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Lawn and Garden



TEXAS AGRICULTURAL EXTENSION SERVICE
THE TEXAS A&M UNIVERSITY SYSTEM

Update

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JULY/AUGUST 1999

July & August Plant of the Month

Althaea, Rose of Sharon

Hibiscus syriacus

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

Most Southerners have childhood memories of althaeas. They were once one of the most popular ornamental shrubs in our region. My memory is of a huge double-pink specimen planted at the side of my grandmother's home in south central Texas. It must have been fifteen feet tall and almost as wide. From May through most of the summer it was laden with double, fluffy pink flowers. Anyone who seriously wanted a plant could root 10- to 12-inch stems during the winter by putting them into any good garden soil, and watering them every few days if rain was lacking. The cuttings were usually ready to transplant the next fall.

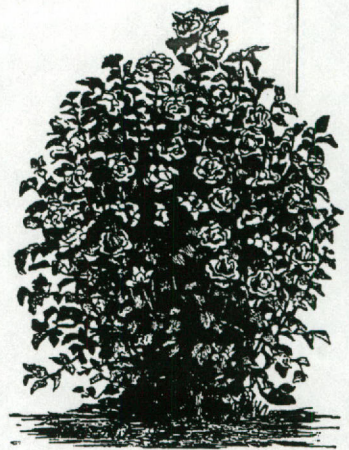
Althaeas grow quickly and need little attention. They thrive in the heat of summer and require only occasional deep watering to keep them growing and blooming. Native to China and India, they have been cultivated as long as records exist. The Chinese used the flowers and leaves for food. Thomas Jefferson grew them from seed, and was documented to have planted them at all three of his homes. Colors range from white to pink, lavender, and reddish purple. Several kinds have dark-colored centers in the flowers, and single-flowering types are quite common. Seedlings often sprout in nearby areas. Propagation from cuttings is usually preferred, because unlike seedlings, rooted cuttings will be exactly like their parents.

Althaeas are cold hardy over most of the nation. About the only serious problem is cotton root rot, which can kill plants of any age, and for which there is no practical control. Cotton

root rot is mainly a problem in alkaline soils. Bud drop may occur when plants are under stress from too much or too little water. Newly planted althaeas should be watered every few days, like most other plants. Specimens located in sunny areas bloom much better than those planted in the shade.

The National Arboretum released several new althaeas in the 60s and 70s. These are all sterile triploids that have larger, earlier flowers, but they set no seed. Cultivars include 'Diana' (white), 'Helene' (white with maroon throat), 'Minerva' (lavender), and 'Aphrodite' (pink). Another cultivar released a number of years ago is 'Bluebird', which is a single-flowering lavender-blue color. All these newer introductions tend to be more compact in form than the species types, and I find them better adapted to the northern half of Texas than the south.

Wherever you live, althaeas are a good possibility for use as large, deciduous hedges or specimens. Heavy pruning promotes vigorous growth and flowering, but creates unsightly stubs. By removing lower limbs flush with the main trunks, althaeas may be used as small trees, much like crape myrtles. Almost every southern nursery that sold ornamental plants in the 19th century listed althaeas. They probably deserve wider use in today's gardens, as we seek drought-tolerant, easily grown plants that provide color over a long season. Few non-native plants are as well adapted to our area.



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1999 PECAN MANAGEMENT CALENDAR FOR TEXAS

Drs. George Ray McEachern & Larry A. Stein, Extension Horticulturists, Texas A&M University, May 3, 1999

JANUARY

1. Complete harvest for nuts missed in December
2. Shred orchard floor to remove winter weeds
3. Prepare books for cost analysis for last year and this year's plans
4. Attend the Texas Pecan Orchard Management Short Course at College Station
5. If rains occur, evaluate soil drainage and surface runoff to avoid saturation
6. Clean and store harvest equipment
7. Heel-in and plant new nursery trees
8. Remove crowded trees as lower limbs touch
9. Remove low-hanging and broken limbs

FEBRUARY

1. Service tractors, sprayers, irrigation system
2. Continue to remove crowded trees
3. Collect and store graftwood
4. Repair fences, gates, bridges, roads

MARCH

1. Spray a herbicide strip down tree row
2. Shred row middles if needed
3. Check out irrigation system
4. Check with chemical dealers for products available and costs

APRIL

1. Purchase casebearer pheromone traps
2. Spray zinc three times, beginning at bud break and every 7 days
3. Fertilize at 50-pounds-N-per-acre rate to mature trees
4. Begin irrigation weekly if no rains occur
5. Begin grafting when new growth starts and bark slips easily

MAY

1. Monitor 100 clusters daily for the number of casebearer moths, eggs, worms, and entries
2. Record and plot all casebearer counts to determine if a spray is needed
3. Determine crop size by counting the number of clusters per 10 shoots; 3 of 10 is low, 5 of 10 is good, and when 7 of 10 terminals have pecans, it is a heavy crop
4. Fertilize second time with 50 pounds of N per acre down the band width
5. Spray fourth zinc application two weeks after the third
6. If needed, spray for casebearer at threshold which allows complete orchard coverage at peak insecticide effectiveness
7. If needed, spray a second casebearer application if emergence was extended and large

MAY (continued)

8. A fungicide may be needed if rains have occurred
9. Continue irrigation weekly according to soil water-holding capacity and tree use; avoid soil saturation by using short cycles
10. Spray herbicide strip second time down tree row when weeds are 10 inches tall
11. Shred row middles when grass and weeds are 10 inches tall
12. Continue grafting as long as bark slips

JUNE

1. Spray fifth zinc application, three weeks after the fourth
2. Scout for second-generation casebearer, and spray insecticide only if needed
3. Fertilize with 50 pounds of N per acre if a good or heavy crop is set
4. Continue irrigation, but avoid soil saturation
5. Do not spray aphids
6. A fungicide may be needed if rains have occurred

JULY

1. Fertilize with 25 pounds of N per acre if a good or heavy crop exists
2. Trunk-shake trees with a good or heavy crop to thin nuts and reduce over-cropping stress
3. Continue irrigation to avoid water stage drop
4. Spray herbicide strip down tree row for third time if grass or broadleaf weeds exist
5. Collect leaf samples for lab analysis, nutrient level, and fertilizer needs for next year
6. Attend Texas Pecan Growers Association conference in Abilene
7. A fungicide may be needed if rains have occurred

AUGUST

1. Fertilize with 25 pounds of N per acre only if a good or heavy crop exists
2. Continue irrigation for kernel filling and stress reduction, but do not saturate soil
3. Remove cattle from orchards
4. Monitor shuckworm, stink bug, and black aphid; spray only if needed
5. Place weevil traps under trees, and spray following major emergence
6. Check out harvest equipment
7. Begin preparation for harvest; remove sticks and limbs from orchard floor

SEPTEMBER

1. Continue irrigation for kernel filling and stress reduction, but do not saturate soil
2. Continue to monitor weevil emergence; a second spray may be needed
3. Check out crow control equipment
4. Estimate crop, and inform buyers of the varieties, volume, and quality of nuts for sale
5. Check out crackers and shellers if kernels are to be sold at the orchard
6. Contact potential retail sales outlets

OCTOBER

1. Continue irrigation until shuck split
2. Shred and drag under trees to remove holes in soil, in preparation for harvest
3. Rake limbs in preparation for harvest
4. Harvest nuts as soon as shucks begin to open
5. Clean sticks, pops, and dirt balls out of pecans
6. Dry pecans to less than 6% moisture
7. Collect 40 nut samples of each variety for entering in county pecan shows
8. Identify trees by variety, and mark or map for future use
9. Fight crows, squirrels, raccoons, turkeys, and other animal thefts
10. Make detailed notes on leaf and shuck disorders by variety, location, and severity

NOVEMBER

1. Continue harvest, cleaning and drying as fast as possible
2. Measure nut size, percent kernel, color, and freedom from flaws to provide pecan buyers an opportunity to pay highest possible price for each variety for sale
3. Contact several buyers to obtain best price
4. Winterize engines, sprayer pumps, irrigation equipment, to prevent freeze injury
5. Continue to fight crows
6. Take every precaution to prevent the theft of nuts in the orchard and after harvest

DECEMBER

1. Complete harvest by December 7 to meet holiday market and obtain best possible price
2. Visit regional pecan shows to learn variety characteristics and this year's performance
3. Bake the best holiday candies, pies and cakes with your fresh pecans

Accent the Fall Landscape with Vegetables and Herbs

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

Now is an excellent time to evaluate the home landscape and begin making preparations for fall plantings. Vegetables and herbs can be used in imaginative ways to add beauty, interest, and utility to our landscapes. Midsummer and early fall offer us a good 'second season' for growing these plants if gardeners can motivate themselves to provide a little extra care during the long, hot days of late summer. Hanging containers of parsley, mint, thyme, rosemary, and tomatoes can all be started now. These plants may be available at local nurseries, but with a little extra effort they can be grown from seed. Each has a drooping growth habit which makes it especially appropriate for hanging-container use. An even larger variety of herbs and vegetables may be grown in the more 'down-to-earth' containers, such as clay pots and wooden tubs. Tomatoes, peppers, lettuce, eggplants, carrots, and radishes are just a few of the many available. Even small porches and decks of apartments can be made more attractive and interesting with groupings of containers filled with herbs and vegetables.

Two important points to consider in growing container plants are the media and the container selection. Most vegetables require excellent drainage, so select a container with a hole in the bottom. Plain clay pottery is attractive and versatile, as are many of the cedar and redwood tubs. Small containers dry out very quickly, and sometimes require daily or twice-daily irrigation. A minimum size for containers is 10 to 12 inches, with 16 or 18 inches being more appropriate for large plants such as tomatoes or eggplants. The media must also drain well for most plants to thrive and yet still hold an adequate amount of water. Some gardeners prefer soil-less mixes, such as half peat moss and half vermiculite. Others like the added support of micronutrients found in mixes such as one-third garden loam, one-third peat moss, and one-third sharp sand. Many different media can be used successfully. The most important factor is for the gardener to learn how to manage the media selected, since water and fertilizer requirements vary considerably.

ROSEMARY ADDS INTEREST TO TEXAS GARDENS

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

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 ever-green 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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Low-Acid Tomato Mystery

Dr. Al Wagner, Extension Food Technologist
and Associate Head, Department of Horticulture
Texas A&M University

It seems like every canning season we get calls about low-acid tomato varieties. In order for us to be consistent, several points need to be discussed. First of all, most of the so-called low-acid varieties are not normally grown in Texas. Secondly, it should be remembered that many tomato varieties, under the right conditions, will possess less acid. Certain environmental conditions, as well as degree of maturity, can have a significant effect on tomato acidity. Over-mature tomatoes will not have enough acid to can safely, using the water-bath method.

In order to avoid a potential problem in the safety of home-canned tomato products, USDA is recommending the addition of one (1) tablespoon lemon juice (bottled) per pint, or two (2) tablespoons per quart, to home-canned tomatoes. This is a precaution to insure a safe pH level of 4.6 or below.

In summary, one should remember that variety is not the only factor which affects the acidity level of tomatoes. Environmental conditions and maturity are also very important. Over-mature tomatoes not only lack enough acidity for water-bath canning, but the quality of the finished product will be inferior.



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Turfgrass Selection - Making the Right Choice!

Gene R. Taylor II, Ph.D., Turfgrass Extension Specialist, Texas A&M University

Home owners are frequently perplexed when it comes time to select grass for their lawn. The choices for most Texas home owners are limited to the following grasses: St Augustine, Bermuda, Buffalo, Centipede, Tall Fescue, and Zoysiagrasses. Each species has its own positives and negatives. For example, Bermudagrass can provide a beautiful, dense, fine-textured lawn with proper care, but it has very low shade tolerance, so it is a poor choice for landscapes with shady areas. To make matters even worse, there are many varieties of each turfgrass species available to choose from. In a recent national turfgrass tall-fescue-variety evaluation trial, there were more than 125 different varieties entered. For most warm season grasses there are typically less than 10 varieties available to home owners.



To assist with the process of grass selection, the following tables have been put together. These tables will allow home owners to select a grass species that would be best suited for their particular landscape, desired level of care, and location in Texas.

Grass Species	Shade Tolerance	Water Requirement	Traffic Tolerance	Cold Tolerance	Salinity Tolerance
St. Augustine	High	Medium	Low	Low	Medium
Bermuda	Very low	Med.-Low	High	Medium	Med.-High
Buffalo	Medium	Very Low	Medium	High	Medium
Centipede	Medium	Medium	Low	Low-Med.	Low
Tall Fescue	High	Medium	High	High	Low
Zoysia japonica*	Med.-High	Low	High	High	Med.-High
Zoysia matrella*	Med.-High	Medium	Medium	Medium	Medium

Grass Species	Mowing Frequency	Mowing Height	Fertility Requirement	Leaf Texture	Disease Potential
St. Augustine	5-7 days	2.5-3.5"	Medium	Course	High
Bermuda	3-7 days	1.0-1.5"	High	Fine	Med.-Low
Buffalo	7-14 days	2.5-3.0"	Low	Fine	Low
Centipede	7-14 days	1.0-1.5"	Low	Course	Low
Tall Fescue	5-7 days	2.5-3.0"	Medium	Course	Low
Zoysia japonica*	7-10 days	1.0-1.5"	Med.-Low	Medium	Med.-Low
Zoysia matrella*	5-7 days	0.5-1.0"	Medium	Fine	Med.-Low

* There are two species of zoysiagrass available to home owners, *Zoysia japonica* (a medium leaf grass that is well adapted for use in home lawns) and *Zoysia matrella* (a fine leaf grass that produces a very dense, beautiful turf, but may require more maintenance than the average homeowner is willing to provide)

Fall Gardening

These articles on fall gardening appeared in "Texas EARTH-KIND™ Landscape and Gardening Guidelines," published by the Texas Agricultural Extension Service, The Texas A&M University System, College Station.

SOIL PREPARATION AND FERTILIZATION

If you made a mistake by not properly preparing your garden soil last spring, now is the time to correct it. This should be done *before* establishing the fall garden, because soil problems encountered during the spring growing season can be expected in the fall also.

Adding liberal amounts of organic matter to all types of garden soils is a highly recommended practice. Hay, compost, rotten grass clippings, or leaves, applied to the garden surface 2 to 3 inches deep and tilled or worked into the soil, greatly improve sands or clays. Heavy clay soils, which are sticky when wet and hard as a brick when dry, are much easier to cultivate if a washed, coarse sand is added. Washing sand removes calcium carbonate, which makes alkaline soils even more alkaline. Add 3 inches of sand to the garden surface if the soil is to be tilled to a 10-inch depth. Gypsum (calcium sulfate) added to a 'sticky' soil makes it more workable. Gypsum is a neutral product which does not increase or decrease the soil's alkalinity. Not only is it a good soil conditioner, but it also furnishes certain amounts of calcium, which may prevent such minor element disorders as blossom-end rot of tomatoes and cabbage leaf-tip burn. Never add lime or wood ashes to alkaline soils. Use iron sulfate or a chelated iron product in the soil to prevent plant yellowing (iron chlorosis) caused by lack of iron.

Adding fertilizer to the fall crop is necessary because spring fertilizer has washed out of the soil or been used for plant growth. Use a slow-release fertilizer at a rate of 3 pounds per 100 square feet. If manures are used, 20 to 50 pounds per 100 square feet should be adequate. Incorporate fresh manure into the soil several weeks before planting. Thoroughly pulverize soils at least 10 inches deep. Mix the above ingredients into the garden, and add nematicide if necessary. A properly prepared soil insures a successful fall flower and vegetable garden rather than a disappointing failure. Additional amounts of fertilizer are needed later in the season to insure optimum plant growth and production. Add 1-1/2 ounces (3 tablespoons) of ammonium sulfate per 10 feet of row to cucumbers, cantaloupes, eggplants, okra, peas and beans, peppers, squash, and tomatoes after the first fruits are set, after the first harvest, and every 3 to 4 weeks thereafter. Broccoli, cabbage, cauliflower, collards, kale, lettuce, mustard, spinach, and turnip greens require 1-1/2 to 2 ounces (4 tablespoons) of ammonium sulfate per 10 feet of row 2 weeks after transplanting or 4 weeks after sowing seed. Flowering annuals require 2 ounces (4 tablespoons) of ammonium sulfate every 4 to 8 weeks for the life of the plants. Sandy soils need more frequent fertilization than heavy clay soils. Crops such as beets, carrots, potatoes, radishes, turnips, and watermelons usually do not need additional fertilization. Excessive amounts of nitrogen reduce yields, or lower quality, or both.

USE DRIP IRRIGATION

One of the best ways to water a garden is by using a drip irrigation system. Drip irrigation is the controlled application of water at a very low flow over a prolonged period. It differs from conventional watering systems in that the soil is not supersaturated with water. When the rate of drip irrigation is adjusted correctly, there are no puddles of water, and no run-off. If puddling occurs, decrease the irrigation rate.

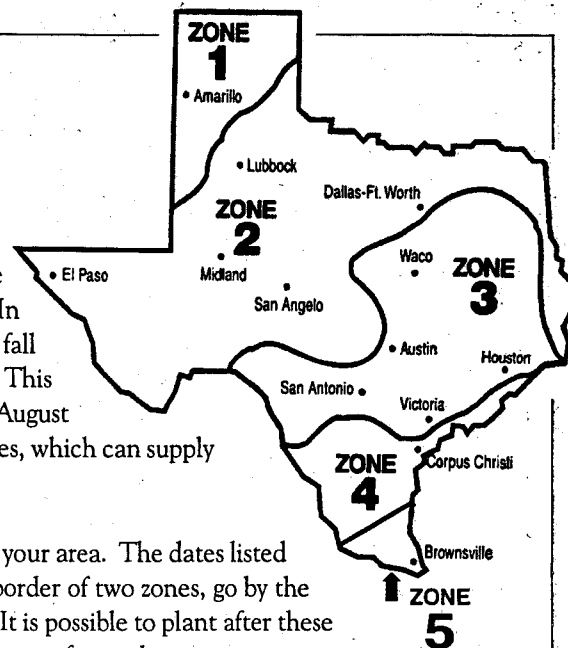
Many types of drip systems are available. Some use small water-releasing mechanisms called emitters, which drip a certain volume of water when a specific water pressure is supplied. Many of these systems are prepackaged, and allow little versatility or adaptation to the various sizes and shapes of gardens. Other systems currently available in garden centers can be adapted easily to almost any garden size and situation. The most common has small holes pre-punched in plastic tubing at 12-inch intervals which allow the water to come out in small amounts. The tubes are

placed along the plant rows so that root zones are moistened by the dripping water. To insure adequate moisture when the garden is planted, apply at least 2 inches of water to the planting zone before seeding or transplanting. This is referred to by farmers as pre-irrigation. Be sure rows are well firmed at the time of pre-irrigation so the water moves laterally in the soil as well as downward. Sprinkling the entire garden may be necessary to settle the soil enough for the drip irrigation water to move horizontally, and not go straight down the rows. This is needed especially in sandy gardens.

Once the drip irrigation system is in place and operating, how long it should be used for optimum plant growth varies with the plants grown and the season of the year, but a general recommendation is to operate the system 3 hours a day on alternating days, such as Monday, Wednesday, and Friday. When rainfall is adequate, it is not necessary to water for several days.

PREPARING FOR A FALL GARDEN

In many areas of Texas, gardening can continue year round. It is always a tough decision whether to terminate a spring garden or try to carry it through until the first cold front. In northern areas of Texas, many spring-planted crops can be grown right up until the first killing frost, provided the plants are kept healthy. In southern areas of the state, home gardeners should be encouraged to begin a fall garden rather than try to carry their spring-planted crops through the summer. This means getting the soil prepared, and getting transplants started as soon as possible. August and September are the best times to plant many popular and cold-hardy vegetables, which can supply fresh vegetables well into the winter in most areas of Texas.



Using the guide below, determine the optimum planting dates for a fall garden in your area. The dates listed are the latest dates on which you can safely plant each crop. If you live on the border of two zones, go by the earliest planting date. The dates are based on the first average freeze in the fall. It is possible to plant after these dates and be successful if the first actual freeze this year occurs later than the average freeze date.

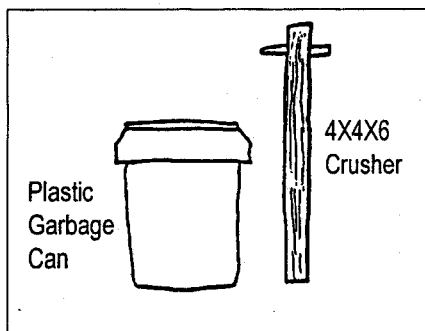
Vegetable	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Beans, Snap Bush	July 15	August 1	September 1	September 10	October 1
Beans, Lima Bush	July 15	July 25	August 20	September 1	September 15
Beets	Aug 15	September 1	October 15	November 1	December 15
Broccoli	July 15	August 1	September 1	October 1	November 1
Brussels Sprouts	July 15	August 1	September 1	October 1	November 1
Cabbage	July 15	August 1	September 1	October 1	November 1
Carrots	July 15	August 15	November 10	November 20	December 15
Cauliflower	July 15	July 1	September 1	October 1	November 1
Chard, Swiss	August 1	August 15	October 1	October 20	December 15
Collards	August 1	August 15	October 10	October 20	December 15
Corn, Sweet	July 1	August 10	August 20	September 10	September 20
Cucumber	July 15	August 1	September 1	September 10	October 1
Eggplant	July 1	June 15	July 1	July 10	August 1
Kohlrabi	August 15	September 1	September 10	October 1	November 1
Leaf Lettuce	September 1	September 15	October 10	November 1	December 1
Mustard	September 1	October 1	November 1	December 1	December 15
Onion (seed)	not recommended	not recommended	November 1	December 1	December 15
Peas, Southern	June 15	July 1	August 1	August 15	September 1
Pepper	June 1	June 15	July 1	July 15	August 1
Potato	not recommended	August 1	September 1	October 1	not recommended
Pumpkin	June 1	July 1	August 1	August 10	September 1
Radish	September 1	October 1	November 25	December 1	December 15
Spinach	August 15	September 1	November 15	December 1	December 15
Squash, Summer	August 1	August 15	September 10	October 1	October 10
Squash, Winter	June 15	July 1	August 10	September 1	September 10
Tomato	June 1	June 15	July 1	July 10	August 1
Turnip	September 1	October 15	November 1	December 1	December 15

Texas Mustang Wine

George Ray McEachern, Extension Horticulturist
Texas A&M University, June 5, 1999

The early German and Czech settlers in Texas developed a very good system for making wine from the native mustang grape. This grape grows along fences over most of Texas, and the fruit will be ripening in July and early August. The following is a typical Czech recipe used in Texas for Mustang Wine. It was handed down for 3 generations to Bob Rozacky of Granger, Texas.

HARVEST. Start with fully ripe, rain-washed mustang grapes on the cluster. Do not de-stem. Start the fermentation as soon as possible. Do not let the fruit sit for several hours. When the pickers come in from the field, have your equipment read to go. Remove any green leaves or any foreign matter. Fill a very clean, 10-gallon crock or plastic garbage can with fruit. Do not use metal, galvanized, or aluminum cans. Crush the fruit down to a soggy must. Acid of the fruit can blister your skin, so Rozacky uses a clean, non-treated wooden board, 4 inches by 4 inches by 6 feet long (4"X4"X6').



PRIMARY FERMENTATION. Naturally-occurring yeasts on the skin of the grapes will begin to multiply, utilizing the sugar in the grapes, so no yeast need be added; however, some wine makers use bread yeast or wine yeast purchased from a wine shop. This primary fermentation will begin in 2 or 3 days in the 10-gallon container. Do not add water, do not add sugar, and do not add starter yeast. Let the natural primary fermentation take place. This can be done in a garage, on the back porch, or in a crib or barn . . . any warm place. It is very important to tightly cover the top with a clean cloth to keep insects out. Check the grapes daily. Do not stir the must or crushed grapes. The speed will begin to pick up in 2 or 3 days, and you will be able to see and hear the bubbles of carbon dioxide gas. This is a good sign that fermentation is progress-

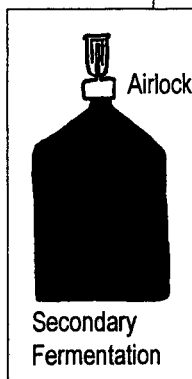
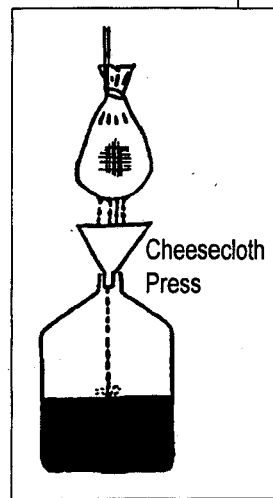
ing properly. Allow the primary fermentation to run its full course. You can tell when it stops, because the must cap on top of the raw wine will drop, and you will hear no more bubbles. The deep red color and tannin are extracted from the grapes during primary fermentation.

SECONDARY FERMENTATION. The next fermentation should take place in a clean 5-gallon glass bottle. Siphon off 2-1/2 gallons of the raw wine into the 5-gallon bottle. Press the rest of grapes in a cheesecloth bag by hanging it up and letting the raw wine drip through the cloth. Add 2-1/2 gallons of previously boiled sugar-water to 2-1/2 gallons of raw wine [to make sugar-water, boil 2-1/2 gallons of water, add 10 pounds of sugar, and cook until the mixture comes to a full boil; cut off the heat, and allow the sugar-water to cool all the way down to room temperature]. Completely fill a 5-gallon glass bottle with enough of the raw wine and sugar-water mixture so that no air is present in the bottle. The secondary fermentation will begin in 2 or 3 days; cork the bottle with an air lock. As the wine continues to ferment, carbon dioxide will be released, and the wine level will go down. Add sugar-water daily to keep the bottle full. After you see no more bubbles -- in about 2 or 3 weeks -- you are ready to seal the bottle. Be sure it no longer bubbles. The alcohol in the wine will kill the yeasts, and stop further fermentation. The sweetness of the final wine will be determined by how much sugar is left in the wine when the yeasts are killed by the alcohol.

Let the wine age in a glass bottle for 6 months until cold weather. In December, after a freeze or frost, siphon wine into bottles, and cap or cork. Label bottles with date and year.

REFERENCE:

"Making Wine at Home," by Richard P. Vine. Information Bulletin 26, Mississippi State University, Mississippi State, Mississippi 39762.



GARDEN CHECKLIST FOR JULY / AUGUST

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



✓ Caladiums require plenty of water at this time of year if they are to remain lush and active until fall. Fertilize with 21-0-0 at the rate of one-third to one-half pound per 100 square feet of bed area, and water thoroughly.

✓ Prune out dead or diseased wood from trees and shrubs. Hold off on major pruning from now until midwinter. Severe pruning at this time will only stimulate tender new growth prior to frost.

✓ Sow seeds of snapdragons, dianthus, pansies, calendulas, and other cool-season flowers in flats, or in well-prepared areas of the garden, for planting outside during mid-to-late fall.

✓ Plant bluebonnet and other spring wildflowers. They must germinate in late summer or early fall, develop good root systems, and be ready to grow in spring when the weather warms. Plant seed in well-prepared soil, one-half inch deep, and water thoroughly.

✓ Picking flowers frequently encourages most annuals and perennials to flower even more abundantly.

✓ It is time to divide spring-flowering perennials, such as iris, Shasta daisy, oxeye, gaillardia, cannas, day lilies, violets, liriope, and ajuga.

✓ Make your selections and place orders for spring-flowering bulbs now so that they will arrive in time for planting in October and November.

✓ Don't allow plants with green fruit or berries to suffer from lack of moisture.

✓ A late-summer pruning of rosebushes can be beneficial. Prune out dead canes and any weak, brushy growth. Cut back tall, vigorous bushes to about 30 inches. After pruning, apply fertilizer, and water thoroughly. If a preventive disease-control program has been maintained, your rose bushes should be ready to provide an excellent crop of flowers this fall.

✓ It is not too late to set out another planting of many warm-season annuals, such as marigolds, zinnias, and periwinkles. They will require extra attention for the first few weeks, but should provide you with color during late September, October, and November.

✓ Establish a new compost pile to accommodate the fall leaf accumulation.



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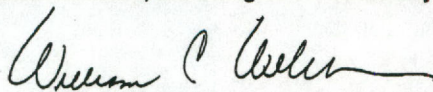
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William C. Welch, Editor for July/August 1999