Summer Bulbs

While spring is famous for its flowering bulbs, there are a variety of summer flowering bulbs that may actually grow better in our climate. The most familiar may be gladiolus but there are others you might want to try. Many of these bulbs are tropical or semi-tropical. For the colder areas, you may have to dig them up during the winter but that may be easier than getting tulips to bloom in the warmer areas of the County. Most of these bulbs do well in containers, so you may have a solution for any climate.

As the bulbs are susceptible to cold weather, do not plant until the the night temperatures don’t go any lower than 50°F. Around here, that can be fairly early (except for this winter maybe!) so you need to order in the midst of winter to have the bulbs ready when spring comes.

Loose, well-drained soils are needed. Lots of organic matter will help alleviate the problem of heavy soils and provide a healthy environment for the bulbs. In containers any potting soil will work, perhaps adding sand, gravel or perlite to improve drainage (1 part sand and gravel to 3 parts soil). There are a few bulbs that like wetter soil, so understand the plant’s requirements before planting.

Plant the “nose” of the bulb four to six inches below the soil surface. If your soil is heavier, plant a bit shallower. In containers you will have to monitor the water carefully, especially in the hottest part of the summer. It doesn’t take very long to fry any container plant in July, August and September.

Fertilize frequently, in containers up to five times a year. For those in the ground you can fertilize much less. Like most bulbs, these appreci-
ate a higher phosphorous content to promote blooming but you can alternate a high nitrogen fertilizer with a high phosphorus fertilizer to meet all their needs. If you have provided a lot of organic matter in your soil, you should not have to fertilize very often.

Summer bulbs can be remarkably trouble-free, with few insect problems or maintenance needs. The biggest issue is should you dig the bulbs in the fall. The answer is—depends. If you live in an area that gets very cold, you will need to dig up the bulbs. They do not tolerate cold weather. Even in areas like Camp Verde you may have to dig the bulbs in an especially cold winter. If they are in containers, you can keep them indoors. Find a place to store them where it will not drop to below 50°F. Keep an eye on them and water, if necessary; they can dry out. Water lightly or just sprinkle the bulbs.

In the spring put the bulbs outside. For the container plants replace the top two inches of soil with fresh soil and begin to water and feed.

Try some of these summer bulbs:

**Acidanthera**—this bulb is related to gladiolus. Native to Ethiopia it is one of the more common bulbs in catalogs. It will grow to about 2 1/2 feet tall and blooms in late summer or early fall. Pure white flowers with maroon markings make a dramatic statement in the garden. The fragrance is lovely and they make good cut flowers. They need a well-drained soil and lots of nutrients in order to bloom.

**Crinum and Amacrcinnrum**—Another commonly available bulb. These plants produce either white or pink trumpet-shaped flowers that are very dramatic. They have an appearance similar to Amaryllis, producing flowers on a straight leafless stalk. The plants bloom in late summer or early autumn and the blooms can last up to a month. Plant in partial shade or in containers that can be moved to cooler quarters when it gets hot. These do best in containers as they like to be crowded but do not like being transplanted and may not bloom the first year after moving. Plant them with the neck just showing above the soil.

**Aztec Lily**—*Sprekelia formosissima*—is a striking blood-red flower from Mexico. A short stem, one foot, bears a single flower above thin foliage. It blooms in early summer and possibly again in late summer. They need partial sun and lots of moisture. They also like to be crowded and work well in containers.

**Montbretia**—With foliage similar to gladiolus—it provides a surprise in late summer when its orange, gold or yellow flowers appear. The numerous flowers appear on a graceful arching stalk. The bulbs may survive the winter in the ground, as they are fairly hardy. Plant in well-drained soil with lots of nutrients.

**Peruvian daffodil**—*Hymenocallis narcissiflora*—blooms in early summer. The pale yellow or white flowers have a sweet scent. The stems of the flowers are about one foot tall. Plant in partial shade. They like a moister but well drained soil. Plant the bulb with the tip just exposed.

**Pineapple lily**—*_Eucomis bicolor*_—these produce an interesting arrangement of flowers that look somewhat like a pineapple. (Just use your imagination) Hundreds of flowers cluster around the stem. They are a pale green with pink or purple stripes. They bloom in midsummer and the flowers can last up to a month. The seedpods that follow are also attractive.

**Alliums**—There are a huge number of types available but this isn’t your edible onion; these have huge flowers with a variety of colors.
Crocosmias—have bright orange flowers similar to gladioli. This plant can spread.

**Foxtail lilies—**
**Eremus**—are glorious giants but I have never seen them in Arizona although they might be able to grow here. They can grow to seven feet tall and like well-drained soils. They also do not like to be disturbed. Once in leave them alone.

**Gladioli**—most people are familiar with these. Easy keepers and sun lovers they can add drama to any garden. They do well in our climate.

Lilies—Oriental and Asiatic and other types. Familiar to most of us as the Easter lily, these two lily types are similar and do well in containers. I have had a lot of success with them in containers.

**Agapanthus**—this is another great container plant that rewards you with great balls of blue, dark blue-purple or white blooms. Even when not in bloom the strap-like leaves can add texture to the garden. They are sensitive to the cold. Should be in a container and brought inside for the winter. May keep its leaves through the winter. I have heard people sometimes have a hard time getting them to bloom but I never had any problems—till I forgot to bring it in one winter before the first freeze.

Dahlias—are another favorite among some gardeners. These come in an enormous variety of shapes, sizes and colors and are very readily available. When you buy tubers look for the larger sizes. Mulch heavily.

Ixia—these South American plants produce bell-like flowers on a stalk and come in a variety of colors. These like well-drained rich soils but not frost.

Liatris—also known as gayfeather, this is actually a native plains plant. It produces great long plumes of purple-blue flowers. It is very good as a cut flower and should be able to overwinter in the ground.

Ranunculus—is a forgotten bulb. I remember growing them in Phoenix when I was in high school and they were commonly seen. Since then they seem to have dropped off the gardener’s list. But they are a nice summer flower, putting out colorful pom-pom-like flowers. They are a member of the buttercup family, surprisingly enough. They like a well-drained soil; amend heavily if you have a heavy clay soil.

Sparaxis—related to iris, it has similar sword shaped leaves. If you like bright flowers, this one should do as the blooms are quite vivid. It does make a good cut flower. It is native to South Africa but may survive our winters with heavy mulching.

Tigridia—Another iris relative from Mexico, this makes an interesting addition to the garden with its striking flower shape. It’s almost geometric with three large petals in a solid color that’s slightly flattened. Three smaller speckled petals are between the larger petals, creating a pinwheel effect. The flowers only last a day but it produces multiple blooms.

Zephyranthes—the rain lily can overwinter outside. It came to be known as the rain lily because it blooms after rains.
THE BLACKBERRIES ARE RIPE AND SUMMERS 'A' WASTIN'

Blackberry picking time was quite a production at our place. Sunday afternoon, when the blackberries were ripe, we would all pile into the car and drive down the lane that led to the pasture. Dad would park along the pasture fence next to the woodlot, about a quarter mile from the house. On the other end of that woods was an open area, about a half acre, loaded with blackberry and some raspberry bushes. We would fill every container that we could carry in the car with us; milk pails, lard cans, coffee cans, clean paint cans—whatever we could scrounge up. Then Mom would can quart after quart of berries and make jam and jellies. Some she would save out to make fresh blackberry pie, food for the Gods.

There was plenty of fun time, too. Sundays we got the cows milked and the barn chores done and breakfast out of the way in plenty of time to make it to church at the county seat, 5 miles away. When we got home from church, it was free time. I would go to the elementary school about 2 miles from home, meet up with a large group of other farm boys and we played baseball (school yards didn't have to be fenced off like concentration camps in those days.)

I usually walked or rode my bicycle. When I was 14 in 1947 we bought a brand new tractor. What a wonderful machine, after wrestling with the old 1928 iron wheel Fordson. This was an Oliver tractor, shiny green with yellow trim and red wheels. It had huge rubber tires on the back and two small ones that were close together on the front. It even had hood covers over the engine, just like a car, and an electric starter.

It had a smooth running 6 cylinder engine, a double transmission with 1st, 2nd, 3rd and reverse gears in the front position and 4th, 5th, 6th and a second reverse gear in the back neutral position. It could do nearly 40 miles an hour in 6th gear. After I became proficient in handling it, I asked and got permission to use it as my Sunday transportation to the school ball field. How I was envied by my fellow ballplayers when I drove up on that tractor that first Sunday.

FIRST THE CHORES AND THEN THE FUN

Sometimes, in the summer evenings after all the chores were done, some of the kids from neighboring farms would show up at our place. We would mark off an impromptu ball diamond in a mowed hay field near the house and have a game of "work-up."

Almost any summer day, when I was about 10 to 13, when my morning chores were done and there was nothing specific going on, I was free to take off to visit my friends. We would often gather together, a group of school chums, and ride our bicycles to the county seat, 5 miles north of home or in the opposite direction to another little railroad town about 3 miles from home. We would hit the drugstore ice cream parlors and spend an afternoon of just eating sundaes and joking around and riding around town. Sometimes we would just hike through the woods to see what we could see. Chore time came fast, though, and I would have to be home by 4:30 or I was in trouble.

One time I met up with a second cousin who lived nearby and had a riding horse. He talked
me into going to a horse show with him at the fairgrounds. As the afternoon wore on, I lost track of time. I got home a couple of hours late. This was particularly bad because my uncle had gone on a trip and Dad was counting on me to help with the milking. I came in when the milking was about a third done and found my mother helping Dad in the barn. They didn't have to bawl me out because they knew I was devastated by their disappointment in my behavior.

I never had an allowance but I never went without. Every year at county fair time, my Dad and my uncle would give me all the money I needed to have a fun time at the fair, their way of paying me for the summer's work. I learned to be frugal with it. When I got into high school, which was in the county seat, Dad always saw that I had some money in my pocket. We would walk uptown from the school for lunch and I always had money when my city friends were broke. I also worked part-time with my cousin, Johnny Corkren, hauling lumber from the Corkren's sawmill. They paid me a dollar thirty-five an hour, which was darn good for a teenager in 1949 and 1950.

Farm life was hard but so very rewarding. Your days always had a purpose and you never wanted for something to do. Going to the pasture to get the cows for milking was a lesson in nature. You saw the wild flowers break through the earth in the spring and each day you tracked their progress. You could stop and listen to the babbling brook that ran across the pasture and woodland and watch the tadpoles turn into frogs. You watched the squirrels scramble through the trees and marked where to find them when squirrel season came around. Once in awhile you would scare up a grouse or a pheasant or a rabbit out of a thicket. There was a peace and tranquility there, on those trips to the pasture, that is so very hard to find nowadays.

Living and working on a farm meant learning to be a jack-of-all trades. You had to be a mechanic to keep your equipment running. You were a carpenter and a roofer to keep your buildings in shape. You had to be an expert agriculturist and a meteorologist to try to predict the weather and stay ahead of the storms. You had to be a manager and a bookkeeper and a business man. You also had to be a butcher; in the fall you butcheted the hogs and preserved the meat for the winter. You just couldn't afford to call in experts to do all these jobs for you. You had to be self sufficient in everything or you just couldn't make it as a farmer. You learned that, if you were a good steward of the earth that God has given us, it will take care of you.

You sat down to a big breakfast of eggs and bacon or pancakes and sausage, a big lunch of maybe pork chops and fresh garden salad and a big dinner of pork roast or pot roast or chicken and mashed potatoes and gravy with sides of fresh green beans or corn and turnip greens. But first you had to wash the grime and sweat from your hands and face, that you got from working hard all day to put those bountiful feasts on the table.

A couple of weeks after I graduated from high school my mother taught me the final lesson on becoming an adult. I was working pretty much full time then for the Corkreans, at the sawmill and hauling lumber. My mother sat me down, one evening, and said. "Well, now that you're out of school and have a job, it's time for you to help pay for your keep." We agreed on a figure for me to pay her each week. The amount was a pittance in comparison to the food I ate and for her preparing it and washing my clothes, etc. It wasn't that she needed or wanted the money, the idea was for me to understand that when you get out into the world on your own, there is no such thing as a "free lunch."
INSECTICIDAL SOAP AS AN ALTERNATIVE
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REGULATORY HORTICULTURE Commonwealth of PA Department of Agriculture

(Cooperative Extension does not promote the use of any specific brand of chemical. I picked this article up from a greenhouse list-serve and thought it might be useful information. There are other brands of insecticidal soap available that work in the same manner as Safers)

Insecticidal soap was first introduced in 1980 by Safer Agro-Chem Inc. The company officially became Safer, Inc. in 1986 and continues to produce a wide variety of biorational pesticides for commercial and home use.

The active ingredients of insecticidal soap are potassium salts of fatty acids (49%); inert ingredients are water and alcohol. Although technically a soap, the fatty acids are what provide the insecticidal action. You may remember from basic biology that fatty acids are naturally occurring components of animal fats and plant oils. Some fatty acids act as basic energy sources and others as building blocks of cell membranes. Those contained in insecticidal soap are derived from plant oils and combined with potassium bases to produce potassium salts of fatty acids.

The label for Safer Insecticidal Concentrate (insecticidal soap for commercial use) includes adelgids, aphids, earwigs, grasshoppers, lace bugs, leafhoppers, mealybugs, plant bugs, psyllids, sawfly larvae, scales, spider mites, tent caterpillars, thrips, whiteflies, and woolly aphids in the list of pests effectively controlled. It is labeled for use on foliage plants, flowers, shrubs, trees, fruits, tree nuts, and vegetables. The label also states it can be applied up to harvest and used effectively in integrated pest management (IPM) programs.

Safer Insecticidal Soap is also packaged for noncommercial use as a concentrate and ready-to-use-formulations for homeowners. All formulations carry the single word CAUTION because of the relatively low mammalian toxicity.

It sounds like the ideal product but let's take a look at some of the pros and cons for using insecticidal soap in nurseries and greenhouses.

On the positive side, none of the target insects have shown to develop resistance. The mode of action is physical rather than chemical. Therefore, resistance will be unlikely to occur. The inability of a pest to develop resistance is very important if you are trying to control spider mites, which are well known for rapidly developing resistance to some traditional miticides.

Insecticidal soap is also fast acting. The active ingredients, potassium salts of fatty acids, act on contact to penetrate the body and enter the cell membrane. They disrupt the cell and membrane functions, allowing the cell contents to leak from the cell. This results in rapid death of the target organism. Another plus is the lack of effect on many beneficial insects and mites. Parasitic wasps and ladybugs are not killed by insecticidal soap.

Predatory mites are reportedly less affected than by many synthetic petrochemical insecticides. In greenhouse studies, adults of two-spotted spider mite and a predatory mite were both killed by soap spray. However, there was a higher percentage of viable predator mite eggs than two-spotted mite eggs. This indicates the material may be effective as a quick knockdown, allowing predator populations to catch up to prey.

Insecticidal spray is relatively nontoxic to birds, fish, honeybees, and mammals, including humans. Precautionary statements on the technical data sheet indicate that the only protective device needed by applicators is a good pair of goggles to protect their eyes from mild irritation. Frequent washing of exposed
skin, to avoid irritation caused by soap buildup, is also recommended.

All this may sound like the answer to a grower's prayers. However, there are drawbacks to the use of insecticidal soap. The most significant is the lack of residual action. Soap acts on contact only; there is no insecticidal action once the spray has dried. This translates to the need for thorough coverage, to the point of drip, to get control. In fact, Safer recommends spraying when slow drying will occur, such as in the early morning, in the evening, during overcast periods and even during periods of fog, in order to delay drying time.

A second disadvantage to, or rather problem with, the use of insecticidal soap concerns water hardness. The fatty acids in the active ingredients are readily tied up by calcium, magnesium, iron, and other metallic ions associated with hard water. When this happens, the effectiveness is reduced and, in extreme cases, precipitation may occur in the tank of the sprayer. Phytotoxicity may result if the precipitated material contacts the foliage.

In order to avoid these problems, Safer recommends checking the hardness of your water source before mixing. If your water has 17.5 grains or more of hardness, it is necessary to condition the water before mixing. If you are unable to ascertain the hardness of your water, the technical sheet provides instructions for testing a small amount before spraying. Essentially, you mix a given amount of water and insecticidal soap, let it stand for a period of time, and examine the contents of the jar. If a scum develops on the surface, the water is too hard and conditioning is required.

Safer also cautions against using insecticidal soap on drought-stressed plants, newly planted nursery stock, and unrooted cuttings. Yellow spots or rings that appear on foliage 1-2 days after application of soap are caused by the "lens effect." This damage occurs as sunlight shines through droplets of the liquid on leaf surfaces. Plants with waxy, horizontal leaves are especially susceptible. To avoid damage by the "lens effect" do not spray during periods of full sun. The same conditions that permit slow drying will prevent "lens effect" damage.

The Technical Bulletin can be requested from Safer, Inc., 189 Wells Avenue, Newton, MA 02159.

This article does not constitute an endorsement by the Pennsylvania Department of Agriculture. Users are, as always, cautioned to read and follow all label directions.

April Calendar

Continue to plant cool-season vegetables. There is still time to plant asparagus, horseradish and rhubarb. Beets, carrots, cauliflower, broccoli, chard, lettuce, onions, parsnips, peas, spinach, radishes and turnips can all still go in.

Start warm-season vegetable seeds inside. Tomatoes, peppers, melons, squashes should be ready for transplanting in May.

Perennial flowers can be transplanted in April and May. Those that bloomed in the summer or fall may be divided now, also.

Plant annual flowers. Calendula, candy tuft, linaria, poppies, stock and alyssum are good choices. Zinnias and marigolds can go in later; they prefer warmer weather.

Fertilize annuals and spring vegetable transplants with a low-strength fertilizer.

You can still prune fruit trees, vines, grapes and roses. Hurry though; it's easiest to prune when you can see the structure of the plant.

April 27th is the normal date in Prescott for the last occurrence of 28° temperatures, the critical temperature for fruit blossoms.
Strawberries

This is strawberry season. Those red jewels are just beginning to roll into stores. Yes, I know if you are home-growing them it will be awhile yet before they ripen. And I also know those big fat store-bought ones aren't even close to the flavor of home-grown but when you like strawberries as much as I do you—well you just have to accept second best sometimes.

Growing your own strawberries can sometimes be difficult but with six hours of sun available and a well drained soil, a lot of labor and luck you should be able to start your own patch. The lots of labor comes in because strawberries are susceptible to a variety of pests and diseases. Birds and slugs love strawberries; grubs do too. Verticillium wilt, chlorosis, nematodes and salt accumulation can all be problems, along with others. This is a plant that benefits from drip irrigation to keep salts from accumulating in the root zone or on the leaves if you have poor quality water. You might also consider using a row cover. It helps if you keep the berries from direct contact with the soil and keep the weeds down. Is it worth it? Of course—once you taste homegrown, it's tough to go back to the store. Then again, when the choice is no berries, store bought will do—for now!

Some varieties to consider for our area: Garfield, Fresno, Lassen, Quinault, Sequoia, Shasta, Tioga and Torrey.

On a hot summer day, something cool is always a treat. Combine that with the something strawberry and it can make for a perfect afternoon break. While this Italian treat can be a bit time-consuming to make, you will think it worthwhile when you take a break from your gardening chores or to show off your berries to guests.

**Berry Gelato**

1/2 cup sugar  
3 thin strips lemon peel (yellow part only)  
each 1/2 by 3 inches long  
2 Tbsp. cornstarch  
2 cups low fat milk  
2 teas. vanilla

**Berry Puree**

3 1/2 cups berries, pureed in blender or food processor  
1 Tbsp. lemon juice

In 2-3 quart pan, combine sugar and lemon peel. With a wooden spoon, press peel against sugar to help release the oils. Mix in cornstarch. Stir in milk. Stir over medium heat. Stir or whisk until sauce boils, about 5 minutes. Continue to boil and stir for another minute. Remove from heat. Remove lemon peels.

Stir in berry puree and vanilla until smoothly blended. Cool, cover, and chill until cold—at least 1 1/2 hours or until the next day. Pour into an ice-cream maker. Process according to ice cream maker’s instructions until softly frozen. Serve immediately for a softer texture or freeze two to three hours for a firmer texture.

Can store in the freezer up to three weeks before its flavors fade.
Activities & Events

Yavapai Rose Society - Will meet April 16, 2:00 PM at the First Christian Church, 1230 Willow Creek Road, Prescott. Guests are welcome and there is no charge. For more information call Bob or Nancy at 771-9300, or Dave at 778-5507.

The Cottonwood Organic Gardening Club, meets at the Cottonwood-Verde Valley Fairground on the second Wednesday of each month at 1:30 p.m.

Master Gardener website
You can find this newsletter along with the Master gardener Manual, the farm fresh brochure plus other information at the Yavapai county cooperative extension website. Go to:

http://ag.arizona.edu/yavapai>

Send in your interest form for the Master Gardener Conference!

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Adventure Travel!

June 16th—Join the Master Gardener Van for a full day of fun in Flagstaff. First stop—the Arboretum Plant Fair so you can stock up on hard to find plants. Then stop at Warners Nursery and Flagstaff Native Plant Nursery to further increase your plant collection and last, a surprise stop. Yes—they even stop for lunch. Plant buying takes a lot out of you. If you are interested in going contact Patti Conrad at (520) 778-4810. The van leaves Prescott at 6am. Trip length may vary, so don’t make plans on getting back at a specific time unless you drive your own vehicle. For those in the Verde Valley if someone would like to drive and can take several people, we could have a group start from Camp Verde (Fast food junction at I-17 and Hwv 260 is a great place to meet). Let me know and I will get the information in the May newsletter.

The "Arizona Master Gardener Manual" is now on-line. Check out
http://ag.arizona.edu/pubs/garden/mg/

NOTE FROM THE EDITOR:
Let me know about your garden, the types of seeds you planted, interesting articles you found—anything of gardening interest. Send to:
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