



University of Arizona, Yavapai County Cooperative Extension

Yavapai Gardens

June 2001

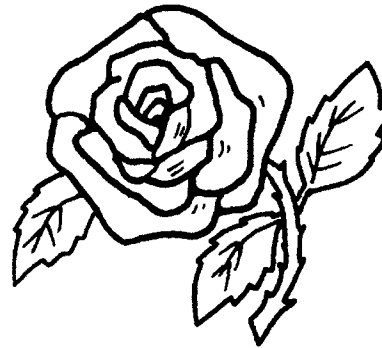
Master Gardener Newsletter

Everything is Coming Up Roses

The history of the rose gets misty the farther back you go. It is said that roses acquired their thorns after Adam and Eve were thrown out of the Garden of Eden. Greeks claimed the red rose came from the blood of Aphrodite. Aphrodite stuck her foot on a thorn while helping Adonis. Turks claim the red rose is stained from the blood of Muhammad.

Romans cultivated *Rosa gallica*, using it to crown bridal couples and in banquet centerpieces. They even developed hot-house techniques that allowed them to force roses into blooming more.

Greek colonists brought them to Southern Italy. Cleopatra filled a room knee-deep in rose petals to woo Mark Antony. Egypt even exported roses to the Roman Empire. In the 10th century, rose water was being prepared, while attar of roses appeared in the 16th century.



During the Middle Ages, roses were used in holy festivals and as a part of medicinal gardens. As the merchant class arose after the Middle Ages, trade in horticultural materials

began to flourish. The Netherlands became the center of the nursery trade. They were also some of the first to systematically grow roses from seeds. Before 1810, only about 10 cultivars of roses were available but after that some 200 varieties were being sold.

American colonist, William Penn, brought 18 roses with him to the new world, while John Adams was the first to plant roses at the White House. The wild American rose was used by the Indians for a variety of health reasons. Rose petals and bear grease were used for fever sores and blisters. Petals soaked in water were used as an eye wash and boiled bark was used on boils.

Greenhouse Workshop

July 6, Payson High School, 10:30-4pm
see pg ... 6

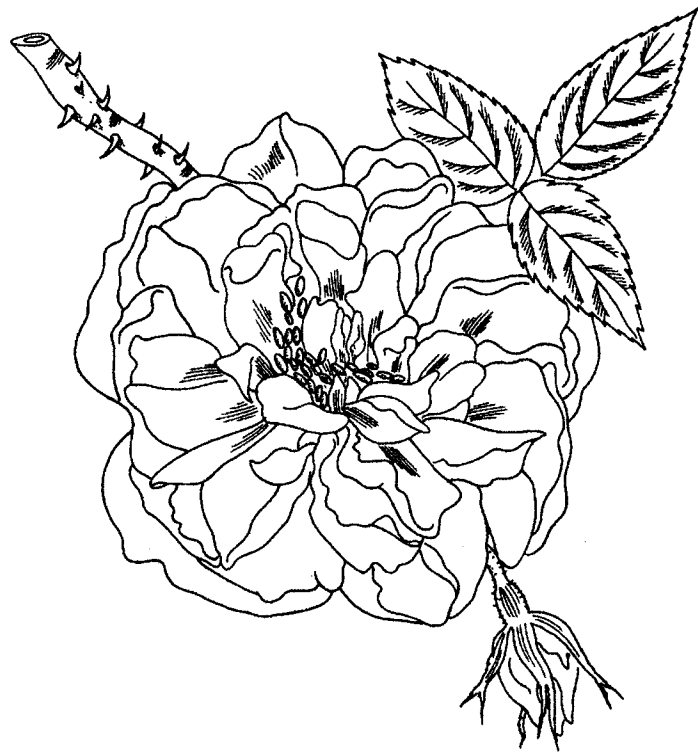
Last Call: Road Trip!

**See page 6 for more information
on the trip to the Flagstaff Arboretum**

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The French came into the rose business around 1800. Empress Josephine collected and encouraged the breeding and hybridization of roses. The French breeder, Descemet, is said to be the



first in the West to have practiced controlled cross-breeding.

While all this was going on, the Chinese were breeding roses. Between 1750 and 1824, four cultivars were developed that became the foundation of an entire segment of the rose-breeding industry. The 1820's and 30's were a hotbed of hybridization between the Chinese and European varieties. In fact, it was during the 1820's that the greatest diversity of roses were available.

The 1840's saw the rise of rose shows and competitions. This focused breeding experimentation and some cultivars began to disappear in some groups, especially the old European varieties. Tea roses which were often weak and not very hardy, were crossed with Bourbons; this group eventually became the hybrid teas we are familiar with today. Teas are thought to have come from a cross of two Chinese varieties.

The crossbreeding and hybridization of roses continues to this day. Each year new varieties hit the market. While most are the hybrid teas,

today there is a renewed interest in old roses, which can be quite beautiful.

Roses have always had a large impact on the perfume industry. 60,000 roses will only yield 1 ounce of pure essential oil.

The name of "teas" came about from their scent which was compared to "a newly-opened sample of the choicest tea."

Roses are available through a wide range of outlets: discount stores, local nurseries, and hardware stores—even grocery stores carry roses. There are also a huge number of catalog nurseries and internet sites that sell roses. Most of these sell the most common varieties. If you are looking for a good source of Old roses, try

The Antique Rose Emporium
9300 Luechemeyer Rd
Brenham, TX 77833-6453
1-800-441-0002

Roses In Your Garden

I'm sure all of you have visited the traditional rose garden. Plants spaced several feet apart with absolutely nothing but bare ground between them. While this brings the individual plants to the viewers attention, roses can also be part of a



garden bed and guess what—all the rest of the plants can hide rose's sometimes not very attractive canes. Don't be shy; mix things up!

Plants growing around the base of the rose can enhance the roses. Look for something that works with the color of the rose. Mix complementary colors together or one of the favorite gardens is the white garden. Plant allysm around your white roses. Plant purple sages or catmint around the orange flowered roses. Use contrasting texture and leaf color. Since roses have large shiny green to dark green leaves, try something like santolina or lavender to contrast all that green. Even something fuzzy like lambs ear or dusty miller would make a nice contrast to the rose.

Look for plants that have long seasons and can grow to about 1 1/2 feet tall. For larger roses you might even consider a vining plant to curl up among the thorns. Just make sure that the vine isn't so big and overwhelming that it ends up hiding the roses.



Whatever you do, do something to cover up all that bare ground and enhance your rose garden!

June Calendar

Keep roses deadheaded. Fertilize and water deeply. Hose off rosebushes occasionally to control spider mites.

Snip away at those herbs. Morning is the best time.

Plant warm-season crops: cucumbers, eggplant, peppers, pumpkins, squash, tomatoes, corn, black-eyed peas, beans and melons.

Strawberries, raspberries, blackberries and other small fruit will probably need to be protected from birds as they ripen.

Squash borers will be looking for places to lay their eggs. Look for the eggs on the vines and rub them out before they hatch.

Water trees and shrubs deeply.

Watch for spider mites. A simple hosing off of the plant should control them if you catch them early.

Check any staked trees. Make sure whatever you used isn't cutting into the plant or the plant isn't growing around the ties. If you have planted the tree correctly and watered it well, after the first year or two it should not need to be staked.

Tomatoes can start suffering from blossom-end rot. The best cure is to maintain even watering schedules. Don't let the plants wilt or suffer from the heat. This helps prevent blossom-end rot.

Plant summer flowers: marigolds, zinnias, cockscomb, globe amaranth, and salvia are all good summer bloomers.

Now is a good time to solarize your soil if you need to remove unwanted weeds and pests. Use clear plastic to cover soil. Leave in place for 3 to 8 weeks to heat soil temperature above 114°.

A Rose By Any Other Name . . .

While you may know a rose when you see it, did you know that there is a variety of different types of rose? The classifications are based on size, shape, form, and flowers. Knowing a little bit about these types will make it easier when you start making selections whether it is at your local garden center or by catalog.

Old Garden Roses or Antique Roses are any roses that date from before 1867. Generally they are hardy, fragrant and have low maintenance. Antique roses add color and form to historical landscapes, along with any other place where color is needed as part of a bed or as a specimen plant.

Hybrid Teas are the rose most people are familiar with. They are the "classic rose." They have long pointed buds and as they open they have swirls of petals in nearly every color—blue is still elusive. Some are fragrant, some are not. Hybrid teas can be grown as a single specimen or in a group.

Floribundas produce an abundance of flowers. They are second to hybrid teas in popularity. One of their parents is the hybrid tea and they have inherited long cutting stems. Generally they pro-

duce a spray of blossoms throughout the summer. The plants tend to be compact, disease resistant and hardy. With their continuous blooming, they are a spectacular addition to the garden.

Grandifloras were created as a class in 1954 for the rose Queen Elizabeth. This rose is a cross between hybrid teas and a floribunda. It is very hardy like the floribunda. The flowers grow in clusters on shorter stems and bloom throughout the growing season. A group of grandifloras can make a striking addition to a border.



Climbing Roses trail long stems over fences, walls, arbors or whatever is handy. They are vigorous and can grow to impressive heights. The famous yellow rose in Tombstone, Arizona, is a climbing rose. Generally they are covered with flowers along the length of the stem. When planting climbing roses, give them plenty of room!

Miniature roses are tiny versions of their larger relatives. They can grow outside and need similar conditions. Miniatures make nice borders or work well in window boxes or containers. Size



ranges from a few inches tall to about 1 1/2 feet. Patio shrubs are halfway between miniatures and floribundas and work well in containers.

Polyanthas Roses are a cross between *Rosa multiflora* and *R. chinensis*. The plants are low growing and covered with small, one-inch flowers.

Tree Roses are a grafter's creation. A rose is grafted on to a single straight sturdy cane. Standard trees are 36 inches high and can make a striking addition to an entryway or patio. There are now miniature trees available that run about 18 inches high.

Shrub Roses can be fit into the landscape as a border or as a single plant. Simplicity Hedge Roses are fairly new to the market. They are very low maintenance but heavy bloomers. They can be used for hedges, to brighten areas and conceal foundations. Prune them low or leave them to grow tall, depending on your landscaping needs.

Rugosas are old varieties. They are hardy, vigorous growers with lots of blooms. Use in cottage gardens or borders or for masses of color.

English Roses are crosses between old and modern. Also known as David Austen Roses (the hybridizer) the roses are old-fashioned with a strong fragrance. They bloom continuously and work best massed together.



The Fragrance of the Rose

Roses are linked with their fragrance. When you receive a rose, what's the first thing you do?—sniff it. But not all roses are fragrant. Approximately 25% of roses do not have any fragrance. Only 20% are intensely fragrant.



Hybridizers are trying to breed in more fragrance to new varieties. Modern hybridized roses are, unfortunately mostly scentless. Breeding in scent isn't as easy as breeding for color. There are a number of different genes responsible for the fragrance and a series of genes is needed to create a fragrance. If you cross two fragrant roses you will normally get at least one offspring with no fragrance at all.

It may surprise you, but most parts of the rose are fragrant including thorns. It's just that the highest concentration occurs in the petals. The scent comes from a combination of chemical elements that include aromatic alcohols, aldehydes, fatty acids, phenols, carbonic acid, essential oils and resins.

Not all fragrances are the same; roses emit scents that resemble apples, citrus, cloves and other familiar flower and fruit scents. Generally speaking, darker roses tend to be more scented than light colored flowers. Heavier petals tend to be more fragrant and red and pink roses usually

have the more traditional rose scent. Yellow and white roses usually have fruity, citrusy or other flowery scents. Try the variety *New Dawn* and *Honorable Lady* for an apple scent. Looking for a fruity, citrus or clove scent try *Eden Rose*. The classic rose scent can be found in the variety *Parfum de Lowe*. *Soleil d'Or*, *Scentsimental*. *Ain't She Sweet* and *Secret* have a spicy scent and *Margaret McGreedy* smells of violets.

Environmental conditions will affect how the roses smell also. The fragrance is more intense if the plant has been taken care of properly. Weather conditions can also affect the scent. It is more prominent on warm and sunny days than when it is cold and the evening is the best time to wander through the rose garden.

In many rose catalogs the quality of the scent is sometimes mentioned, but not always. You can wander through other people's gardens and take notes or look for varieties that have won the American Rose Society's James Alexander Gamble Fragrance Medal.

Some fragrant varieties to look for (Medal winners:) *Crimson Glory*, *Tiffany*, *Chrysler Imperial*, *Sutter's Gold*, *Granada*, *Fragrant Cloud*, *Papa Meilland*, *Sunsprite* and *Double Delight*.

Non medal winners, but still very fragrant: *Ain't She Sweet*, *Dolly Parton*, *Fragrant Plum*, *Scentsimental*, *Scentsational*, *Secret*, *Alfred de Dalmas*, *Cardinal de Richelieu*, *Ispahan*, *Madame Hardy*, *Rosa Mundi* and *Sombreuil*.

Happy sniffing!



Master Gardener Opportunities

Roses grow very well in Arizona, if you are interested in getting more information join the Yavapai Rose society!

Yavapai Rose Society - Will meet June 18, 2:00 PM at the First Christian Church, 1230 Willow Creek Road, Prescott. There will be a Consulting Rosarian Question and Answer period. Guests are welcome and there is no charge. For more information call Bob or Nancy at 771-9300, or Dave at 778-5507.

Last Chance for Adventure Travell June 16th—Join the Master Gardener Van for the Arboretum Plant Fair. If you are interested in going contact Patti Conrad at (520) 778-4810. The van leaves Prescott at 6am. Trip length may vary, so don't make plans on getting back at a specific time unless you drive your own vehicle.



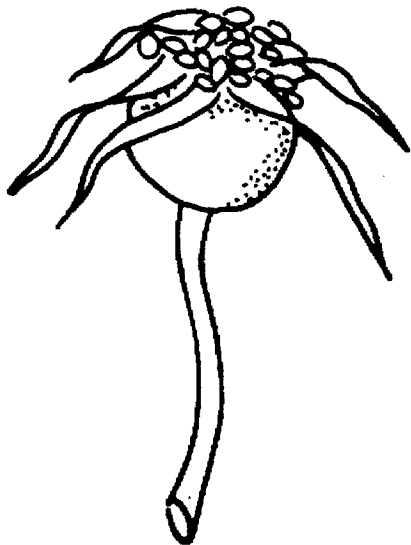
Greenhouse Workshop, Friday July 6th, 10:30 to 4:00, Payson High School, Longhorn and Wade (next to athletic dome), Hwy 87, left on Bonita, then right on Wade, then to athletic dome. Speakers: Gene Giacomelli & Pat Rorabaugh. 20 minute talk w/ 10 minute questions for each topic presented. Topics include, basic principles of greenhouse crop production, greenhouse structures, environmental controls, plant nutrition and nutrient delivery systems, insects & disease. Registration fee \$15.00. Contact: Christopher Jones, Extension Agent, Gila County Cooperative Extension, 1177 Monroe Street, Globe, AZ 85501, Ph: (520) 425-7179, FAX: (520) 425-0265. E-mail: ckjones@ag.arizona.edu>

The Cottonwood Organic Gardening Club meets at the Cottonwood-Verde Valley Fairgrounds on the second Wednesday of each month at 1:30 p.m.

Among Your Roses

from the Yavapai Rose Rambler, ed. By Dave Humphrey

Watering: Are your roses getting enough water? To check, dig down into the soil about a foot from the center of a rose bush and see if the soil is moist. If it is not moist, water, water, water. If your roses are planted more than three feet apart,



apply water over a radius of at least two feet around each bush. If you are using a drip system, be sure to water with a hose in addition at least once a week. When you do this, it is a good time to wash off your bushes and, use a wand with a cut off control, set so as to provide a strong spray to

wash off the underside of the leaves to eliminate any spider mites that may be there.

Mulching: Your roses should have a heavy mulch around them and if they are in a bed fairly close together, the entire bed should be covered with mulch. A good mulc, 3 to 4 inches thick will cut down on the loss of up to 80 percent of the moisture from the surface of the soil. It will also prevent severe temperature changes to the soil, eliminate most weed growth, and prevent the soil from puddling when water is applied by mankind or nature, thus facilitating the penetration of water into the ground.

Fertilizing: Assuming you have applied the first dose of fertilizer (other than organics, be it in liquid or granular form) it is time to add more. These monthly applications should be of a balanced nature. That is, they should contain N-P-K and preferably, iron manganese and zinc in a che-

lated form. When chemicals are applied to the soil in chelated form the plants can use them regardless of the pH of the soil. Normally, there is sufficient iron in our soils but the pH must be below 6.5 to make it readily available to the roses. So, when we add chelated iron we don't have to be concerned about the level of the pH. Don't be lulled you into thinking you don't need to have the pH at 6.2-6.8. A pH of 6.5 would be optimum. When fertilizing, remember to be sure the plants are good and moist before applying fertilizers, either the dry type or in solution. Then, water well after fertilizing. It is not necessary to scratch in fertilizer unless it is organic material. Each time you do the weekly watering, the plants will get fed. If your soil contains considerable compost, extra nitrogen will be required as the decomposition of the compost will steal some of the nitrogen

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Organic versus chemical: I like to use both but not at the same time necessarily. Organic material, like fish, blood, cottonseed meal and other organic materials, contain minor and micro elements not usually available in chemical fertilizers. Plants do not distinguish between nutrients



supplied by chemical or organic fertilizer material. The nutrients all arrive in chemical form at the roots carried there by microbial action or water. Can you use too much organic fertilizer? Yes, you can. Can you use organics any time of the year? Yes, but they are more expensive than chemical fertilizers and a greater quantity would be necessary to

achieve the same result and more work would be involved in the application, as organics should be worked into the soil, since most are not water soluble.

Insect and Disease Control: Some rosarians prefer to wait until the damage is done by insects and disease before they treat the problem but I have found that an ounce of prevention is worth a great deal. It is much easier to prevent mildew and thrip damage than it is to eliminate it after the damage has been done. So-called surface fungicides can prevent mildew but will not eradicate it. A systemic fungicide is required to do that and, unfortunately, none of the nurseries or hardware stores in this area carry systemics that will do the job; Systhane, which I am able to provide at cost for our members is one of the best for eradication of mildew. [Since powdery mildew can become tolerant to a fungicide under repeated use, you may wish to obtain one or two additional fungicides.] Kimbrew Walter Roses in Texas is a good source for such material. Rubigan is a good alternate fungicide.

Unfortunately, thrips don't wait until the roses bloom to start their damage. As soon as buds form, they go to work laying eggs and starting to

be a nuisance, so it is hard to spray too early for them. Two of the best insecticides for thrips are Cygon 2E and Orthene. Aphids may be found in your garden any time but most insecticides will control them. Malathion is very good and readily available. If you find a bad infestation of thrips, spraying should be done on five-day intervals until they seem to be pretty well under control; then you can slack off to every seven days.

Never spray your roses when they are in need of water. Spray the underside of the leaves, the canes and the tip of the leaves. When spraying thrips, be sure to saturate the buds and the ground under the plants. Spraying early in the morning serves three purposes; you find less wind, few (if any) bees, and it is cooler then. Try to avoid spraying before the temperature reaches 80°F.

Pruning and Deadheading: Yes, pruning. As you spray or fertilize, look your bushes over for dead or dying growth and remove it. Also look for small growth toward the inside of the bush. Deadheading on a daily basis is best, so you don't delay the development of new growth.

Good luck and enjoy the blooms!



Roses in the Kitchen

Turn your summer roses into a cool summer treat. Try one of these on a hot summer day.

Rose Ice Cream

- 1 quart vanilla ice cream
- 1 Tbls. pesticide free, dried, ground-up red and pink rose petals
- 3 Tbls. coarsely chopped pistachios
- 1 Tbls. Rose syrup (You can purchase rose syrup on the internet or in Middle Eastern food stores.)
- 1 Tbls. Rosewater
- 2 teas. ground cardamon

Soften ice cream in large bowl. Stir in remaining ingredients until well mixed. Spoon into serving dishes. Refreeze until set.



Rosy Cooler

- 4 cups rose petals, red or pink, pesticide free
- 1 bottle rose' wine
- 1/4 cup vodka
- Raspberries, fresh, lightly crushed
- Ice cubes
- 1 quart carbonated mineral water

In glass bowl, combine the wine and petals. Chill 1 hour.

Add vodka, lightly crushed fresh raspberries and lots of ice cubes. Chill for another hour. Just before serving, add the mineral water.

Yavapai County Cooperative Extension
Website is: <http://ag.arizona.edu/yavapai/anr/hort/byg/>

Master Gardener website: <http://ag.arizona.edu/yavapai>
<http://ag.arizona.edu/yavapai>



The "Arizona Master Gardener Manual" is now on-line. Check out

<http://ag.arizona.edu/pubs/garden/mg/>

NOTE FROM THE EDITOR:

Let me know about your garden, the types of seeds you planted, interesting articles you found-anything of gardening interest. Send to:

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