

Onion

(*Allium cepa*)

Recommended Varieties

Early Bulb

Grano (red or white)
Granex (red or white)
California Early Red

Green Bunching (scallions)

(best quality obtained by growing seeds or transplants)

Evergreen White
Southport White
White Sweet Spanish
White Lisbon
Tokyo Long White

Late Bulb

Fiesta (yellow Sweet Spanish type)
Yellow Sweet Spanish
White Sweet Spanish
Southport White Globe
Southport Red Globe
Stockton Yellow Globe

Onions are often grouped according to taste. The two main types of onions are strong flavored (American) and mild or sweet (sometimes called European). Each has three distinct colors -- yellow, white, and red. Generally, the American onion produces bulbs of smaller size, denser texture, stronger flavor, and better keeping quality than European types. Globe varieties tend to keep longer in storage.

Onion varieties also have different requirements regarding the number of daylight hours required to make a bulb. If the seed catalog lists the onion as long-day, it sets bulbs when it receives 15 to 16 hours of daylight. Short-day varieties set bulbs with about 12 hours of daylight. The variety and the planting date are extremely important in the production of a good bulb crop. Before buying and planting, obtain advice from an experienced gardener or your county Cooperative Extension farm advisor. If you live south of Bakersfield, use early varieties seeded or transplanted in October for June harvest. Sets and late varieties are not recommended. If you live north of Bakersfield, seed or transplant early varieties from November through January for late spring or summer harvest. Seed or transplant late varieties or sets from January through March for late summer or fall harvest.

You can grow onions from seed, sets, or from transplants. Seed requires a longer growing period than onions grown by other methods and the plants have to be thinned. However, it is the cheapest method and is the one most commonly used. Sets are small, immature onion bulbs that are planted the same way as seed. Sets are a good method for producing a quick crop of green onions. They are not recommended for the production of mature, dry bulbs because varieties used to produce sets are frequently not well adapted to California and/or they frequently result in bolting (going to seed) rather than bulbing.

Transplants are also an easy method for producing an early crop, but you will probably have to raise your own plants as they are rarely available from nurseries. Dry onions are ready to harvest when the tops fall over (approximately 6 months after planting). Pull onions and let them dry for a few days on the top of the ground. Cover the bulbs with the tops to prevent sunburn. When the tops and "necks" are dry, remove the tops and store the bulbs in a cool, dry place. Or you can leave the tops on, braid them, and hang in a cool, dry place. If onions are allowed to form seed stalks, the center of the bulb becomes woody, undesirable to eat and not suitable for long storage.

Plant green onions 4 to 6 times thicker than you would dry bulb onions. Harvest green onions when they are 1/4 to 1/2 inch in diameter.

Onions vary in their pungency or "hotness." In general, the softer varieties, such as Grano and Sweet Spanish, are milder than the harder varieties, such as Southport White Globe. The mild onions are preferred for fresh consumption, but the stronger flavored ones are better for cooking.

Nutritional Value

| | | | | |
|-------------------|--------------------------|--------------------------|----------------|----------------|
| Serving size: | 1/2 cup, chopped, boiled | <u>Primary Nutrients</u> | <u>%RDA(m)</u> | <u>%RDA(f)</u> |
| Calories | 47 | Vitamin C | 6 mg | 10 |
| Fat | 0.2 g | Folic acid | 15 mcg | 7.5 |
| Calories from fat | 4% | | | 8 |
| Cholesterol | 0 | | | |
| Sodium | 2 mg | | | |
| Protein | 1.4 g | | | |
| Carbohydrate | 10.7 g | | | |

Problem Diagnosis for Onion

| What the Problem Looks Like | Probable Cause | Comments |
|--|---|---|
| Tiny bulbs. Roots look white and normal. | Wrong variety Wrong time to plant Weed competition | Plant right variety at proper time. Garlic and onions do not compete well with weeds. |
| Seedstalks develop | Cold weather after plants are 6-10 weeks old | Plant right variety at proper time. Do not "overwinter". |
| Roots rotted and pink in color. Yields drastically reduced. | Pink root Caused by soil fungus | Grow a pink root-resistant variety Rotate crops to reduce disease severity. |
| Tunnels and cavities in bulb and underground stem. Plant may die or become wilted and yellow. Tips may turn brown. | Onion maggot (Adults are small flies. Larvae are off-white, legless. | Preventive controls only. Nothing practical can be done once pest occurs on growing crop. Destroy cull onions after harvest. |
| Leaves turn silvery Leaves can also have white streaks, blotches | Onion thrips | Most common during dry, warm weather. Use insecticidal soap. |
| Yellow or white areas on leaves. Leaves, stalks bend, wilt, and die. Soft, white to purple spore (mold) growth during wet, humid weather | Downy mildew (Fungus attacks plants only in onion family - the <i>Allium</i> family) | Destroy old plant debris. Keep soil well-drained. Allow plants to dry out between irrigations. Keep air circulating. Use resistant varieties. |
| Plants collapse. Bulbs have soft, watery rot. Leaves and/or bulbs have white, fuzzy growth speckled with black bodies. | White rot Caused by the fungus <i>Sclerotium</i> spp. in northern California | Destroy diseased plants. To prevent spread in soil, do not compost. Rotate crops. Fungus survives in soil for years. |
| Seedlings are pale, thickened, deformed. Older plants are stunted, limp. Leaf tips are dying. Bulbs swollen at base. | Stem and bulb nematode | Use certified seed. Do not plant onions in areas where onions, garlic, leeks, or chives grew in previous years. Parsley and celery are also hosts. Remove and destroy infested culls. |