PRUNING AND TYING TOMATOES TO A STAKE, TRELLIS, OR TRIPOD AND USE OF A WIRE CYLINDER

by

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Tomato varieties described in seed catalogs as being intermediate, or for staking, are the ones for pruning and tying. These have a terminal bud that keeps on growing and the plant produces side or "sucker" shoots. Determinate varieties do not have a continuously growing terminal bud. Their branches terminate with a fruiting cluster and are generally smaller than the indeterminate plants and rarely need training.

**Stakes, Tripod, and Trellis.** Stakes should be 1 to 1.5 inches in diameter, about 6 feet in length, and driven 8-10 inches into the ground. A tripod, made of 3 or 4 stakes, rests on the top of the ground. Drill a 1/8-inch hole through the top of each stake about 1 inch from the end and wire the tops together. The bottoms are placed 2 feet apart on the ground. The trellis requires sturdy posts to support the weight of the plants. Number 8 or number 9 gauge wire is nailed or stapled to the post and securely anchored to a guy stake at each end.

**Pruning.** The pruning procedure for the stake, trellis, or tripod is identical. The general idea is to leave 2 good, vigorous stems on which all fruit will be produced. Remove all others. The main stem or leader of the plant will be 1 choice, because this will produce the first blossom cluster. The idea at this point is to select the second stem that will be first with its blossom cluster. This will be a "sucker shoot" or lateral branch growing from the main stem. A good rule to follow (you will be right 95 % of the time) is to select the lateral that forms just below the first blossom cluster. This lateral will produce its first blossoms at about the same time that the main stem produced its second cluster. Continue to prune all laterals that form, either on this or the main stem, until harvesting begins.

The time to start pruning is when the lateral just below the first cluster is about 4 inches long. The easiest way to prune is by the fingers to snap off the 1 to 3 inch laterals as close to the stem as possible. They can be cut from the plant, but this method usually requires more time.

**Training and tying.** If stakes or a tripod are being used, the first tie is made just below the first blossom cluster. Using 3-ply jute twine or some other soft material that has been cut into lengths of 10-12 inches, tie the stem to the stake or tripod leg in the form of a figure "8." The stem will be in one loop of the figure "8," with the stake or leg in the other. Always tie the ends against the stake or leg, never on the side of the plant. Also, try to position the stem so that the blossom cluster is facing outward. Pull the figure "8" tight...
enough so that the plant stem is about 1 1/2 inches away from the support. This will secure the plant, yet provide enough room for expansion of the stem. Each tie is made in exactly the same manner. Tying and pruning are usually done at the same time and at about 10-day intervals. This means about 3 to 4 ties during the season.

When a trellis is used for support, the single tying is done as soon as the supporting wire has been stretched in place. Using binder or baler twine, tie a loose slipknot at the base of the stem (ground level) with one end and a strong knot around the supporting wire with the other end. When tied from the base of the plant to the supporting wire, there should be about 8 inches of slack in the twine. It will be impossible to twist the plant stem around this twine if the slack is omitted.

Prune and twist the leader around the twine about 3 times during the season. If care is taken, a double stem system can be twisted around the same supporting twine. However, it is advisable to provide another supporting line for the second stem. Topping plants after the third tie is neither necessary nor recommended. As long as the plants are healthy and foliage is maintained, the plants will produce throughout the entire growing season.

**Wire Cylinder Method.** The cylinder method eliminates the need to prune and tie. It works with indeterminate and determinate varieties. The wire should have a 4-6 inch mesh to allow reach through to pick the ripe fruits. Cattle fencing or wire mesh used in reinforcing concrete works well and should last for several years. A piece 6 feet in length will form a cylinder about 22 inches in diameter.

Plants set 24-30 inches apart will permit one plant per cylinder. To prevent a cylinder from blowing over in the wind, it is wise to anchor the base to 3 pieces of metal or wood that have been driven 8 inches into the ground at 3 locations around the base. The only training needed is to guide any shoots back into the cylinder if they should start to grow through the mesh.

When frost forecasts you may cut the plant at ground level and take it, while still inside the cylinder, indoors. The fruit will continue to ripen for a few weeks on the severed plant.

Picture compliments of Parks Seed