

### Plant of the Month . . . July

Dr. William C. Welch, Landscape Horticulturist Texas A&M University College Station, Texas

Pomegranate, *Punica granatum* Family: Punicaceae Zones: 8 - 10

**D**omegranates were brought by the Spanish to America. After Cortez conquered Mexico in 1521, Jesuit missionaries sent to work with the Indians brought pomegranates from Spain; from Mexico they were carried northward to missions in California and possibly east to Texas. They were also thought to be in the early Florida city of St. Augustine. Some pomegranates have naturalized in the coastal areas of the United States.

The pomegranate plant form is that of a small deciduous tree or large shrub, growing up to 25 feet tall. Pomegranates are multistemmed unless pruned to a single trunk. Originally grown for their fruit, they are also known for their beautiful flowers that can occur for several months in the spring and early summer. Most commonly, they are red-orange, but white, pink, and variegated flowers may also be found. Double flowering types have blossoms that are carnation-like. Pomegranates are also useful for large hedges. Their foliage is shiny, dark green, and the stems are somewhat thorny.

Native to Arabia, Persia, Bengal, China, and Japan, pomegranates are sometimes hardy as far north as Washington, D.C., but are best adapted to the Deep South where they have escaped cultivation in the Gulf Coast states.

> Pliny considered pomegranates to be among the most valuable of ornamental and medicinal plants. Theophrastus provided an early description about 300 years before the Christian era. Many legends concerning the pomegranate have been handed down by Asian people. The many seeds are supposed to be a symbol of fertility. Legend also

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# Use Leaf Analysis to Determine Nutrient Needs

Dr. Calvin Lyons, Professor and Extension Specialist Texas Agricultural Extension Service Texas A&M University

With the lack of crops in many areas of the state due to freezes and major hail damage, fruit growers should consider taking leaf samples this year. Trees that don't have a crop because of early spring freezes probably are growing excessively and won't need any additional applications this year, and probably only a light dose next year.

Hail damaged trees, on the other hand, present a different problem. Many of these trees were stripped of foliage and fruit at a time when they were at their low point of carbohydrate reserves. These trees will have to put out new foliage and should receive extra attention. Leaf analysis done in mid to late July will determine if the plants are in need of extra nutrition this fall. If the samples submitted come back low in nitrogen, an application of about 15 lbs/ac should be made in early September. This will not cause extra growth, but will make the trees healthier for the coming winter and better able to produce a good crop next year.

Leaf analyses should be taken from each block of trees. It should consist of 50 randomly selected leaves from mid terminals. Send the samples in paper bags. Do not send in plastic bags covered with wet paper towels, as this will cause the leaves to rot. **CS** 

#### Pomegranates (Continued from Page 1)

says that the pomegranate was the "tree of life" in the Garden of Eden, and from this belief it became the symbol of hope and eternal life in early Christian art. The erect calyx-lobes of the fruit were the inspiration for Solomon's crown and for all future crowns.

Pomegranates were often found in 19th century southern gardens and nurseries. In his Southern Rural Almanac, and Plantation and Garden Calendar for 1860, Thomas Affleck listed them in his Washington County, Texas nursery and said, "The pomegranate grows, thrives, and bears most admirably." For a period in the early 1900s, pomegranates were grown in commercial quantities in the U.S., but consumers have never really developed an appreciation of the pomegranate fruit. One of the few varieties still available is 'Wonderful,' which, if picked and aged at room temperature for a month or two, will develop the rich, sweet taste characteristic of better quality fruiting varieties. Although of very easy culture, pomegranates prefer a sunny location and deep soil. They thrive in acid or alkaline soils and tolerate heavy clay as long as there is sufficient drainage. Many forms exist and not all fruit well. Generally, double flowering types provide little, if any, fruit. Mature specimens withstand drought well, but fruit often splits after rainy spells following extended dryness. Dormant hardwood cuttings root well, as do softwood cuttings, under mist in the summer.

In addition to eating it fresh (it is very seedy), the fruit may be used in the preparation of syrups (especially grenadine), alcoholic beverages, and jellies. Plants of the dwarf and large-growing forms are sometimes available in the southern half of Texas. Plants tend to be long lived, but occasionally they freeze back to the ground. Interesting trials with pomegranates from Iran and Russia are being conducted in the Houston area by fruit specialists who believe that some of the plants may have superior fruiting, growth, and hardiness characteristics.

Attracting Butterflies

Keith Hansen, Smith County Horticulturist Texas Agricultural Extension Service Texas A&M University

Butterflies are the jewels of the insect world. Nothing approaches the beauty and grace of these colorful insects as they flit and wing about from blossom to blossom.

Although butterflies are drawn to many plants routinely used in Texas, the practice of deliberately attracting them to our yards is gaining in popularity. As evidence of this trend, several botanical and public display gardens in the United States are developing butterfly gardens, with special greenhouses and outdoor plantings which display both exotic and native butterflies and moths year-round.

It is important to provide food plants not only for the adult butterfly, but also for the less attractive larvae. Caterpillars often prefer different foods than the adults, so plant a variety of plants to increase the diversity of butterflies. Larvae feed on the foliage and flowers of shrubs, trees, and perennials, while the adults require the nectar of flowers and other sweet things, such as decaying fruit and wet wood. Bleeding trees which have been riddled by yellowbellied sapsuckers are favorite feeding spots for such butterflies as the mourning cloak. Butterflies also like damp areas where they can sip water from the mud.

Some butterflies are drawn to specific plants, while others will visit nearly any attractive flower. Many species need very particular plants on which to lay their eggs. For example, the beautiful orange, silver, and black Fritillary butterflies lay their eggs on passionflower vines (Passiflora), and it would be unusual to not find caterpillars munching away on the leaves or the adults flitting around. Passionflower vines are easy to grow and have beautiful flowers. Provide plenty of room for them to run!

Another vine which attracts a particular kind of butterfly is the Dutchman's Pipe (Aristolochia). Its peculiar flower looks kind of like a pipe. Dutchman's Pipe attracts the large, dark green Pipevine Swallowtail butterfly.

Obviously, if you are going to attract the caterpillars to get the adults, you will need to tolerate some loss of foliage. But the rewards are well worth it if you enjoy drawing a wide range of butterflies to your yard. Different species will be present at various times of the year, and sometimes great migrations of one species will pass through the area over a two- or three-day period. A few of the many different kinds of plants which should attract butterflies are:

**Blue Sage** (Salvia farinacea) -- also sold as the "improved" varieties Victoria or Better Blue -- a tough plant, blooming spring through fall, which attracts a wide variety of butterflies

Lantana -- comes in a wide range of growth and colors, a perfect designer plant

**Butterfly Weed** (Asclepias) -- its bright orange, or red-to-yellow flowers attract all types of butterflies

Zinnias -- come in a wide range of bright colors and attract many kinds of butterflies

**Ixora** -- a favorite of many tropical butterflies, often used in butterfly houses at botanical gardens

Landscape Plants -- azaleas, butterfly bushes (Buddleia), Abelias, Carolina jessamines, asters, cardinal flowers, gomphrenas, and verbenas.

Vegetable gardeners know that the cole crops, such as broccoli and cabbage, are a preferred food plant for the cabbage looper and cabbage butterfly larvae. Adults range from white to bright, sulfur yellow. Fennel, carrrots, and mint may attract one of the large swallowtail butterflies to your garden.

For more information, consult your local libraries. A new book entitled, *Butterfly Gardening for the South* by Geyata Ajilvsgi, is very good.

### Harvest Time

William D. Adams, County Extension Agent - Horticulture Texas Agricultural Extension Service The Texas A&M University System

Harvest time is finally here. Almost everyone is lugging baskets of vegetables out of the garden. Chances are if you're an avid gardener, you already know a lot about when to harvest; but this time of year, it seems only appropriate to go through some of the basic principles of harvesting fruits and vegetables.

First of all, harvest at peak quality -- before the vegetables get too big. I like to gather fruits and vegetables in the early morning when they are at their freshest. I then carefully rinse off the vegetables -- I don't want to bruise them so I don't scrub them, since this would reduce the length of time that they can be stored. Vegetables, like sweet corn and peas, need to be cooled off as soon

as possible. Harvest early in the morning and get them to the refrigerator fast to reduce the conversion of sugar to starch which, of course, reduces the sweetness of these vegetables. Obviously, you don't want to leave vegetables lying out in the sun for any length of time.

The following are a few of our most popular vegetables, with suggestions on what to look for before harvesting.

Snapbeans. The pods should be almost full size, but they should be picked before the seeds begin to bulge. Store them cold (45-50 degrees) in a plastic bag or in the crisper section of the refrigerator. Washing them before storing will help to retain moisture.

*Sweet Corn.* Corn is ready about the time that the silks begin to darken and dry out. Kernels will fill out toward the top, so the ends of the corn will become more blunt as harvest time approaches. The correct stage to pick sweet corn is called the "milk stage." This occurs when a milk-like juice exudes from the kernels when they are punctured with your thumbnail. Since corn is very susceptible to starch conversion, rapidly chill or eat it after harvest.

Cucumbers. Harvest when the fruits are bright, firm, and green, before they get too large. If you plan to make sweet pickles, harvest the cucumbers when they are 1-1/2 to 2 inches long; dills should be 3 to 4 inches long, and slicing cucumbers are usually 6 to 8 inches long, but they may be 10 to 24 inches long if they are the burpless type. Once cucumbers begin to develop a yellow color or lose that bright, dark green look, they are probably seedy in the center.

> Eggplant. These should be harvested when approximately full size -- I know there are a number of new varieties that make this hard to determine, but generally, the fruits ready for harvest will be brightly colored and shiny. Once they become dull

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and soft, they will be full of seeds and they may be bitter. Be sure to keep them cool and humid after harvest. Edible gourds, like the climbing okra which is actually a luffa, should be picked when they are 8 to 10 inches long, and young and tender.

Melons. Most home gardeners don't have room for melons, but if you planted a few, here is what to look for. Honeydews should be harvested when they are yellowish to creamy white, with a soft, velvety feel. The rind should be slightly soft at the blossom end and it should have a faint melon odor. Muskmelons are harvested at 3/4 to full slip. This occurs when the stem slips readily from the fruit under moderate pressure and leaves a circular depression. Also, the outer rind should not have any green color. Watermelons are often the most confusing. If you are a good melon thumper, you probably know exactly when to harvest them, but generally, the surface color should be somewhat dull and there should be a creamy colored ground spot. All melons are best stored cool after harvest.

**Okra.** Pick when they are 3 to 4 inches long and before the pods reach the hollow, puffy stage. If a pod looks too large, take your knife and try cutting into it. If it is tough and woody, cut if off and throw it away. If you have ever harvested okra, you know that it is important to wear a long-sleeved shirt or you will be scratching for hours afterward.

**Bell Peppers.** Harvest when they are 4 to 5 inches long with full, well developed lobes. Jalapeños are picked when they are 2 to 2-1/2 inches long. Peppers should be stored at 45-50 degrees.

**Potatoes.** These probably have been harvested by now, but if you haven't already dug them, chances are the vines are beginning to turn yellowish and they may have a leaf spot fungus. If you will carefully dig around in the soil, no doubt you will find lots of small new potatoes; while digging, you will probably find some large baking-size as well. Remove some of the adhering soil, but don't bother to wash them before storage, since damaging the skin could cause decay. They should be stored in a cool, dry area. Some gardeners place potatoes on screens and set up a fan to blow on them for several days to improve their storage qualities.

Yellow Crookneck and Zucchini Squash. Harvest when 4 to 8 inches long -- generally, the smaller the better. The fruit should be a glossy color, which indicates tenderness. Although almost everyone has ended up with a baseball bat-sized zucchini, it takes some special treatment to eat one when it gets that big. Squash can be damaged if stored at cold temperatures for more the 2 or 3 days, so it's important to either eat a lot of squash or freeze it for later use.

**Tomatoes.** Tomatoes are best harvested when they are fully colored but still firm. Once the tomato develops a certain amount of red color, chances are it will continue to develop color and taste on the kitchen cabinet out of direct sunlight. Personally, I have never liked cold tomatoes, but they can be stored in the refrigerator once they are fully ripe. I recently read an article about a researcher who determined that much of the flavor that we appreciate in tomatoes was lost in cold storage -- no wonder I don't like them that way.

Don't forget you can also make pickles or freeze an overabundant harvest. If you would like bulletins on how to process canned or frozen vegetables, contact our Extension Home Economists at (713) 855-5600.

# Herbs Bring Old World Home

John Cooper, CEA Horticulture Texas Agricultural Extension Service Texas A&M University

A mericans have enjoyed herb gardens from colonial times. George Washington and Thomas Jefferson cultivated herbs and thought gardening to be among their most worthy contributions to American life and practice.

Our forefathers were always experimenting with plants they considered useful that they could acquire. At Monticello today, Jefferson is quoted as having said he was "an old man but a young gardeners." We have learned much since their day, but our knowledge of plants and gardening has only increased our appreciation and sense of awe for nature and her vast resources.

Today's gardener has greater access to plant material than anyone dreamed of 200 years ago. Although we enjoy new plants of every sort, our garden herbs are not too different from those planted in Colonial America.

Herbs can be treated much like vegetables and flowers. All herbs prefer a sunny well-drained site. A few plants go a long way, so herb gardens don't require much space. In fact, any of the herbs make excellent candidates for containers.

Herbs grown in containers, more commonly known as "potted herbs," are more likely to get that perfect drainage they prefer and are more likely to remain weed free. As with any plant growing system, mulching the soil surface will reduce watering requirements.

Although not heavy feeders of nutrients, herbs will benefit from the slow, even release of organic fertilizers such as well rotted compost. Mix organic fertilizers into herb beds or potting soil prior to planting. Avoid fresh manures or fertilizers high in nitrogen. Plant perennial herbs in permanent garden beds, separated and apart from other vegetable and annual flower beds. Perennial herbs will come back year after year, and you don't want to disturb them unnecessarily. Many folks locate them near the kitchen door for easy access. Popular perennials include peppermint, spearmint, lemon balm, lovage, oregano, rosemary, sage, tarragon, and thyme. After your final harvest and the tops frost down in the fall, cover perennial beds with 3 or 4 inches of shredded leaves to protect them from winter injury.

Annuals and biennials can be planted among flower and garden beds. Popular annual and biennial herbs include anise, basil, borage, caraway, chervil, coriander, dill, fennel, parsley, sweet marjoram, and summer savory. Grow in attractive borders or in decorative pots. Edge flower beds and gardens with edible herbs.

Plant herbs from seeds or started transplants. Most commons garden herbs can be found as transplants. When planting seeds, be sure to prepare a fine seed bed to insure good seed-soil contact. **CS** 

Farmer's Market Opens in Denton

The Denton County Farmer's Market is officially open for the 1994 season at the K-Mart parking lot on University Drive and Bonnie Brae in Denton. Market days are Tuesday, Thursday, and Saturday through the spring and early summer. The market opens at 8 am and runs until the farmers sell out each market day. The market is operated by the Denton County Farmer's Market Association, and all produce sold at the market is grown in Denton County. Support our local producers by shopping at the Denton County Farmer's Market.

Garden Checklist for July

Dr. William C. Welch, Landscape Horticulturist Texas A&M University College Station, Texas

- Check plants for mulch. Replace or add when needed.
- ✓ Keep close check on recently planted plants. Inadequate root systems and drought can be damaging. Plants injured by last winter's cold should not be allowed to suffer drought stress.
- Sow seeds of the following annuals for late summer and fall flowering: marigold, zinnia, periwinkle, petunia, cosmos, portulaca, ageratum. Transplants, if available from your nursery or garden center, will usually provide faster color.
- ☑ To keep hanging baskets looking attractive, soak the baskets in a tub of water every few days in addition to the regular daily watering. This is also a good time to fertilize baskets, but never apply fertilizer to dry plants.
- Divide spring and early summer perennials -- including daffodils, daylilies, iris, etc., and replant the best clumps. Discard the diseased or damaged material and share any surplus with friends.
- ✓ Don't forget to water large leafed plants like hydrangeas, coleus, caladiums, and chrysanthemums. Even in shade, the hot, dry wind can soon deplete the soil of moisture where these plants are grown.
- Bluebonnet seeds should be ordered this month so you will be ready to plant in August.
- If you have planted copper plants for fall color, be sure to pinch out the tips of the branches to encourage branching and develop bushy, compact plants.
- $\blacksquare$  Gladiolus corms can be dug, cured, and stored as soon as the foliage turns brown.
- Many spring flowering shrubs will be forming flower buds in late July and August. Drought conditions can reduce both the quantity and quality of spring flowers. This is true of azaleas, camellias, peaches, pears, forsythias, and other similar plants. Don't allow them to suffer drought stress at this critical time.
- Clean up iris beds and thin out clumps if crowded. They can be transplanted and divided anytime from late July to October.
- The care you give your rose garden in July and August will determine both the quality and the quantity of flowers you will have in late September and October. Adequate moisture and an application of nitrogen fertilizer in late July will be beneficial.

#### Horticultural Update

Published by Extension Horticulture . . .

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