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TOMATO TIPS & TRICKS!

Tomatoes are easily the favorite fruit grown by home gardeners. They're easy to plant, require little space, bear profusely over a short period of time, and require little maintenance. Here are some of my secrets to help you dramatically improve your tomato-crop success.

CLASSIFICATIONS

There are basically three ways to classify tomatoes—according to **fruit shape, time to maturity, and color.**

Fruit Shapes

There are five major fruit shapes. From the smallest to the largest, they are **cherry, plum, pear, standard, and beefsteak.** They are defined by weight in a range from 1/4 ounce to several pounds.

- Cherry tomatoes are the smallest, and are produced in clusters, like grapes. They have a tendency to crack if not picked regularly.
- The plum and pear tomatoes are the fruit shapes, and weigh between 2 and 6 ounces. Normally, they have meaty interiors, thick fruit walls, and less gel than the others.
- Standard tomatoes are round to globe shape, weighing between 4 and 8 ounces.
- Beefsteak tomatoes can be 2 pounds or more depending upon the variety. The shape is usually oblate.

Maturity

Tomatoes are categorized by their maturity date, which is the number of days from planting outdoors to expected ripe fruit. Tomatoes can be **early, mid-season, or late.** Early tomatoes will ripen from 55 to 65 days from transplanting. Mid-season is considered 66 to 80 days for ripe fruit. Late types require over 80 days to ripen. Make sure you pick a variety that is suited to your area.

Color

Tomatoes come in a wide variety of colors, ranging from creamy white through lime green to pink, yellow, golden, orange, and red. The major difference among the colors are the flavors. Pink, yellow, and orange tomatoes are milder tasting than most red varieties.

PLANT GROWTH

There are basically two types of tomato plant growth, **determinate** and **indeterminate.** Indeterminate varieties grow, blossom, and produce tomatoes throughout the growing season until they're killed by frost. The continuous growth produces many main stems, all capable of flowering and producing fruit.

To identify an indeterminate plant, look at the main stem—in a normal plant, there are three leaf stems growing from the main stem. Above or below the three stems, you will find a flower cluster. This pattern is repeated over and over on the main stem.

Indeterminate plants should be pruned to harvest larger tomatoes. To prune, simply pinch out the suckers, which are shoots that develop in the “V” between the main stem and a branch.

Determinate tomato varieties are relatively compact, and produce full, bushy plants. These plants will reach a predetermined height or number of fruit clusters, and not grow beyond it. The plants flower, set fruit and ripen in a short period of time so that the main harvest is concentrated into a few weeks. This is ideal for folks who want to can or preserve their fresh tomato harvest. Instead of three leaf stems and a flower cluster, determinate varieties have two leaf stems and a cluster.

There is a third type of tomato plant called a semi-determinate, which is a bushy plant that will set and ripen fruit over a longer period of time than a normal determinate plant. The best way to grow determinate or semi-determinate plants is to NOT prune them, instead placing a cage around the plant while it is still quite small. As the plant grows, it fills the cage. Then you only need to harvest the fruit as it ripens.

CHOOSING PLANTS

Most folks find it convenient to buy tomato seedlings. When choosing plants, pay particular attention to their color and shape. Choose uniform, medium-green (not light green or yellowing) plants. Short, stocky, compact plants are preferable to tall, thin, leggy ones.

PLANTING TIPS

Tip # 1 – When to Plant

Set your plants outside after all danger of frost has past. Tomatoes are very susceptible to frost damage, so covering them is essential if old Jack Frost is coming to visit.

Tip # 2 – Where to Plant

Tomatoes need full sun; even partial shade will reduce your yield. They thrive on sun and heat, so long as they are given enough food and water.

Tip # 3 – Soil Prep

Tomatoes grow well in varying soil conditions. They like rich, loose soil, but will do well even in less desirable soil provided it

is worked up well and fortified with nutrients. Compost, humus, peat moss or sand added to the soil for loosening is very beneficial.

For the healthiest tomatoes, the soil should be thoroughly worked up in an area 2 feet around the plant, to a depth of at least 12 inches. Tomatoes develop tremendous root systems in loose soil, but the roots have extreme difficulty penetrating hard, compacted soil.

Tip # 4 – How to Plant

There are several different ways to plant tomatoes. The traditional method is to dig a hole in the ground, and place the plant in it. For northern gardeners, if your plants are tall and leggy, don't worry, just dig a deeper hole, and bury the plant up to the first leaf stem. The buried stem will grow roots, which helps develop a deep root system. I don't recommend deep hole planting for southern gardeners because it encourages the growth of fungal rot on the young stem.

Some folks use the trench method of planting. A long, shallow hole is dug, and the tomato plants are laid horizontally into the trench. Pinch all but the top leaves off of the stem. Keep the top two to three inches of the stem out of the trench. Push soil on top of the trench, and push a pillow of soil under the top stem. The stem will grow up towards the sun. Because the bulk of the stem is buried at a shallow level, the newly developing roots and surrounding soil will warm up relatively quickly. This is great for those of you living with a short growing season. With the roots close to the surface, be sure to water deeply to encourage deep root growth.

If you intend to “sprawl” your plants, set them 4 feet apart. For staked plants, spacing them approximately 2 feet apart in rows 4 feet apart should be fine. After planting, protect the stems from cutworms (which destroy plants by chewing the stems off at ground level) by placing a cardboard collar around each plant.

FEEDING

Initially, small tomato plants need a lot of phosphate to develop properly and set fruit. So use a fertilizer with a higher middle number (5-6-5). Before planting, mix a small amount of

fertilizer and Epsom salts into the soil around and under where the plant is to be set. Then side-dress the plant with a couple of handfuls of dry fertilizer once a month during the growing season. Animal manure may be used, but it should be supplemented with bonemeal when the plants are set out. After that, feed your plants every 3 weeks throughout the growing season with my All Season Green-Up Tonic.

SUPPORT

Some folks allow their tomato plants to sprawl to save themselves the hassle of tying and pruning. If that's your method, then the weight of the tomatoes will be greater, but they will be smaller; the chance of rotting will also be greater. Make sure you use mulch under the plants to reduce rotting and conserve moisture.

Most professionals prefer staking their tomato plants because it is neater and requires less room. Staked plants should have, at most, two to four stems. Prune your plants every few days by pinching off any suckers. This pruning speeds up the development of fruit, and increases the size of individual tomatoes.

STAKING METHODS

You can use any one of several different staking methods. A 6-foot metal stake, driven 1 to 2 feet into the ground, is most common. Avoid tying up plants with small strings or wires which can cut into stems. Thin strips of nylon pantyhose are idea for this job.

Another method is to drive two posts into the ground, one at each end of a row of a dozen or less tomato plants. Stretch a metal wire from one post to the other at a height of 6 to 7 feet. Above each plant, drop a double stand of twine which can be wrapped around the stem of each developing plant. A variation on this is to simply stretch a wire fence between these two posts, and tie the plants to the wire.

One of the very best (and my favorite) methods is to make a tomato cage out of the kind of fence with large spacing between the wires. Weave alternate strands of wire over a 1 x 2" stake that is 4' long, and drive it a foot into the ground so that the post will support the basket. Your plants will develop freely in the cage, and are held off of the ground. No tying

or pruning is needed.

MULCHING

Mulching is extremely important for tomato growing success. Mulch:

- ✓ maintains constant water content in the ground which helps prevent diseases like blossom-end rot;
- ✓ preserves the moisture that is already in the ground during the hot day;
- ✓ prevents the soil surface from baking, which causes rainwater to runoff; and
- ✓ eliminates the need for constant cultivation around the plant.

Plastic sheeting, newspaper, straw, leaf mold, grass clippings, and wood chips are great for mulch.

BUGS & THUGS

These pests can be controlled by regular applications of my All Season Clean-Up Tonic. If strong medication is necessary, use any pyrethrin containing control. Be particularly alert for tomato horn-worms; they can defoliate a plant overnight!

Early and late blights are fungus diseases which cause spots on leaves. Fusarium wilt can attack the plants through the roots which causes them to die. This disease remains in soil for several years. If you lose your crop to it, move elsewhere in the garden for subsequent plantings. Wilt is best overcome by buying wilt-resistant varieties of plants, such as Better Boy VFN and Terrific VFN.

HARVEST TIME

Green tomatoes must be gathered before they are exposed to the cold because tomatoes can't stand any amount of frost. You can ripen green tomatoes by cutting off the entire plant at root level, and hanging it upside-down in the basement. You can also wrap them in newspaper and stick them in a box that has an apple in it. This'll speed up the ripening process.

PRESERVING TOMATOES

Although most people know that tomatoes can be canned, they don't realize that they are also easily frozen. Freezing tomatoes is simple; place whole tomatoes on a baking sheet, freeze them, and then store them in plastic bags. The skins will crack during the process, which makes it easy to peel them when the tomatoes thaw out. They will keep for up to a year or so in the freezer.

TROUBLESHOOTING PROBLEMS

Despite your best efforts, there is nothing more frustrating than harvesting fruits that look like they came from Dr. Frankenstein's laboratory. While you might want to blame insects or diseases, it may be that the variety, the weather, or even your gardening habits are the actual problem.

To help you troubleshoot what's spoiling your tomatoes, here's a list of the most common tomato problems that are not caused by insect or diseases:

- ✓ **Botched ripening:** This condition is characterized by yellow-gray patches on the fruits, which never mature properly. It's caused by cool temperatures; you can prevent it by growing varieties that produce fewer leaves, and by not applying too much high nitrogen fertilizer.
- ✓ **Blossom-end rot:** You know you have this problem when the top of the fruit suddenly collapses and rots. The problem, however, starts with the soil. Either it doesn't have enough calcium, or it got alternately wet and dry. Add crushed eggshells to the soil, use a commercial Rot Stop spray, and keep the soil moisture constant by using mulch, a soaker hose, or both.
- ✓ **Fruit cracks:** This condition is similar to blossom-end rot, but has circular cracks that develop on top of the ripening fruit. It's caused by fluctuations in the soil-moisture. Mulching well will keep the soil moisture

constant. Also if you see this condition developing, reduce the amount of nitrogen in the fertilizer you're using.

- ✓ **Green Shoulders:** If the tops of your tomatoes stay green or yellow instead of ripening normally, then they're giving you the green shoulder. If that's the case, then pick them later while they're still green (but before the frost gets them), and let them ripen indoors.
- ✓ **Sunscald:** This problem causes the fruits to develop lightly colored patches that eventually rot. This is just the opposite of blotchy ripening. You can prevent this condition by keeping the plants leafy and the fruits shaded (use Harvest Guard fabric). Also, be very selective when pruning out suckers and leaves.
- ✓ **Zippering:** If you've got fruit with a thin dark line that runs from the stem to the bottom of the fruit, then you've got zippering. Cold temperature early in the season cause poor pollination. To avoid this keep your young plants warm and protected by covering them with Harvest Guard fabric.

GROWING SECRETS

- ⊙ Buy young plants with healthy green leaves and no flowers. Avoid any plant with thin, yellow, or scraggly stems.
- ⊙ Plant where they'll get plenty of sunshine, in a sheltered (from the wind) location.
- ⊙ Add compost or rotted manure to the soil when planting, and fertilize often.
- ⊙ Stake with metal poles, and tie with panty-hose strips to supercharge the atmosphere.
- ⊙ Bury a bottomless can or milk jug next to the plants, fill it with stones, and then use the can to get water directly to the roots.
- ⊙ Place green tomatoes left over at the end of the season in a box with a few apples or bananas—they emit a gas that's a ripening agent.