



## GROWING TOMATOES FOR HOME USE

Larry Bass, Extension Horticultural Specialist

Much success in growing tomatoes can be attributed to use of a few proven techniques. Choosing a variety that has proven to be a true performer should be at the top of every gardener's list. Better Boy, Whopper, Celebrity, and Mountain Pride are among some of the best selections. Better Boy, Celebrity, and Whopper are VFN, which means they carry resistance to verticillium wilt, fusarium wilt, and root-knot nematodes. It is best to experiment with several varieties in order to find the ideal tomato for your taste buds.

Use the best soil available to grow the tomato crop. Clay and sandy soils can be improved by working in 2 to 3 inches of compost, peatmoss, or other forms of organic matter in the top 6 to 9 inches of soil. Lime and fertilizer should be added according to soil test recommendations. If no soil test has been taken, apply  $\frac{3}{4}$  cup of lime and  $\frac{1}{2}$  cup of 8-8-8 fertilizer for each plant. Lime will help reduce nutrient imbalances, particularly with calcium and help control the blossom end rot problem that occurs so frequently on tomatoes.

Tomato plants should be spaced 1  $\frac{1}{2}$  to 2 ft apart in the row and 3 to 4 ft between rows. The planting hole should be deep enough to allow the top of a peat pot to be covered with one inch of soil. If peat pot is exposed to the air, it will act like a wick and rapidly dry out the root ball, causing stunting or death of the plant.

If the transplant is tall and leggy at time of planting, the trench planting method should be used. To trench plant a tomato plant, dig a horizontal trench rather than a hole for each plant. *Next, remove all of the leaves from the plant except the top leaf cluster (4 to 5 leaves).* Then lay the plant on its side in the trench and cover the root system and bare stem up to the top leaf cluster with 2 to 3 inches of soil. Firm the soil over the plant. Be sure not to press the soil too firmly around the stem where it comes out of the soil, as the stem may break.

A starter solution should be used at planting time to insure proper fertilization during the early growth stages of young plants. Starter solutions can be purchased from local garden centers or made at home. To make a starter solution, mix one pound of a complete fertilizer such as 8-8-8 in 10 gal of water. If small quantities are desired, 3 to 4 Tbsp. of fertilizer can be mixed per gal of water. The high phosphorus content in commercial starter solutions make them the preferred choice over home mixes. Never use more than one cup of fertilizer solution per transplant. Large quantities of starter solution will burn the root system.

Tomato plants should be staked or caged shortly after planting. Generally, staking produces larger tomatoes but less quantity than caging. A common 6-ft tomato stake may be purchased from many garden centers. The stake should be driven in the soil about

Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Employment and program opportunities are offered to all people regardless of race, color, national origin, sex, age, or disability. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.

1 ft deep, 3 to 5 inches from the plant. Be sure to avoid driving the stake on the root side of plants that have been trench planted. Trench planted tomatoes should be staked immediately after planting while the location of the buried stem is fresh in mind. Use a strip of cloth, nylon stocking, or heavy string to tie the plant to the stake.

Tomato cages may be made by using a 5 1/2 ft length of concrete reinforcing wire or pasture wire. The wire will form a circle 18 to 20 inches in diameter. The bottom horizontal ring of the wire cage should be cut off so that the ends can be pushed into the ground. After setting the cage in place over the tomato plant, drive 2 or 3 stakes around the outside edge of the cage to give it extra support.

Sidedress tomato plants with 2 to 3 Tbsp. per plant of a complete fertilizer such as 8-8-8 or 10-10-10 after the

plants have *started to set fruit* and *4 to 6 weeks* thereafter throughout the growing season. Keep the sidedressing material *4 to 6 inches from the plant's stem* to avoid fertilizer burn.

It is important to make sure the tomatoes receive sufficient water during the season. The soil should be *soaked 6 to 8 inches deep at 7-day intervals*. Mulches such as wheat straw or composted leaves around the tomato plants will prove to be a real asset in conserving soil moisture during July and August.

Finally, have a prepared plan for dealing with the various insect and disease problems. Frequent observation of tomato plants for pest damage is the only way to stay ahead of the game. Contact your local Extension Service Office if you need advice on pesticide recommendations.