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October Plant of the Month . . .

Pomegranate

Punica granatum

By Dr. William C. Welch, Landscape Horticulturist

Pomegranates 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 multi-stemmed unless pruned to a single trunk. Originally grown for their fruit, they are also known for the 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 and 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 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 nineteenth 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."

(Continued on Page 2)

Harvesting, Curing, and Storing Sweet Potatoes

By Dr. Samuel D. Cotner, Head, Department of Horticultural Sciences

Home gardeners as well as commercial producers in many areas over the state are presently involved in harvesting and storing sweet potatoes. Following are some suggestions for the proper harvesting, curing, and storing of freshly dug sweet potatoes.

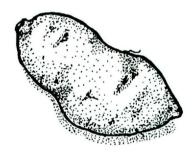
HARVESTING. Harvest sweet potatoes before soil temperatures drop to 50 degrees F, to prevent injury. If frost damages the vines before digging, remove them to prevent decay from starting in the dead vine and moving into the roots. If possible, dig sweet potatoes when the soil is dry. Less soil will stick to the roots, and they will be easier to handle. Let the roots dry about three hours after digging.

CURING. Successful storage depends greatly upon proper curing. Cure by placing a large quantity of roots in a fairly air-tight building. If artificial heat is not available, the heat of respiration and high outside temperature is often sufficient for curing. Artificial heat can be used to bring storage temperature to 80 to 90 degrees F. Bring the relative humidity up to 85 to 90 percent with a water hose or humidifier. Wounds heal rapidly and there is some root drying. The curing process takes about two weeks.

STORING. Store sweet potatoes in a warm building where the air is dry and the temperature uniform. The curing room may also be the storage room if conditions are right. Temperature during storage should be kept as close to 55 degrees F. as possible. The roots may chill if the temperature drops below 50 degrees. Ventilate the storage room if the temperature gets to 60 degrees F. or above. Cellar

houses used for storage should be ventilated. Poor ventilation is one reason why losses are sometimes heavy when pits or banks are used for storage.

Disturb the sweet potatoes as little as possible after they have been cured and stored. Excessive handling will result in increased rot and decay during storage.



Pomegranates (Continued from Page 1)

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 fruit 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 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.

Ground Cover Plants Substitute for Lawn Grasses

By Dwight S. Hall, Landscape Horticulturist

Although grass is generally regarded as the most desirable ground cover for the home landscape, there are situations where it may not be the most practical landscape covering. In steeply sloping or heavily shaded areas of the landscape where grass will not grow well, other methods of covering the soil must frequently be selected. One of the most satisfactory methods is the use of ground cover plants.

Ground covers are low-growing plants that spread by underground or above-ground stems that have a n inherent trailing growth habit. As these plants grow and develop, they produce a continuous mat on the soil surface. Ground cover plants may range from woody vines to dwarf shrubs, depending on individual needs.

Some of the more typical uses of ground covers are to cover bare areas of ground, prevent erosion of the soil, give variety in the yard or garden, regulate foot traffic in the yard or garden when used as edging for pathways, and to unify unrelated shrubs and flower beds in the landscape. In addition, ground covers are frequently used under or around trees where grass grows poorly or where exposed tree roots make mowing a problem. Ground cover plants eliminate the need for mowing and conceal the exposed tree roots.

Many possibilities for living ground covers are now available. For shade or partial shade use vinca, Asiatic jas-

mine, English ivy, monkey grass, liriope, ajuga, and hypericum. For sunny locations, use Asiatic jasmine, monkey grass, creeping junipers, purpleleaf honeysuckle, liriope, daylilies, santolina, sedum, and dwarf yaupon.

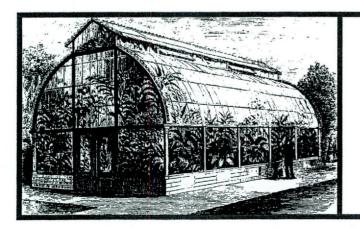
Proper soil preparation is needed before ground-cover plants are planted. Dig the soil at least six inches deep. Rake thoroughly to remove grass roots. Spread two to three inches of organic material such as peat, well-rotted manure, or leaf mold over the ground, and spade it into the soil.

It is essential to remove all grass, and to have a weed-free planting area. Once the ground cover is planted, it is difficult to eradicate undesirable weeds and grass.

On rocky or uneven soil, where the entire area cannot be worked, dig individual holes. Dig these deep enough so that you can back-fill partially with soil mixed with organic material before you set the plants.

Ground cover planting will profit from a mulch such as pine needles or pine bark to hold the soil in place until the planting is established.

Ground covers can be planted anytime during the growing season. Fall and spring plantings give the best results if potted or canned plants are used. Keep the new planting well watered until it becomes established.



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USE LEAVES FOR COMPOST

By Dr. William C. Welch, Landscape Horticulturist

Autumn is here, and with it comes the yearly chore of keeping the lawn free of fallen leaves. They should be re-

moved from the lawn, since a heavy blanket of leaves can smother a lawn if allowed to remain. In previous years, leaves were burned or hauled to the dump to be burned or buried. Air pollution controls have made the smell of burning leaves a thing of the past. Actually, leaves are much too valuable to burn. A better procedure is to compost them, to provide a ready source of composted soil for use in preparing flower and shrub borders, potted plants, and top-dressing for the yard.

The simplest method of composting leaves or other vegetable matter is to build up alternate 4- to 6-inch layers of vegetable matter with 2 to 4 inches of good garden soil. Sprinkling a commercial fertilizer on each layer of veg-

etable matter will hasten decomposition. One-half pound or one cupful of 10-10-10, 10-6-4, 10-20-0, or the equivalent, per ten square feet of vegetable-matter layer is sufficient. Manure, if available and free of weeds, may also be added to good advantage to the soil layer.

The compost pile should be 4 to 6 feet wide, and of any desired length. The top layer should consist of soil, and the surface of the pile should slope toward the center, forming a basin to hold water. The layers of leaves should be watered thoroughly as they are spread out, and when the pile is completed, additional water should be added periodically to keep the material moist but not soggy.

The compost should be turned or mixed with a garden fork or shovel every three or four months, and within six months to a year, it should be ready for use.

Fall Planting Gields Spring Color

By Dr. William C. Welch, Landscape Horticulturist

The first cooling rains and winds of fall are a signal for vigorous gardening activity in the South. Spring-flowering perennials are best set out or divided now so they will have time to be well established when they begin flowering. Among the most dependable are oxeye and Shasta daisies, Louisiana and bearded irises, Louisiana phlox, and daylilies.

Prepare the soil well by adding large quantities of compost (about one-third by volume) and mixing well with existing soil. Incorporate a balanced fertilizer according to label instructions. Four to six pounds of cottonseed meal per 100 square feet provides a fairly long-lasting source of nitrogen. Arrange perennials in 'drifts', which are elongated masses of 5 or more plants, spaced so that they can fill in nicely by spring. Prepare beds for annuals such as pansies, sweet peas, violas, ornamental kale, cabbage, alyssums, poppies, snapdragons, and other cool-season favorites, but wait until November, or when the soil and air

have cooled significantly, before setting out transplants. Poppies and larkspurs should be direct-seeded for best results, since they are not easily transplanted.

Consider adding fragrance to your garden with heirloom shrubs such as sweet olive (Osmanthus, banana shrub (Michelia figo), or mock or-

ange (Philadelphus sp.). All three of these mature into large shrubs (10 to 15 feet tall), and add their distinctive fragrances during winter or spring.



Tree Pruning



This article by Brad Abrameit, Extension Horticulturist and Master Gardener Coordinator for Rio Grande Valley, appeared in Valley Master Gardeners, Vol. 1, No. 8, May 1997.

In April 1998, at a tree pruning seminar held in Weslaco, Don Mueller, from the State Forest Service, gave an excellent presentation followed by hands-on pruning demonstrations. The information below is reinforced with material from that seminar.

DO NOT'S

Do not top your tree. Topping is unfortunately a common practice designed to encourage vigorous new growth. While that is achieved, the overall strength and structure of the tree are sacrificed. The limbs that are forced from latent buds are very often weakly attached, which makes them susceptible to wind damage. Pollarding is often confused with topping, but this practice is following by thinning, and is more technically demanding. Many Europeans utilize this practice to dwarf their trees.

Do not make stub cuts. Do not leave a portion of the branch sticking out; this will allow rot to enter more easily.

Do not remove all of the lower limbs on newly planted trees. This is sometimes referred to as 'limbing up'. Some of the lower branches should be left intact for a period of time to encourage caliper growth. No more than one-third of the top growth on younger trees should be removed.

Do not make cuts flush with the trunk or adjoining limb. The proper cut is made flush with the collar at the base of the branch. The collar is the somewhat raised area surrounding the branch union with the parent branch or trunk. This zone contains chemically-protective tissue; if it is cut off or severely cut into, proper natural 'healing' cannot occur. And, once this area is damaged, it is damaged for good. Trees have the unique ability to compartmentalize, or surround injured tissues with a protective barrier.

Do not cut large limbs with a one-cut method. This will surely result in bark peeling from the weight of the cut limb. Rather, use the three-cut method.

Do not use pruning paints or wound dressings. They do not encourage 'healing', nor do they prevent pathogens from entering the tree. Although they will not damage the tree, they will certainly prove to be an unwarranted cost. Painting could be justified where aesthetics are concerned. A dark paint can hide the glaring spots made from fresh wood being exposed from a recent cut.

DO'S

Do approach the tree, and look for any limbs that might be a hazard to someone underneath it or to a building or structure nearby. Broken branches, weak branches, narrow crotch angles, and other obvious faults should be identified. First and foremost, these limbs should be taken care of

Do remove any dead or dying material on the tree.

Do remove limbs that are rubbing each other or cross over one another. Limbs that rub will develop wounds that attract insects and diseases.

Do remove excessive vertical sprouts. Some may need to be left in place to encourage caliper growth.

Do prune to encourage fruiting. In the case of fruit trees, thinning out of limbs will allow allocation of nutrients, etc., for fruit production. In addition, practices such as open-center pruning allow sunlight penetration for fruit ripening.

Do choose to keep branches with wide crotch angles. Wide crotch angles are generally from 40 to 90 degrees, and are very strong as a result of being composed of solid wood. Narrow crotch angles are less than 40 degrees, and contain a bark inclusion that causes them to be very weak. Narrow crotch angles should preferably be pruned out while the tree is still young. In older, established trees, bracing and cabling may be the only resort.

Do prune the tree to your liking. There are many different ways that one particular tree may be pruned. Even experts will have differing opinions on which branches to remove. The bottom line is: whatever you like is what you should do, so long as you utilize proper cutting techniques and pruning methods.

Do keep in mind that you should always have a reason for every cut that is made.

Fall Ideal for Planting Trees & Shrubs

By Dr. Douglas F. Welsh, Professor and Extension Horticulturist

I inally, fall is here. The weather is becoming slightly cooler, and gardeners are slowly migrating back outdoors after record-breaking heat this summer. Now is a perfect time to add a new tree or a grouping of shrubs to the landscape. Or perhaps you have an area in the landscape that needs "remodeling" or rejuvenating. The fall may be the best season to plant, surpassing even the spring.

Many people prefer January through March for planting, but the fall months of September through December have distinct advantages. Fall planting follows the heat of summer, and precedes a cool winter season. Trees and shrubs planted use this to good advantage. Plant roots grow anytime the soil temperature is 40 degrees or higher, which may occur all winter in Texas. During the winter months, the root systems of the fall-planted specimens develop and become established. When spring arrives, this expanded root system can support and take advantage of the full surge of spring growth.

Fall planting is the optimum time to plant balled and burlapped trees and shrubs. Balled and burlapped plants have ample time to recover from transplanting and proliferate roots before spring growth begins. Remember however, all bare root plants, including roses and pecan and fruit trees should be planted in late winter when they are completely dormant.

When buying plants for your landscape, be sure to get healthy, well-grown plants. Always buy from a reputable dealer. Those in the plant selling business year-round depend on repeat customers, and only by selling customers quality plants can there be assurance of future business. Beware of plant bargains. They can easily turn out to be real headaches. A bargain is no good if it dies. The price tag, especially the cheapest one, is not the best guide to quality.

All plants have growing requirements. Think about the plant's needs before you invest. Is it adapted to your

area's soil? Will it grow in sun or shade? Does it need a wet or dry location? Is it cold hardy? Some nurseries have this type of information on tags beside the plant. If not, ask a nursery professional or the county Extension agent.

'Plan before you plant' is always a good rule of thumb. Whether you are planting a single plant or an entire land-scape, plan first, then plant. Good planning is a worth-while investment of time that will pay off in greater enjoyment of attractive and useful home grounds, and in increasing the value of your home. It's much easier to move plants on paper than to dig them after planting in the wrong place. A plan saves many planting mistakes.

Every plant in the landscape should serve a purpose. Ask yourself if you want a plant for screening, for privacy, or for shade. How large will it be five years from now? Plants, like people, grow up. Remember, that a small one-gallon size plant will look entirely different after a few years of growth in your landscape.

Plant properly for success. Here are a few guidelines on getting the job done right:

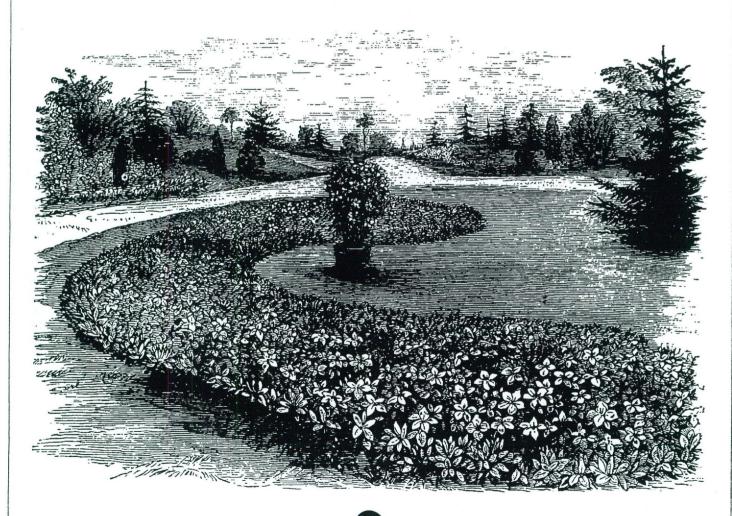
- Dig a hole large enough in diameter so that the root system has at least six inches of clearance on all sides. The root ball should rest on a solid soil foundation, so don't dig the hole much deeper than the ball.
- Plant the tree or shrub slightly above the level of the surrounding soil, to allow for settling and increased soil drainage.
- 3. Carefully place the tree or shrub in the hole. Handle the plant by the root ball, not by the trunk. A broken ball of earth can mean a dead plant. Always remove any container before you plant.

(Continued on Page 7)

- 4. Backfill the hole, using only the native soil removed from the hole; do not use soil amendments when planting large shrubs and trees. Fill the hole, and firm the soil around the plant. Water thoroughly to settle the soil around the roots and to eliminate any air pockets.
- 5. Do not fertilize your tree or shrub after planting. Wait until early in the spring to do this, and even then, go lightly. Heavy applications of fertilizer may burn and injure the root system, and could possibly kill the plant.
- 6. Watering has been and remains paramount in transplanting. At the time of transplanting, soak the root

- ball and surrounding soil. A thorough watering every 7 to 10 days dramatically increases the success ratio. More frequent watering may encourage root rot. Remember more trees and shrubs fail from over watering than from under watering.
- 7. Before calling it a day, add 4 to 6 inches of mulch around the base of newly planted trees and shrubs. This helps to keep down weeds and conserve soil moisture. Use pine bark, compost, grass clippings, or leaves.

Fall is for planting. Visit your nursery today, and beautify and add value to your home.



Rosemary for Texas Gardens

By Dr. William C. Welch, Landscape Horticulturist

Many landscape plants suffer during the dry heat of August, but rosemary (*Rosmarinus officinalis*) thrives on it. Although usually cold-hardy in South Texas, some winter protection may be needed elsewhere in the state. Rosemary grows well even in poor, dry, rocky soil as long as drainage is good.

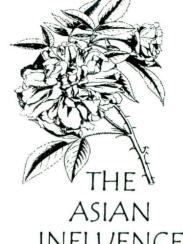
The evergreen character of the narrow foliage and many horticultural forms of the plant make it quite useful. Prostrate selections are good for ground cover or spilling over retaining walls. Mature height ranges from 18 inches to 4 feet, depending on the variety and growing conditions. Small lavender-blue flowers in spring and summer are attractive but not spectacular. A major attraction of rosemary is the strongly scented foliage which is popular, fresh or dried, for seasoning. The fresh tops are reported to be used to distill the aromatic oil used in perfumery and medicine.

Rosemary has been a popular plant for centuries in Europe, and was often planted close to the entrance of homes in the traditional cottage gardens of England. When people passed by and brushed against a rosemary plant, the scent was released and enjoyed.

Rosmarinus officinalis is a native of the Mediterranean region. Typical of many plants in that part of the world, old specimens may be thinned to expose the gnarled stems, which create a bonsai-like effect.

Few herbs can compete with this plant for landscape value. Propagation is by seed or cuttings. With the renewed interest in herbs, many garden centers now stock rosemary. One-gallon-size plants establish quickly. Full sun or partial shade are both good exposures. The key to successfully growing R. officinalis is well drained soil. If your soil is not well drained, try growing the plant in a clay pot or whiskey barrel half. Recently, interest in trimming rosemary into various topiary forms has increased. Tree standards are particularly nice. 'Arp' is probably the most cold-hardy selection of rosemary.

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Looking for the Best Hostas

By Keith C. Hansen, Smith County Extension Agent

Hostas are by many accounts the most popular perennial in the United States. They are shade-loving plants that are grown more for their attractive foliage than for their spikes of flowers. However, hostas are not commonly grown in Texas. They rarely reach the same perfection here that they achieve in northern U.S. gardens, English picture books, or plant catalogs. Many varieties burn up in our hot, humid summers, and since new varieties tend to be pricey, some good varieties may be overlooked as candidates for shaded Texas gardens.

We set out in 1997 to evaluate as many hosta varieties as possible. Our hosta evaluation site, located in the Tyler Rose Garden under a mixed oak and pine canopy, receives partial sun throughout the day. We started out with 3 each of 22 varieties in 1997, added 14 varieties in 1998, and added 4 more in 1999. All varieties were obtained from local Northeast Texas growers (Tawakoni Plant Farm and Whitehouse Gardens). The hostas were evaluated every six weeks during the growing season for overall attractiveness and pest damage.

The following are the top six 2-year-old varieties, as evaluated in 1998. These did quite well, despite the record heat and drought which occurred that summer. Over 5 evaluation dates, these varieties averaged 7.5 or above (10 = excellent; 1 = nearly dead). 'Royal Standard', 'Blue Cadet', 'So Sweet', 'Albo-Marginata', 'Sugar & Cream', and 'Blue Angel' were the overall outstanding varieties. However, within this group, all varieties except 'Blue Cadet' went down in ranking between the September and October evaluation. 'Blue Cadet', a small, blue-leaved variety, held its color and showed no leaf yellowing or other defects the entire year. Some hosta varieties, like 'Patriot' and 'Francee', did not emerge until late May, while some varieties such as 'So Sweet' emerged in late March or early April. Many varieties looked good for a couple of months but began to have leaf burn by late summer.

More details, including photos, a detailed report and data, are available at the East Texas Piney Woods Gardening web site (http://aggie-horticulture.tamu.edu/county/smith). Look under New Features for the link to the hosta trial.

Xeriscapes

By Dr. Douglas F. Welsh, Professor and Extension Horticulturist

Ivery plant in the nursery or garden center can be used in a Xeriscape landscape. It is not which plant you use, but where you put it. Each region of Texas has a palette of plants to choose from which are adapted to the soil, temperature extremes, and pest problems of the area. The challenge for both the professional and amateur gardener is to categorize the plants, based on expected water requirements.

Three different plant zones can be incorporated into a Xeriscape: A regular Watering Zone, an Occasional Watering Zone, and a Natural Rainfall Zone. For example, in much of Texas (areas of 30-plus inches of rainfall), the following categorization is often used:

Regular Watering Zone: Plants in this zone, such as turf grasses, and annual flowers, require watering once every week or more, once established, in the absence of rain.

Occasional Watering Zone: These plants would require watering once every two or three weeks, once established, in the absence of rain. Plants for this zone would include perennial flowers, and tender woody shrubs and vines.

Natural Rainfall Zone: Plants in this zone would require only natural rainfall, once established. Tough woody shrubs and vines, and all trees would do best in this zone.

By zoning the plants in the landscape according to their water requirements, you prevent the situation of having to over water one plant type to meet the needs of another. All plants have a place in a Xeriscape landscape. Visit your nursery or garden center today, and start creating your own beautiful, water-conserving landscape.



BULBS

By Dr. William C. Welch, Landscape Horticulturist



Prepare for Bulbs in the Landscape Now

Planting spring bulbs in the fall is as natural as falling leaves and football games. It is an opportunity neglected by the home gardener if he does not include some of the hardy, easy-to-grow spring beauties in the garden this fall. Bulbs are truly some of the simplest of flowers to grow, easy to care for, and inexpensive. All they ask is a fall planting, and they will reward you with weeks of early spring color, fragrance, and beauty.

Success with spring bulbs will depend to a large extent on the selection of good, healthy, quality bulbs. Second-rate bulbs, or bargain bulbs, produce second-rate flowers, and often first-rate disappointment. To be assured of top quality bulbs and desirable varieties, order or purchase bulbs as early as possible. In general, good bulbs produce flowers the first season after planting, as the flower buds are already formed when the bulbs are purchased and planted. This emphasizes the importance of purchasing quality bulbs, as the quality of flowers is determined by the bulbs and not affected to a great extent by cultural conditions or growth practices. One can be assured that the larger the bulb, the larger the bloom. Many disease problems can also be eliminated by obtaining healthy, disease-free bulbs.

If you purchase bulbs early, before planting time in October and November, store them in a cool, dry, well-venti-

lated area until planting. Excessively high temperatures will cause the bulbs to dry out and result in injury to the flower bud inside the bulb.

When thumbing through a colorful bulb catalog, one quickly sees the wide variety of spring bulb choices. The grower, however, should be aware that not all varieties produce well in the South, out of their native colder areas. Yet there remain enough successful types to make the decision about which to choose very difficult. Texas growers may choose from daffodils or narcissus, tulips, Dutch hyacinths, French-Roman hyacinths, grape hyacinths, Ipheon and Dutch iris, and leucojum, to name a few.

Some spring bulbs, such as tulips and Dutch hyacinths, require a cold treatment prior to planting to have them perform better in the South, where the winters are comparatively mild. Tulips and Dutch hyacinths should be placed in the vegetable bin of the grower's refrigerator for 45 to 60 days prior to planting. They should never be frozen, and should be planted immediately upon removal from cold treatment.

An early selection and proper treatment of spring bulbs now will insure a beautiful and colorful spring, come March.

Forcing Bulbs for Indoor Enjoyment

As you select spring flowering bulbs, set a few choice ones aside for indoor forcing. They will add a bit of cheer and color to the indoor landscape during the winter months.

Bulbs that are good for indoor forcing include crocuses, grape hyacinths, daffodils, and tulips.

Pot the bulbs as soon as they are available. Prepare the soil by mixing equal parts of soil, peat, and sand. Place a one-inch layer of gravel in the bottom of the pot. Firm the soil around the bulbs, leaving the tips of large bulbs showing above the surface. Barely cover small bulbs, and space them about one-half inch apart in the pot.

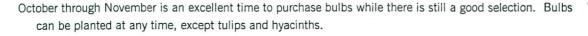
Newly potted bulbs should be stored at temperatures from 40 to 50 degrees F. for 10 to 12 weeks. Success with forcing bulbs depends upon the development of roots during the cold storage period. Keep the soil moist but not saturated. The vegetable drawer in the refrigerator provides excellent cold storage conditions. After cold storage treatment, place the bulbs in a cool, semi-lighted location. Gradually move them to a sunny location for good growth and color. Do not allow the bulbs to dry out any time during the forcing period.

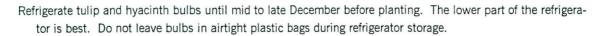
Most bulbs will be in flower by January. However, if you purchase pre-treated bulbs, it is possible to have blooms by Christmas.

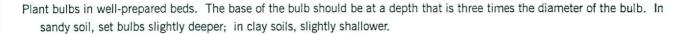


GARDEN CHECKLIST FOR OCTOBER

By Dr. William C. Welch, Landscape Horticulturist







Start collecting leaves for composting. Be sure to have enough soil on hand to cover each 6-inch layer of leaves with several inches of soil. Add about 1 pound of a complete lawn or garden fertilizer to each leaf layer to provide the necessary nitrogen for decomposition. Thoroughly wet the leaf layer before adding soil.

Check your nursery or garden center for plants of snapdragons, pinks, sweet williams, poppies, and calendulas. Planted now, they will usually provide a riot of spring color.

Keep Christmas cacti in a sunny spot with nighttime temperatures below 65 degrees F; buds drop if nighttime temperatures rise above 70 degrees F, or if the plants become excessively dry. To initiate flower buds, Christmas cacti should be kept in total darkness from 5 PM until 8 AM for about 30 days in October.

If you have saved seed from your favorite plants, first air-dry them, and then place in an airtight container and refrigerate. Carefully label each packet. Remember, plants grown from hybrid plant seed seldom resemble the parent plant.

Prepare planting beds for pansies as soon as they are available at garden centers, and the night temperatures are consistently cool.

Pansies need well-drained soil and at least a half day of sun. It is best to use started plants, as seed is difficult to handle.

Other annuals to plant now (except in the high plains and panhandle) include ornamental kale and cabbage, snapdragons, sweet alyssum, and petunias.

If you wish to save caladium tubers for another year, dig in late October and allow them to dry in a well ventilated but shaded area. After 7 to 10 days, remove the leaves and dirt; then, store in dry peat moss, vermiculite, or similar material. Pack so that the tubers do not touch each other, and dust with an all-purpose fungicide. Store the container in an area where temperatures won't drop below 50 degrees F.

If twig girdlers have infested your trees, and many twigs and branches are dropping, make sure these are collected and destroyed, since the eggs are deposited in that portion of the branch that drops to the ground.

There is still time to divide and reset perennials such as phlox, violets, iris, day lilies, and shasta daisies.

October is a good time to reduce the potential for insects and disease in next year's garden. Clean up the garden, removing all annuals that have completed their life cycle. Remove the tops of all herbaceous perennials when they finish flowering, or as soon as frost kills the leaves.

Holly plants with a heavy set of fruit often suffer from a fertilizer deficiency. Applying a complete fertilizer late in October can be helpful, and will provide a head start next spring.

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William C. Welch, Editor October 1999