

ONIONS

FOR THE HOME GARDEN

Vegetable Gardens



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Onions are a member of the amaryllis family. Although onions are used primarily as a flavoring agent, they contain vitamins, especially vitamin A in green onions, minerals and are low in calories.

Growing Onions

Onions may be grown using sets, plants, or seed. Planting will vary according to the availability, use, and variety.

Sets. Sets are usually used to grow green onions (often called scallions), although they will produce onions for bulbs later in the season. Onions from sets grow rapidly in the early spring. Sets are small onion bulbs that were planted thickly the previous season to suppress large bulb development, stored through the winter, and offered for sale in the early spring.

Sets are usually poorly identified by variety, making it a gamble to know the flavor, use, or keeping quality of the mature bulbs. Separate onions into two size groups—smaller than a nickel or larger than a nickel. Large sets will usually “bolt” or produce a seedstalk, so they should be used for green onions early in the season. Small onion sets are better for producing mature bulbs. Place sets 1 to 1½ inches deep, close enough to touch each other in a single row or a wide bed planting. When plants are 6 inches or taller, they can be pulled for green onions to thin until 2 to 3 inches remain between onions grown for mature bulbs.

Plants. Plants are onion transplants grown in the fall or winter in southern areas and bundled in 50 to 100 plants per bunch offered for sale in spring. Some greenhouses offer market packs of onion transplants similar to other bedding plants.

Onion plants are usually well identified as to variety and can make excellent mature bulbs. Choose healthy, green and fresh transplants and set them 1 to 1½ inches deep in rows 12 to 16 inches apart (or wider). Onions should be spaced 2 to 3 inches apart, depending on the size of the mature bulbs.

Seed. Onions can be grown from seed, but seeds are the slowest to develop—usually not ready for harvest until August in most areas of Kansas. Plant seeds early in late March or early April, using one seed per inch in rows 12 to 16 inches apart. Onion seedling plants are slow to establish, so weed control will be critical in seeded onions.

Some gardeners seed onions and then drop in a radish seed every 6 to 8 inches to mark the rows. They harvest the radishes early, then onion plants utilize the space. Thin seedlings to 2 to 3 inches apart when plants are 2 to 4 inches tall. You may also consider producing your own transplants by planting seed in a potting mix indoors in early January and growing the seedling plants under artificial lights.

Fertilization and Water

Onions have a shallow, poorly developed root system, so regular fertilization and watering are essential. Organic material added to the soil in the fall helps loosen soils and provides necessary fertility. Apply 1 pound of all-purpose fertilizer per 100 square feet before tilling unless a soil test recommendation is available. Onions respond to additional nitrogen 2 to 4 weeks after planting or emergence using ½ pound ammonium nitrate (34-0-0) per 100 feet of row or 1½ pounds of all-purpose garden fertilizer per 100 feet of row sprinkled 2 to 3 inches alongside the row.

Regular, uniform watering is essential for high yields and quality. Onions should receive 1 inch of water per week (if not supplied by natural rainfall). Remove weeds regularly.

Herbicides such as Dacthal 75W can be used as a pre-plant incorporated or a preemergent at the manufacturer’s recommended rates. A second application of Dacthal can be applied later in the season to recently cultivated onions to reduce crabgrass.

Varieties

The size, color, flavor, and keeping quality of onions are determined by the variety.

Plant Varieties	Color	Notes
Early Harvest	Yellow	Medium round to flat shape.
Early Yellow Globe	Yellow	More pungent flavor. Good keepers.
Downings Yellow globe	Yellow	
Ebenezer	Yellow	
Chieftan*	Yellow	
Fiesta	Yellow	
Grano	Yellow	
Granex	Yellow	
Ruby	Red	
Bermuda	Yellow or White	Smaller, flattened, bulbs. Mild flavor, poor keepers.
Sweet Spanish	Yellow or white	Large bulbs. Milder flavor, fair keepers.
Benny's Red	Red	Large bulbs with mild flavor, poor keepers.
Red Burgundy		

Sets. Most common varieties are Ebenezer or Golden Globe. They are best used for green onions.

Seed. Many onion varieties, including all the above, are available from seed sources. Note the size, shape, and use from catalog descriptions; Kansas growers should plant intermediate day length onions from plants or seeds. Varieties with an * after the name do exceptionally well from seed.

Bunching Onions. Selected varieties have been developed for use as green onions since they do not produce bulbs. They include Beltsville Bunching, Evergreen, or White Portugal.

Harvesting and Storage

Onions grow rapidly during early spring, cool conditions. It is essential to produce large plants early in the season to support large bulb development. Bulb development starts in relation to temperature and day length later in the season.

When the onion bulbs are as large as they will grow, the tops become weak and fall over. When one half or more of the tops have fallen over, onions are ready for harvest. Pull or dig the onions with the tops attached, hang in bunches or spread them out in a warm, airy location out of direct sun, for 2 to 4 weeks, until the tops and necks are dry. You can use an electric fan to speed drying. Nothing improves the keeping quality of onions more than thorough drying or curing. After the onion tops and necks are thoroughly dry, clip the tops and roots one-half inch from the bulb and place the onions in storage.

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Onions should be stored in loose baskets or crates or in mesh bags so air can circulate through them. Onions should be kept from 32 to 40°F in a low humidity (75 percent or less) for best results. A cool, dry basement is good. At warmer temperatures, onions will begin to produce sprouts. If storage conditions are too moist, roots may begin to develop. Sweet, mild-flavored onions will keep a shorter period because the bulbs are more succulent. More pungent onions are best for winter storage. Mild-flavored onions should keep 2 to 4 months, while other onions should keep all winter. If onions freeze, they will thaw and be edible for several months.

Onion Relatives

Several relatives of onions will grow in Kansas. General fertilization and culture conditions are similar.

Shallots. Shallots are smaller than onions and are grown by dividing the bulbs into small "cloves." Shallots can be used as green onions or the mature bulbs dry in midsummer for winter storage.

Garlic. Garlic is propagated by planting divisions of the bulb (cloves) in the fall or early spring. Select large, healthy cloves and space them 2 to 4 inches apart. Garlic often will produce a cluster of small bulblets on stalks above ground. These can be collected, dried, and planted.

Multiplier onions. These are usually used as green onions in the spring since the onions split and divide at the base. They produce bulblets or "top sets."

Chives. A common relative of the onions, chives are usually grown in clumps and the tops trimmed for a mild flavored, green herb. Chives are perennials and produce attractive purple flowers in late spring.

Leeks. Leeks are difficult to grow in Kansas because they require a long, cool season for best results.

Pest Problems

Onions are not seriously affected by pest problems, but a few can cause reductions in yield.

Onion thrips. These tiny, sucking insects cause elongated, white blotches on the leaves as onions develop. General use insecticides will control this pest if a spreader-sticker is used. They seldom cause death of plants, but severe infestations will reduce yields.

Bulb and neck rots. A soft, sunken area on the top of bulbs can develop in storage or in the field causing the leaves to die. Rapid, thorough drying is the best control. Many varieties have resistance to this disease.

Smut and smudges. A blackish growth on bulbs, just under the skin, indicates this disease, and severe infestations can cause leaf or bulb losses. White varieties are more susceptible. If smut problems develop, rotate to another area the following season.