Happy Spring and Happy Gardening!

Greetings from K-State Research and Extension Harvey County! Please enjoy this educational information as we navigate this spring and its challenges. Happy Gardening!

SPOTLIGHT: CARROTS!

Carrots are a hardy cool-season crop that grows in the spring or fall in Kansas. Carrots harvested in cooler weather will be tender and sweet. Carrots are an excellent source of vitamin A. The roots grow best in loose or sandy soils. Long slender varieties are not well adapted to growing in our heavier, tighter soils.

Varieties

Carrot varieties differ in the length and diameter of the root. Short fat varieties include Red Cored Chantenay and Royal Chantenay. Miniature varieties include Sweet-n-Short, Gold Nugget, Little Finger, and Tiny Sweet. Moderate length varieties include Scarlet Nantes.

When to plant

Plant carrots in mid- to late April before the last freeze, because carrots can tolerate a light freeze. Make sure the soil is well tilled or loosened to an 8- to 9-inch depth before planting. Fall carrots are excellent for growing in Kansas. Plant seeds in late July to early August.

Spacing

Plant seeds ¼-½ inch deep--deeper for fall plantings--in moist soil. Rows may be as close as 12 inches apart with plants every 1-2 inches in the row. Carefully sprinkle seeds so that excessive plants do not emerge. Thin carrots to the desired spacing when the plants are small.

Care

Until carrots germinate, avoid heavy watering that could form a crust on the soil surface. Germination may be slow and uneven in early spring. Young carrot plants are weak and spindly. Weeds compete with young plants, so, careful weeding is necessary. Water is required as roots are enlarging. Carrots that develop in hard, compacted soils will be misshapen or forked.

Harvesting

Dig or pull the roots when they are the desired diameter. Most carrot varieties require 55-60 days from seeding to mature. Fall-planted carrots can be mulched with straw and harvested as needed until the ground freezes solid in mid December. After harvesting, cut the tops to within ½ inch of the root top and store in plastic bags in a refrigerator until ready to use. Carrots can be stored for long periods.
Another Bunny Favorite: LETTUCE!

Lettuce is a cool-weather crop that is fairly cold tolerant. However, the thin fragile nature of the leaves makes them susceptible to freezes and drought. Lettuce is best grown as a spring or fall crop.

There are four distinct types of lettuce.

* Leaf types--Leaves are loosely arranged and colors may range from green to pale red to deep red. Leaf lettuce matures rapidly and is the most reliable type of lettuce to grow in Kansas, especially from seed.

* Romaine or cos--This lettuce forms a loose or soft head with thick stronger flavored leaves. It is an excellent addition to a mixed salad and takes longer to develop than leaf lettuce.

* Butterhead--Tender rounded leaves that form into a loose or soft head are characteristic of this succulent and delicious lettuce. It takes longer to grow than leaf lettuce and can be started and planted as transplants as well as direct seeded.

* Head or crisphead--Head lettuce takes nearly twice as long as leaf lettuce to develop. It is most reliably grown using transplants, and the fall season is the best time to grow head lettuce in Kansas. When to plant Sow lettuce seed in mid-March or set plants in early April. Sow seeds for a fall crop in mid- to late August for leaf or bibb types, or in late July to early August for head or romaine types. Lettuce grown in hot weather will have a strong, bitter flavor. You may improve the flavor by storing the lettuce in a plastic bag in a refrigerator for several days.

Spacing

Sow seeds thinly ¼ inch deep, and water consistently until the lettuce emerges. Thin to a plant every 6-8 inches, or set transplants at this spacing. Rows may be as close as 15 inches apart.

Care

Lettuce is shallow rooted, and the root system is fairly spindly. Therefore, it will require careful cultivation so as not to damage roots. Regular watering and fertilizing are necessary. Over-watering in heavy soils can cause root or head rots.

Harvesting

Cut the heads of heading types slightly above ground level and remove damaged, dirty, or excess leaves. Select full sized leaves of leaf lettuce individually so that the plant will continue to produce. Store lettuce in a plastic bag in a refrigerator immediately after harvest because it will become limp quickly.
Fresh Summer Tomatoes!

Plant tomatoes where they will receive full sun for a half day or more. Plants grown in shade will be spindly and unproductive.

Tomatoes are sensitive to frost and will not thrive in cold garden soils. In extreme southeastern Kansas, tomatoes can be transplanted in early to mid-April. Late April to May is the suggested transplanting date for most of eastern and central Kansas. If there is a danger of frost after plants are set, be prepared to provide temporary cover.

Tomatoes will grow in many different soil types, but they prefer a deep, loamy soil with a pH of 6.2 to 6.8. If topsoil is shallow, improve the growing area by mixing in a 2- to 3-inch layer of peat moss or compost to a depth of at least 6 inches. Otherwise, till the soil thoroughly with a spade or rototiller.

Ask your local extension agent for specific recommendations on fertilizing tomatoes. If you choose not to do a soil test, add 1 to 2 pounds of complete garden fertilizer per 100 square feet. Avoid fertilizers with too much nitrogen. Excessive nitrogen fertilization leads to spindly plants and few fruits. Fertilizers with 5-10-10, 6-12-12, 5-10-5 ratios, or about half as much nitrogen as phosphate, are the most desirable.

Spacing

Spacing depends on plant size and whether plants will be staked. Small-vined types should be spaced 15 to 18 inches apart, and staked vines 18 to 24 inches. Unstaked plants should have 30 inches of space between them. If planting several rows, place them about 4 feet apart.

Tomato plants should be set in the ground slightly deeper than they grew in the original flat or pot. Place the stem of tall, spindly plants mostly below the soil surface and cover to the first leaf to keep them from breaking in spring winds.

You do not have to remove peat containers, but tear off the top edge or place pots well below the soil surface. An exposed edge acts like a wick, drawing water from the soil around the plant.

After planting, water well with a starter fertilizer solution. This can be purchased from your local garden center, or you can mix 3 to 4 tablespoons of ordinary garden fertilizer in a gallon of water. Pour about 1 cup of starter solution around each plant. Protect plants for a few days by shielding them with boards, shingles, or light-penetrating coverings such as plastic milk jugs, glass, or hotcaps.

Mulching

Mulch benefits growing tomatoes by retaining soil moisture, reducing soil compaction, and helping to control weeds. Plastic mulches can be used early in the season before planting to warm the soil and encourage early growth. Apply straw, compost, leaves, and grass clippings in mid-June at the base of each plant.
Your Checklist of Good Gardening Practices

* Create a "healthy" soil – Many insects are attracted to unhealthy plants. Sickly plants also recover slower from insect injury. Have a soil test and follow the recommendations to supply a full range of nutrients. Adding extra fertilizer won't create healthy soil, because excess nitrogen or phosphorus can promote insect and disease injuries. Add organic matter to the soil each year in the form of soil amendments or mulch.

* Choose pest-resistant or tolerant varieties – Nursery and garden catalogs often identify such varieties.

* Start with quality – Purchase stocky, dark green transplants, and buy certified virus-free seed potatoes.

* Eliminate competition – Remove weeds and grass from the growing site because they compete for nutrients and water. Rapidly growing vegetables can better tolerate or outgrow insect and disease damage, but they also quickly use up available nutrients. Applying fertilizer and water at critical times during maximum plant growth is essential for producing pest- and disease-resistant plants.

* Keep it clean – Remove plants and debris after harvest to avoid harboring insects and diseases. Remove weeds which may provide shelter for pests. Dispose of or burn diseased plants, fruits, and vegetables. Composting is seldom thorough enough to eliminate disease-causing fungi and bacteria.

* Rotate crops – Planting the same crop in the same place year after year invites losses due to soilborne diseases and overwintering pests. Follow a crop rotation of at least 3 years for the four major vegetable plant families--Solanum (tomato, potato, pepper, eggplant); Cucurbit (melons, squash, cucumbers); Cruciferous (broccoli, cauliflower, cabbage, Brussels sprouts); and Allium (onion, garlic, leeks).

* Choose a sunny location away from trees – 8 to 10 hours of direct sunlight a day are necessary for proper growth, of most vegetable crops. Sunlight dries foliage and reduces fungal and bacterial diseases.

* Water properly – Plants receiving either too much or not enough water will be less vigorous and more susceptible to diseases and pests. Consider using a form of drip irrigation, which keeps foliage dry and helps prevent foliar diseases while using water more efficiently.

* Use mulch--Mulches help control weeds and reduce moisture evaporation from the soil surface. They also help to prevent rot caused when fruit is in contact with bare soil. When tilled under, organic mulches become valuable soil amendments.

* Provide good air circulation – Overcrowding plants can cause weak growth and an increase in foliar diseases. Stakes, cages, trellises, and pruning all help to increase air circulation. * Plant at the proper time--Seeds planted too early are more susceptible to rot. Delay planting until the soil has warmed to allow rapid germination and growth of the young plants.

* Know the major pests in your area – Learn the weaknesses in their life cycle, their habits, and at which stages they are most easily controlled. Refrain from any pesticide until you have identified a pest.

* Grow crops that have fewer pest problems – Plants that have few insect and disease problems include loose leaf lettuce, rhubarb, Swiss chard, garlic, cos lettuce, leeks, parsley, sweet potatoes, okra, beets, snap peas, parsnips, carrots, onions, and kale.

* Inspect the entire garden at least weekly – Check the undersides of leaves. Discover any symptoms when they first develop so that they can be more easily controlled.

* Be realistic in your expectations – Accept the fact that there may be some damage and even an occasional crop failure. This is also the case in many gardens using conventional pest control methods.