

Horticulture 2014 Newsletter No. 10 March 11, 2014

Video of the Week: [Pruning Grape Vines](#)

VEGETABLES

Frost Proof Vegetable Plants



Certain vegetables can withstand cold spring temperatures as long as they have been toughened up by gradually exposing them to sunlight and outdoor temperatures. This “hardening off” process usually takes about a week. Reducing watering and temperature is the key to toughening up transplants. If possible, move transplants outside for a portion of each day. Start by placing them in a shady, protected location and gradually move them into a more exposed, sunny location as the week progresses. Hardened off cabbage, broccoli, cauliflower and onions can withstand temperatures near 20 F without being killed.

Lettuce plants are not quite as tough but will be OK if exposed to temperatures in the mid 20s. Don’t hesitate to put these plants out soon if extreme cold is not forecast and the plants are hardened off. (Ward Upham)

Onions, Cabbage and Broccoli Can Be Planted Soon



We mentioned elsewhere in this newsletter that this group of plants can withstand colder temperatures. Normally these plants can go in as early as the middle of March. Watch the forecast before planting.

Following is more detailed information on planting. As with other vegetables, be sure to fertilize before planting and work the fertilizer into the soil. It is best to have a soil test done to determine what is actually needed as many of our soils have enough

fertility to only need a nitrogen-only fertilizer. If you don't wish to use a soil test, use a vegetable fertilizer at the suggested rate.

Broccoli and cabbage are normally started from seed indoors and then transplanted outside at this time. Acclimated plants can take temperatures down to the mid- to lower-20s without damage. Plants that are coming out of a protected environment (not acclimated) will need to be gradually exposed to the wind and cold so they develop the toughness necessary to thrive in early spring conditions. This may take as long as a week if plants start out "soft." When planting, use a "root stimulator" or transplant solution to water in after the plants are set. About 1 cup of solution per plant is sufficient.

Onions are normally grown from either sets (small bulbs) or plants. Plants are more often labeled as to variety. Onions can be planted thickly if young plants are harvested for green onions so that the remaining onions are thinned. Those left to develop bulbs will need to be about 4 to 6 inches apart. Onions are shallow rooted, so be sure to water if the weather turns dry. (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 in the same time period as new plantings are established. 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)

FRUIT

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 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. 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 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. Keep aisles free of new suckers during the summer by mowing.

We now have what are called everbearing 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 or Prime-Jan blackberry.

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)

FLOWERS

Pruning Hybrid-Tea Roses



The best time to prune roses is in the spring before new growth appears and after danger of killing frost. Be sure to remove dead stubs. Otherwise, canker fungi may invade stubs and progress into healthy tissue during the summer. Use sharp shears and make cuts at a 45-degree angle about a quarter-inch above healthy buds. How much to prune after dead wood removal depends on the type of rose.

For shrub roses, pruning usually consists of removing dead wood or light pruning for shaping. This article focuses on hybrid tea roses which require much more extensive pruning. With hybrid teas, there are three pruning styles, each with a specific purpose. Heavy or severe pruning is done on well-established, vigorous plants to produce large, showy flowers. Prune back to three to four healthy canes with three to six eyes per cane. Canes normally will be 6 to 12 inches long. Moderate pruning is done on well-established, healthy plants and is designed to increase the number of flowers produced rather than increase flower size. Leave five to six healthy canes with at least seven buds per cane. Prune stems to 12 to 18 inches long. Light pruning rejuvenates plants after years of neglect or may be performed on newly established plants. Leave five to seven canes of about 18 inches or more in length. This helps maximize leaf area for energy production and rejuvenates plants.

If your plants suffered a significant amount of winter damage, they may need to be cut back more severely than even the heavy-pruning style. This will result in a few large flowers but in this case is your only option. (Ward Upham)

TURFGRASS

Managing Turf in Shade



Turfgrasses differ in their capacity to grow in shade. Among Kansas turfgrasses, tall fescue is the best adapted to shade but isn't all that good. Although the fine fescues (i.e., creeping red, chewings, hard and sheep) have better shade tolerance, they lack heat tolerance and typically decline during hot Kansas summers. The warm-season grasses have the poorest shade tolerance, although zoysia does better than bermuda or buffalo.

Where shade is too heavy for fescue, there are other courses of action. The most obvious is to either remove trees, or to prune limbs and thin the tree canopies. Grass will do better under openly spaced trees than under closely spaced trees. Pruned limbs and thinned canopies will allow more sunlight to directly reach the turfgrass. If possible, raise the mowing height in the shade to compensate for the more upright growth of the leaves, and to provide more leaf area for photosynthesis. The thin, weak turf in the shade may tempt you to fertilize more. Remember the problem is lack of light, not lack of fertility. Too much nitrogen in the spring causes the plant to grow faster and may result in weak plants. The nitrogen rate for shaded grass should be cut back to at least half of that for grass in full sun. Late fall fertilization after tree leaves have fallen, on the other hand, is important for shaded cool-season turfgrasses and should be applied at a full rate. Irrigate infrequently but deeply. Light, frequent irrigation may encourage tree feeder-roots to stay near the surface, which increases competition between the trees and the turf. Restrict traffic in the shade.

Many times, the best choice for shaded areas is switch from a turfgrass to a more shade-tolerant plant. For example, English ivy and periwinkle (*Vinca minor*) are much more shade tolerant than any turfgrass adapted to our area. Another option is simply to mulch the area where turf doesn't grow well. The trees will love the cool, moist soil and the absence of competition. (Ward Upham)

Wild Garlic, Wild Onion and Star-of-Bethlehem



Wild garlic (*Allium vineale*) and wild onion (*Allium canadense*) are two closely related plants that can become weed problems in home lawns and landscapes. Though wild garlic and wild onion look much alike, each has an odor that is characterized by its name – wild garlic smells like garlic and wild onion smells like onion. These plants are perennials that can also reproduce by seeds and aerial bulbils. Bulbils form at the top of the stem and are oval and smooth. Wild garlic also reproduces by underground bulb offsets, but wild

onion does not. Both species produce a clump of plants that is unsightly in a lawn. Control recommendations are the same though we now have a couple of new additions to our arsenal.

Traditionally we have used 2,4-D or 2,4-D + MCPP + Dicamba (i.e., Trimec, Weed-Out, Weed-B-Gon). These products should be sprayed during March on a day that is at least 50 degrees. Newer products are Weed Free Zone and Speed Zone. Both are combination products that contain a formulation of Trimec plus carfentrazone. These will give a quicker response at cooler temperatures near 50 degrees. A spreader-sticker added to the spray should help any of these products be more effective. At times, the spreader-sticker is already mixed into the weed killer; no additional amount is needed. These herbicides are also effective on dandelions.

Unfortunately, we have not had a good chemical control for Star-of-Bethlehem. The best products we had were Coolpower (31.3% control) and Turflon Ester (23.8% control). Coolpower is a commercial only product, but Turflon Ester is available to both commercial and homeowner

users. But recent research out of Virginia Tech has improved our outlook. Scientists there did a study in which they gained 96% control of Star-of-Bethlehem one month after treatment by using Quicksilver, a formulation of carfentrazone at the rate of 4 fl. oz/A. Quicksilver is a commercial only product, and therefore is not available to homeowners. However, both Speed Zone and Weed Free Zone contain carfentrazone and would certainly be worth a try if you have this troublesome plant. (Ward Upham)

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