## **PRUNING AND SUPPORTING HOME GARDEN TOMATOES**

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Tomato plants have two general growth habits. It is important to know what type of plants you have in order to space and train them properly.

Indeterminate types are tall growing plants, normally growing 5 to 8 ft tall, producing a fruit cluster on the stems between every third leaf. Plant terminals continue to grow as long as the plant is healthy. Most of our home garden varieties in North Carolina belong to this group. Some of the varieties in this group are Manapal, Better Boy, Big Boy, Fantastic, and Cherokee.

**Determinate types** are shorter growing plants, normally growing 1 to 5 ft tall, producing a fruit cluster on stems between each leaf, and each stem terminates in a fruit cluster 3/4 thus, they often are called "selfpruning" types. Some varieties in this group are Pik Red, Colonial, Mountain Delight, Mountain Pride, Sunrise, Sunny, and Roma VF(pear-shaped).

Indeterminate types produce a shoot or "sucker" at each leaf axil. These suckers, if left undisturbed, grow into larger stems and produce fruit. This type of plant is usually supported above ground with a stake or trellis. A 5- to 7-ft stake may be driven into the ground and the stems tied loosely to the stake with soft twine or cloth. Trellised tomatoes may be handled in a similar manner, leaving one stem for each 8 to 12 inches of space in the row; that is, if plants are spaced 3 ft apart, leave 3 stems per plant; if plants are spaced 2 ft apart, leave 2 stems per plant. Break out all other suckers before they grow to 3 inches long.

**Determinate** types are usually pruned only once when suckers are 2 to 4 inches long (later pruning reduces size). The plants are normally spaced  $1\frac{1}{2}$  to 2 ft apart in the row. The plant is sometimes tied to a stake. More often, plants are supported in a weave of strings supported by stakes. This weave system is developed as follows: Stakes (1 x 2) are placed between every other plant, and 2 stakes are placed side by side at each end of a section. These sections usually are not more than 50 ft long. This break provides a path to carry fruit out of the garden. When plants are about 12 inches tall, the first string is tied to the stalks at one end of a section. Then, pulling the string as tight as possible, it is wrapped around each stake making sure to keep it tight (this takes practice). The string is stretched down one side of the row and then back up the other. When one returns to the starting point the string is tied again. A second string is added in a week or two, when the tops of plants are 8 to 10 inches above the first string and before plants begin to flop over. Usually, only 4 strings are needed to support a crop. Many people use





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a 12- to 36-inch stick with a hole at the end to guide the string around the stake. With a little practice, stringing can be done at a slow walk. Nylon "baler's" string usually is used, because it does not stretch like "binder's twine."

Wire supports can be used like string but, here, larger posts are located 10 to 15 ft apart. Wire is stretched on both sides of the row every 7 to 14 days as the plants grow. This wire is attached to fence posts with a nail or fence staple at the end of each row. Plants are not normally pruned in this system.

Wire cages are often used to support tomato plants in home gardens. A cylinder, about 2 ft in diameter and 3 to 5 ft high, is made from strong hog fence or wire that is used for reinforcing concrete. This cylinder is placed over the plant and anchored to the ground. Plants growing in cylinders are normally spaced 3 to 4 ft apart in the row and are not pruned; rather, the suckers are pushed back in the cage to force them to grow upward in the cage. This is a good system to use if only a small number of plants can be grown since yield per plant is generally higher than from other systems of training.