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# Texas Agricultural Extension Service

The Texas A&M University System

# Horticultural Update

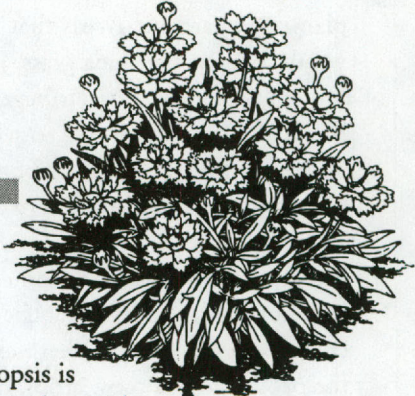


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## Plant of the Month . . . April

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



### Coreopsis

Coreopsis are among the most useful native perennials in our area. They are very heat and drought tolerant and require little fussing to produce lavish amounts of color in the garden. *C. lanceolata* tends to be rather tall (about 3 feet) and sprawls as it reaches its peak flowering. This is especially obvious after wind or rain and is aggravated by an abundance of water and fertilizer. The foliage is long and slender, and the 2-inch yellow daisy-like flowers appear on long slender stems from mid-spring until really hot weather in July.

The good news about Coreopsis is the introduction of cultivars such as 'Baby Sun' and 'Sunray', both of which are more compact and less sprawling in character. 'Sunray' is a semi-double golden orange, and 'Baby Sun' is more yellow. Both stay in the 18-inch height range and have all the good characteristics of the species. 'Gold Fink' is a very compact selection that makes dense tufts of foliage, and can be used as a ground cover in small areas. It is not, however, as well adapted to the Gulf Coast as the other two cultivars, and is often short-lived, melting during the heat of midsummer. Better success can be expected in Central, West, and Northern parts of Texas.

Coreopsis clumps should be divided every 1 to 2 years, and they will usually bloom from seed the first year. Seedlings will appear in large numbers around established plants, but to maintain the dwarf character of the new cultivars, it is necessary to divide existing clumps or purchase fresh seed. Mature clumps will sometimes form plantlets called "proliferations" on the tips of floral stems. These may be removed and quickly rooted in moist potting soil. "Proliferations" will have the same form and size as the parent plant.

As Coreopsis finish their bloom cycle, the seed heads are unsightly. It is best to cut these as close to the foliage as possible to prevent an untidy mass of stubble. Removing spent blossoms and stems often stimulates another cycle of flowering.

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# Vegetable Gardens: Consider Weed Problems

*Dr. Samuel D. Cotner, Head, Department of Horticultural Sciences  
Texas A&M University, College Station*

Controlling weeds can be one of the most troublesome jobs associated with producing vegetables in a home garden. New gardeners would do well to consider weed problems when selecting a garden site. Old-time gardeners have found that where certain weeds occur, it is best to forget about planting a garden. Areas that are infested with perennial weeds, such as Bermuda grass, Johnson grass, and nutsedge (nut grass), are not suited to vegetable gardening. There is no herbicide that can be used to selectively control these pests where most vegetables are to be grown, and controlling them by hand, hoe, and plow is very difficult.

In this modern day, when someone thinks about weed control, he usually thinks about chemical weed control. Indeed, chemical weed killers -- herbicides -- are essential tools in the production of most crops, including certain vegetables. But for the home gardener, other older methods of control are still important.

Herbicides may be used under certain conditions to control some weeds in some vegetables grown in the home garden. But there is no herbicide that can be used on all vegetable crops that will control all weeds. The use of herbicides in a home garden requires special planning and careful application. For most home gardeners who grow a number of vegetables on a small area, the use of herbicides is not practical.

The first step in controlling weeds in the garden is to prepare a good seedbed in which to plant vegetables. All weed growth should be destroyed, and the seedbed should be smooth,

firm, and free of clods. This allows vegetable seeds to be planted and covered to the correct depth so that plants will emerge uniformly and grow rapidly, to get ahead of the first crop of weeds.

Most annual weeds can be controlled by cultivation. Annual broadleaf weeds are easily removed while they are in the seedling stage. Cultivation should be made to control each flush of weeds that emerge, usually within a few days after a rain. At this time, weed seedlings are easily uprooted, even with hand-pushed garden plows, hoes, and other hand tools.

If the weeds are allowed to get very large before control measures are taken, their root systems will develop to such an extent that removal with a garden plow or hoe will be difficult, if not impossible. The old saying, "nip it in the bud," certainly applies to weed control in the garden.

During the first few weeks after vegetables are planted, it is important to control weeds. After the vegetables get well established and start shading the ground, they become competitive and do a good job of preventing new weeds from becoming established.

Mulches of plastic, grass clippings, straw, leaves, and other such materials may also be used to help control weeds. In addition, mulches help conserve soil moisture. Some gardeners have found old newspapers to be good mulching material. For best results with mulches, it is important to remove all weeds by cultivation, hoeing, or hand-pulling before applying mulching materials. A good mulch prevents light from reaching the soil surface, and prevents weed seedlings from becoming established. Porous mulches, such as hay or straw, should be several inches thick to accomplish this purpose.

By following good cultural practices and using mulches along with timely cultivation and hand-hoeing, most annual weeds can be controlled in home gardens without excessive 'back-breaking' labor. In fact, if done in time, the exercise required to control weeds in home gardens would be beneficial to most of us. If nothing else, it should stimulate our appetites, and make us appreciate those delicious vegetables being produced.





## *Ornamental Grasses Add Flair to Landscapes*

There is a trouble zone in your landscape -- a no-man's land between woods and yard, or between pond and garden. It is a transition area in need of plants that won't look out of place. They must be fast-growing, jumping from 2 to 6 feet in one season. You would like it to be disease- and drought-resistant too. It must be attractive, adding color and texture to your yard without costing a fortune. According to the American Nursery and Landscape Association (ANLA), ornamental grasses meet all these requirements.

The trend toward naturalized landscapes is driving the increased use of grasses. From coastal regions to prairies to woodlands, there are grasses indigenous to your area. Many hardy native and adapted grasses will thrive under a wide variety of conditions. Plant grasses responsibly, however, since a few varieties can become invasive in some areas. Confine invasive grasses to urban areas where seeds don't have as many opportunities to spread. Ask the professionals at your nearby garden center which ones they recommend.

Grasses are a natural choice to stabilize soil and control erosion. Many home owners use grasses as accents in the landscape, planting one or two as specimens. Achieve a stronger effect with mass planting. Try 20 grasses of one type rather than a few plants of different varieties. Plant grasses as a backdrop for perennials or to screen an unattractive view. In winter, while your garden sleeps, ornamental grasses add color, texture, and movement. Backlighting grasses is another way to wake up landscapes.

Ornamental grasses are easy to maintain, but a few pointers ensure their success. Grasses are susceptible to crown rot, especially in winter. The majority prefer well drained soils in sunny location. In many regions, grasses fare best if planted in spring, rather than fall. Springtime planting allows grasses time to get established before winter.

Nursery professionals can recommend planting schedules for your area. Cut back grasses to short clumps in early spring; consider dividing clumps every three years to benefit plant health. Maintenance is low, but the rewards are great when grasses grace your landscape.

*From Discover the Pleasure of Gardening, published by the American Nursery and Landscape Association*

## **Pruning Basics Help Ensure Healthy Landscapes**



To keep your landscape at its healthy best, start a regular pruning program. The following guidelines from the American Nursery and Landscape Association (ANLA) explain the basics. Nursery professionals are an excellent sources of additional information.

Remove spent flowers to stimulate growth and additional bloom; otherwise, plant energy is used for seed production.

Prune spring-flowering plants, such as lilacs, forsythias, or azaleas, after they bloom. Summer-flowering plants, like butterfly bush or crape myrtle, should be pruned just before spring growth. Consult your garden center if you are uncertain. Nonflowering ornamentals can be pruned in late winter, spring, or summer. Pruning in fall or early winter may encourage tender new growth that cannot withstand cold.

On bulbs, cut faded blooms to stop seed formation. Cut back foliage only after it has died naturally.

Branches damaged by diseases, insects, winter weather, or storms, should be pruned back to the healthy green wood. Remove branches that grow inward, rub against other branches, are leggy, or interfere with walkways or mowing.

Heading shortens plants and makes them more dense. Cut terminal portions of branch to a point directly above the bud.

Thin to improve light penetration, shorten limbs, or direct growth. Cut back the entire limb or shoot to its origin at trunk or branch. Cut at branch collar, but leave collar intact.

Tip-pinch to encourage thick foliage and new branching. Remove stem tip of new growth with thumb and forefinger.

Renewal pruning brings abundant new growth. Plants such as forsythia and spiraea will benefit from a few of the oldest canes being cut back to 6 to 12 inches above ground.

Shearing promotes such new growth. Use hand shears on stems to create a uniform surface.

*From Discover the Pleasure of Gardening, published by the American Nursery and Landscape Association*

# Keys to Proper Landscape and Garden Watering

By Dr. Douglas F. Welsh, Landscape Horticulturist  
Texas A&M University, College Station

In a few months, we will be in the midst of another hot Texas summer. Properly watering plants during the summer tends to be one of the most confusing and misunderstood gardening chores. Often, ardent gardeners do not recognize inadequate watering until it is too late, and plants are badly damaged or dead.

"How often should I water?" and "How much should I apply?" are a couple of the most-often asked questions from gardeners. Since water is both essential for healthy plant growth, and often costly to apply in quantity during the summer, it is important to get it to the plants' roots efficiently and keep it there.

The following are several suggestions for easier and more effective watering. These techniques apply to all gardening, from shade and fruit trees and vegetable gardens to lawns and house plants.

1. Never water strictly by the calendar. We don't drink water 'every ten minutes' or 'every hour', so why should plants be watered 'every two days' or 'once a week'? Instead, learn to recognize dry plants and soil, and use these as your tip-offs for watering. Too many factors determine how fast a soil dries for us to put watering on a regular basis.
2. When the plants are dry, water thoroughly. Water lawns so that the soil will be wet several inches down, to encourage deep rooting and drought tolerance. One of the worst mistakes people make in their gardens is trying to 'sprinkle' them each day by using their thumb and the end of a running hose. Most gardeners just don't have the patience to stand in one spot long enough for deep water penetration. Water trees by taking the sprinkler off the end of the hose, and letting water run slowly for several hours out under the drip line (not near the trunk). Be sure that runoff does not occur.
3. Most plants should be watered in the morning. Evening watering increases the likelihood of disease invasion, as the majority of diseases develop most rapidly in cool, moist conditions.
4. While watering your lawn, try to keep water off the leaves of trees and shrubs as much as possible. This is especially important for such plants as crape myrtle and roses, which are troubled by leaf diseases which spread rapidly on wet surfaces.
5. Symptoms for plants which have been kept too wet are about the same as for those kept too dry. Roots in waterlogged soils die and do not take up water, so plants wilt and turn yellow. Try not to water a drowning plant!
6. Organic matter, such as shredded pine bark and composted manure, can increase water absorption when it is worked into our native soil. To keep moisture in the soil, use a thick mulch such as shredded pine bark, grass clippings, or tree leaves. In addition to reducing evaporation, mulches also keep the soil cooler, and make weed pulling much easier.
7. Be especially careful to keep newly planted trees and shrubs well watered. Their developing root systems are sensitive to under- and over-watering. But, again, don't drown them.
8. Always soak chemical fertilizers into the soil immediately after application. These materials are excellent sources of plant foods, but they are also salts, and can pull water out of plant tissues, resulting in burn, unless they are watered into the soil.
9. Gardeners often wonder what type of sprinkler is best. Generally speaking, most do a satisfactory job of making an even application. However, the most efficient and effective type is the impact sprinkler (the kind used on golf courses and athletic fields). For plants to thrive during the upcoming summer months, they will need plenty of water, but equally important is applying it properly.

# Tours Yield Inspiration for Home Gardeners

*From Discover the Pleasure of Gardening,  
published by the American Nursery and Landscape Association*

**I**magine delving into a secret garden in England while conferring with the owner. Picture yourself discovering the finer points of design on an Italian villa overlooking the Mediterranean. Garden tours indulge such fantasies while gathering a payload of knowledge. If a week lying dormant on the beach is beginning to lose appeal, explore these suggestions from the American Nursery and Landscape Association (ANLA).

**GREAT SOUVENIRS.** Is a head full of ideas and a renewed enthusiasm for gardening your kind of souvenir? If so, book a tour today. By observing landscape designs and plant materials firsthand, and by talking with tour leaders and participants, gardeners learn what works and what doesn't. You'll also get a glimpse into the future, observing varieties that won't cross the Atlantic for years. It is ill advised (and against the law) to sneak plants back home.

Be a trend setter -- let nurseries know what you want. Consumer demand frequently dictates plant selection. Garden centers specializing in new plants are an excellent source for unique varieties, as are mail order catalogues.

Returning home to Mississippi, one traveler recreated a flower bed similar to one she had seen in England. With the help of a landscape designer, she selected plants appropriate to her climate, and achieved a satisfactory facsimile of the English garden.

**WHAT TO PACK.** A camera and lots of film are standard equipment on a garden tour. Many travelers keep a diary and sketch book handy. A professional tour company usually provides a reading list and background information before you depart. Itineraries let you know what to expect as well. Some tours visit two or three gardens a day, so comfortable walking shoes are essential.

**LOCATING A TOUR.** The popularity of specialty travel, like gardening, has grown tremendously in recent years. There are as many types of tours as there are travelers. Some firms sell scheduled and escorted tour packages for the gardener traveling alone or with a companion. Other tours are customized for garden clubs and horticultural societies. Inquire at travel agencies or botanical interest groups. Read travel and gardening magazines too; they list seasonal events and tours.

**CLOSER TO HOME.** If finances or schedules keep you closer to home, don't despair! Your community could have tour opportunities you have overlooked. Botanical gardens, garden centers with display gardens, even zoos, are treasure troves of professionally designed gardens. Perhaps your city is host to an annual flower show or tour of homes and gardens. The best ideas may grow right in your own backyard.



# What Can Kill Texas Grapes

*Dr. George Ray McEachern, Extension Horticulturist  
Texas A&M University, College Station, Texas*

**T**he very high cost of vineyard establishment requires potential investors to seriously consider all of the factors which can kill grapes in Texas. Ideal vinifera climates such as Burgundy, Bordeaux, Italy, Australia, Napa, Sonoma, Long Island, and Yakima have limitations, but long vine life is expected. This is not the case in Texas. Texas wine grape growers need to know their vines are at risk because of several major limitations.

**Freeze.** Early fall freezes can kill vinifera vines in all areas of Texas. Most deciduous fruit trees have what is known as a rest period which slows plant growth in the fall, and prepares the current season's growth for the first freeze. Vinifera wine grapes do not have a rest period, and will grow anytime weather conditions are favorable. The Texas weather conditions in September and October are ideal for vine growth; an early fall freeze can kill mature vines to the ground, and young vines can be killed entirely. Most fall or early winter freezes in Texas are associated with a cold front and strong winds, making heaters and fans of little value. Every effort needs to be taken to reduce vine growth in the late summer and early fall to reduce the potential of freeze damage. Late spring frosts also can kill new growth. Once the primary bud is dead, secondary buds can produce a crop, though it is less than normal. Many high plains growers leave more buds than normal during pruning, expecting some loss from frosts.

**Cotton Root Rot.** All fruit trees grown in Central, South, and West Texas are susceptible to cotton root rot (CRR). The major exception is the high plains -- cotton root rot has not yet killed vines in the Lubbock area. The fungus is most serious on high pH soil, and most common on heavy soils which do not drain well; but it can occur on well drained soil. Cotton root rot moves into young roots and grows between the wood and bark up to the vine crown at the ground line. Once the fungus completely circles the trunk, the vine dies within a few days, usually just before harvest. The leaves will turn solid brown with no green color, and remain attached. On high pH sites, rootstocks such as Dog Ridge or Champanel can give some protection. On severe sites, such as the Grand Prairie soils north and west of Fort Worth, nothing will protect the vines from CRR. Dead vines can be tested for positive identification at the TAMU Plant Disease Diagnostic Laboratory at College Station, TX 77843.

**Pierce's Disease.** All of East and South Texas can grow only Pierce's-disease (PD) resistant varieties such as LeNoir, Blanc duBois, and Champanel. Recent vine death in Central Texas has

created serious concern from Fredericksburg north to Denison, where there are over 700 acres of commercial wine vineyards. Research at Texas A&M University is currently underway to learn how to determine if PD is in a vineyard, and there is hope that PD can be managed in Central Texas as it is in Napa and Sonoma. PD is a bacteria-like organism which can be hosted by a wide range of plants such as alfalfa, many grasses, blackberries, willow, cedar elm, red oaks, and native grape vines. The organism is moved from the host to the grape vine by an insect vector such as leafhoppers or sharpshooters. Current practice is to remove the hosts from within and adjacent to the vineyard after PD is positively identified, and monitor and control leafhoppers in the vegetation adjacent to the vineyard. Recent studies in California suggest that PD is vectored from active hosts surrounding the vineyard and not from vine to vine.

Meetings were held recently in the Hill Country to determine what action needs to be taken to address the PD problem. For leafhopper control, scientists recommended spraying the riparian host vegetation adjacent to the vineyard with Dimethoate, Sevin, or Orthene; this is a non crop area with no livestock grazing and no public access. The leafhoppers are monitored via butterfly-net sweeps or sticky traps. Two area vineyards and adjacent hosts are currently being tested for PD to determine the effectiveness of different treatments, and to ascertain which hosts are active. Every effort is being made to develop a PD management system for Central Texas, and recommendations are constantly changing. If an effective management system is not found, resistant varieties will need to be planted.

**Phylloxera.** Texas has for many years had grape leaf phylloxera which does not kill the vine. Recently, one case of grape root phylloxera which kills vines was identified in Gillespie county. If the problem can be limited to this vineyard, the immediate danger from phylloxera may be stopped. The long-term phylloxera problem can be corrected with resistant rootstocks. Own-root vines are currently recommended because of the rapid redevelopment of vines after a freeze. This will not be possible if rootstocks are used. Freeze and PD are currently more serious than phylloxera in Texas.

**Other Grape Vine Problems In Texas.** Hail, crown gall, salinity, black rot, wind, anthracnose, powdery mildew, viruses, summer rains, drought, iron chlorosis, heat, predators, and other problems remain as challenges to Texas grape culture, and need to be evaluated before entering the business.

# Garden Checklist for April

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

- ✓ Prune spring-flowering shrubs soon after flowering. Keep the natural shape of the plant in mind as you prune, and avoid excessive cutting except where necessary to control size.
- ✓ Roses have high fertilizer requirements. For most soils, use a complete fertilizer for the first application just as new growth starts; then, use ammonium sulfate or other high nitrogen source every 4 to 6 weeks, usually just as the new growth cycle starts, following a flowering cycle.
- ✓ Continue to spray rose varieties susceptible to black spot, using a spray containing trifenox, or as it is more commonly known, Funginex. Use every 7 to 10 days.
- ✓ Climbing roses may be pruned as soon as they complete flowering.
- ✓ Removing spent flowers, trimming back excessive growth, and applying fertilizer to an established annual bed can do wonders towards rejuvenating and extending the life of the planting.
- ✓ As soon as azaleas have finished flowering, apply an acid type fertilizer at the rate recommended. Don't over fertilize, as azalea roots are near the surface and damage can occur. Water thoroughly after fertilizing.
- ✓ Seeds of amaranthus, celosia, cosmos, marigold, portulaca, zinnia, and other warm-season annuals can be sown directly in the beds where they are to grow. Keep seeded areas moist until seeds germinate. Thin out as soon as they are large enough to transplant. Surplus plants can be transplanted to other areas.
- ✓ It will soon be time for bagworms to attack junipers and other narrow-leaved evergreens. Control measures, such as Sevin dust or spray, should be applied while the insects and the bags are about one-half inch in length.
- ✓ For instant color, purchase started annual plants. Select short, compact plants. Any flowers or flower buds should be pinched to give plants an opportunity to become established.
- ✓ Check new tender growth for aphids. A few can be tolerated, but large numbers should be controlled. Always follow label instructions on approved pesticides for control.
- ✓ Many flower or vegetable seeds left over after planting the garden can be saved for the next season by closing the packets with tape or paper clips and storing in a sealed glass jar in your refrigerator.
- ✓ Start weeding early in the flower garden. Early competition with small plants can delay flowering. A mulch will discourage weed growth, and make those that do come through easier to pull.
- ✓ Soil purchased for use in beds, low areas, and containers should be examined closely. Often, nut grass and other weeds, nematodes, and soilborne disease are brought into the yard through contaminated soil sources.
- ✓ Watch newspaper and other publicity for information regarding wildflower trails, and plan to take a trip to enjoy this beautiful natural resource.





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*Plant of the Month . . . Coreopsis (continued from page 1)*

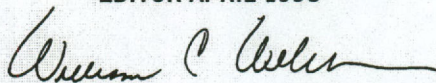
The last few years have seen the introduction of *C. verticillata* into the nursery trade. This is a very fine-textured foliage form known sometimes as Threadleaf Coreopsis. At least three cultivars are available. 'Golden Shower' has bright yellow flowers that tend to bloom all summer and into the fall on 2- to 3-foot mounds of airy foliage. 'Zagreb' is the most dwarf form, with a height of about 18 inches and gold flowers. 'Moonbeam' is just slightly larger but with lovely creamy yellow flowers.

*C. verticillata* cultivars tend to form running thickets of fine stems that may be divided in fall or early spring. All Coreopsis prefer sunny locations and well-drained soil. They like sandy soils and perform well with little or no fertilization. In addition to use as masses and in border plantings, I have enjoyed *C. verticillata*, 'Moonbeam', in a large container combined with gray-foliaged Dianthus, which spills over the edge of the pot. *C. verticillata* and its cultivars are, however, not as well adapted to coastal areas of Texas as *C. lanceolata* and its kin.

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EDITOR APRIL 1998



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