Soil preparation

Work the garden soil only when it is dry enough not to stick to the garden tools. Several weeks before planting, work the top 8 to 10 inches of soil. Remove all rocks and trash from the soil and rake it to break up large clods.

Tomatoes grow best in soils that have lots of organic matter. If possible, spread 2 to 3 inches of organic material such as compost, leaves, or rotted hay over the planting area. Mix this organic material into the top 4 to 6 inches of soil.

Planting

Most families need only a few plants, so it is best to buy plants and not grow them from seed. Buy healthy, green plants that are 6 to 8 inches tall.

Do not set out tomato plants until all danger of frost has passed. Transplant fall tomatoes in the garden about 100 days before the first expected frost.

If possible, set out tomatoes on raised
If you plan to grow single plants, dig a hole 2 feet wide and 10 inches deep. Refill the hole with half soil and half organic matter. For this type of planting, mix 2 level tablespoons of fertilizer into this planting area.

**Fertilizing**

Add 2 to 3 pounds of fertilizer such as 10-10-10 for every 100 square feet of garden area. Spread the fertilizer evenly over the area, and then mix it into the top 3 to 4 inches of soil.

**Watering**

Water the tomato plants slowly and deeply to help them develop a strong root system. Do not let the tomatoes wilt severely, or yields and fruit quality will be low.

**Care during the season**

For the highest yields, place mulch around the tomato plants. Spread a 2- to 3-inch layer of organic material such as compost, leaves, or hay around the growing plants. Mulching will help stop weed growth and water loss from the soil.

You can let tomatoes grow on the ground or support them with stakes or cages. When you stake tomatoes, put the stake in shortly after transplanting to lessen root damage. A 6-foot-long stake.

![Figure 1. Plant tomatoes on beds raised to about 6 inches.](image1)

![Figure 2. Plant tomatoes slightly deeper than they were first growing (A). If the plants are leggy, set them as shown (B).](image2)

Plant each transplant slightly deeper than it had been growing (Fig. 2). Pack the soil loosely around the plant. Leave a slightly sunken area around each plant to hold water.

![Figure 3. Loosely tie the tomato plants to support stakes.](image3)
1 inch in diameter, scatter 1 level tablespoon of fertilizer around each plant. Scatter it about 6 inches from the stalks. Work it lightly into the soil. Water the plants after fertilizing.

Fertilize the plants every 3 to 4 weeks with 1 to 2 level tablespoons of fertilizer.

To control weeds, you may cultivate or hoe around the plants. Work the soil only deep enough to kill the weeds but shallow enough not to damage the tomato plant roots.

**Insects and diseases**

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

---

**Table: Name and description**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flea beetle</td>
<td>1/16 inch long; bronze-black, blue, or green, with light markings; jumps quickly; eats holes in leaves</td>
<td>Sevin</td>
</tr>
<tr>
<td>Hornworm</td>
<td>A 3-inch-long caterpillar with a horn on the back end; green with stripes on the side</td>
<td>Bacillus thuringiensis (Dipel, Thuri- cide, Biotrol)</td>
</tr>
<tr>
<td>Psyllid</td>
<td>1/8 inch long; pale green or yellow; adults are banded black and white</td>
<td>Sulfur dusts, permethrin, insecticidal soaps</td>
</tr>
<tr>
<td>Whitefly</td>
<td>Adults are white; nymphs do not move</td>
<td>Pyrethrin, malathion, insecticidal soaps</td>
</tr>
</tbody>
</table>

---

Figure 5. Cages made from reinforcing wire give good support to tomato plants.
fur also has fungicidal properties and helps in controlling many diseases. Neem oil, sulfur, and other fungicides are available for use.

Harvesting

For best quality, pick tomatoes at full color. If you pick them when they are pink, let them ripen at room temperature. They may be stored in the refrigerator after they reach full color.

Acknowledgments

This publication was revised from earlier versions written by Sam Cotner, Professor Emeritus and former Extension Horticulturist.