



Master Gardener Newsletter

- New Mexico State University
- Cooperative Extension Service
- U.S. Department of Agriculture
- College of Agricultural, Consumer & Environmental Sciences

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Plant-of-the-Month

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POMEGRANATE TREE

The Pomegranate (*Punica granatum*) is a fruit-bearing, attractive deciduous shrub or small tree growing to anywhere from 12' up to 30' tall depending on the type of cultivar. It is multi-branched, more or less spiny, and extremely long-lived, some specimens at Versailles are known to have survived two centuries.

Native to the Iranian Plateau, the pomegranate has been widely cultivated throughout the Middle East, Northern India, southeast Asia, peninsular Malaysia, the East Indies, the Mediterranean and Southern Europe and tropical Africa. Introduced into Latin America and California by Spanish settlers in 1769, the pomegranate is now cultivated in parts of California and Arizona for juice production.

It is a best choice for a landscaping tree, particularly in a hot, dry Mediterranean-type climate, the pomegranate is well suited to a small garden, a backyard or a patio. The benefits of growing a pomegranate are both aesthetic and nutritional. Design wise, the tree has an arching, vase-like habit. Due to the small diameter of its trunk, it is best grown as a multi-stemmed tree. It is as beautiful as its fruit is decorative. It literally "performs" all year round.

As a naturally deciduous plant, the pomegranate provides exciting fall color, other than in the mildest of winter climates. The new, juvenile leaves in the spring are one of the finest and much overlooked sights in the garden calendar.

Furthermore, the pomegranate can be combined with other species of similar habit and growth, such as the Crape Myrtle (*Lagerstroemia indica*) whose flowers prolong the flowering season of the pomegranate, while the pomegranate's fruit take over, in the decorative sense, from the *Lagerstromia* flowers towards the end of the summer.

Pomegranate leaves are evergreen or deciduous, opposite or in whorls of 5 to 6, short-stemmed, oblong 3/8 to 4" in length, and leathery. Showy flowers grow on the branch tips singly or as many as five in a cluster. They are 1 1/4" wide and characterized by the thick, tubular, red calyx having 5 to 8 fleshy, pointed sepals forming a vase from which emerge the 3 to 7 crinkled, red, white or variegated petals enclosing the numerous stamens. Nearly round, but crowned at the base by the prominent calyx, the fruit, 2 1/2 to 5" wide, has a tough, leathery skin or rind, basically yellow more or less overlaid with light or deep pink or rich red. Inside, the fruit is separated into membranous walls and white spongy tissue compartments packed with transparent sacs filled with tart, flavorful, fleshy, juicy, red, pink or whitish pulp (technically the aril). In each sac, there is one white or red, angular, soft or hard seed. The seeds represent about 52% of the weight of the whole fruit.

Article Continued on Page 2

Deadline for submitting articles and information for the June 2010 newsletter is Tuesday, May 25th.

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Pomegranate Tree—Continued from Front Page

Types of Pomegranate Trees. There are fourteen types of pomegranate trees that can be bought and grown for your own personal use, but only a few are popular enough for you to be able to find them. Some hybrids have been made to make it easier to grow these trees in different climates but they still are mainly restricted to proper growing and blossoming in areas that are mostly hot and humid such as the lower quarter of the U.S. or the more southern most countries of Europe. In the States there are several major pomegranate tree species, most were created at the University of California, Davis campus, as an experiment. There are many different species throughout the world but there are four main types most popular that are available for common sales.

The “Wonderful” is the most popular pomegranate tree species the world over. It produces very large fruits and each fruit has a blushed red skin and juicy red flesh. It grows about 18’ tall and if you really have a taste for pomegranate, this tree is considered the best bearer of fruit. Fruits generally have a long growing season on this tree and will not fully ripen until around late September, depending upon where you live.

Another type of pomegranate tree is the “Grenada” or “Grenada” that resembles the “Wonderful” tree closely but the fruit blossoms are much smaller and its fruit has a much deeper color red. A benefit of this tree, however, is that it ripens a full month earlier than the “Wonderful” variety. This makes it also a popular pick for those who wish to dine upon the pomegranate fruit and no matter which type you select keep in mind that most grocery stores are now charging over \$2.00 per fruit, so a wise investment is to plant your very own tree.

The “Sweet” pomegranate tree is a fairly big pomegranate with distinctive light pink flesh. It is named for its fruit, which is very sweet and juicy. In fact it is the sweetest out of all the types of pomegranate trees, so it is very aptly named. This type of tree grows only to around 12’ and has a beautiful shade of orange-red flowers in late spring, and these develop into fruit in the fall, around early September.

The last type is the “Angel Red” which is the newest type of pomegranate tree available and has recently grown in popularity. It has some very unique qualities in comparison with other pomegranate trees and many now consider it to be the very best type. First, it typically bears fruit in early September or late August, earlier than most other pomegranate shrubs, but most amazing is its capacity for bearing many more fruits compared to the other species. Its seeds are also usually soft and edible with a sweet flavor and the fruit it bears has a really pretty vibrant red color and it has the highest juice content per fruit so it is considered the best tree to make fruit juice out of all types of pomegranate trees.

Also, there are ornamental pomegranates. The Japanese dwarf pomegranate, *P. granatum* var. *nana*, is especially hardy and widely grown as an ornamental in pots. Its flowers are scarlet, the fruit only 2” wide but borne abundantly. Among other ornamental cultivars are 'Multiplex' with double, creamy white blooms; 'Chico', double, orange-red; 'Pleniflora', double, red; 'Rubra Plena', double, red; 'Mme. Legrelle' and 'Variegata', double, scarlet bordered and streaked with yellowish-white.

**FACTS****Botanical Name:** *Punica granatum***Common Name:** Pomegranate

Basics: Hardiness: 10°F
Sun: Full and/or partial sun
Water: Moderate

Growth: Growth Rate: Moderate
Mature Size: 18'-30' height X 6' width
Mature Form: Upright, dense
(Strong tendency to sucker from the base)

Foliage: Evergreen: Deciduous
Foliage Color: Dark Green
Foliage Texture: Medium

Flowers: Flower Color: Orange to red, showy
Flower Season: Spring

Comments: Litter: Moderate Thorns: none
Allergenic: No

(Look for selections that offer a variety of flower colors, fruit characteristics, and plant sizes)

Special Features:**Wildlife:** Hummingbirds are attracted to plant's flowers**Features:** Fruit is colorful and edible**Native To:** Mediterranean**Design Tips For the Pomegranate.**

- It's perfect for the sunniest and warmest locations in the yard that might scorch other plants.
- It's somewhat drought tolerant, and also salt tolerant.
- Its flowers attract hummingbirds.
- It's a popular choice for bonsai.
- Its bark is red-brown and its branches may have spines.

SOURCES:

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- <http://treesandshrubs.about.com/od/commonshrubs/p/Pomegranate.htm>
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- <http://www.pomegranatefacts.net/how-grow-pomegranate-tree.html>
- <http://www.pomegranatefacts.net/typespomegranate-trees.html>
- "Landscape Plants for the Arizona Desert", Arizona Municipal Water Users Assn. http://www.amwua.org/plant_detail.html

(Research and compilation of information for this article provided by Ann Shine-Ring, Certified Master Gardener.)

Pomegranate Tree—Continued from Page 2

How to Grow a Pomegranate Tree. Pomegranate trees themselves are hardy and will flower in most any climate, but specific temperatures and direct sunlight are needed for them to bear fruit. Though the tree has a smallish size and is quite pretty so many people are happy just to have this tree as a decoration in their yard. The pomegranate is neat in appearance and is rounded to look more like a shrub than a tree. It can, under the right circumstances however grow up to 30', but far more normally reaches around 12'-16' in height. Many dwarf varieties such as the "Nana" are known and anyone without a garden can grow it indoors.

The branches of the pomegranate tree are often stiff, angular and covered in spines which are a natural defense against some of its insect predators. The red-brown bark color will later become gray with age and these plants can live up to 200 years in some areas, but will stop producing fruit after about 20 years in most cases. Leaves may persist on the tree even when no fruit is borne and the shape of the leaves themselves are long and narrow in a lance shape, they are also very glossy, beautiful, and come in a variety of shades.

The flowers that blossom in spring before fruit arrives also come in a variety of shades depending on the type of tree you buy, but are commonly a deep scarlet red or white. Regardless, most are over an inch across in each petal and have a red calyx in the middle which later produces fruit, the calyx itself is fleshy and tubular in appearance.

Pollination—The tree can be cross-pollinated by insects but is also self-pollinated. Of course, cross-pollination is always better for your tree so encourage bees and other insects around it. There is very little wind dispersal of pollen. Self-pollination of bagged flowers has resulted in 45% fruit set. Cross-pollination has increased yield to 68%. In hermaphrodite flowers, 6%-20% of the pollen may be infertile; in male, 14%-28%. The size and fertility of pollen vary with the cultivar and season.

Location—Be sure to plant your pomegranate tree in a very sunny location with plenty of room to grow and blossom its wonderful fruit which by the way tend to make its branches sag, so never plant anything else underneath it or place it in an area where it has no room to slump down a bit. You may also want to consider staking the tree as it is really more of a shrub with soft and flexible wood that blows around easily. Simply tie a string suitable for young trees around the trunk and stake it on opposite sides of the ground. This is particularly vital when first planting you tree before the roots have time to grow.

Maintenance/Pruning—Pomegranates are prone to producing suckers, so remove them as they appear. Pruning procedures: 1) Cut the pomegranate back once it is 2' high, and 2) Allow 4-5 shoots to develop about 1' above ground. For the first three years keep shortening the branches to encourage shoot development. Fruit only develops where there is new growth. Also, after 3 years, just prune away dead, damaged or diseased branches.

If your tree has already started producing leaves and is ready to blossom, do not prune it then. Do not forget to put some pruning salve on the cut shoots to prevent your tree from developing viruses, bacteria or insect infestations in the exposed tissue of your tree. Over all, pomegranate trees do not need much pruning and it is better to have some stray shoots than to over-prune them and ruin your tree.

Climate—In the U.S., the pomegranate can be grown outdoors as far north as Washington, Utah, and Washington, D.C., although it doesn't fruit in these locations. It can be severely injured by temperatures below 12° F. The plant favors a semi-arid climate and is extremely drought-tolerant.

Soil—It does best in well-drained soil, and can thrive in a wide variety of soils from acid loam to alkaline soil.

Propagation—Propagation is through cuttings taken in winter, and air layering. Seeds may be used, but some varieties may not stay true. Pomegranate seeds germinate readily even when merely thrown onto the surface of loose soil and the seedlings spring up with vigor. However, to avoid seedling variation, selected cultivars are usually reproduced by means of hardwood cuttings 10"-20" long. Treatment with 50 ppm. *indole-butyric acid* and planting at a moisture level of 15.95% greatly enhances root development and survival. The cuttings are set in beds with 1 or 2 buds above the soil for 1 year, and then transplanted to the field. Grafting has never been successful but branches may be air-layered and suckers from a parent plant can be taken up and transplanted.

Culture—Rooted cuttings or seedlings are set out in pre-fertilized pits 2' deep and wide and are spaced 12'-18', depending on the fertility of the soil. Initially, the plants are cut back to 24"-30" in height and after they branch out the lower branches are pruned to provide a clear main stem. Inasmuch as fruits are borne only at the tips of new growth, it is recommended that, for the first 3 years, the branches be judiciously shortened annually to encourage the maximum number of new shoots on all sides, prevent straggly development, and achieve a strong, well-framed plant. After the third year, only suckers and dead branches are removed.

For good fruit production, the plant must be irrigated. The pomegranate shrub is drought-tolerant, though irrigation is needed for proper fruit production. Water every 2-4 weeks during the dry season when you are establishing new shrubs. Fertilize in November and March for the first two years. Otherwise, not much fertilizer is usually needed in subsequent years.

The pomegranate may begin to bear one year after planting out, but 2.5 to 3 years is more common.

Harvesting and Yield. Fruits ripen 6 to 7 months after flowering. The fruit cannot be ripened off the tree even with ethylene treatment. Growers generally consider the fruit ready for harvest if it makes a metallic sound when tapped. The fruit must be picked before over maturity when it tends to crack open if rained upon or under certain conditions of atmospheric humidity, dehydration by winds, or insufficient irrigation.

The fruits should not be pulled off but clipped close to the base so as to leave no stem to cause damage in handling or shipping. Appearance is important, especially in the U.S. where pomegranates may be purchased primarily to enhance table arrangements and other fall (harvest-time) decorations. Too much sun exposure causes sunscald russet-colored blemishes and roughening of the fruits' rind.

The pomegranate fruit ships well, cushioned with paper or straw, in wooden crates or in baskets.

Pomegranate Tree—Continued from Page 3

Keeping Quality and Storage. The pomegranate is equal to the apple in having a long storage life. It is best maintained at a temperature of 32° to 41° F. The fruits improve in storage, become juicier and more flavorful; may be kept for a period of 7 months within this temperature range and at 80-85% relative humidity, without shrinking or spoiling.



Pests and Diseases. Pomegranate shrubs are one of the easier fruits to work with because they're not usually affected by many pests or diseases. Possible pests may include the pomegranate butterfly (shown above), thrips, scale, mealy bugs and white flies. Deer will sometimes eat the leaves, and occasionally gophers will chew on the roots. Diseases include leaf spot, fruit spot, twig dieback, dry rot and soft rot. The pomegranate butterfly, *Virachola isocrates* lays its eggs on flower-buds and the calyx of developing fruits; in a few days the caterpillars enter the fruit by way of the calyx. These fruit borers may cause loss of an entire crop unless the flowers are sprayed 2 times 30 days apart. A stem borer sometimes makes holes right through the branches.

Twig dieback may be caused by either *Pleuroplaconema* or *Ceuthospora Phyllosticta*. Discoloration of fruits and seeds results from infestation by *Aspergillus castaneus*. The fruits may be sometimes disfigured by *Sphaceloma punicae*. Dry rot from *Phomopsis* sp. or *Zythia versoniana* may destroy as much as 80% of the crop unless these organisms are controlled by appropriate spraying measures. Excessive rain during the ripening season may also induce soft rot.

Minor problems are leaf and fruit spot caused by *Cercospora*, *Gloeosporium* and *Pestalotia* sp.; also foliar damage by whitefly, thrips, mealybugs and scale insects; and defoliation by *Euproctis* spp. and *Archyophora dentula*. Termites may infest the trunk. Paper or plastic bags or other covers may be put over fruits to protect them from borers, birds, bats and squirrels.

Culinary Use. After opening a fruit by scoring it with a knife and breaking it open, the arils (seed casings) are separated from the peel and internal white pulp membranes. Separating the red arils is simplified by performing this task in a bowl of water, wherein arils sink and pulp floats. It is also possible to freeze the whole fruit in the freezer, making the red arils easy to separate from the white pulp membranes. Pomegranate juice can be very sweet or sour, but most fruits are moderate in taste, with sour notes from the acidic tannins contained in the aril juice.



A very effective way of quickly harvesting the arils with minimal time and effort is to cut the pomegranate in half, score each half of the exterior rind four to six times to assist in spreading the rind and ejection of arils, hold pomegranate half over a bowl and smack rind with a large spoon. Arils should eject from pomegranate directly into the bowl, leaving only a dozen or more deeply embedded arils to remove. The entire seed is consumed raw, though the watery, tasty aril is the desired part. The taste differs depending on subspecies of pomegranate and its ripeness.

Having begun wide distribution in the United States and Canada in 2002, pomegranate juice has long been a popular drink in Persian and Indian cuisine. The fruit is also made into jams and jellies, and distilled into a liqueur called Grendine. Grenadine syrup is thickened and sweetened pomegranate juice used in cocktail mixing. Before tomatoes arrived in the Middle East, grenadine was widely used in many Iranian foods, and is still found in traditional recipes such as *fesenjan*, a thick sauce made from pomegranate juice and ground walnuts, usually spooned over duck or other poultry and rice, and in *ash-e anar* (pomegranate soup).

Wild pomegranate seeds are used as a spice known as *anardana* most notably in Indian and Pakistani cuisine, but also as a substitute for pomegranate syrup in Persian cuisine. Seeds of the wild pomegranate variety known as *daru* from the Himalayas are regarded as quality sources for this spice.

Nutrients and Phytochemicals. Pomegranate aril juice provides about 16% of an adult's daily vitamin C requirement per 100 ml serving, and is a good source of vitamin B₅ (pantothenic acid), potassium and antioxidant polyphenols.

Pomegranates are listed as high-fiber in some charts of nutritional value. That fiber, however, is entirely contained in the seeds which also supply unsaturated oils. People who choose to discard the seeds forfeit nutritional benefits conveyed by the seed fiber, oils and micronutrients.

Potential Health Benefits. As with many fruits and vegetables, great claims have been made for the health-giving properties of the pomegranate, and some of these claims are backed by studies. However, very few of these studies are conducted on humans in a properly controlled, randomized, double blind manner.

Medicinal Uses. The juice of wild pomegranates yields citric acid and sodium citrate for pharmaceutical purposes. Pomegranate juice enters into preparations for treating dyspepsia and is considered beneficial in leprosy. The bark of the stem and root contains several alkaloids including *isopelletierine* which is active against tapeworms. Either a decoction of the bark, which is very bitter, or the safer, insoluble *Pelletierine Tannate* may be employed. Overdoses are emetic and purgative, produce dilation of pupila, dimness of sight, muscular weakness and paralysis.

Summary. Nutritionally, the pomegranate fruit is one of the healthiest foods available, being rich in minerals and vitamins and high in fiber. Other than being eaten straight, pomegranate juice is both delicious and nutritious.

Growing a pomegranate tree is not difficult, but not necessarily maintenance-free. It is worth thinning out excess stems, by pruning a few of them to the ground towards the end of the winter. Sometimes though, abundant quantities of fruit on a single branch can prove to be too heavy, and cause the branch to bend and snap. It's sometimes necessary, therefore, to cut away a certain number of fruits, before they ripen. ■

SPICES & HERBS FOR THE HOME GARDEN

Revised by G. W. Dickerson (NMSU Guide H-221)

Dickerson states that, "although most herbs are used primarily for cooking and scents to enhance our environment, a resurgent interest has occurred in medicinal uses of herbs and their decorative qualities in an edible ornamental garden."

Dickerson discusses the term "herb", as well as herb growing conditions and how to prepare herbs and spices. He describes the following 47 different herbs:

Aloe	Clary	Mint
Amaranth	Coriander	Mustard
Angelica	Curry Plant	Nasturtium
Anise	Dandelion	Onion
Arugula	Dill	Oregano
Basil	Echinacea	Parsley
Borage	Elderberry	Purslane
Calendula	Fennel	Rose
Caraway	Flax	Rosemary
Catnip	Garlic	Sage
Chamomile, German	Horehound	Salad Burnet
Chamomile, Roman	Hyssop	Savory
Chervil	Lavender (Eng.)	Sunflower
Chicory	Lemon Balm	Tarragon
Chile	Lovage	Thyme
Chives	Marjoram	

Copies of this Guide are available in our Master Gardener Hotline Library as well as at the following link:

http://aces.nmsu.edu/pubs/_h/h-221.pdf

This Guide is an important resource to understanding the many herbs available to us here in New Mexico. In addition, Dickerson provides advice on how to create your own 10x12 ft. herbal garden in your backyard.

HOME VEGETABLE GARDENING IN NEW MEXICO (NMSU, Circulars-457 & 457-B)

By George W. Dickerson, Horticulture Specialist

Dickerson's Circular 457 provides general information on how to grow vegetables in home gardens. Dickerson has also written an accompanying Circular 457-B that addresses growing zones plus recommendations on crop varieties, planting dates, days to harvest, planting instructions and yield information.

Circular 457 contains the following topics:

- Easy steps toward a successful garden
- Know your climate
- Plan before you plant
- Prepare the soil
- Fertilize for optimum crop production
- Planting your garden
- Water properly to improve yields
- Control pests
- Harvest at the right time
- Recommendations for specific vegetables, including the onion family, Cole crops, greens and salad crops, root crops, solanaceous crops (i.e. potato, tomato, pepper & eggplant), the legumes, vining crops or cucurbits (i.e. warm-season crops), corn and okra.

Copies of this Circular are available in our Master Gardener Hotline Library as well as at the following link:

http://aces.nmsu.edu/pubs/_circulars/circ457.pdf

Copies of Circular 457-B are available in our Master Gardener Hotline Library as well as at the following link:

http://aces.nmsu.edu/pubs/_circulars/circ457B.pdf



2010 SALSA CONTEST RECIPES

These are the final 3 of the 9 recipes submitted at the Contest.

GREEN TOMATO SALSA—Val Fernandez

- | | |
|---------------------------------|------------------------|
| 5 cups chopped green tomatoes | 1 tbsp. ground cumin |
| 1/2 cup green chiles | 3 tbsp. oregano leaves |
| 4-6 seeded chopped jalapenos | 1 tbsp. salt |
| 4 cups chopped onions | 1 tsp. black pepper |
| 6 cloves garlic, finely chopped | |

1. Combine all ingredients in a large saucepan and stir frequently over high heat until mixture begins to boil. Reduce heat and simmer 20 minutes, stirring occasionally.
2. Ladle hot salsa into pint jars, leaving 1/2" headspace.
3. Adjust lids and process in a boiling water canner for 25 min.

GUACAMOLE-LIME SALSA—Jeff Anderson

- | |
|--|
| 6 Avocados (peeled, pitted, and pureed finely) |
| 8 tbsp. fresh lime juice |
| 12 oz. Crema Mexicana |
| 1 Jalapeno (stemmed, seeded and finely pureed) |
| 1/4 tsp. Kosher salt |
| 1 tsp. NMSU Holy Jolokia Sauce |
| 3 Green onions, chopped |

1. Combine avocado puree and remaining ingredients together in a large bowl and stir together.
2. Place mixture in food processor and blend until smooth.
3. Serve with corn chips.

TROPICAL MANGO SALSA—Jeff Anderson

- | |
|--|
| 5 Large mangoes (peeled and coarsely pureed) |
| 1 Medium white onion (pureed finely) |
| 1-8 oz can of pineapple (coarsely pureed) |
| 2 Kiwi fruit (peeled and coarsely pureed) |
| 2 Green onions, chopped |
| 2 Jalapeno peppers (destemmed & seeded; one, pureed fine; one pureed coarsely) |
| 1/8 to 1/4 tsp. Kosher salt |
| 1/8 tsp. Turmeric |
| 1 tsp Whole cumin seed, coarsely ground in mortar and pestle |
| Dash of ground ginger and cinnamon |
| 1 tsp. NMSU Holy Jolokia Sauce |

1. Puree mangoes coarsely and place in a large mixing bowl.
2. Puree white onion finely and add to mangoes; stir together.
3. Place pineapple and kiwi fruit in food processor and puree coarsely.
4. Chop green onions (incl. leaves) finely & stir into mango mix.
5. Puree finely one jalapeno and finely chop the other. Stir both into mango mix.
6. Combine Kosher salt, turmeric, cumin seed, ginger, and cinnamon and stir into the mango mix.
7. Finally, stir in NMSU Holy Jolokia sauce.
8. Serve with corn chips.

2010 New Mexico Master Gardener Conference, June 10-12



Over 128 people have already registered. You have until May 10th to take advantage of the Early Bird Discount. Until then, you will only pay \$65 for this terrific conference including a Welcome Dinner and Silent Auction, Tours, lunch on Friday, a great program and a social event Friday evening at the Albuquerque Balloon Museum. While a few tours and workshops have filled and closed, there are still great choices. You can register online by logging on to: http://www.regonline.com/2010_NM_MG_Conf.

We have already reached capacity for one workshop and one of the tours. Remember, everyone needs to register and pay to attend, including volunteers!

We have more good news about our Conference. We are announcing a new social event Friday evening June 11, from 5 to 7:30 pm. Please plan on attending so that you can relax, discuss the day's sessions and socialize with fellow attendees. The Anderson-Abruzzo Albuquerque International Balloon Museum is a spectacular facility for this new event!

One of Albuquerque's newest museums, the Anderson-Abruzzo Albuquerque International Balloon Museum is located at the south end of the field where the world famous Albuquerque Hot Air Balloon Fiesta is held every October. The Museum is located at 9201 Balloon Museum Dr. NE, very close to the CNM Training Center where our Master Gardener State Conference takes place. The Museum building is shaped in the form of a hot air balloon on its side—a very unique building architecture. The Museum is host to thousands of visitors each year and displays a number of collections such as the recreation of the Double Eagle II gondola, the first manned balloon to cross the Atlantic Ocean in 1978 and the "original" Double Eagle V gondola used for the first crossing of the Pacific Ocean by manned balloon in 1981. Docents will be available at key locations to answer your questions if you wish to take a self-guided tour. Our social event will be located in the main first floor hall with easy access to the Museum and beautiful views of the Balloon Fiesta Park. A variety of snacks and beverages including a cash bar for wine and beer will be provided.

And don't forget about the Silent Auction! We are still looking for donated items for the event! We are asking MG's to donate items for the Silent Auction, and we would love to get items from each of our participating MG groups that reflect the region in which they live and garden. Look to your local businesses, restaurants, artisans, and of course, your very own talented MG's for donations. The Silent Auction will take place during the reception on Thursday night. Please email or call Linda Smith, at bob.linda.smith@yahoo.com, or 505-323-2985, with the description of your donations in advance so that she can plan ahead for placement of those items. If you live outside Albuquerque, you can bring the item to the Garden Center when you come to pick up your registration materials and leave for your Thursday afternoon tour. Locals should arrange delivery of their items with Linda.

The Silent Auction is a very important part of our fundraising efforts to offset the cost of hosting the Conference. We think this will be a very fun event and great opportunity to take home some terrific Silent Auction items

So log on, get registered and we'll see you there. Send us an email at nmmgstateconf@yahoo.com if you want additional information. Or if you prefer to register by mail, call Jamey Lathrop at 505-836-4384 and she will send you a packet.



If you are an individual with a disability and need auxiliary aid or service please contact Jamey Lathrop at 505 836-4384 by 5/31/10.



MAY MG BIRTHDAYS

Annette Froehlich	May 6
Dixie LaRock	May 13
Katrin Sumpter	May 13
Ann Palermo	May 20

MANY THANKS FOR THE GOODIES

We appreciate your thoughtfulness

<u>May Goodies</u>	<u>June Goodies</u>
Katrin Sumpter	Dale Petzold
Pat Anderson	Laurie Davidson
Dixie LaRock	Linda Morgan



Seed Exchange Suggestion

Hope Movsesian, Certified Master Gardener, has suggested that we do a seed exchange at our monthly meetings. Anyone with seeds to share is encouraged to bring them to our next monthly meeting.



Leafcutter Bee (Species: *Magachile* spp.)



Adult female leafcutter bees cut round to oval disks from the margins of plant leaves. The damage is considered a nuisance since the plants are rarely damaged. However, ardent rose growers often find the leaf damage unacceptable. These bees also seem to prefer other landscape plants, such as azalea, lilacs, green ash, Virginia creeper, redbud and maple leaves.

LEAFCUTTER BEES

Information provided by W. Cranshaw, Entomologist of Colorado State University Extension "These bees are important pollinators and should not be killed. Tolerate these pests as there are no known effective controls". (UC Davis, [Healthy Roses](#), 2nd Edition)

Quick Facts About Leafcutter Bees

- They are native bees and they are essential pollinators of wild plants. Some leafcutter bees are even semi-domesticated to help produce alfalfa seed. However, their habit of leaf cutting, as well as their nesting in soft wood or plant stems, often attracts attention and concern.
- They are not aggressive and have a mild sting that is used only when they are handled; the sting is much less painful than that of honeybees or yellow jacket wasps.
- They cut the leaves of plants in a characteristic half-moon shape. The cut leaf fragments are used to form nest cells.
- They nest in soft, rotted wood or in the stems of large, pithy plants, such as roses.

Life History and Habits

- Most common leafcutter bees are approximately the size of the common honeybee, although they are somewhat darker with light bands on the abdomen. They also have different habits.
- Leafcutter bees are solitary bees, meaning that they don't produce colonies as do social insects, (e.g., honeybees, yellow jackets, ants, etc.). Instead, individual female leafcutter bees do all the work of rearing. This includes digging out nesting areas, creating nest cells and providing their young with food. After a nest is made, the bees collect fragments of leaves to construct individual nest cells. The bees cut leaves in a distinctive manner, making a smooth semicircular cut about 3/4 inch in diameter from the edge of leaves.
- Adult females may live up to two months and lay some 35 to 40 eggs during this time.
- Leafcutter bees nest in soft, rotted wood, thick-stemmed, pithy plants (e.g., rose); and in similar materials that the bees can easily cut through and excavate. Nest tunnels may extend several inches deep and coarse sawdust may be deposited at the entrance. This sometimes causes confusion with other wood-nesting insects such as carpenter ants. However, leafcutter bees restrict their tunneling to soft, rotted wood and do not cause damage to homes or other wooden structures.
- There also are concerns about leafcutter bee nesting in rose canes, excavating the pith of pruned canes. Leafcutter bees sometimes nest in the largest diameter rose canes but cause little damage because they restrict tunneling to the pith and rarely girdle cambium. Furthermore, other insects, including various hunting wasps (*Pemphredon* spp.) and small carpenter bees more commonly tunnel and nest in rose canes.
- To prevent leafcutter bees from tunneling into rose canes, seal exposed pith as canes are pruned. This can be easily achieved by placing a thumbtack, bit of sealing wax or white glue on the opening.
- These bees do not eat the cut pieces of leaves that they remove. Instead, they carry them back to the nest and use them to fashion nest cells within the previously constructed tunnels. A finished nest tunnel may contain a dozen or more cells forming a tube 4 to 8 inches long. The young bees develop and remain within the cells, emerging the next season, usually appearing in May here in the Las Cruces-Deming area.
- There are a great many parasites that act as important natural enemies of leafcutter bees. As a result, leaf cutting activity may vary widely from year to year. Parasitic bees and wasps, velvet ants and certain blister beetles are among the most important enemies of leafcutter bees and other solitary bees.
- Insecticides are ineffective for preventing leaf cutting. The only known control of leaf injuries is to cover susceptible plants with cheesecloth or other loose netting during periods when leafcutter bees are most active. However, the Maryland Rose Society Newsletter suggests a [possible solution to deter these bees](#). It said to, "Mix one teaspoon of flea and tick shampoo and add one tablespoon of ammonia to one gallon of water. Mix well and spray this mixture on your rose bushes. The bees hate the smell of this mix and won't attack the foliage." It may worth a try!



DROUGHT-TOLERANT PLANTS

Excerpt From Garden Gate Magazine, August 2007

Many perennials have special mechanisms to help them survive, especially when it comes to drought. Some have deep roots that go down where the soil stays cool and moist much longer than it does near the surface. Or they may have fleshy tubers that store water to be used in times of drought. Other plants have waxy leaves so moisture won't evaporate out very fast. Still others have fuzzy leaves to protect them from the drying sun and wind.

Here's a list of 52 perennials that will grow well in dry conditions. Even if they are tolerant of dry soil, make sure to keep all plants well watered until they're fully established in your garden. And they'll do better with a deep watering when you see them beginning to wilt.

PLANT NAME	BOTANICAL NAME	COMMENTS
Agastache	Agastache spp. and hybrids	Spikes of lavender, pink or orange in summer
Ajuga Ajuga	Reptans	Ground cover with green, bronze or variegated foliage; spikes of blue or pink flowers in spring
Anthemis	Anthemis tinctoria	Yellow or white daisies much of the summer
Artemisia	Artemisia versicolor 'Seafoam'	Low mat of fine-textured silver-gray foliage; most other artemisias are also drought tolerant
Baby's breath	Gypsophila paniculata	Billows of tiny white flowers in summer
Basket-of-gold	Aurinia saxatilis	Low mat of bright-yellow flowers in early spring
Bearded iris	Iris hybrid	Wide variety of colors in late spring
Bishop's weed	Aegopodium podagraria 'Variegatum'	Vigorous ground cover with variegated leaves
Blanket flower	Gaillardia grandiflora	Mahogany-red flowers with yellow edges much of the summer; most blanket flower species are drought tolerant
Butterfly weed	Asclepias tuberosa	Glowing orange flowers in summer
Candytuft	Iberis sempervirens	Low clumps of white flowers mid- to late spring
Catmint	Nepeta spp.	Spikes of lavender-blue flowers in late spring
Cushion spurge	Euphorbia polychroma	Dome-shaped mound with bright-yellow bracts in late spring
Daylily	Hemerocallis hybrids	Wide variety of colors that bloom mostly in summer
False indigo	Baptisia australis	Spikes of deep-blue flowers in late spring
Garden pinks	Dianthus gratianopolitanus	Mounds of fragrant pink flowers in late spring
Gaura	Gaura lindheimeri	Tall spires of pink or white flowers in summer
Gazania	Gazania spp.	Shades of orange and yellow in early spring
Germander	Teucrium chamaedrys	Pale-pink to deep-purple flowers in late summer
Globe thistle	Echinops ritro	Globes of metallic-blue flowers in summer
Goldenrod	Solidago spp.	Sprays of golden-yellow flowers in late summer

Drought-Tolerant Plants - Continued

PLANT NAME	BOTANICAL NAME	COMMENTS
Hardy ice plant	<i>Delosperma cooperi</i>	Ground cover with bright-pink flowers all summer
Hyssop	<i>Hyssopus officinalis</i>	Spikes of blue or pink flowers in midsummer
Jupiter's beard	<i>Centranthus ruber</i>	Rosy pink flowers in late spring
Lamb's ears	<i>Stachys byzantina</i>	Mounds of gray leaves and spikes of magenta flowers in summer
Lavender	<i>Lavender</i> spp.	Spikes of fragrant blue-purple flowers in summer
Lavender cotton	<i>Santolina chamaecyparissus</i>	Yellow button flowers in summer; aromatic gray foliage
Mallow	<i>Malva sylvestris</i>	Mauve-purple flowers with stripes on the outside in late summer
Missouri primrose	<i>Oenothera macrocarpa</i>	Large yellow flowers much of the summer; most <i>Oenothera</i> species are drought tolerant
Mullein	<i>Verbascum bombyciferum</i>	Tall spires of yellow flowers in mid- to late summer
Orange globemallow	<i>Sphaeralcea munroana</i>	Wands of orange flowers in midsummer
Oriental poppy	<i>Papaver orientale</i>	Often brightly colored papery flowers in spring
Ornamental onion	<i>Allium senescens</i>	Lavender or pink flowers in late summer; most alliums are drought tolerant
Penstemon	<i>Penstemon</i> spp. and hybrids	Large family of drought-tolerant plants with spike flowers in many colors
Peony	<i>Paeonia lactiflora</i>	Mounds of white, pink or red flowers in spring
Poppy mallow	<i>Callirhoe involucrata</i>	Wine-red, white -eyed flowers much of the summer
Prairie zinnia	<i>Zinnia grandiflora</i>	Deep-yellow flowers from late summer into fall
Purple coneflower	<i>Echinacea purpurea</i>	Carmine-pink daisies in late summer
Red hot poker	<i>Kniphofia uvaria</i>	Orange and yellow spikes in summer
Rough blazing star	<i>Liatris aspera</i>	Spikes of rosy purple flowers in summer
Russian sage	<i>Perovskia atriplicifolia</i>	Spires of lavender-violet flowers in late summer
Sage	<i>Salvia</i> spp.	Spikes of blue, pink or white flowers in summer; many drought-tolerant species and hybrids
Sea lavender	<i>Limonium latifolium</i>	Airy panicles of lavender-blue flowers in late summer
Snow-in-summer	<i>Cerastium tomentosum</i>	Gray-foliaged ground cover with white flowers in late spring
Stokes' aster	<i>Stokesia laevis</i>	Lavender-blue or pink chrysanthemum-like flowers in summer
Tall sedum	<i>Sedum spectabile</i>	Flat clusters of pink, white or rust in late summer
Threadleaf coreopsis	<i>Coreopsis verticillata</i>	Small yellow daisies much of the summer
Thyme	<i>Thymus serpyllum</i>	Mat-forming ground cover with pink or white flowers in spring; most thyme species are drought tolerant
Verbena	<i>Verbena bipinnatifida</i>	Magenta-pink flowers all summer; many other verbena species are drought tolerant
Veronica	<i>Veronica spicata</i>	Spikes of blue, pink or white flowers in summer
Yarrow	<i>Achillea filipendulina</i>	Dark-yellow flower clusters in summer
Yucca	<i>Yucca</i> spp.	Tall spires of creamy white flowers in summer; spiky evergreen foliage

Blossom –End Rot (NMSU Guide A-231)

Author: Natalie P. Goldberg, Extension Plant Pathologist

College of Agricultural, Consumer and Environmental Sciences, New Mexico State University

Diagnosis At A Glance:

Causal Agent:	Calcium deficiency in developing fruit
Hosts:	Many vegetable crops, notably peppers, tomatoes, and watermelons
Symptoms:	Light tan to brown lesion at the blossom-end of fruit. Lesion becomes sunken and leathery with time. Lesions turn black with invasion by secondary organisms.
Conditions for Disease:	Moisture stress. Too much N, Mg, K, or Na fertilization. High salt levels in soil or water.
Management:	Good water and fertilizer management. Avoid injury to roots.

Every year many commercial growers and home gardeners become concerned about a large tan to black spot on the bottom of fruit, especially on peppers and tomatoes. No fungi, bacteria, or any other living disease organisms are known to cause the condition, and it is not spread from one plant to another. This is "blossom-end rot," a physiological disorder caused by a calcium deficiency in the developing fruit compounded by an imbalance in water and plant nutrients.

The disorder first appears as brown discoloration on the blossom end of the fruit (the end opposite the stem) (figures 1A and 1B). On chile fruit, the spot occasionally will be off to the side of the blossom end. The spot enlarges as the fruit matures and may eventually cover up to half the fruit. With age, lesion tissue becomes sunken and leathery. Eventually, secondary fungi or bacteria may invade the tissue. Secondary invasion results in a black or watery appearance (figures 2A and 2B). Affected fruit ripens faster than unaffected fruit.



Figure 1A



Figure 1B



Figure 2A



Figure 2B

Calcium deficiency may result from insufficient calcium in soil or an inability of plants to take up sufficient amounts of the mineral. Insufficient uptake can occur due to 1) too much nitrogen, magnesium, potassium, or sodium fertilization, 2) very wet or very dry conditions, 3) high salts, or 4) a combination of the above. As the weather warms and the plants begin to grow more rapidly, requirements for water and calcium increase. Because calcium is not a highly mobile element, a fluctuation in water availability, even for a short period, can result in a deficiency. It is at this time that fruit begins to show symptoms of blossom-end rot.

Blossom-end rot is best controlled by following a management program that includes pre- and post-planting practices. Using some or all of these control practices should help reduce the incidence and severity of this disorder.

PRE-PLANT TREATMENTS

1. Take a pre-plant soil test to determine pH and nutrient levels.
2. Adjust pH of the soil to 6.8-7.2
3. Use only moderate amounts of fertilizer—enough to keep plants green and vigorous, but not too lush. About 1 1/2 pounds of 10-20-10 per 100 square feet mixed into the topsoil just before planting is usually enough. Remember to check your soil test and adjust to your specific needs.
4. Select cultivars that are more tolerant of conditions that lead to blossom-end rot (shorter, rounder fruited varieties tend to be more tolerant than long-fruited varieties).
5. Plant in an area with good drainage. Plants sitting in saturated soils for prolonged periods will have problems associated with diseases that result in loss of roots. *(Article continued on page 11)*

Blossom End-Rot – Continued from Page 10

POST-PLANT TREATMENTS

1. Water carefully so the soil is never too wet or too dry, to a depth of 2 feet. Routinely check the soil moisture in the root zone by digging with a trowel to a depth of 1 foot. To avoid water stress, the soil in the root zone should be moist enough to easily form a ball. This technique can be used to determine when to irrigate.
2. Fertilize with a nitrogen side-dressing only if necessary to maintain "normal" green color and moderate growth. Use calcium nitrate or ammonium sulfate at the rate of 1/4 pound per 100 square feet.
3. Restrict all cultivations to the top inch or two to avoid damage to the roots, or use a mulch to eliminate the need for cultivation.
4. Although erratic, some success has been found using calcium sprays during the growing season. To try this treatment, spray the plants (leaves and fruit) with 2 level tablespoons of calcium chloride in 1 gallon of water. Apply 2 more sprays at 1-week intervals. Be careful not to wash spray residues off the leaves and fruit with irrigation water.

Blossom-end rot is a common complaint we hear from citizens contacting the MG Hotline this time of year.

EASY HOMEMADE CHILI POWDER



Prep Time: 5 minutes
Total Time: 5 minutes

Ingredients:

- 1 teaspoon paprika
- 2 teaspoons ground cumin
- 1 teaspoon cayenne pepper
- 1 teaspoon oregano
- 2 teaspoons garlic powder

Preparation:

Combine all ingredients; store in an airtight container.

Source: About.Com (southern foods)

<http://southernfood.about.com/od/seasoningrecipes/r/bl30420j.htm>

Recipe provided by Dale Petzold, Certified Master Gardener

New Master Gardener: Linden Ranel

Linden Ranel is a member of the 2009/2010 Master Gardener class, but she has been gardening in the Las Cruces area since she arrived in June 1966. Her first crops were dill and Indian corn.

Currently Linden and her husband Randy live off of Valley Drive about 1/4 mile east of the river. They have an acre (more or less) for the house, outbuildings, yard and gardens.

Linden's first solo garden was entirely zinnias when she was eight years old. She arranged a turquoise Fiesta gravy boat of assorted zinnias from that first garden and took first place at an elementary school flower show. She says that if houseplants count, she has been gardening for over sixty years.

"I like a great many plants, but I'm a big fan of Swiss chard because it grows here year around. Our Master Gardener manual claims that chard is "fool proof". Since I have good luck with Swiss chard, I guess that makes me a fool," she jokes.

On a more serious note Linden says, "I was very, very disappointed with our vegetables—especially the tomatoes. I wanted to find out what I was doing wrong. That's what caused me to enroll in the Master Gardener Program". " I hope to learn more about growing vegetables and herbs. I'd be happy to "teach" anyone how to grow fool-proof Swiss chard," she adds.

Linden is retired. She worked in educational television in American Samoa for two years and came to Las Cruces to manage KRWG-FM. Later she turned to teaching American history and English at Holy Cross Junior High in Las Cruces, English at the Zuni Pueblo, and both subjects at Mayfield High School.

Beyond gardening, Linden helps her husband drive veterans to their medical appointments at the El Paso VA Clinic. She also transcribes journals at the Institute of Historical Survey, and prepares blankets for Project Linus [quilting, knitting, and crocheting].

Linden also enjoys working with Delta Kappa Gamma [a society for women educators], and participating in a variety of church activities. She's been married nearly twenty years to Randy, who also likes to garden. ■

Written by Ann Palormo, Certified Master Gardener

NMSU Sends Chile Seeds & Expertise to 'The People's Garden'

By Justin Bannister



Chile seeds developed by New Mexico State University will be planted in "The People's Garden" near the National Mall in Washington, D.C. Tourists visiting Washington, D.C., can now add an additional stop to their sightseeing list. "The People's Garden," surrounding the U.S. Department of Agriculture, will feature chiles developed by NMSU.

The People's Garden started in 2009 as a six-acre tract near the National Mall that demonstrates conservation and growing techniques. According to the USDA, the Garden is meant to help illustrate the many ways the agency works to provide a sustainable, safe and nutritious food supply while protecting and preserving the landscape where that food is produced.

Curtis Smith, NMSU Extension Horticulture Specialist, traveled to Washington, D.C. with other experts from around the country to train USDA employees who have volunteered to tend the Garden. Carol Sutherland, NMSU entomologist, will also be making a visit soon.

Smith heads NMSU's [Master Gardener Program](#), which teaches volunteers across New Mexico about soil, plant science and environmental topics. After completing their courses, Master Gardeners are able to answer homeowner horticulture questions. While training USDA employees, Smith also delivered an assortment of New Mexico chile seeds to be grown in the Garden this summer.

"We sent almost every variety developed at NMSU," said Danise Coon, a senior research specialist for NMSU's [Chile Pepper Institute](#). "It's about thirty different varieties since 1913."

Coon said the Chile Pepper Institute regularly receives calls from all over the world asking about chile, including a call recently from researchers in Nepal looking for chile seeds. She said this is the first time she can remember NMSU chile seeds heading to the nation's capital.

"If they want hot chile, they are probably going to have to buy some grown in New Mexico," Smith said, noting the large role environment plays in growing chile, especially when it comes to heat. Because Washington D.C.'s climate is cooler and wetter than New Mexico, chile grown there is likely to be milder than chile grown in New Mexico. Precautions will also have to be taken to ensure the chile plants' soil can adequately drain. Improper drainage can lead to fungus and various other chile ailments.

For chile plants grown this year, Coon recommends starting the seeds in a greenhouse within the next few weeks. For seeds planted directly in the ground, waiting until mid-April or later is probably best.

Smith also took blue corn seeds to Washington as well to "give them a real taste of New Mexico."

Source: Gardening123.com

For more information about the Chile Pepper Institute and the International Chile Conference that will be held in Las Cruces on Sept. 12-14, 2010, contact:

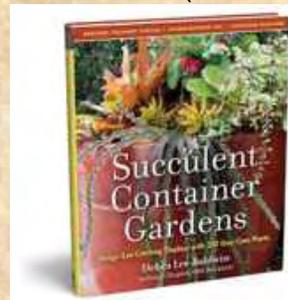
Link: http://www.chilepepperinstitute.org/about_us.php

Article provided by Dale Petzold, Certified Master Gardener

GREAT NEW GARDENING RESOURCES

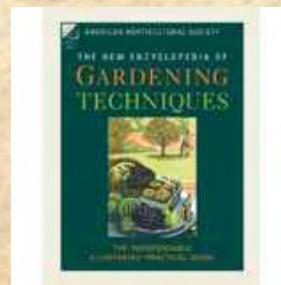
Succulent Container Gardens:
Design Eye-Catching Displays with
350 Easy-Care Plants

By Debra Lee Baldwin (Timber Press, 2010)



If you love succulents—regardless of your climate or space constraints—you'll want to read Baldwin's latest book on the subject. Discover how with container gardening, succulents can thrive anywhere in the world. You'll find hundreds of ideas for great containers, creative ways to use colors, shapes and textures, which are the best succulents for pots, small-space solutions and much more. Plus, there are more than 300 gorgeous photos.

Source: Horticulture Magazine, May 2010



New Encyclopedia of Gardening
Techniques

By the American Horticultural Society

This is a newly revised and updated version of this 2002 reference book. From pruning wisteria to sowing onions, the topics covered are numerous. What is even more helpful, there are over 2,000 color illustrations and 200 photographs that will show you—step-by-step—how to get things done in the garden.

Source: Garden Gate Magazine, June 2010

Dixie's Honey-Do List for May



Many of our suggested garden tasks is information coming directly from [Month-by-Month Gardening in the Desert Southwest](#) by Mary Irish (2002). We wanted you to know that this is an outstanding gardening resource book.

GENERAL: For those of you who live in sparsely populated areas, cut down dried grasses and weeds that are growing within ten feet of your house or nearby in vacant areas. This will help reduce the chances of a wildfire starting. Also, take time to record successes and failures of cool-season crops in a garden journal and list current crop growth and development.

ORNAMENTALS

- In our zone, we can set out ageratum, coreopsis, cosmos, gaillardia, globe amaranth, lisianthus, marigold, portulaca, vinca, and zinnia early in May. There is also time to sow seed for these annuals.
- Recently planted annuals will need afternoon shade until they are well established.
- Plant landscape sages, salvias, daleas, and other container-grown shrubs and trees.
- Keep thinning small seedlings to prevent crowding and to get the best growth and bloom for plants.
- Continue planting container grown plants but provide extra water and shade as May temperatures rise.
- For spring and summer flowering bedding plants, fertilize every 2 to 4 weeks using a product with a higher phosphorus (P) content.
- As irises complete their bloom period reduce irrigation to allow rhizomes to "rest."
- Continue to fertilize bulbs until leaves begin to die back then discontinue for rest of summer.
- Pinch back chrysanthemums to maintain a compact form.
- Prune spring flowering shrubs after spring bloom, then fertilize with a high nitrogen product to induce vigorous vegetative growth.
- Water large annuals like vines and gourds to a depth of one foot. Increase watering to every three days as our temperatures rise throughout the month. Water all other annuals to a depth of 6"-8".
- To retain moisture, apply organic mulch to all annuals in the ground, including native plants.
- Every two weeks, fertilize annuals in pots with a water-soluble fertilizer at the recommended strength for houseplants.



For additional resource information check out the [Drought-Tolerant Plants](#) article on pages 8-9 of this newsletter.

FRUITS, NUTS & SHADE TREES



- Increase watering frequency as temperatures rise and water to a depth of 18 inches.
- Continue zinc sprays to pecans.
- Continue cover sprays to pome fruits (e.g. apples, pears)
- Harvest fruit as soon as it ripens and remove buggy or diseased fruit promptly.
- Protect young trees from sunburn with shade cloth or tree wrap.
- As temperatures rise, begin planting palm trees. Water newly planted palms frequently until established, then reduce frequency to about once every 2 weeks.
- Fertilize established palms with a product formulated specifically for palms.
- If birds are a problem on fruit trees, cover them with bird netting just as fruit begins to increase in size. It is very important to spread the netting before the fruit begins to ripen as birds may poke holes in the fruit and ruin it.
- If you don't have an irrigation system, build up basins that extend to the drip line around trees. Fill basins with water regularly.

For additional information check out these MG Hotline Library resources:

Establishing Fruit Trees in the Home Orchard (NMSU Guide H-316)

Fruit Species & Varieties for Home Orchards (NMSU Guide H-310)

Establishing Shade & Fruit Trees (NMSU Guide H-420)

Minor Small Fruit Crops in NM (NMSU Guide H-326)

VEGETABLES, FRUIT AND HERBS

- Pinch back side shoots on tomatoes to increase fruit production.
- Shade plants to reduce beet leafhopper pressure and sunburn.
- Watch for signs of curly top on tomatoes and peppers. Remove infected plants promptly.
- Lightly fertilize summer herbs such as basil, oregano, and mints.
- Plant sweet potato slips.
- Continue planting other summer vegetables such as corn and squash.



For additional information check out the newsletter articles featured on Pages 5 and 10-11 of this newsletter.

Dixie's Honey-Do List for May-Continued



LAWNS/GRASSES

- Continue planting warm season turf species. Keep plantings moist not soggy.
- Fertilize established warm season turf. Apply 1 lb N/1000 ft².
- After mid-month, discontinue fertilization of cool-season grasses.
- Depending on temperatures and winds, water at least once a week to a depth of 6–8 inches.
- Mow as needed to maintain desired turf quality. Mowing height also influences rooting depth so mow at the greatest height recommended for your turf species.
- If needed, apply a pre-emergent herbicide to established turf for control of late summer weeds. READ THE LABEL CAREFULLY! Water well after application.

For additional information check out these MG Hotline Library resource articles:

Bermuda Grass Spring Seeding (NMSU Guide H-506)

Mowing Your Lawn (NMSU Guide H-505)

Care of Established Turf Grass (#2 Blue Binder, Plants Section)

Turf Grasses For New Mexico (NMSU Guide H-508)

Fertilizing Your Lawn (NMSU Guide H-503)

Watering Your Lawn (NMSU Guide H-504)

ROSES

- Continue to plant container-grown roses this month. Plastic pots are better than clay; clay allows for evaporation on all sides of the pot and this can dry out the rose during the summer.
- Water roses and other plants that are susceptible to powdery mildew early in the day.
- Many hybrid roses begin to slow down as the weather heats up. If roses are planted in areas that receive over six hours of afternoon sun or are in an area of reflected heat (e.g. near a wall or side of the house), you may want to provide some artificial shade (e.g. shade cloth or box frame) during the summer.
- As temperatures rise, if you have been using a liquid fertilizer, switch to a granular or slow-release fertilizer on roses or discontinue fertilization completely until September.
- Apply heavy mulch, up to 6" around your roses, but keep mulch away from the rose's main stem to avoid too much moisture on it.
- Roses like abundant water, but will decline quickly if kept continuously wet. Water frequently, but let the soil dry out slightly between waterings. Once the soil is dry 6" below the surface, it's time to water again, usually every 3-4 days to a depth of 16-18". Roses kept in pots, may need daily watering.
- Regularly wash off roses to control powdery mildew, aphids and spider mites. Aphids can easily be removed by hand, a strong jet of water or soapy water spray but spray **early** in the day as you may burn the leaves when the sun is out.
- Do not prune roses in May other than to remove spent flowers.



For additional information check out these MG Hotline Library resources:

Fertilization Guide for Roses (Handout)

Roses in the Garden & Landscape: Cultural Practices and Weeding (UC-7465)

Growing Roses (NMSU Guide H-165)

Roses in the Garden & Landscape: Insect, Mite Pests & Beneficials (UC-7466)

Rose Calendar for Las Cruces & El Paso (Handout)

Roses: Diseases and Abiotic Disorders (UC-7463)



CACTI & SUCCULENTS

- Separate yucca and agave "pups" from parent plant. Allow agave pups to dry in the shade for a few days before replanting.
- Continue to cut back frost-damaged cactus. To maintain size and shape of prickly pear, remove young pads.
- Continue to set out warm-season succulents. Water newly planted succulents weekly and established ones every 2–3 weeks, but be sure they are not getting sunburn. Pale surfaces or yellowed patches that appear suddenly are often signs of sunburn.
- Divide aloes by cutting out plants along the edge until you have reduced the size of the clump by at least one-half.
- Yucca should not be pruned unless it is necessary to remove dead or diseased stems.
- Water large cactus, ocotillos, and large yuccas at least once a month from now through September. Water agaves, smaller yuccas, prickly pear and smaller cactus every three weeks throughout the summer. Barrel cactus and beaver-tail prickly pear do not need as much water as most other succulents, but watering them every 5-6 weeks in the summer retains their vigor.
- Succulents planted in the ground do not need frequent fertilization. Fertilize container-grown succulents with a water-soluble fertilizer once in May. Use it at half strength of what is recommended for houseplants.

For additional information check out these MG Hotline Library resources:

Bird of Paradise Bushes (#2 Blue Binder, Plants Section)

Controlling Cholla Cactus (NMSU Guide B-804)

Cacti, Agaves, Yucca and Ocotillo (AZ-1225)

Problems & Pests of Agaves, Aloe, Cactus & Yucca (AZ-1399)

Care of Desert-Adapted Plants (AZ-1048)

Dixie's Honey-Do List for May
Continued from Page 13

PESTS

- Watch out for hornworms/corn earworm and other caterpillars. Handpick or treat with an appropriate B.T. (*Bacillus thuringiensis*) solution.
- As temperatures rise, so do spider mite populations. Put a sheet of white paper under a suspect stem or leaf, tap the leaf, and look for tiny red specks scurrying around on the paper. Blast plant with water or spray with an appropriate insecticide.
- Hollyhock weevils spend the winter inside the seedheads of hollyhocks and as our weather warms, they lay eggs in the emerging flower buds. To prevent damage next year, discard all spent seedheads as soon as they arise.

For more information, check out the article on page 7 of this newsletter about Leafcutter Bees that usually arrive in this area during May. This information is also available in our MG Hotline Library.

BRANIGAN LIBRARY
"LUNCH & LEARN"
PRESENTATION

Date: Thursday, May 20
Time: 12:00-1:00 p.m.
Place: Branigan Memorial Library,
upstairs in the Terrace Gallery
Speaker: Sabine Green
Topic: "Orchids for the Curious"
Synopsis: "Learn the basics on how to care for orchids, as well as learn about resources where you can get further training for more difficult species. Become familiar with the best orchids for beginners, the ones to shy away from, and the opportunities for you to become an "orchid addict" in Las Cruces.

Information provided by Sylvia Hacker,
Certified Master Gardener



WEED WATCH: SPOTTED SPURGE

Spotted spurge (*Euphorbia maculata*) is an annual plant native to the eastern U.S. It's the most common species of the spurge family, which also includes creeping spurge (*E. serpens*) and petty spurge (*E. peplus*). These weeds invade many crops, affecting vegetables, trees, citrus, turf, ornamental beds, and container ornamentals. Management of all the spurges is similar. There are 18 native species of spurge occurring in various states.

Although spotted spurge is the major spurge weed, six other species of spurges appear regularly as weeds in many states—ground spurge (*E. prostrata*), creeping spurge, petty spurge, garden spurge (*E. hirta*), nodding spurge (*E. nutans*), and thyme-leaved spurge (*E. serpyllifolia*). IDENTIFICATION. Spotted spurge grows close to the ground, often forming a dense mat. Its dark green leaves, which grow in pairs called "opposites," are 1/8" to 1/2" long and about 1/8" wide. Often, a "red spot" will mark the leaf halfway down its center vein.

Its flowers, fruit, stems, and leaves are hairy. And its short stems have a separate stipule or a little, scale-like appendage at its base, although you may need a 10X hand lens to see them. **Broken stems and branches secrete a milky, poisonous sap.** Although spotted spurge sap is being studied as a cure for various skin cancers, in general, **the sap is an eye and skin irritant.**

Spotted spurge produces tiny, pinkish flowers that consist only of stamens and pistils grouped in small, flowerlike cups, called cyathia, in the area where the leaf joins the stem. The fruit is a three-celled seed capsule that is 1/16" or less. Each cell contains one seed that is about 1/25" long. The plant's central taproot system is capable of extending more than 24" into the soil.

All spurges have milky sap, which can be toxic to some animals. Ground spurge and creeping spurge grow prostrate like spotted spurge but have no markings on their leaves. All spurges reproduce by seed, and creeping spurge also can produce roots along the stem, creating new plants vegetatively.

BIOLOGY. Most weedy spurges are summer annuals that don't like competition and depend on their prolific seed production for survival. A single plant can produce several thousand seeds, which are small and can remain dormant in the soil until conditions are suitable for germination (sprouting). Seeds produced in summer germinate immediately while those produced in late fall mostly will lie dormant and won't germinate until spring.

Spotted spurge germinates best when temperatures are 75°-85°F, but germination can occur at temperatures as low as 60°F and as high as 100°F. When moisture is available, germination can occur from February through September in most areas. Light also is a requirement for maximum germination; seeds buried deeper than 1/2" won't germinate well. Plants that germinate early in spring in cool conditions can remain as small seedlings until temperatures are more desirable for growth. *Continued on Page 16*

Spotted Spurge—Continued from Page 15

Once the seed germinates, a small rosette of leaves develops. As growth continues, the leaves form a dense mat that can grow up to 3' in diameter. Reproductive growth is rapid, and the plant can produce seeds as soon as 5 weeks after germination.

IMPACT. Spotted spurge can overgrow itself on sparse turf areas and low-growing ground covers, invade open areas in gardens and landscapes, and can grow in sidewalk cracks. In addition to reducing the growth of desirable plants, spotted spurge reduces uniformity and quality of turf, provides a habitat for undesirable insects in citrus groves, serves as an intermediate host for fungal diseases of cultivated crops, and attracts ants with its seed.

Spotted spurge is poisonous and can kill sheep grazing in pastures where it is the predominant weed. Sheep that have consumed as little as 0.62% of their body weight of this plant have died within a few hours.

MANAGEMENT. The primary method of managing spurges is prevention, since controlling these weeds is very difficult once plants have established themselves. Avoid bringing seeds into uninfested areas by using weed-free planting seed and uncontaminated planting stock. Clean work clothing and machinery such as lawn mowers to remove any seeds that might be present, and remove spurge plants as soon as you discover them.

Cultural Control—Constantly monitor infested areas, so you can mechanically till or hand pull new plants before they produce seed. Take care as you weed, since plants that you hand pull often break at the stem, leaving the root and several buds or a single stem from which regrowth is possible. Wear gloves when you hand pull, since the sap can be a skin irritant. Mowing is an ineffective method of control, since most species grow closely to the ground.

When planting new, container-grown ornamentals and ornamental beds, be sure to use sterilized or weed-free planting mix. When purchasing plants for ornamental beds, avoid those with spotted spurge infestations. Mulches can effectively limit spotted spurge if they prevent light from reaching the seed.

Solarization—Before planting an area with turf or ornamentals, you might want to follow the management method known as "soil solarization". Covering the soil with sheets of clear plastic for 4-6 weeks during the summer can effectively reduce the number of seeds in areas where summer daytime temperatures are very hot. In areas where summer temperatures are lower than 90°F, soil solarization can partially control this weed.

Mulching—The most common strategy for controlling weeds in ornamental plantings is to use organic or synthetic mulches, which prevent light from reaching weed seeds and seedlings, starving them before they can start making food through photosynthesis. Bark, compost, or straw laid at least 2" thick can effectively control many weed seeds including many spurge species. A large, coarse bark will require a 3"-4" layer to be effective; however, larger, coarser mulches last longer than finely shredded ones. Thick mulch eventually can accumulate soil, decaying organic matter, and weed seeds that can germinate. All organic mulch needs periodic replacement.

**MANAGEMENT (Continued)****Mulching—Continued**

Black, synthetic polypropylene weed barriers (fabrics or geotextiles), which are available at nurseries, also block sunlight and starve weed seedlings. The fabrics are porous to allow water to drain through them. Often a synthetic barrier with bark or rock on top makes the area more aesthetically pleasing.

Organic mulches such as bark and straw don't need to be as thick if you also are using the fabric. Since mulches and weed barriers reduce evaporation from the soil surface, adjust the irrigation cycle to prevent overwatering.

Turf Management—One of the best control measures for spotted spurge in turf is to maintain a competitive stand of grass. When open areas develop in turf due to stress, disease, lack of fertility, insects, or abuse, light penetrates to the soil surface, allowing spotted spurge to germinate. Once spotted spurge establishes itself, altering cultural practices such as fertilization or irrigation won't control it. However, raising the mowing height to 2 inches or more in tall fescue or perennial ryegrass can reduce initial invasions. Check turf for excessive thatch, which should be less than 1/2" high.

Food Crops—In vegetable gardens, you can control spurge seedlings by using soil solarization, mulches, and early cultivation.

Chemical Control—Pre-Emergent Herbicides can help prevent spotted spurge outbreaks if you apply them in late winter before weed seeds germinate. Time the application, so it occurs before the soil temperature exceeds 55° to 60°F at a depth of 1".

Pre-Emergent herbicides for turf and ornamentals include benefin (Balan), pendimethalin (Pendulum), isoxaben (Gallery), oryzalin (Surflan), trifluralin (Treflan, Preen), and dithiopyr (Dimension). Of these, only pendimethalin, trifluralin, dithiopyr, and oryzalin are available for use by home gardeners. Combination products such as oryzalin plus benefin are available to both home gardeners and landscape professionals.

Pre-Emergent chemicals are almost never used in home vegetable gardens, because chemical residues last for months after application, and product labels routinely regulate against such use. Herbicide recommendations for commercial orchard and vegetable crops are available online; see the link below.

Post-Emergent Herbicides available to home gardeners include 2,4-D/MCPP/dicamba combination products, triclopyr (Turflon), and glyphosate (available for both commercial and home landscape use). In general, 2,4-D and its combinations don't control the larger, more mature spotted spurge plants. ■

SOURCE: UC Davis, Statewide Integrated Pest Mgmt. Program
<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7445.html>

VEGGIES: A To Z



—CAULIFLOWER—

Cauliflower (*Brassica oleracea*) is a cool season vegetable that is one of several vegetables in the family *Brassicaceae*. It is an annual plant that reproduces by seed. Typically, the head is eaten while the stalk and surrounding thick, green leaves are used in vegetable broth or discarded.

Cauliflower originated over 2,000 years ago in the gardens of Asia Minor and the Mediterranean. It was consumed throughout Western Europe around 16th century. China and India are the top producers of cauliflower and broccoli. About half of all cauliflower is raised in China and one fourth in India. In Europe and the U.S., it is grown in Spain and California respectively.

Cauliflower got its name from Latin *caulis* (cabbage) and *flower*, an acknowledgment of its unusual place among a family of food plants which normally produces only leafy greens for eating. *Brassica oleracea* also includes cabbage, Brussels sprouts, kale, broccoli and collard greens, though they are of different cultivar groups.

Cauliflower is the most temperamental member of the cabbage family and is less tolerant than cabbage or broccoli to either heat or cold, thriving best in moist, cool climates. Cauliflower heads that mature in hot weather will not develop well or may not form at all. Cauliflower is at its best when the heads mature in cool weather. Curds (heads) that mature in fall remain edible longer, are easier to process and taste better.

Cauliflower can be grown in a wide range of soils. A deep, fertile, well-drained, sandy loam or silt loam is best with a pH of 6.5 to 7.5. Avoid soils that crust easily and are high in salts.

Botanical Varieties. Cauliflower and broccoli are the same species and have very similar structures, though cauliflower replaces the green flower buds with a white inflorescence meristem.

Varieties. These differ in many characteristics including: days to maturity, uniformity, yields, product size, color, foliage characteristics, curvature of the plant's leaves surrounding the curd, and resistance to disease and other disorders. Unlike many other crops, there is not a big difference in taste between most cauliflower varieties. However, the purple cauliflower is an exception when it comes to taste. It's tender and mild-flavored and turns green like broccoli when cooked.

■ **Traditional Varieties:** 'Snowball', 'Hybrid White', 'Super Snowball', 'Snow Crown', 'Mayflower', 'Candid Charm', 'Mormon', 'Agrahani', 'poushi', 'maghi', 'Snow White', 'Snow Grace'.

■ **Self-blanching Varieties:** 'Self Blanche', 'Early Tuscan', and 'Late Tuscan'.

■ **Heirloom Varieties:** 'All the Year Round', 'Early Pearl', 'Early Snowball', 'Igloo', 'Violetta Italia' and 'Walcheren Winter'.

■ **Commercial Varieties:** 'Fremont', 'Igloo' and 'Snow Crown'.

A comprehensive list of cauliflower varieties is maintained at North Carolina State University.

Link: <http://www.ces.ncsu.edu/depts/hort/hil/hil-10.html>

COLORS OF CAULIFLOWER.

Orange cauliflower (*B. oleracea* L. var. *botrytis*) contains 25 times the level of Vitamin A of white varieties. This trait came from a natural mutant found in a cauliflower field in Canada. Cultivars include 'Cheddar' and 'Orange Bouquet'.

Green cauliflower (*B. oleracea botrytis*) group, is sometimes called "broccoflower or brocliflower/broccliflower". It is available both with the normal curd shape and a variant spiky curd called "Romanesco broccoli". Both types have been commercially available in the U.S. and Europe since the early 1990s. Green-curded varieties include 'Alverda', 'Green Goddess' and 'Vorda'. Romanesco varieties include 'Minaret', and 'Veronica'.

Purple cauliflower also exists. The purple color is caused by the presence of the antioxidant group *anthocyanin*, which can also be found in red cabbage and red wine. Varieties include 'Graffiti' and 'Purple Cape'.



Nutritional Value. Cauliflower is low in fat, high in dietary fiber, folate, water and vitamin C, possessing a very high nutritional density. As a member of the *brassica* family, cauliflower shares with broccoli and cabbage several *phytochemicals* which are beneficial to human health, including *sulforaphane*, an anti-cancer compound released when cauliflower is chopped or chewed. In addition, the compound *indole-3-carbinol*, which appears to work as an anti-estrogen, appears to slow or prevent the growth of tumors of the breast and prostate. Cauliflower also contains other *glucosinolates* besides *sulforaphane*, substances which may improve the liver's ability to detoxify carcinogenic substances. A high intake of cauliflower has been found to reduce the risk of aggressive prostate cancer.

A Tasty Food. Cauliflower can be roasted, boiled, fried, steamed or eaten raw. When cooking, the outer leaves and thick stalks are removed, leaving only the florets. The leaves are also edible but are most often discarded. The florets should be broken into similar-sized pieces so they are cooked evenly. After eight minutes of steaming, or five minutes of boiling, the florets should be soft but not mushy (depending on size). Stirring while cooking can break the florets into smaller, uneven pieces. Cauliflower is often served with a cheese sauce. Low carb dieters can use cauliflower as a reasonable substitute for potatoes for while they can produce a similar texture, or mouth feel, they lack the starch of potatoes. *Continued on Page 18*

Cauliflower—Continued from Page 17

Cauliflower Growing Practices in New Mexico. It is not difficult to grow cauliflower as it can be grown right along with your broccoli, kale and turnips. If you've had problems with cauliflower in the past, look for cultivars that are tolerant to problems such as high temperatures, hollow stem, and purple tinge.

Cauliflower requires the same cultural techniques as cabbage, but is more delicate. Cauliflower is a hardy vegetable but it will not withstand as much frost as cabbage. Cauliflower heads that mature in hot weather will not develop well or may not form at all. This plant is at its best when its heads mature in cool weather. Curds that mature in fall remain edible longer, are easier to process and taste better.

Best Time to Plant Cauliflower. The time required for growing cauliflower plants is the same as for cabbage. Typically in New Mexico, you will plant cauliflower in mid-summer for a fall harvest. Cauliflower grows best in New Mexico when direct-seeded or transplanted during mid-summer for a fall crop. It takes four to five weeks to produce a fall crop that will produce more quality plants than a summer crop.

Planting Site. Cauliflower grows best in full sun, any partial shade will reduce head size. As with all brassicas, careful rotations are important to prevent pest and disease problems. Avoid planting cauliflower, or any related cabbage-family crops (Brussels sprouts, kale, cabbage, and broccoli), where brassicas have grown in the last three years.

Too much warm weather keeps cauliflower from heading. It can be grown on all types of land from sands to clay and peats. Although the physical character is unimportant, the land must be fertile and well drained. Manure and commercial fertilizer are essential. Most soils can be improved by adding organic matter, such as composted manure.

Plant cauliflower about 1/2" deep on the edge (3"-4") of a flat vegetable bed that has been pre-irrigated. Seeds should be planted 2"-3" apart. In southern New Mexico where we have a longer growing season, you can begin planting cauliflower on July 1 and continue through late July. Stands should be thinned after seedlings develop one or two true leaves. Do not allow plants to become crowded or they will become leggy and fragile.

Plants should be spaced 15"-24" apart in a row. Because of the cauliflower plant's large size, most growers plant only one row per bed. Cauliflower plants should never be stressed for water. If you use drip irrigation, space your emitters within 4'-8" of plants.

When the cauliflower plants begin to form a small head (button), pull the leaves over the head and tie them together to protect the head from the sun. Newer varieties are often self-blanching, with leaves that naturally curve over the head. Harvest the head or curd (thickened clusters of immature flowers) before it starts to spread and become "ricey" (exertion of pistils and anthers).

If they have been well protected from the sun, heads should be pearly-white. The exception is the colored-head varieties. A necessary precaution in cauliflower culture with all varieties, except "Purple Head", is to tie the leaves together when the heads, or buttons, begin to form. This keeps the heads white. Cauliflower does not keep long after the heads form; 1 or 2 dozen heads are enough for the average garden in one season.

Fertilization. When you first water, make sure to use a high phosphate fertilizer so the plants can get a good contact with the soil. Make sure you use fertilizer frequently.

Fertilization (Continued) Cauliflower likes a good magnesium level as well and will show symptoms of deficiency when the soil is allowed to become too acidic.

Watering. Be sure to water your cauliflower every five to seven days. This is required for your cauliflower to produce nice heads. It is very sensitive to both over and under watering as well, so be sure to irrigate the plants so they don't get stressed.

Problems And Their Causes In Cauliflower Production

- Problem: Premature heads or curds (buttoning).
Cause: Stress -- too low or too high temperatures, drought or poor quality transplants.
- Problem: "Riciness and fuzziness" in heads.
Cause: Too high temperature.
- Problem: Development of bracts or small green leaves between the segments of the curd.
Cause: Too high temperature or drought.
- Problem: Leaf or loosely formed curds.
Cause: Excess vegetative growth caused by excessive nitrogen.
- Problem: Hollow stem with internal browning and brown water-soaked areas on the curd.
Cause: Boron deficiency.

Insect Control & Diseases. Except for some minor viruses, cauliflower grown in New Mexico has few disease problems. Insect control begins with the flea beetle early in the season. They are most prevalent during cool, wet years. Cotyledons and leaves of young, developing seedlings will appear to have been punctured with fine bird shot. Mustard oil that vaporizes from the injured plants will attract more flea beetles. Control insecticides include *diazinon*, *carbaryl* and *malathion*.

The cabbage looper is a major insect pest on mature cauliflower plants. Its larva is readily identified by thin, white lines along each side of its tapered greenish body. The cauliflower looper is easily controlled by applying *carbaryl* or *malathion*. Gardeners and growers interested in biological control of the cauliflower looper can treat plants with *bacillus thuringiensis* (BT), a special bacterium used to control the cauliflower looper and other caterpillars such as the cabbageworm and hornworm. BT should be applied at 3-14 day intervals. It is not harmful to humans or pets or insects that are not caterpillars.

When to Harvest Cauliflower (Days to Maturity). Heads are ready 50 to 125 days from transplanting as soon as they reach a suitable size. Appearance is usually the best guide to determining whether a cauliflower head is ready, usually 4"-8" in diameter and compact. ■

SOURCES:

- "Cauliflower Growing Practices and Varieties for New Mexico", G. Dickerson (no longer in print, but copies available in MG Hotline Library)
- "Home Vegetable Gardening in New Mexico", NMSU Circular 457
- <http://en.wikipedia.org/wiki/Cauliflower>
- <http://www.agriculturalproductsindia.com/vegetables/vegetables-cauliflower.html>
- <http://www.gardeningknowhow.com/vegetable/growing-cauliflower.htm>
- <http://www.weekendgardener.net/vegetables/cauliflower.htm>

Master Gardener Matters

—Monthly Meeting, April 21, 2010—

▣ WELCOME, INTRODUCTIONS & NEWS—Jeff Anderson

Jeff provided an update on funding for the Cooperative Extension. He stated that Karim Martinez had a meeting with the County to discuss Extension Programs and how they work. Now, the County and other relevant parties are talking and moving forward, but we will not know about the continued funding for Extension until a final vote on May 11. There was a petition for support of the Extension for people to sign.

Jeff did sell his house, closing is on May 13. It will take 3 months to fix up the new house, and he will host an open house.

▣ COMMITTEE/PROJECT REPORTS

MG Hotline—(Pam Crane) Only two slots on the Hotline are open in the next three months. We need more certified MGs to sign up to train Interns. Also, please sign up for the Hotline substitute list if you are willing to be called at the last minute.

Refreshment Sign-Ups—MG's were asked to volunteer to provide refreshments for our 2010 monthly meetings. There were still many open slots. (The list is now complete for this year.)

Newsletter—(Ann Shine-Ring) The Plant-of-the-Month for May will be the Pomegranate. There will also be articles on home vegetable gardening, spices and herbs, blossom-end rot, and leafcutter bees. Ann announced that the Chile Pepper Institute was holding a plant sale during the week (e.g. chiles, tomatoes and various herbs).

Spring Garden Expo (April 10-11)—We had a smaller turn out this year even though we did have good publicity. Next fall if we continue to participate in the Expo, we need to email the presenter schedule out to MG's as they did not receive a copy last time. In the future, we may need to re-evaluate this Expo approach to community outreach and education.

Farmer's Market & April 17 Plant Sale—(Barb Sallach & Dixie LaRock) Unfortunately, our plant sale was rained out. All plants were packed up and the sale was to be held again on April 24 if we had enough volunteers. Also, we have a Farmers' Market information booth scheduled for May 8 and June 12. MG's were asked to sign up for these events.

4-H Horticulture—(Juliet Williams) Several MG's have signed up to help with coaching the youth, which is appreciated.

Kids, Kows, & More at the Farm & Ranch Heritage Museum—(Juliet Williams) This educational event for school children went very well this year.

Other Community Events—

(Sylvia Hacker) Last week at the "**Lunch & Learn**" presentation at the Branigan Library, Jeff Anderson did an outstanding presentation on palms with good handouts. Next month's topic will be orchids (see page 15 in this newsletter). We do need more MG's to do presentations at this monthly event. Maybe those who prepared workshops for the Spring Garden Expo would be willing to do their presentation for this Program.

(Sylvia Hacker) "**Grow a Row Program**" for the homeless This Program is still in the development stages.

Community Gardens Report—(Darrol Schillingburg)

The **Esperanza Neighborhood Assn.** will be conducting a plant give away for the neighborhood and plant donations would be appreciated. This event was held on Sunday, April 25.

School Gardens The Hermosa School garden will be planted. Darrol is providing a workshop for parents on how to maintain it. The **Garden Project at the Court Youth Center** is in the works. Since this site is on this year's Garden Tour on May 15 more development is expected.

The **School/Community Support Committee** is working on developing curriculum and trying to recruit people to get involved in working with school gardens and to provide mentoring for teachers. MG's could help with this. Community volunteers will need to be available for each garden and to keep an eye on these gardens over the long summer breaks. A **Junior Master Gardener Program** at the schools might be a solution for summer care, however, the schedule at each school is different. Darrol stated that a part-time manager might be hired to manage gardens over the summer. A Committee is working on publicity and it is getting positive public attention around Las Cruces, but needs more attention at the County level.

▣ OLD / CONTINUING BUSINESS

Annual Tour of Gardens, May 15—(Bonnie Eisenberg) Bonnie distributed copies of the Gardens listed on this year's tour. A few more slots for volunteers are still available. Tour tickets will be available soon (each volunteer will receive a free ticket).

State Master Gardeners Conference, June 11-12 (Juliet Williams) Over 128 people statewide had already registered. About 4 or 6 MG's from Doña Ana County are registered. The deadline for early registration is May 10th and there is a \$20 reduction in the registration fee if you register before this deadline.

Juliet asked for help to setup a display table to showcase our County MG Program. Hope Movsesian agreed to put together a Memory/Scrapbook to show photos of our MG's and Projects. Ann Shine-Ring volunteered to put together a binder to display copies of our MG newsletters.

UTEP Chihuahuan Desert Garden Plant Sale, April 24-25 (John White). John distributed a Plant Sale flyer and provided a several page list of available plants species. For more information about this Sale, please contact Kaye Mullins at (915) 747-8994 or kmullins@utep.edu. Many of our MGs have signed up to volunteer.

Master Gardener Matters

—Monthly Meeting, April 21, 2010 (Continued)—

▣ OLD / CONTINUING BUSINESS (Continued)

State Fair (Val Fernandez) Val announced that she has volunteered to be this year's coordinator of the Ag Unit at the Fair. The Program has been completely revamped with an emphasis on vegetables, fruits and nuts. We would like all MG's to enter items in the Fair, as there are cash prizes and it's also a lot of fun. Entries will be accepted at the Extension office on Tuesday, Oct. 5th from 9 am–noon MG volunteers will be needed to help.

Group Purchase of Olive Trees (Hope Movsesian)

Hope mentioned that several varieties of olive trees are available at the Sandy Oaks Nursery and the order will be placed very soon. Cold hardy varieties are best for this area—some tree varieties are larger, some smaller. Tree prices will be approx. \$13.50 per tree for the 2 gallon size. If you are interested in purchasing some trees, contact Hope at (575) 521.1920 home, (575) 649.8039 cell or email: hopew_m@msn.com Dixie asked that if you purchase any trees, please save your 2 gallon pots for our next plant sale.

Other Announcements—

- The Master Gardener brochure is still in process. Jeff still needs to review it.
- We need to update a CD put together some time ago on plants we can grow for this area. Jeff says we will be working on it.

▣ NEW BUSINESS

Sonoran Conference in Tucson, May 15-16—(Jeff Anderson) The Cactus and Succulents Society of Tucson will be holding its annual conference. Last year the focus of the Conference was ocotillo. Guest speakers this year will discuss seasonal cactus and succulent gardening, designing with succulents, and Mary Irish will present on, "The Cultivation of Yuccas". Contact the link below for information. Unfortunately, this Conference is on the same weekend as the Annual Tour of Gardens here in Las Cruces.

Link: http://www.tucsoncactus.org/html/sonoran_conference.html

Trees That Please Open House—Arboretum Tomé, May 15, 2010—(Jeff Anderson) To be held in Los Lunas from 9am-4:30pm at the "Trees That Please" Nursery located at 3084 Highway 47. For more information check out this website:

Link: <http://aces.nmsu.edu/county/valencia/documents/arboretum-event-20101.pdf>

Using Biosolids in our Yards and Gardens—(Jeff Anderson)

The type of soil you have makes a big difference in your watering needs, so be sure to consider this when watering or advising others on watering. Jeff stated that the biosolids (compost mulch) from the Las Cruces Landfills (4755 E. Foothills or 2855 W. Amador) is working very well in his garden. This compost is dry like manure, but be sure to wear a mask when working with it. It does smell, but this dissipates in a few days. These biosolids contain a lot of iron and other minerals but is not high in salts. When picking up this soil, it's best to take a truck. Staff there will load the soil into buckets or trashcans. And it is free to residents. These facilities are open Monday through Friday from 8am-4pm. You can download information on these Yard Recycling locations at this website:

Link: http://www.las-cruces.org/utilities/solid%20waste/Recycle_2008.pdf

Ann Shine-Ring suggested that MG's check out NMSU Circular #562 (Uses of Municipal Solid Waste Compost in New Mexico) in our Hotline library for more information on using biosolids. Link: http://aces.nmsu.edu/pubs/_circulars/circ562.pdf

The Cooperative Extension Budget Situation—(Karim Martinez)

The Extension is funded locally for 1/3 of our total budget and that amount is matched by state and federal government for the remaining 2/3. We are not able to apply for state and federal funds without the County funding match. Over 200 people attended a recent County Commissioners meeting to show their support for the Extension.

A meeting was scheduled with the County Manager and the state and regional extension directors to discuss this issue. A letter will be sent out from the district director on the current status of the budget situation, plus it will ask the community to put their letters and public comment on hold while negotiations are underway. Our state and federal funding support is not in jeopardy.

Our funding for the Extension in Doña Ana County is set up differently than other counties in New Mexico. Currently we are trying to get that changed so we are treated like a regular County department and not an outside organization. The County Commissioners will have to take action in order to direct the County Manager to make this very important change. Currently, a big project that the Extension is working on right now is "Food Supply Safety" and the County needs to know about these kinds of critical activities conducted by the Extension Service.

▣ EDUCATIONAL PRESENTATION

Topic: Getting to the Root of Good Plant Choices Presenter: John White, UTEP Assistant Botanical Curator

John discussed how to make good plant choices in the face of raging spring fever and retail plant availability.

Snacks: Thanks to Linda Schukei and Juliet Williams for today's goodies. Next month, Katrin Sumpter, Dixie LaRock, and Pat Anderson will be bringing snacks.

Next MG Business Meeting – Wednesday, May 19, 2010

Bonnie and Juliet



(Hotline assignments listed were current as of 4/30/10)

Interns please notice that there are two open spots in June

Please remember to be present on your assigned date for the Hotline. If another Master Gardener forgets, please give him or her a "reminder" call. We are always very busy this time of the year so we need to have full coverage on the Hotline. Thank you.

Master Gardener Hotline Assignments for May

- Tuesday, May 4 **Carla Clouser**
Jodi Richardson (I)
Bruce Begin (I)
- Friday, May 7 **Alberta Morgan**
Richard Hiss
Linda Morgan (I)
- Tuesday, May 11 **David Hutchinson**
Dixie LaRock
Bruce Begin (I)
- Friday, May 14 **Leigh Matthewson**
Ann Palormo
Linda Schukei (I)
- Tuesday, May 18 **Pam Crane**
Frank Collins
Holly Richardson (I)
- Friday, May 21 **Pat Anderson**
Richard Hiss
Bruce Begin (I)
- Tuesday, May 25 **Leigh Matthewson**
Frank Collins
Mary Ozenne (I)
- Friday, May 28 **David Hutchinson**
Bonnie Eisenberg
Mary Ozenne (I)

Master Gardener Hotline Assignments for June

- Tuesday, Jun. 1 **Susan McNeill**
Jodi Richardson (I)
Mary Ozenne (I)
- Friday, Jun. 4 **Alberta Morgan**
Mike Lee
Mary Ozenne (I)
- Tuesday, Jun. 8 **Nancy DeLouise**
Maya Brewington (I)
_____ (I)
- Friday, Jun. 11 **Leigh Matthewson**
Dale Petzold
Russ Boor (I)
- Tuesday, Jun. 15 **Betty Tomlin**
Jodi Richardson (I)
_____ (I)
- Friday, Jun. 18 **Paul Hutchins**
Pat Anderson
Mary Ozenne (I)
- Tuesday, Jun. 22 **Leigh Matthewson**
Mike Lee
Jane Zimmer (I)
- Friday, Jun. 25 **Richard Hiss**
Katrin Sumpter
Linda Morgan (I)
- Tuesday, Jun. 29 **Pam Crane**
Susan McNeill
Linden Ranelis (I)

Next Monthly Meeting of the
Doña Ana County Master Gardeners

May 19th @ Cooperative Extension Office
9am-11am

Reminder: The date of our September monthly MG
meeting has been rescheduled to Sept. 22nd