# **HELPFUL GROWING TIPS & TERMINOLOGY**

### SOIL & INPUTS

Since tomato health and luscious flavors depend on fabulous soil, now's the time to start preparing! Years ago a customer told us that her mother always said, "Buy it cheap, buy it twice!" This certainly applies to soil! During our 5 years in the Farmers Markets, we've never heard anything positive about bulk soil – except that it costs less. Reports are always that it tends to be lifeless and the plants just sulk. So do yourself a favor and start with high quality soil, and consider it a sound investment!

### Cheap soil will not produce million dollar tomatoes!

If, like us, you grow your tomatoes in EarthBoxes, please use the OMRI-Listed Black Gold Organic WaterHold Potting Mix as we do, and think of it as money well spent. We sell it in the 16 qt. size, which is really easy to handle; you'll need 3 bags per EarthBox.

In addition to the EarthBox Kit's own Organic Plant Food and Dolomite Lime, we also add 4 cups of Black Gold OMRI-listed Worm Castings, a handful of Soft Rock Phosphate and 1 Mycorrhizae "tea bag" to each EarthBox to insure our soil is thriving with microbial activity!

We use a Red Mulch Cover, and plant ONLY ONE Tomato Seedling per EarthBox. We install the cone-shaped cages, stacked one on top of the other (with stakes for stability) over each plant immediately; it's easy for them to "get away from you" if you wait.

If we're **re-planting** an EarthBox, we remove old plants & big roots from whatever was the previous crop, loosen the soil, and add Black Gold Compost & Worm Castings to revive the soil and to replace lost soil volume. Then we proceed as above.

For those planting in raised beds or in the ground, remove any old crops, loosen the soil, and amend it well with high quality Black Gold OMRI-Listed Garden Compost and a generous amount of Black Gold Worm Castings. If your soil is rocky or sandy and won't hold water, amend with our Black Gold Just Coir ready-touse Coco Coir and Black Gold Compost. Tomatoes have large root systems and really benefit from rich, lofty soil.

### LOCATION, LOCATION...

Tomatoes are solar-powered sugar factories and love full sun! They require at least 7 to 8 hours a day (more is even better), so whether you plant in EarthBoxes or in the ground, carefully consider your site. Tomato plants need the sun for photosynthesis which creates the energy and sugars they need to produce incredible tomatoes for you! Too little sun and you'll be all foliage and no fruit!

### **PLANTING OUT**

There are so many opinions on how to plant a tomato, but everyone does agree that they are "heavy feeders," and that this is not the time to skimp on great soil and amendments! Your soil may already be rich, lofty and teeming with beneficial worms and microbes because you've regularly cared for it, or it may be hungry, parched and lifeless. Whatever the case, you can tinker with the formula below accordingly:

When you plant out, dig a good-sized hole (at least 8" deep x 10" wide). Put about 1/3 of the topsoil you removed back into the hold and add the following:

two trowels of Black Gold OMRI-Listed Garden Compost
a half-trowel of Down to Earth Organic Veggie Fertilizer
a half-trowel of Dolomite Lime
one trowel of Black Gold Organic Worm Castings
one trowel of Dr. Earth Soft Rock Phosphate
and the contents of one Mycorrhizae Tea Bag

Mix all these together in the planting hole and water thoroughly. Gently place the plant deep into the well-watered soil, all the way up to its first set of leaves or even much deeper; the sunken stem will develop roots all along its length, thereby creating an even stronger foundation for your eventually-huge plant. Fill the rest of the way, if needed, with the original top soil. Tamp it in firmly, and remove any yellowed leaves and all initial blossoms - you want your plant to be concentrating on developing a great root system for the first few weeks. Water it in and wish it happiness.

### **SPACING & SUPPORT**

Speaking of huge plants, Heirloom varieties can get very large and need good air circulation, so please space your seedlings 3' apart and allow 4' between the rows, and provide them sturdy support. Allowing your plants to sprawl on the ground will only encourage diseases.

We suggest strong, stackable square tomato cages, which fold flat for winter storage; made of galvanized, powder-coated steel wire, they will see you through many bountiful seasons. We also recommend galvanized steel cone-shaped cages which fit perfectly into an EarthBox. Stacking 2 cages, one on top of the other, and weaving a stake down through them on each side, provides more than 8' of vertical support, which will come in very handy as the season progresses! (I got this idea from our friend, Yvonne Savio, who for many years directed the California Master Gardener Program in Los Angeles!)

### WATERING

The biggest, and most common, mistake when growing tomatoes

is over-watering. Don't trust your eye; trust a moisture meter if you're unsure. If it reads "moist", resist the temptation! Or stick your finger into the soil – if it's still moist a couple of inches down, don't water. Remember overly-watered plants produce "watery-tasting" tomatoes!

If you're in EarthBoxes, just keep the reservoir filled, and note that as the plants get big and start fruiting like mad, you will need to fill up once a day – maybe twice, if the weather is quite hot. If you're in Smart Pots or other containers, you will probably water twice a week thoroughly, and if you're in the ground or raised beds, a deep watering once or twice a week will suffice.

**Here's a tip**: if the plants look droopy at the end of the day, don't water; if they are still droopy in the morning (after being exposed to evening dew), go ahead and give them a drink. It's ALWAYS better to err on the side of under-watering.

And please, oh please, do not water your plants with the sprinklers! As best you can, keep the foliage of your plants dry; otherwise, you're inviting fungal diseases. And if you feed with a foliar spray (Great Big Tomatoes, for example, which we highly recommend), please do it in the morning or early evening, so as not to stress the plants in the mid-day heat.

## MULCHING

It's a very good idea to mulch your tomato beds. This will discourage weeds, keep the soil moist and warm, and help prevent splash-back when watering. Deep layers of straw, leaves, ground cloth held in place with earth staples or simply sheets of plastic...it doesn't really matter which. Recent studies at Cornell University have shown that RED plastic mulch increases tomato (and strawberry) yields by 12–20%. We sell the individual Red Mulch Covers from EarthBox, so don't forget them for your Tomatoes and Strawberries!

#### FERTILIZING

Excessive fertilizing can leave you with lots of leaves and little fruit, but tomatoes *are* "heavy-feeders", so experiment with these guidelines; much will depend on the quality of your soil.

If growing in an EarthBox, simply add the entire package of OMRI-Listed Plant Food that comes with your kit (or Replant Kit). We always add Worm Castings and Mychorrizae to our EarthBoxes also, and do foliar feedings throughout the season. It's also a great idea to simply add an Organic Liquid Fertilizer right into the water reservoir of the EarthBox every couple months.

But if you're growing in another type of container, or in raised beds, we suggest an application of granular fertilizer at the time of planting out, another application when the plants set fruit and roughly every three weeks thereafter.

Tomatoes are hungry so see what works best for you. And since plants actually absorb nutrients very efficiently (and much quicker!) through their leaves, we also highly recommend Great Big Tomatoes Liquid Compost for regular foliar feeding and soil drenches.

### PRUNING

And finally, because leaves do tend to *get yellow and fall off, starting from the bottom up*, we are not big fans of excessive pruning. Snip off the first 8" of leaves & branches from your plants to increase air circulation. Your tomatoes need sufficient foliage for photosynthesis and to help shield them from sunburn, otherwise known as "sunscald." If too much direct, hot sun ever threatens to burn your tomatoes, and foliage is sparse, a temporary canopy of shade cloth can save the harvest!

#### **COMMON PROBLEMS**

**Powdery Mildew** – Powdery Mildew comes from an air-borne fungal spore; warm days and cool nights with some humidity is all it takes! So, it's important NOT to wet your leaves when watering (which only encourages it), and in fact, we suggest you remove the first 8" of leaves from your plants to prevent contact with the wet soil. And be sure your plants get at least 7-8 hours of sun per day. Although there's not a 100% effective treatment available for organic gardening, we've found the OMRI-Listed "**Mildew Cure"** really does help keep it in check if you catch it early and spray regularly. We sell it in a handy ready-to-use spray.

**Tomato Horn Worms** – (In California, we actually have Tobacco Horn Worms, which are equally problematic!) These prehistoriclooking creatures can eat an entire plant practically overnight, so be on the lookout! Generally you can spot them where you see evidence (chewed up leaves and fruits) and simply hand-pick them (sometimes they cling – don't lose your nerve!), and dispose in the trash. You'll usually see their poop before you see them...watch for round balls of dark or greenish poop on the leaves or soil surface, and look up! If the worms are winning the war, we suggest using OMRI-Listed **"B.T." by Monterey**, which kills caterpillar-type insects with no damaging effect on bees, birds, ladybugs, or beneficial garden worms.

**Blossom End Rot** - In addition to an even, deep-watering schedule, tomatoes need a dose of **Dolomite Lime** (mixed into the soil) to help prevent the heartbreak of Blossom End Rot. The Dolomite is a source of calcium which makes for strong cell walls, and when there is a lack of calcium, or an unintended dry spell, the furthest-most cells from the stem (the blossom end of the

fruit) collapse and become black and leathery...you can remove this part and still eat the tomato, but it's better to prevent the problem from the start!

The EarthBox Kit includes its own OMRI-Listed Dolomite, and we also sell boxed Dolomite Lime separately, for those of you growing in beds or other containers; it's approved for organic gardening.

NOTE: All of the great organic products mentioned here, and many more, are available for sale at our Nursery; you can see them all on our <u>Products We Love page</u>.

## TO SUM UP...

Check your plants daily, pick off any worms you might find, try to keep the foliage dry, keep the End All, BT and Mildew Cure handy, give 'em loads of sun, fertilize and foliar feed regularly, and <u>don't over-water</u>. Things should go smoothly.

Don't forget weather plays a huge role in growing great tomatoes; too hot or too cold, and the blossoms can drop, etc., so don't panic if it doesn't go exactly how you'd planned. You'll always hear gardeners talking about "great tomato years" and "bad tomato years".

Remember, too, that as soon as a plant begins to set fruit, the leaves are no longer its focus because now it's concentrating on producing incredible tomatoes for you, so please don't freak out if your foliage doesn't remain "pretty" like when it was younger (it won't). We've *never* had a tomato plant remain beautiful once it started fruiting, and yet, we've harvested tons of amazing, delicious tomatoes!

**SHIPPING...** <u>**PLEASE NOTE:**</u> We NO LONGER SHIP live plants or products.

## **HELPFUL TOMATO TERMINOLOGY:**

**"HEIRLOOM"** – There are many definitions of what constitutes an Heirloom variety. Dr. Carolyn J. Male discusses this topic fully in her wonderful book, *100 Heirloom Tomatoes for the American Garden*, but the general idea is that to be called an Heirloom, a tomato (or other edible) must:

- Be Open-Pollinated (by Nature, not a man-made Hybrid)
  Have been around for at least 50 years
- ∞ Have had the seeds handed down from generation to generation within the same or extended family
- so And/or be traceable to a particular geographical location.

NOTE: All Heirlooms are Open-Pollinated, but not all Open-Pollinated varieties are Heirloom...yet, anyway! One of our suppliers refers to his tomatoes as "Heirlooms of the Future!"

ANOTHER NOTE: Seeds properly saved from Heirlooms or Open-Pollinated varieties will grow "true to type" the next season; seeds from Hybrids will not!

*OK, A FINAL NOTE:* **Please know that "Hybrid" does <u>not</u> equal "GMO!!"** A Hybrid results from man-made selective breeding of tomatoes with other tomatoes, NOT of a tomato and a fish, for example! And being Certified Organic, Two Dog Nursery will never use Genetically Modified seeds, but we will offer certain Hybrid varieties for their excellent characteristics.

**"REGULAR LEAF"** – Regular leaves are the most common type and have serrated edges.

**"POTATO LEAF"** – Potato leaves are somewhat less common. They are large and have distinctly smoother, un-serrated edges. **"WILT GENE"** – Commonly present in heart-shaped tomatoes (Brad's Black Heart and Anna Russian, for example), this gene causes the foliage to appear wilted, droopy, and in need of water (which it is not). It doesn't in any way affect the production or taste of the fruit, so please do NOT overwater!

**"DETERMINATE"** – Determinate varieties are "bush" types which are smaller and more compact...excellent for small spaces and not requiring lots of support. They grow only until they set their first fruit, and typically, their fruits ripen all at the same time, which is great for sauce making.

**"INDETERMINATE"** – Indeterminate plants grow, set blossoms, and produce fruit simultaneously and continually until killed off by frost. They average at least 6 to 9 feet in height and require substantial support.

**THE NUMBER OF "DAYS"** – This is the time it takes from planting out your seedlings until you can expect to harvest mature fruit. Use this information when selecting which varieties are right for your growing season and to plan your Early-, Mid-, and Late-Season harvests. Click here to see the <u>"2018 Varieties</u> by Season" page.

**FRUIT OR VEGGIE?** – In case you were wondering, tomatoes ARE fruit, but in 1893, the United States Supreme Court allowed them to be re-classified as "vegetables" as a way to increase tax revenues...hmmm.

### FINAL SUGGESTIONS

- As a "beneficial companion," plant lots of our fragrant, edible Organic French Marigolds around your tomatoes (the flower petals are lovely in salads). Marigold roots exude a substance that kills Root-Knot Nematodes, which can render tomato roots incapable of absorbing soil nutrients. (The formula in Great Big Tomatoes includes a special nematicide, too.)
- So Don't forget that a simple shade cloth can save your entire season; have one handy to cover your plants when the temperatures really soar!
- Also, since tomatoes are primarily self-pollinating, shake your plants gently for a few seconds once or twice a week to help distribute pollen and increase tomato yields.
- So Talk to your plants honestly, they're listening. And play them music...according the *The Secret Life of Plants*, they don't like jazz or rock, but they love Classical and especially enjoy Ravi Shankar!
- So Most of all, please BE CONFIDENT! Immediately stop affirming that you "kill everything"; you DO have a green thumb! The plants know what to do, so have some faith, OK? After all, your greatest "cheerleader" is Mother Nature, Herself, and She knows what She's doing!!

Thanks so much for your business. Have fun, and as always, Happy Harvests!