Site selection

Onions grow best in full sunlight and well-drained soils.

Soil preparation

Work the garden soil only when it is dry enough not to stick to garden tools. Before seeding or transplanting, work the soil 8 to 10 inches deep.

Remove all rocks and trash from the soil; then break up the remaining clods and rake the soil smooth.

Planting

Onions are a cool-season crop and can stand temperatures well below freezing. They may be planted from seeds, from small bulbs called sets, or from transplants.

Seeding costs the least but takes longer before onions are ready. When seeding onions for bulbs, plant them ¼ inch deep during October through December. Place the seeds 1 inch apart. When the plants are about 6 inches high, thin them
larger plants and bigger bulbs (Fig. 2). Each leaf forms a ring in the onion bulb. More leaves means more rings and larger bulbs.

Use about ½ cup of fertilizer for each 10 feet of onion row. Scatter the fertilizer evenly between the rows. Water the onions after adding the fertilizer.

**Fertilizing**

Onions grow best when the garden soil is fertilized correctly. Spread 2 to 3 pounds of a fertilizer such as 10-10-10 over a 100-square-feet of garden area. Measure and spread the fertilizer; then mix it with the top 3 to 4 inches of soil.

**Watering**

Watering once a week usually is enough in the spring. But you may need to water more often during dry, windy weather. Water onions slowly and deeply to help grow strong, healthy roots.

**Care during the season**

Weeds are easy to pull or cut when they are 3 to 4 inches tall. Do not let weeds or grasses grow large because they compete with onions for nutrients.

If you use a hoe to remove weeds and grass, do not chop too deeply. You may be cutting the onion roots. Pull all weeds by hand when possible.

When the onion plants have 5 to 6 leaves, apply fertilizer again to help grow larger plants and bigger bulbs (Fig. 2). Each leaf forms a ring in the onion bulb. More leaves means more rings and larger bulbs.

**Insects**

Onions have few insect problems. However, thrips, which are very tiny insects, may be found between the center leaves.

Many insecticides are available at garden centers for homeowner use. Sevin is a synthetic insecticide; organic options include sulfur and Bt-based insecticides.

**Diseases**

Diseases may be a problem on onions. Brown leaf tips or brown spots on the middle and lower parts of leaves may be caused by plant diseases.

Sulfur also has fungicidal properties and helps control many diseases. Neem oil and other fungicides are also available for use.

Before using a pesticide, read the product label. Always follow cautions, warnings, and directions.
For dry-bulb onions, let the plants grow larger. The onions are ready when the main stem begins to get weak and fall (Fig. 3). Pull the plants out of the soil. Leave them lying in the garden for 1 to 2 days to dry. Then remove the tops and roots and let them keep drying in baskets or boxes.

**Storing**

Store onions in a refrigerator crisper or in a dry, airy place such as in a wire net in the garage or carport.

**Acknowledgments**

This publication was revised from earlier versions written by Tom Longbrake, former Extension Horticulturist.