonists slowly adjusted to their new land, adapting to appropriate farming methods with help from Natives. Each immigrant surge pushed the frontier westward until farms and livestock covered the country. When the Industrial Revolution replaced manual labor with machines, factories drew workers and cities grew. Soon the United States was transformed from self-sustaining agrarian communities to industrial urban centers where city dwellers were disconnected from their food sources.

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Urban Agriculture in the United States—*cont. from page 9*

Two special situations brought vegetable gardens back to urban areas. The Panic of 1873 (an economic crisis that led to a major depression) and the 1930s Great Depression led to unemployment and hunger. Cities allowed the unemployed to grow food on vacant lots, and work garden programs paid gardeners to cultivate and distribute produce to those in need.

During the two world wars, when farm workers became soldiers, civilians planted victory gardens to feed themselves and help supply troops. In 1917 there were 3.5 million war gardens, and in 1944 20 million victory gardens supplied 40 percent of America's vegetables. After World War II, kitchen gardens carried a social stigma of poverty and were abandoned. A housing boom expanded suburbs, which often banned vegetable gardens and chickens; instead lawns were promoted as symbols of privilege. Improved refrigeration and transportation brought food from greater distances, and supermarkets appeared.

By the 1960s the "green revolution" of pesticides, synthetic fertilizers, and genetic modification further increased productivity and consolidated agribusiness. In 1970 Earth Day marked the emergence of public concern about our biosphere. Neighborhood organizations and municipalities created community gardens on unused land to supply fresh, affordable food to inner cities, to build community, and to encourage local food economies.

Urban gardens trends have come and gone in recent decades, but today they are on the upswing with young and old. The National Gardening Association reported that in 2018 nine million people in urban areas were growing food.

Now commercial urban farms are emerging. In 2010 Brooklyn Grange assembled a one-acre rooftop soil farm on a 1919 office building in Queens. Two more sites added over 200,000 square feet, including a hydroponic garden, where plants are grown in water. AeroFarms practices vertical farming in indoor multistory greenhouses using aeroponic technology: plants grown without soil and sustained by mist.

While projections for using urban agriculture to reduce food insecurity, increase urban livability, and curb our agricultural footprint are hopeful, fulfillment is still at an early stage, especially in the United States. Issues such as increasing land values and water use impose limitations. In 2016 only a third of American urban farmers surveyed were able to make a living farming. Fortunately, many of us can grow produce without the expectation of financial gain but simply to reconnect to the natural world and provide some of our own food.

Citylab, Big Data Suggests Big Potential for Urban Farming, by Amy Crawford
Grist, Food Feeding the City
Zoom Out Mycology, Then and now: The history of urban farming in America, and its 21st century resurgence, by Marena Gibson

Photo by Mike McLaren via Pixabay

What's That Weed?

Tumbleweed/Russian Thistle (*Salsola tragus*)

by Sally Roberts

Photo by Matt Lavin (via Wikimedia Commons)

The "tumbling tumbleweed" of Western movies and songs turns out to be not just one but many species in the Amaranthaceae/ Chenopodiaceae family of plants. They occur around the world and are all characterized by becoming hard and dry at maturity, breaking off at the base to then roll across the landscape, dispersing their many seeds. Some mature plants can have over 250,000 seeds.

The tumbleweed most people think of and that we have in abundance here in New Mexico is the so-called Russian thistle, *Salsola tragus*. It is an annual plant that usually starts off in a pyramidal shape, with soft fleshy leaves; it then becomes round and bushy with many branches, having sharp spiny tips. The stems often have red or purple striations, but there are many variations. Flowers are green and inconspicuous, occurring on the upper branches, with bracts that enclose the seeds. It is normally a third to one foot tall and wide and grows most readily in disturbed soils.

Photo by Mary Ellen Harte (via Bugwood.org)

Salsola tragus was introduced into South Dakota from Russia in the 1800s, in contaminated flax seed, and with its tumbling mechanism (and the help of the transcontinental railroad) rapidly spread across the United States. It is considered a noxious weed in some states, though not in New Mexico. It is an agricultural pest, reducing yields and harboring pests such as the curly top virus, carried by leaf hoppers to tomatoes and other crops.

Tumbleweed does have value for a wide variety of wildlife as habitat and food. It is a pollen source for pollinators. It was even eaten by humans during the Great Depression. Because of its oxalate content, however, the plant can be poisonous if too much is consumed.

Environmentally friendly control or elimination of Russian thistle is best done by mechanically removing young plants. Neither burning nor mowing is effective, and allowing plants to mature can cause safety hazards, such as fire and road debris contributing to accidents.

Backyard Bugs: *Anthophora* species

by Pam Wolfe

A mating pair of *Anthophora* sp. Photo by Pam Wolfe.

Anthophora (an-THA-for-uh), or "flower bearer" (*antho* = flower, *phora* = bear), is a cosmopolitan genus of bees in the Apidae family, with 400 species found worldwide, except in Australia and a few other areas of the South Pacific. These bees are fast flying, very hairy, and may hover while checking out a flower. Many are among the earliest spring bees to appear because they have the ability to warm themselves by "shivering"; they can fly at temperatures of less than 60° F. Although some *Anthophora* are specialists, many are generalists and visit a wide selection of flowers. They are important pollinators of penstemons, lupines, and evening primroses. In California their ability to buzz pollinate increases yield in tomato crops. Here in Santa Fe they were active in the apricot blossoms in mid-April and in the *Chinodoxa* blooming in my garden the last week of March. All but one species of *Anthophora* are ground nesters, sometimes in large congregations. In some species females share an entrance to their individual nest cells.

Lost: Charles Mann Magazine Archive

Santa Fe garden photographer and writer Charles Mann recently wrote us asking for help. He is looking for his archive of magazine clippings of his work and thinks it may have been in one of the many boxes of garden books he donated to our organization in 2016. The collection was in a bright pink plastic file box, with dozens of magazines in it. If you have seen this or have any thoughts about someone who might have, please contact Charles Mann at carlosdsf@nets.com.

New & Noteworthy

Have you recently read a plant-related article or book, visited a horticultural website or blog, listened to a podcast, or seen a nature show or documentary you think other gardeners would enjoy or find useful? Send a link to the newsletter (news.sfemg@gmail.com) and we'll include the information in the next issue. ***Note that some of these sources may have paywalls***.

Atlas Obscura, Preserve Your Quarantine Nature Walks with a DIY Herbarium, by Jessica Leigh Hester

Botany One, Staminodes of Aquilegia: how an unusual floral organ develops, by Laura Skates

The Garden Professors, Flowers for Barbara: Cultivating Hope in a Pandemic, by John Porter

NMSU, Seed to Supper: A Beginner's Guide to Low-Cost Vegetable Gardening (self-paced online class, free to NM residents)

New York Times, Food Supply Anxiety Brings Back Victory Gardens, by Tejal Rao

New York Times, Superfund, Meet Super Plants, by Wudan Yan

Santa Fe New Mexican, From farms to food banks: New initiative seeks to benefit food growers as well as the hungry, by Olivia Harlow

Santa Fe New Mexican, Thankfully, migrating birds in Santa Fe oblivious to virus, by Anne Schmauss

Santa Fe Reporter, Seeds for the Summer, by Leah Cantor

Selby, Christina M. *Best Wildflower Hikes New Mexico* (Falcon Guides, 2020)

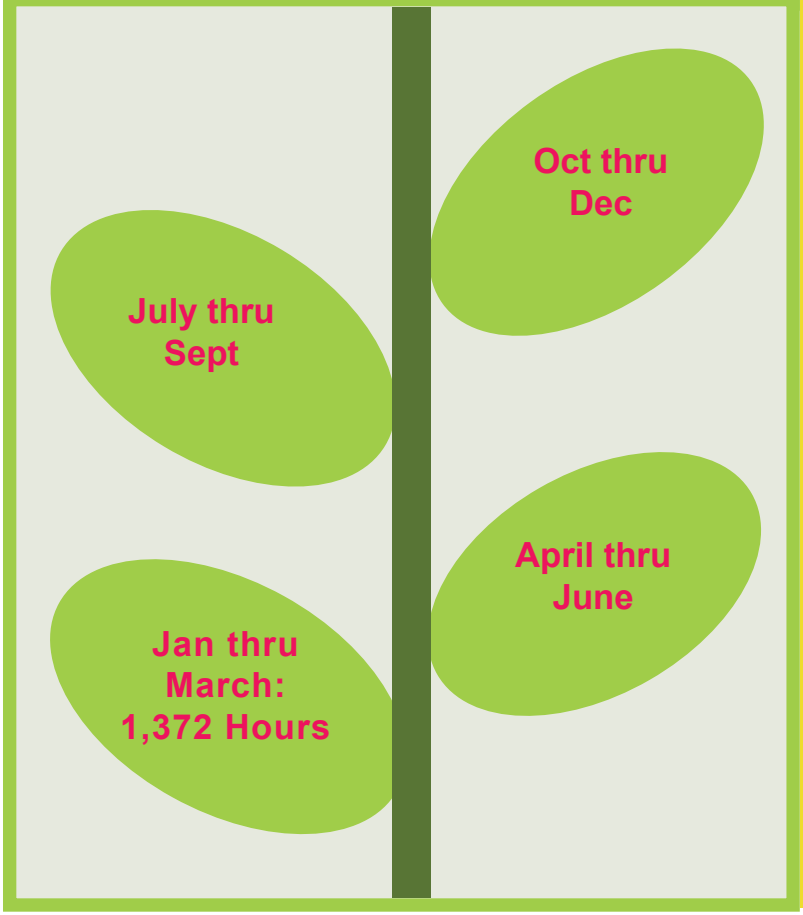
Smithsonian Magazine, Meet the Bee with a Body That's Half Male, Half Female, by Katherine J. Wu

Southwest Yard & Garden, Oh, yes! Ollas!, by Marisa Thompson

I shall never have the garden I have in my mind, but that for me is the joy of it; certain things can never be realized and so all the more reason to attempt them.

—Jamaica Kinkaid (b. 1949)

MASTER GARDENER HOURS



First Quarter Membership Report

Wow, what a first quarter of 2020 for SFEMG. I hope all are healthy and managing well during this public health crisis.

Help us keep our records accurate by checking out the current membership list, which can be found in the members only section of our website; if you see anything that needs to be corrected, please email me at members.sfemg@gmail.com.

As of this writing, these are our membership numbers:

SFEMGs: 176
Interns, Track I: 49
Interns, Track II: 16

Hours logged on TIF as of March 31 come to 1,372, including 923 OS, 397 CE, and 52 PE. As described by Wendy Wilson in the April newsletter, hours required for certification in 2020 will be adjusted based on when we can return to our SFEMG projects.

Take good care,

Gail Dodge
Membership Coordinator

The Garden Journal Radio Show

Every Saturday
10–10:30 a.m.
Live from the Farmers Market

Tune in to KSFR 101.1 FM on Saturday mornings from 10 to 10:30 to listen to a lively, entertaining, and informative gardening show.

May 02	Santa Fe Botanical Garden edition with host Lindsay Taylor
May 09	SFEMG edition with host Christine Salem and guest Isabelle Jenniches on a regenerative approach to soil health for home gardeners
May 16	Santa Fe Farmers Market Institute edition, “Food, Farms & Friends,” with host Carrie Core live from the Farmers Market
May 23	SFEMG edition with host Christine Salem and MGs Lesley Mansfield and Pam Wolfe on how to create a native grass and wildflower meadow
May 30	Home Grown New Mexico edition with host Christine Salem and guest Jannine Cabossel, the Tomato Lady, offering tips and techniques for next month’s veggie garden; more info at Giant Veggie Gardener

Schedule subject to change. To listen to previous broadcasts, click here.

Calendar of Events

Because of the COVID-19 crisis, most SFEMG classes and all face-to-face events through at least June have been cancelled or postponed. Some classes may be held electronically. Please check the SFEMG website as well as the websites of other relevant organizations for updates on the status of events.

We Are Here to Help!

If you have a gardening question, Santa Fe Master Gardeners are available to help. Go to our website, click on the Garden Questions? link, and pose your question. Someone will do research and get back to you.

Mission Statement:
Santa Fe Extension Master Gardeners is a non-profit volunteer organization whose mission is to learn, teach, and promote locally sustainable gardening through reliable, current research-based practices