

MAY / JUNE 2000

COLLEGE STATION, TEXAS

May / Unne Plant of the Month LANTANA, Lantana camara

By Dr. William C. Welch, Landscape Horticulturist

Lantana camara is native to South Texas and tropical America. It grows well in dry, sunny locations, and provides landscape color over a long period. Lantanas will grow in sandy soils near the coast where most other plants are severely damaged by the salt. In northern parts of our region, lantanas should be treated as annuals. In zones 9 and 10, as well as parts of 8, frost-damaged wood is removed, and plants are cut back and shaped each spring.

Flowers of *L. camara* come in bicolor mixtures of yellow, red, pink, white, and orange. They resemble small verbenas in size and form. Native types seem to be more cold-hardy and reliably perennial than most of the hybrids. 'New Gold' is a particularly popular golden-yellow flowering cultivar that is

LAST ISSUE

This issue of Lawn and Garden Update will be the last printed edition sent out by mail. Beginning in July 2000, Lawn and Garden Update will appear on the worldwide web at the aggie horticulture web site:

<http://aggie-horticulture.tamu.edu>



semi-trailing in form, and re-blooms well during the growing season. *L. horrida* is sometimes known as Texas Lantana or Orange Lantana, and has naturalized over much of Texas. Flowers are yelloworange, and appear from spring till frost. *L. Horrida* grows well in dry soils, and is effective in mass plantings and as a ground cover in sunny areas. *L. Macropoda* is similar, but flowers are pink and cream.

Lantanas are grown from cuttings or seed, and do best in sunny areas having well drained soils. Frequent tip pruning during the growing season promotes more flowers. Fertilizer should be used sparingly, with one light application each spring usually being adequate.

L. montevidensis is a lavender, trailing form that is also native to South and Central Texas. As with all the lantanas, the foliage is aromatic. Trailing lantanas are useful as ground covers in dry, sunny areas. They are also attractive in hanging containers and spilling over edges of retaining walls and flower boxes. This trailing species is sometimes listed as *L. sellowiana*. The berries of all lantanas are reported to be poisonous. Lantanas are excellent plants for attracting butterflies to the garden. All lantanas are especially useful along the Gulf Coast. Occasional pruning helps to keep them neat and in flower for many months.

Plants of Interest During Early Spring at the TAMU Horticultural Gardens and Field Laboratory

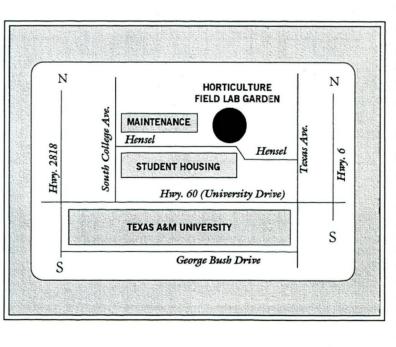
By Dr. William C. Welch, Landscape Horticulturist

Spring looked better than ever at the Horticultural Gardens in April.

Old Garden Roses such as the white-flowered Fortuniana, Old Blush, Cecile Brunner, Veilchenblau rambler and Clothilde Soupert were the first to put on a real display, along with locally 'found' roses such as Martha Gonzales, 'Hadacol' and Del Rio. Belinda's Dream, a rose bred by retired Texas A&M Professor Robert Basye (who passed away at age 91 in February of this year),

exhibited its usual vigor and beautiful blooms. It is fast being recognized as a first-rate rose for Texas conditions.

Petunias, dianthus, flowering tobacco, pansies, ornamental Swiss chard, Hinckley's columbine, H i p p e a s t r u m Johnsonii, ox-eye daisy, snapdragons, *Salvia Gregii* cultivars, and California poppies are blooming well and proving their In the water-garden area the Louisiana and *Pseudacorus* iris and crinums bloomed over an extended period. Plants more typical of drier regions which are still producing flowers are blackfoot daisy (*Melampodium leucanthemum*), Four-nerve daisy, (*Hymenoxys scaposa*) and Calyophus. The Apache Plume and Desert Bird of Paradise (*Caesalpinia gillesii*) were well into flower, and the Hesperaloes began their bloom period. Bulbine (*B. candescens*) has put on flowers and increased in size throughout the winter months. This very tough perennial,



which was introduced into Texas gardens relatively recently, has created much favorable comment.

Trial plantings presently include snapdragons and ground covers such as verbena 'Homestead Purple,' lyre leaf sage, wedelia, evolvulus and an interesting variegated Bermuda grass (Cynodon dactylon 'Bermuda Ghost,')

suitability for Central Texas conditions.

Larger masses of bloom were provided by the semitropical Golden Cestrum jasmine (Cestrum aurantiacum), honeysuckle (Lonicera americana), and Australian Bottle-Brush Tree (Callistemon citrinus). brought to us by Greg Grant.

A planting bed devoted to cut-flowers provided much floral material through the winter and spring. Small-flowered morning glories on short trellises grown in containers furnish moveable color until the weather gets too warm.

Aggie Roots

(Reprinted with permission from the Bryan-College Station Eagle)

Everyone here has some connection to Texas A&M. Some are former students, others staff and faculty. Some people have just grown to love the university just because they live near it.

One man's lifelong association with Texas A&M has led him to help others keep the Aggie Spirit with them in a unique way.

Tim Walton, Class of '90, has roots in Texas A&M, and not simply through being a student. Walton, owner of Sand Creek Tree Farm, personally collects acorns from the oak trees on campus, plants and raises them, then offers them to Aggies all over the country.

His program, Aggie Roots, is an official collegiate licensed product by Texas A&M, and a Texas grown product by the Texas Department of Agriculture.

"This is the first and only living thing licensed by Texas A&M. Since A&M receives royalties, I feel like this is my way of giving back to the university," said Walton. Not only does the school get something back, individual clubs sell Walton's trees as fundraisers and receive a percentage of the profits. Walton's grandfather was the inspiration behind the program.

"My grandfather used to manage the trees on campus. He passed away right around the time I was thinking about doing this. He loved those trees, and so do I," said Walton.

When Walton started the program, he began with a few of the trees around the Administration Building. Since then, he has collected acorns from the Bonfire oak and even the Century oak.

Each tree Walton sells comes with a certificate of authenticity. Future plans hope to include a metal tag, which



can be chained around the tree and has a picture of the parent tree on it. Since his program began, Walton has shipped trees all over the nation, including California and North Carolina. He has gotten requests from Maine to Oregon. Aggie Roots has become a popular program, but unfortunately not everyone can have a piece of Aggieland in their yard.

"I try to talk people into trees that can take the climate they're in. I'm cultivating more trees that will be able to better stand colder climates. Walton loves Aggie Roots, not only because a tree gets planted, but also because of what the trees represent.

"A&M is rich in tradition and history. These trees let you take a piece of that with you," said Walton.

Aggie Roots trees can be found at San Creek Tree Farm. For more information on the program, visit www.aggroots.com.

Pre-Vacation Planning Pays

By Ted Fisher, Cherokee County Extension Horticulturist

N ow that summer has arrived, you may be thinking about taking that well-earned vacation. If you are planning to take an extended trip now or later this summer, be sure your landscape is in order prior to leaving. Lawns, gardens, and landscapes left unattended for several weeks can be ruined by our summer sun, wind, and heat. Just a little extra effort on your part before leaving can make a big difference in the health and well-being of your plants. Here are some practical tips that should help ensure that your home landscape will not suffer the post-vacation blues.

WATER. Water the home grounds well prior to leaving. Soak your lawn, gardens, and all landscape plants deeply. Our shallow soils can dry out rapidly even after heavy watering, so if you will be gone over a week, plan to have a neighbor hook up your hose and do a little supplemental watering.

CUT. Mow your lawn a day or two before your leave. Use the same cutting height that you normally do. Don't lower the mower blade for a 'closer shave'. Doing so could easily cause sun scald and damage. If you plan to be gone more than a week, it would be a good idea to arrange to have a friend or neighbor mow the lawn for you.

Prune hedges and other plants likely to get gangly by the time you return.

Be sure that walks and flower beds are neatly edged before your departure. A buildup of growth while you are away will be difficult to manage on your return.

MULCH. Mulching helps conserve valuable moisture needed for plant growth while you are at home or away. Choose a clean mulch, free of weed seed, and one which will remain loose and well aerated. Consider grass clippings, pine bark, compost, or a variety of other organic materials. Mulching will also reduce or eliminate the weeding problem. CHECK FOR INSECTS AND DISEASES. Spray, if necessary, for insects and diseases to prevent a buildup of pests during your absence. Summer insects and diseases do not take a vacation, and will work overtime on your healthy plants. This goes particularly for chinch bugs. Make sure you have applied chinch bug control to your St. Augustine lawn, or you just might find it severely damaged by this little critter when you return.

HARVEST. Pick all ripe or nearly ripe fruit and vegetables. If you will be gone over a week, arrange for a friend to pull and use produce. Vegetables left unpicked will frequently cease to bear.

MAINTAIN EQUIPMENT. Take lawn and garden equipment by the repair shop if needed. They will have it ready by the time you return.

PROTECT PROPERTY. Arrange for a neighbor to pick up newspapers, or ask the paper delivery service to hold them until you return. Newspapers scattered over the front lawn are a dead giveaway that no one is home.

Lights on a timer are a good idea, and can provide an impression that someone is home.

Have a nice trip knowing that things at home will be in fine shape when you return. And don't forget to visit some gardens while you are away. There are many spectacular gardens to enjoy in just about any part of the country where you may be headed. Landscape preparation for a summer vacation may sound like a lot of extra work, but it is really not much more than the normal weekend routine of maintaining a healthy, well-groomed landscape.

Where Do Seedless Watermelons Come From?

This article is excerpted from "Seedless Watermelon Production" by Jerry Parsons, Larry Stein, Tom Longbrake, Sam Cotner, and Jerral Johnson, published by the Texas Agricultural Extension Service.

The seedless watermelon is now a reality. Seedless watermelons -- sweet inside but without the numerous seeds found in conventional watermelons -- are the ultimate in convenience food.

The obvious question asked about growing seedless watermelons is: 'How does one obtain seed of a seedless watermelon?' Obviously, you cannot save seed from a seedless watermelon. So, where do the seeds come from?

Simply stated, the chromosome number (threadlike bodies within cells that contain the inheritance units called genes) of a normal watermelon plant is doubled by the used of the chemical colchicine. Doubling a normal (diploid) watermelon results in a tetraploid (have four sets of chromosomes) plant. When the tetraploid plant is bred back or pollinated by a diploid or normal plant, the resulting seed produces a triploid plant that is basically a 'mule' of the plant kingdom, and produces seedless watermelons. Seeds of seedless varieties are available from most major seed companies.

Seedless watermelons are a warm-season crop, preferring relatively high temperatures for optimum growth. Daytime temperatures of 80 to 95 degrees F, and night temperatures of 60 to 70 degrees F are best. When temperatures are lower, plant growth is slowed considerably. With favorable weather, seeded fields can produce ripe fruit in 85 to 100 days.

PLANTING

Poor seed germination is the main problem with growing seedless watermelons. When direct seeding, the soil temperature should be a minimum of 70 degrees F at a depth of 4 inches. Soil temperatures below 70 degrees F will reduce germination and emergence. Soak the planting medium thoroughly, and let drain 4 to 6 hours before sowing. Plant one or two seeds per cell or pellet. The greenhouse temperature should be 75 to 85 degrees F during the germination period.

Do not allow the growing medium to become dry, but do not over-water during initial germination. Begin watering, as needed, after 10 to 15 percent of the seedlings have emerged. Plants should be ready for transplanting in 3 to 4 weeks.

Transplants should have not more than three true leaves when set in the field. Use of older, larger transplants can cause slow, stunted growth and poor yields. In-row and between-row spacing generally is 48 X 80 inches.

POLLINATION

The male and female flowers are born separately on the watermelon plant. Female flowers must be pollinated for fruit to set. Also, cross pollination must occur between a seedless and regular type watermelon for seedless fruit to be produced. This is best accomplished by planting a standard watermelon variety in the garden, along with the seedless variety.

Approximately one-third of the plants in the garden should be of the standard of 'pollinator' variety. Honeybees are the principal insects that pollinate watermelons. Pollination is a must, and poor or partial pollination may result in misshapen fruit and no seedless melons.

(Continued on Page 9)

DRIP IRRIGATION: Salvation for the Gardener

By Dr. Larry A. Stein, Extension Horticulturist, Uvalde

I am always amazed at the number of folks who have never used drip irrigation, much less know what it is! In working with day-to-day drip irrigation applications on fruits, pecans, and vegetables, I have come to take it for granted. However, its use is not nearly as widespread as I once thought. In this day and age, when water is considered a critical resource, there is a great potential for water conservation using drip irrigation.

Drip irrigation, also commonly known as trickleor micro-irrigation, is merely the precise application of water where and when plants need it. The concept is not new, as the Germans and Italians worked out the basics in the 1930s, and, according to Dr. Jody Worthington, former TAES Research Horticulturist who did extensive research on drip irrigation, Texas Extension specialists in the 1940s were showing growers how to make concrete lines to sub-irrigate gardens from windmills. However, it took the development of UV-light-resistant plastic pipes and fittings to make drip irrigation practical for home gardeners.

The greatest selling point for drip irrigation in its earliest applications was that great savings in water could be realized. Some sources claimed plants under drip irrigation required only a third as much water as usual. These erroneous assumptions have caused tremendous headaches in the industry. A plant's water requirements are the same *regardless* of how the water is applied. Initially, water savings are realized when plants are small and only a small volume of soil must be wet. However, as plants grow, more and more soil volume must be wet for drip irrigation to be effective.

The real conservation features of drip irrigation come from the precise application of water and minimal runoff, less evaporation from an essentially closed system, and less water lost to weeds and undesirable plants, since the system is placed exactly where the desirable plants need it.

The basic component parts of a drip irrigation system are as follows:

- (1) water source (well or city),
- (2) filter,
- (3) delivery lines, and
- (4) emitters.

The water source used will dictate the amount of filtration needed. If the water is sandy or dirty or from an open pond, there is a greater need for filtration as opposed to using city water. Although it is best to filter city water, it can often be used unfiltered without too much problem. However, the life of the lines and emitters can be prolonged using filtration.

Basically there are two types of drip emitters. In one, the water path is very long, thus reducing the amount of water which comes out of the emitter. The other type utilizes a very tortuous or crooked path. Emitters are also designed to be either lowor high-pressure. Low-pressure emitters usually apply one to two gallons per hour at operating pressures of 2 to 5 psi, whereas high pressure emitters typically apply one gallon per hour at 15 psi.

Such devices can be purchased or made. Considering the low cost of emitters, it is best to purchase them. They can be placed at the desired spacing along a poly hose, or hose can be purchased which already have holes or emitters within. Three common types are Bi-wall, At@ tape, and Ram tubing. The hose with pre-formed holes works extremely well for garden applications. Spacing between holes varies with the product; 12-, 18-, and 24-inch spacing is common.

(Continued on Page 7)

There are many drip irrigation products on the market. All are basically good, and there is no great advantage of one over another, but regardless of how good the products are, they all eventually stop up. Drip systems must be maintained and cared for, as with other water systems; hence, it is best to leave the emitter and loops on top of the ground so they can be checked regularly.

The most practical applications for drip irrigation in the home landscape are in gardens, hedge rows, shrub or flower beds, and combinations of these, along with trees. The key to making drip irrigation work in home landscape is in scheduling -- knowing when and how long to water.

The best absorptive roots for most plants are in the top 6 to 12 inches of the soil, since this upper soil

area contains a lot of oxygen. The deeper one goes into the soil, the less oxygen is present, and root growth is less. In order for water to be absorbed by the plant, oxygen must be present. If oxygen is not present, plants cannot take up water, and the roots will drown if the saturated conditions continue.

An irrigation system should never be operated for longer than 8 to 12 hours a day. In no case should the system be turned on and forgotten. Some turn the system on for 24 hours, or until the water reaches the surface (buried systems), and then leave the system off for several days. Such operations present extreme wet and dry periods which are deleterious to plant growth. An ideal situation is to maintain uniform moisture and oxygen in the soil.

In garden applications, the hose with holes is laid down the plant row. One hose will work for two rows of vegetables, or emitters can be placed at each transplant. Either way, the plants or seeds are well watered at planting, and then left alone until regular growth begins, unless it is very dry. The system should maintain uniform moisture down the plant row. If saturated conditions occur, the time interval between watering will need to be increased.

Generally speaking, when using drip around hedges, one emitter per plant is sufficient. The hose and emitters are placed around the shrubs at planting, and are used to maintain uniform moisture as needed. The hose can be tied into lawn sprinkler systems or operated manually.

Hose with holes, hose with emitters, or micro-sprinklers can be used for flower beds. Basically, the size and shape of the bed will dictate the system employed. Remember to water early in the morning to avoid excess humidity and disease pressure.

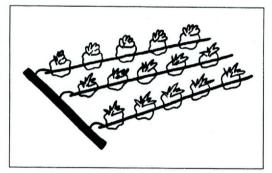
Tree applications begin with emitters but are usually best served later with micro-sprinklers. As the

> best absorbing roots are at the drip line of the trees, the emitters need to move out as trees grow. This requires hose loops with emitters, which can cause problems with maintenance operations. Hence, after 5 years, microsprinklers which wet the area covered by the canopy of the tree work best. Micro-sprin-

kler heads can be changed as the tree grows, to provide greater water coverage. The key with trees is to wet as much of the tree root system as possible, but maintain water in the top 18 to 24 inches of the soil.

Drip irrigation is a wonderful, labor-saving and water-conservation device for the home owner. For some, such devices have been the salvation of their gardening efforts. Many wish they had discovered it years ago, and wonder how they made it before.

Most large nurseries and seedsmen carry drip irrigation kits, which can be purchased to get a feel for how the system works. These same folks carry supplies to upgrade and increase the range of your drip irrigation system.





By Robert "Skip" Richter, CEA-Horticulture Texas Agricultural Extension Service, Montgomery County

Gardeners wanting to be 'organic' or garden more naturally are overwhelmed by the flood of confusing and conflicting claims in the marketplace. What works and what doesn't? I will try to cast a bit of light, logic, and reason on the subject, and hopefully help you garden with nature.

Prior to this century, farmers and gardeners were organic primarily by necessity. Discovery of the efficacy of compounds such as lead arsenate and DDT for pest control led us into the 'chemical age' in farming and gardening. Our dependence on these broad-spectrum products fueled the search for new and better pesticides. But concerns over the direct and indirect effects of widespread, indiscriminate pesticide use soon gave birth to the organic movement. Now, most gardeners attending our programs are at least partially 'organic' in their approach to gardening.

Pesticide Sprays: A Last Resort. Organic gardening is far more than spraying with organic sprays. There are many cultural practices and techniques we must understand and employ if we want to be successful at organic gardening. However, when all else fails, or when pest populations reach unacceptable levels, chemical controls enter the picture.

How Safe Is It? In choosing a pesticide spray, the factor most often considered is toxicity. There is no totally safe product. It is grossly inaccurate to say that natural or organic controls are less toxic than synthetic or man-made ones. Many of the most toxic compounds are natural, while many of the least toxic are synthetic. Products also vary in the **spectrum** of control. Some kill only a narrow range of insects. Others affect a wide range of insect orders. There are times when both are warranted, although for the most part, narrow-range products are the least disruptive to the ecosystem.

Another consideration is **how long a product lasts in the environment.** Some, such as soap, may become ineffective soon after they are applied. Others may last 10 days or more. There are times when you want a product to break down quickly, and times when lasting control helps avoid many repeat applications. Nicotine sulfate (an organic) is among the most acutely toxic products available over the counter; rotenone is very hazardous to fish; *Bacillus thuringiensis* (BT) kills butterfly larvae (caterpillars); and insecticidal soap is devastating to ladybug larvae and other soft-bodied beneficials.

While organic controls tend to break down quickly in the environment, they must be selected carefully and used with caution.

SOME TOP WEAPONS IN THE ORGANIC ARSENAL

Insecticidal Soap - Works great on soft-bodied pests, including mites, aphids, and lace bugs. Mix at label rates. Apply early to avoid the hot sun. Some plants are sensitive to repeated use of soap sprays. Spray must contact pests to work, so direct-spray upward from beneath the plant.

(Continued on Page 9)

Seedless Watermelons . . . (Continued from Page 5)

Oil - Dormant oil is fine for late winter just prior to budbreak, while *horticultural oils* are lightweight and can be used throughout the growing season. Spray must contact the pests to work.

Neem - Products from the neem tree have been used in India for centuries. Extracts of *azadirachtin* from neem trees are a very low-toxicity insecticide, and we now have *neem oil* which, in addition to being an insecticide, will also control several diseases.

Pyrethrin and Rotenone Sprays - Have good 'knock down' power and break down very rapidly in the environment.

Water Wand - A high-pressure mister which attaches to a hose, the wand cleans mites, aphids, and the like from roses and other garden plants.

Newspaper and Bagged Leaves - For season-long weed control, place 4 sheets of wet newspaper around plants, and cover with leaves. By season's end, the paper will be mostly decomposed and can be mixed into the soil.

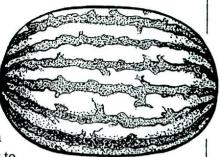
Spunbound Polyester Rowcover [™] - This super lightweight fabric (.6 oz per square yard) excludes pests but allows light, air, and water to pass through. Great for covering a bed of pest-prone greens or a row of 'looperfriendly' cole crops.

While there are many other organic products that will control groups of pests, their toxicity varies, and many are tough on beneficials. Remember that your garden is also a zoo. Proper pest identification and informed pest-management decisions can help you get the most out of your landscape and garden while reducing risks to you and your environment.

If you need help identifying an insect or disease, contact your local Extension office for a free diagnosis and recommended control options.

Harvesting.

The lower side or 'ground spot' of the fruit should be cream or yellowish colored. Thump fruit to



check for ripeness. Results will vary. Generally, a solid sound indicates ripeness, while a sharp echoing sound indicates a greener fruit.

The tendril, or 'tail' which occurs in the axils (where the leaf attaches to the vine) of leaves along the stem, can be used as an indicator of ripeness. Experienced harvesters indicate that if the two tendrils nearest the fruit are dry, the seedless watermelon is ripe.

It is important to note that the first few mature melons in the garden may frequently contain small seeds. This condition is most prevalent under stressed conditions, such as low soil moisture, insufficient fertilizer, temperature extremes, or disease pressure, which affect the normal plant development.

Each planting of seedless watermelons actually produces three different types of watermelons:

- the regular seeded watermelons (from pollinator plants),
- the true seedless melons, and a
- light-green tetraploid melon that produces a very limited number of seed from which next year's planting can be made.



Harvest for Highest Quality

This article appeared in "Growing Fall Vegetables and Annuals in Texas," produced by the Texas Agricultural Extension Service, College Station.

Many gardeners do not know when to harvest homegrown vegetables. Proper harvesting at the right stage of growth is essential for good yields of high quality vegetables from the fall garden.

Bean, snap - when pods are nearly full size but before seeds begin to show appreciable enlargement.

Beets

greens - when leaves are 4 to 6 inches long. **tops and small beets** - when beets are 1 to 1-1/2 inches in diameter.

beet roots only - when roots are 1-1/2 to 3 inches in diameter.

Broccoli - when flower heads are firm and fully developed, but before individual flowers start opening; cut 6 to 7 inches below flower head.

- **Brussels sprouts** when buds along the stem become solid, and thereafter as higher buds become firm. Remove leaves along stem to hasten maturity.
- **Cabbage** when heads become solid; to prevent splitting of mature heads, twist plants enough to break several roots, and thus reduce water uptake from the soil; excessive water uptake causes splitting.
- **Carrots** when roots are 3/4 to 1 inch or more in diameter; during cool, dry periods, leave carrots in the ground for later harvests.

Cauliflower - when curds (heads) are 4 to 8 inches in diameter but still compact, white, and smooth; exclude sunlight when curds are 2 to 3 inches across by covering them with an inverted cabbage leaf (this may need replacing once or twice), or by loosely tying the outer cauliflower leaves together above the curd; curds exposed to sunlight rapidly become discolored, rough in appearance, and coarse in texture.

- **Chard** thin and use small plants when they become 6 to 8 inches tall; thereafter remove only outer, older leaves when 8 to 10 inches long; new leaves continue to grow for a continuous harvest of young, tender chards.
- **Collard** break off older, lower leaves when they are 8 to 12 inches long; new leaves continue to grow for a continuous harvest.
- **Kohlrabi** when bulbs (thickened stems) reach 2 to 3 inches in diameter.

Lettuce

leaf forms - when older, outer leaves are 4 to 6 inches long.

heading forms - when heads are moderately firm, and before seed stalks start; take older, outer leaves from either leaf or head lettuce as soon as these leaves are 4 to 6 inches long; new leaves provide a continuous harvest of tender, tasty leaves until excessive cold weather.

- *Mustard* when older, outer leaves are 6 to 8 inches long; new leaves provide continuous harvest until leaves are strong in flavor and tough in texture from hot weather.
- **Parsley** when older leaves are 3 to 5 inches long; continue to take older, outer leaves for fresh, tender parsley until heavy frosts in early winter.

(Continued on Page 11)

Crape Myrtle Care

By Dr. William C. Welch, Landscape Horticulturist

Summer in Texas would not be complete without the abundance of crape myrtle flowers now beginning to be conspicuous over most of the state.

Proper fertilization and pruning usually result in a long display of flowers of three months or more. Fertilizer recommendations are best made after reviewing soil test results, but a general recommendation of 2 pounds of nitrogen per 1,000 square feet of root area is sufficient for most trees and shrubs. This can be repeated again in the late fall. The first application should be made just before new growth begins in the spring. The number of square feet in the root area is determined by the branch spread of the tree.

The most significant disease affecting crape myrtle is powdery mildew. This can be controlled by spraying with Benomyl or Funginex, used according to label instructions. Mildew is usually less of a problem if plants are located in open sunny areas where air circulation is good.

Pruning is best done in late winter before new growth begins. The structure and trunks of crape myrtle are among their chief assets; therefore, pruning should normally involve only removing dead and twiggy growth to expose the sculptural character of the tree. For dwarf varieties or in shrub borders where crape myrtles may be grown only for their blooms, severe pruning will help insure larger and more prolific flowers. The pruning of faded and seedy blossom heads will usually promote repeat blooming late in the summer. For something different, try some of the dwarf type crape myrtles in tubs or pots on the terrace. They do best in sunny areas, and are as satisfactory for container use as they are in the ground.

Harvest for Highest Quality (Continued from Page 10)

Peas

regular varieties - when pods are fully developed but still bright green.

edible-podded varieties - when pods are fully developed but before seeds are more than one-half full size, if pods are to be eaten; harvest when seeds are fully developed but still fresh and green, if pods are to be discarded.

- **Potato** when tubers are full size and have a firm skin; new potato tubers may be dug at any size, but generally are not harvested before the tubers are 1-1/4 to 1-1/2 inches in diameter.
- **Radish** when roots are 3/4 to 1-1/2 inches in diameter, thin radishes to 1 inch between plants, to insure rapid, uniform growth and crisp roots.

- **Spinach** when larger leaves are 4 to 6 inches long; pull larger whole plants or harvest older leaves, and allow new growth to develop.
- **Squash, winter types** when fruits are full size, the rind is firm and glossy, and the bottom of the fruit (portion touching the soil) is cream to orange colored; light frost will not damage mature fruits.
- **Sweet potato** late in the fall, but before the first early frost; lift to avoid cuts, bruises, and broken roots; cure in a warm, well-ventilated place for 2 to 3 weeks, and store in a cool, dry place.
- **Turnip** when roots are 1-1/2 to 3 inches in diameter, but before heavy frosts in the fall.

Garden Checklist

By Dr. William C. Welch, Landscape Horticulturist

May

- ✓ Cut off old blossoms on spring-flowering annuals such as pansies, snapdragons, stock, and calendulas to prolong the flowering season.
- ✔ Continue to fertilize roses every four to six weeks with small amounts of a balanced fertilizer.
- ✔ Allow foliage of spring-flowering bulbs to mature and yellow before removing.
- ✓ Set out plants of portulaca and purslane in sunny areas. Root cuttings of your favorite colors by placing 3- to 4-inch stems in moist, sandy soils.
- ✓ It is not too late to sow directly into the soil seeds of sunflower, zinnia, morning glory, portulaca, marigold, cosmos, periwinkles, and gourds. Achimenes, cannas, dahlias, and other summerflowering bulbs can also be planted in May.
- ✓ Pinch back the terminal growth on newly planted annual and perennial plants. This will result in shorter, more compact, well branched plants with more flowers.
- ✓ Time to plant caladium tubers, impatiens, coleus, begonias, and pentas in shady areas.



- ✓ Make cuttings of your favorite chrysanthemums and root them in a mixture of sand and peat moss. Cover cutting box with plastic and place in shaded area for 5 or 6 days to prevent wilting.
- ✓ Replace or replenish mulch materials in flower beds and shrub borders to conserve moisture and reduce weed growth.
- ✓ Prune climbing roses as they complete their spring bloom season. Remove dead or weak wood as needed.

June

- ✓ Take a critical look at your landscape while at the height of summer development. Make notes of how you think it can be better arranged, plants that need replacement, overgrown plants that need to be removed, and possible activity areas that can be enjoyed by family members.
- ✓ Check for insects and diseases. Destroy badly infested plants. Spider mites can be especially troublesome at this time. Select a chemical or organic control, or use insecticidal soap.

(Continued on Page 13)

12

- ✓ Supplemental irrigation is essential for many ornamental plants such as coleus, caladium, geranium, dahlia, azalea, and camellia during the h, ot dry summer days ahead. Water lawn and garden thoroughly, but not too frequently. As a general rule, soak to a depth of 8 inches. Finish watering by early afternoon, to lessen the chance of disease.
- ✓ During the summer, soil moisture becomes extremely important and essential for good plant production. Because continual watering is oftentimes costly and time consuming, it pays to conserve the moisture around plants. This is best done by mulching. A good mulch will retain valuable moisture needed for plant growth, and improve overall gardening success. Mulches are usually applied 2 to 6 inches deep, depending on the material used. In general, the coarser the material, the deeper the mulch. For example, a 2-inch layer of cottonseed hulls will have about the same mulching effect as 6 inches of oat straw or 4 inches of coastal Bermuda hay.
- ✓ There is still time to plant some of the colorful, heat-tolerant summer annuals. Directseed zinnias and portulaca, and purchase plants of periwinkle, salvia, marigold, and purslane. Be sure to water transplants as needed until roots become established.
- Removing faded flowers from plants before they set seed will keep them growing and producing flowers. A light application of fertilizer every 4 to 6 weeks will also be helpful.
- ✓ House plants can be moved out of doors this month. Sink the pots in a cool, shaded garden bed to prevent them from drying out so quickly; water pots, container plants, and hanging baskets often. Monthly feedings with house plant fertilizer will encourage continued growth.
- ✓ Now is the time to plan for next spring. Consider digging and dividing any crowded spring bulbs. Once the bulbs have matured and the foliage has turned brown, it is time to spade them up and thin out the stand. Crowded bulbs produce fewer and smaller blooms. They usually need thinning every 3 to 4 years.
- ✔ June is the time to select daylily varieties as they reach their peak of bloom.
- ✓ Fertilize roses every 4 to 6 weeks. Apply a high-nitrogen fertilizer immediately after a flush of bloom.
- ✓ Continue to spray susceptible roses with a black-spot control such a Funginex every 7 to 10 days.
- ✓ Re-blooming salvias, such as Salvia greggii and S. Farinacea, should be pruned back periodically during the summer. To make the job easier, use hedging shears, and remove only the spent flowers and a few inches of stem below. Fall-blooming perennials, such as Mexican marigold mint (*Tagetes lucida*), chrysanthemums, physostegia, and Salvia leucantha, should be pruned in the same manner during the summer to keep them compact, reducing the need for staking. This type of pruning should be completed prior to September 1, since flower buds begin forming about that time.



TEXAS AGRICULTURAL EXTENSION SERVICE UNITED STATES DEPARTMENT OF AGRICULTURE THE TEXAS A&M UNIVERSITY SYSTEM COLLEGE STATION, TEXAS 77843

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE \$300

Address Services Requested

BULK RATE POSTAGE & FEES PAID USDA Permit No. G-268

Educational programs of the Texas Agricultural Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin. Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture, Zerle L. Carpenter, Director, Texas Agricultural Extension Service, The Texas A&M University System.

MAY/JUNE 2000

In this issue . . .

Plant of the Month: Lantana Page 1
Plants of Interest During Early Spring at the TAMU Horticultural Gardens
Aggie Roots Page 3
Pre-Vacation Planning Pays Page 4
Where Do Seedless Watermelons Come From?
Drip Irrigation: Salvation for the Gardener Page 6
Natural Pesticides for Your Garden Page 8
Harvest for Highest Quality Page 10
Crape Myrtle Care Page 11
Garden Checklists for May & June Page 12

Lawn and Garden Update is a publication of the Departments of Soil and Crop Sciences & Horticultural Sciences, Texas Agricultural Extension Service, The Texas A&M University System, College Station, TX. Contributing Editors: Drs. Gene R. Taylor, William C. Welch, and Douglas F. Welsh

Dougles 7. Welch

Douglas F. Welsh, Editor, May/June 2000