VEGETABLES

Time to Plant Potatoes Approaching

St. Patrick’s Day is just around the corner, so it is time to get seed potatoes in the ground. Actually any time from mid- to late-March is fine for potato planting. Be sure to buy seed potatoes rather than using those bought for cooking. Seed potatoes are certified disease free and have plenty of starch to sprout as quickly as soil temperatures allow. Most seed potatoes can be cut into four pieces, though large potatoes may yield more, and small less. Each seed piece should be between 1.5 and 2 ounces. Seed pieces this size will have more than one eye.

Each pound of potatoes should yield 8 to 10 seed pieces. Cut the seed 2 to 3 days before planting so freshly cut surfaces have a chance to suberize, or toughen, and form a protective coating. Storing seed in a warm location during suberization will speed the process. Plant each seed piece about 1 to 2 inches deep and 8 to 12 inches apart in rows. Though it is important to plant potatoes in March, emergence is slow. It is often mid- to late-April before new plants poke their way through the soil. As the potatoes grow, pull soil up to the base of the plants. New potatoes are borne above the planted seed piece, and it is important to keep sunlight from hitting the new potatoes. Exposed potatoes will turn green and produce a poisonous substance called solanine. Keeping the potatoes covered will prevent this. (Ward Upham)

Use Wide Rows for Certain Vegetables

Lettuce, radishes and spinach are planted early enough that weeds are usually not a problem. Therefore gardeners can plant a wide row and get more production out of a small space. How wide? Usually 12 to 18 inches is about right. Leaving aisles between wide rows allows for convenient harvesting.

Seed can be planted in several rows close together to make a wide row but it is easier to scatter seeds uniformly over
the area. After seeding, tamp down the row lightly with the back of a hoe to eliminate air pockets. Then pull soil from the sides of the row with the back of a garden rake to cover the seed. One-quarter inch of soil over the seed should be good.

Be careful to not sow too densely as too much competition can stunt plants. Space seed according to the instructions on the seed packet. If you do happen to sow too thickly, plants can be thinned later.

It is best to go back to a single row for later planted crops to allow for easier weed control. (Ward Upham)

**Rhubarb**

Rhubarb is a perennial vegetable that can be a bit tricky to grow in Kansas. It is native to northern Asia (possibly Siberia) and so is adapted to cold winters and dry summers. However, it is susceptible to crown rot and should not be subjected to “wet feet” and therefore should be grown in a well-drained soil. The addition of organic matter can increase drainage as well as raise the soil level so that crown rot is less likely. Also, have a soil test done as rhubarb does best with a pH below 7.0.

Rhubarb should be planted from mid-March to early April in Kansas. Mix 5 to 10 pounds of well-rotted barnyard manure into the soil for each 10 square feet of bed before planting.

Rhubarb is propagated from crowns (root sections) that contain one or two buds. Plants should be spaced 2 to 3 feet apart in the row with 4 to 5 feet between rows. The crowns are planted shallow so that the buds are just one-half to 1 inch below the soil surface. Firm soil around the crowns and make sure they are not in a depression that holds water. Recommended varieties include Canada Red, Crimson Red, McDonald and Valentine.

Rhubarb needs rejuvenated at least every 5 to 10 years and should be dug and divided from mid-March to early April. Use a cleaver or axe to cut crowns into sections that each contain one or two buds. Plant as described above.

Newly transplanted rhubarb should not be harvested the first year so the plant can recover from the transplant process. Only a few stalks should be harvested the second year to allow the plant to continue to build up its energy reserves. The harvest season for plants that are three years or older usually lasts about 8 weeks. Harvest only the largest and best stalks by pulling them slightly to the side so that they break away from the plant. Never harvest over one-third of the leaf stalks at one time. Only the leaf stalk (petiole) is eaten as the leaf blade contains oxalic acid and is poisonous.
Mulches can be used to reduce moisture loss, prevent weed growth and provide winter protection. However, it should be pulled away in the spring to allow the soil to warm so that early growth is encouraged. (Ward Upham)

**TURFGRASS**

**Why Seeding Cool-Season Grasses in the Spring is Difficult**

People often wonder why we recommend seeding cool-season grasses such as tall fescue and Kentucky bluegrass in the fall. It would seem that the spring would be the more natural time for seeding because the entire growing season is available for the grass to become established before the turf has to deal with winter. Actually there are a number of reasons that tend to make fall seedings more successful.

The soils are warmer in the fall. Warm soils mean less time required for germination and growth so the grass becomes established more quickly. I have seen tall fescue seeded in the last week of August come up in four days. Now, you had to be on your hands and knees to see it but it was up. Tall fescue seeded in the spring may take well over a week to come up and the time required to become established is much longer.

Weeds are less of a problem in the fall. The major weed problems in the fall tend to be the broadleaves such as chickweed, henbit or dandelion. Turf seeded in early September is usually thick enough by the time these broadleaves germinate that often there is not much weed invasion. Even if there is some invasion by broadleaves, the turf is usually mature enough by early November that mild broadleaf herbicides can be applied.

In the spring, our major weed problems are the annual grasses such as crabgrass. Since the spring-seeded turf is slow to mature, there are often thin areas that are easily invaded by these grassy weeds. If this invasion occurs, the weeds are better adapted to our summer conditions than our cool-season grasses and so the weeds tend to take over. The number of chemicals that can be used on young turf is limited, and so these grasses become more of a problem. One of the preemergence herbicides that can be used on young grasses is dithiopyr (Dimension). It is found in Hi-Yield Turf and Ornamental Weed & Grass Stopper and Bonide Crabgrass & Weed Preventer and can be used on tall fescue, Kentucky bluegrass, and perennial ryegrass two weeks after germination.

Summer is the hardest time of the year for cool-season grasses; not the winter. Summertime is very difficult because our cool-season grasses do not have the heat or moisture stress tolerance that our warm-season grasses such as buffalo, zoysia and Bermuda have. Therefore they tend to become weakened in the summer which makes them more susceptible to disease and other stresses. Spring-seeded cool-season grasses are less mature and therefore less able to tolerate these stresses.
Seeding cool-season grasses in the spring can be successful but is more difficult to pull off than fall seedings. If you have a choice, always opt for seeding cool-season grasses in the fall. (Ward Upham)

**ORNAMENTALS**

Cut Back Ornamental Grasses

March is a good time to remove dead foliage from ornamental grasses. Grasses green up earlier if foliage is removed and are more attractive without a mixture of dead and live leaves. A number of tools can be used including hand clippers, weed whips (if the foliage is of a small enough diameter), weed whips with a circular blade, or even a chainsaw. Use the top of the chainsaw bar to cut so the saw doesn't pull in debris and clog.

Also, it is often helpful to tie foliage together before cutting so it doesn't interfere and is easier to dispose of. Burning is another option — but only if it is safe and legal to do so. Note that these grasses may not burn long, but they burn extremely hot. Even so, the crown of the plant is not damaged and new growth appears relatively quickly.

If the center of the clump shows little growth, the plant would benefit from division. Dig up the entire clump and separate. Then, replant the vigorous growth found on the outer edge of the clump. (Ward Upham)

**FLOWERS**

Iris Leaf Spot Control Starts Now

Now is a good time to begin control measures for iris leaf spot by removing old, dead leaves. Iris leaf spot is a fungus disease that attacks the leaves and occasionally the flower stalks and buds of iris. Infection is favored by wet periods during the spring, and emerging leaves eventually show small (1/8- to 1/4-inch diameter) spots. The borders of these spots are reddish, and surrounding tissue first appears water-soaked, and then yellows. Spots enlarge after flowering and may coalesce. The disease tends to be worse in wet weather and may kill individual leaves.

Though the disease will not kill the plant directly, repeated attacks can reduce plant vigor so that the iris may die from other stresses. Spores are passed to nearby plants by wind or splashing water.
Because this disease overwinters in old leaves, removal and destruction of dead leaves will help with control. For plants that had little infection the previous year, this may be all that is needed. Plants that were heavily infected last year should be sprayed with chlorothalonil (Bravado Fungicide, Fertilome Broad Spectrum Landscape & Garden Fungicide, Ortho Garden Disease Control, GardenTech Daconil, Bonide Fungonil, Bravo Flowable Fungicide) or myclobutanil (Immunox, Immunox Plus, F-Stop Lawn & Garden Fungicide) starting when leaves appear in the spring. Repeat sprays every seven to 10 days for four to six sprays. Iris leaves are waxy, so be sure to include a spreader-sticker in your spray to ensure good coverage. (Ward Upham)

**Rose Rosette Disease**

Rose Rosette Disease (RRD) is a very destructive disease on roses. Once infected, roses cannot be cured but must be destroyed. A current USDA NIFA grant is seeking to determine the best way to diagnose the disease, determine the locations in the United States it is active and identify the best management practices with the ultimate purpose of breeding resistance into new cultivars.

The disease is caused by the Rose Rosette Virus (RRV) and is transmitted by the eriophyid mite, *Phyllocopes fructiphylus*. This mite is so small it cannot be seen with the naked eye. Current management focuses on prevention by buying uninfected stock, keeping current plants healthy and roguing out infected plants including nearby wild roses (*Rosa multiflora*). It has been felt that miticides would be ineffective in controlling the disease. However, grant researchers decided to test various miticides anyway to document how effective (or ineffective) each was. Two different trials evaluated effectiveness of miticides over two years. What they found surprised them.

Specific miticides were used on a weekly schedule throughout the growing season with no rotation. In other words, each treatment used only one miticide rather than alternating miticides to avoid resistance. All miticides were used at the highest label rate. Control plants were sprayed with water.

One hundred percent of the control plants were infected with RRD. However, several miticides gave 100% prevention of the disease over the two-year period. Note these are preliminary results and we cannot give firm recommendations until this study is completed but this does open up a new avenue of control we did not expect.

So, what were the miticides? The products that were effective were Akari (fenpyroximate), Kontos (spirotetramal), Forbid (spiromesifen) and Talstar (bifenthrin). Two other treatments, horticultural oil and Avid + horticultural oil, gave good control the first year but not the second as disease pressure increased the second year. Sevin (carbaryl) was also in the test and was about as effective as water. Research is continuing and is looking at rates, timing and alternating miticides.
Commercial people who decide to try to prevent this disease by using these miticides should not use one miticide exclusively but should alternate products from different IRAC groups to prevent the buildup of resistance. Akari is in group 21A, Kontos and Forbid in group 23 and Talstar in group 3. Therefore, since Kontos and Forbid are in the same group, alternating between them would do no good. Applications should be made every two weeks.

For homeowners, we would suggest alternating horticultural oil and bifenthrin (Hi-Yield Bug Blaster Bifenthrin) on two week intervals throughout the growing season. In other words, spray with horticultural oil, wait two weeks, spray with bifenthrin and repeat throughout the growing season. Be careful of temperature restrictions on horticultural oil so pay attention to the label.

A very good publication on the control of RRD has come out of this research and is available at: http://hnr.k-state.edu/doc/extension/Rose_Rosette_Disease.pdf

Again, these are preliminary results and we have much to learn before we can make more specific recommendations. (Ward Upham)

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