

Horticulture 2023 Newsletter

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Video of Week: [Fertilizing the Garden](#)

REMINDERS

1. Prune fruit trees
2. Remove mulch from strawberries when growth begins or when soil temperature reaches 40 degrees.

VEGETABLES

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.” It 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. You may want to 'hill' the plants slightly to prevent water from collecting around the crown which can lead to crown rot. 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 ax 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.

Established rhubarb should be fertilized in late March. Fertilize according to soil test or use a 10-10-10, 12-12-12 or similar fertilizer and broadcast or band at the rate of 1.5 to 2 pounds per 100 square feet or about 1/2 cup per plant.

An additional 1/4 cup of fertilizer per plant of a high nitrogen fertilizer such as a 27-3-3, 28-4-4 or something similar in late June or July after the last harvest is often helpful to stimulate recovery from the harvest season. Though most of these high nitrogen fertilizers are lawn fertilizers, each will work well for our purposes as long as they do not contain weed killers or weed preventers.

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)

Time to Plant Potatoes Approaching



St. Patrick's Day is just around the corner, so it is time to think about getting 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)

Bolting and Buttoning in Cole Crop Plants



Broccoli, cabbage and cauliflower are cole crops that have a tendency to bolt (go to seed) or button (produce an extremely small head) if plants are not grown properly. These crops need to be kept actively growing through their production cycle, including growing transplants from seed. If they slow down due to under-fertilization or are stunted due to overgrowing their container, buttoning or bolting is more likely. Therefore, be sure to properly fertilize plants grown from seed and ensure they have enough light. The easiest way to fertilize transplants is to use a potting soil

with fertilizer already added. Light may be more of a challenge. Often natural sunlight is not

sufficient unless the plants are in a greenhouse. Therefore, additional light is often needed. [Click here](#) for a video on how to build a grow light.

If you are not growing your own transplants but rather selecting plants later in the month for transplanting, choose small, stocky, dark green plants. Even after transplanting, these plants need to be well-fertilized. Fertilize at transplanting with a starter solution and continue to fertilize every 2 to 3 weeks until harvest. Both buttoning and bolting are irreversible. Once a seed stalk starts to form, nothing can be done to force the plant to produce a normal crop. (Ward Upham)

Use Wide Rows for Certain Vegetables



Lettuce, radishes and spinach are planted early enough that weeds are rarely a problem. These plants can be planted starting in mid-March to as late as mid-April. If space is at a premium, 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)

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 chain saw. 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)

FRUIT

Pear Rust



Rust on pear leaves.



Cedar-apple rust gall (used to determine when to spray)

During the summer, many people notice yellow-orange spots on the leaves of their ornamental or fruiting pear trees. These spots begin in the late spring on the upper surface of leaves, approximately 1/8 to 1/4 inch in diameter. Gradually they enlarge and turn orange during the summer months. Though these spots resemble the cedar-apple rust spots on apple leaves, they are caused by a slightly different organism. Pear leaves are infected with cedar-hawthorn rust rather than cedar-apple rust. Though cedar-hawthorn rust is different than cedar-apple rust, both diseases work the same and the control is exactly the same as well. This disease causes primarily only aesthetic damage on ornamental pear trees, and is considered a nuisance problem, rather than causing significant harm to the health of the tree. Therefore, control is optional, and generally not recommended unless the tree experiences substantial leaf drop.

A control for rust diseases must only be applied preventatively. Once the symptoms are visible on the leaf, it is too late to do anything about pear rust, especially once the month of May is over. The fungus that causes rust is only active in April-May time period, which is when the disease infection occurs on pear trees. If you would like to control the disease the following year, consider using a fungicide next year that contains the active ingredient myclobutanil (Immunox, Immunox Plus, or Fertilome F-Stop Lawn & Garden Spray). There are other fungicides that will work but those with myclobutanil have an advantage. Most fungicides must be present on the foliage before the disease spore germinates or they are ineffective. Myclobutanil will kill the rust spore up to 4 days after it germinates. This can be very beneficial in disease control.

Normally to control rust on pear trees, the recommendation is that trees be sprayed every 7 to 10 days starting at the beginning of April until the end of May. However, since we have this 4-day kickback with myclobutanil, we can wait until we actually see evidence of spores being released before we spray. How do we do that? First of all, remember that cedar-apple rust and cedar-hawthorn rust must go back and forth between junipers (cedars) and apples (or pears in this case). The spores from junipers can only infect apples or pears and those from apples or pears can only infect junipers. Therefore, we look at the juniper to see when to spray either apples or pears.

When you see the orange globs (galls) on the junipers, you know you have 4 days to spray the apples and/or pears with a product containing myclobutanil. These orange globs are actually cedar-apple rust but cedar hawthorn rust develops under the same environmental conditions. We use cedar-apple rust as the visual signal because it is much more noticeable on the juniper. If you see cedar-apple rust, cedar-hawthorn rust is also likely present. It is also important to note that the orange galls only develop during rainy, spring weather. The rust disease has a minimal effect on junipers, so no control is need to protect juniper or cedar trees.

In cases where repeat leaf defoliation is a problem with the pear tree, or the aesthetic damage cannot be tolerated, watch the cedar trees during any rainy period between April and May. When the overwintering rust galls bloom their orange, gelatinous tentacles (orange galls appear) get ready to spray. You have 4 days to apply your myclobutanil fungicide. Once May is over, you are done. (Ward Upham)

Pruning Raspberries and Blackberries



Raspberries and blackberries are perennial plants with biennial canes. In other words, a single plant will last many years but an individual cane will only live for two. In a cane's first year, it will grow but will not produce fruit. The second year, it will fruit and then die. Though these canes can be removed after they have finished fruiting, many gardeners wait until now to remove them.

Dead canes are not difficult to identify. They are a much lighter color than live canes and are dry and brittle. These canes should be removed and discarded. The remaining canes should be thinned but the type of growth determines exactly how this should be done.

Black and purple raspberries and thornless blackberries: These tend to grow in a clump. Remove all the canes but 5 to 7 of the largest and healthiest in each clump. Cut back the remaining canes to living tissue if there was winter damage. With black raspberries, eight to 10 buds per lateral (side shoots) are usually enough. Cut laterals back to leave the recommended number of buds. Purple raspberries and thornless blackberries are more vigorous than black, so leave a few more buds per lateral. Thornless blackberries will also produce a few suckers that come up some distance from the clump. These should be removed or dug and transplanted to increase the planting.

Red raspberries and thorny blackberries: These two sucker badly and will fill the row with new plants. Prune out small canes within the row so that there are strong canes 4 to 6 inches apart. Head back all the remaining canes to about 5 feet. There is no need to prune back any laterals present. Keep aisles free of new suckers during the summer by mowing.

Everbearing red raspberries and blackberries: We now have what is called ever-bearing red raspberries and everbearing thorny blackberries. These are the exception to the rule in that they will bear fruit on first-year canes. Therefore, you can cut all canes to the ground in the winter and still have fruit. Examples include Heritage red raspberry and Prime-Jim, Prime-Jan, Prime Ark 45 and Prime Ark Freedom blackberries. For more detail and line-drawings that illustrate pruning techniques, see our publication titled, “Raspberries and Blackberries” at <http://www.ksre.ksu.edu/bookstore/pubs/mf720.pdf>. (Ward Upham)

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