HELPFUL GROWING TIPS & TERMINOLOGY

SOIL & INPUTS

Since tomato health and luscious flavors depend on fabulous soil, get the best your budget can afford! Years ago a customer told us that her mother always said, "Buy it cheap, buy it twice!" This certainly applies to soil! In our 12 years, 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! If the budget doesn't allow our Black Gold Potting mix, go ahead and purchase bulk, but only fill your beds 75-80% of the way with bulk, and save that last 25% to add in the Black Gold Compost & Worm Castings, which will enliven and enrich your soil.

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. (We also sell it in the 1.5 cu. ft. size, if you don't mind lifting it.)

In addition to the EarthBox Kit's OMRI-Listed 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 plant per Box for the greatest yield. We install the square, folding cages, stacked one on top of the other (with stakes for stability) over each plant.

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 Black Gold Worm Castings. If your soil is mostly clay, add Black Gold Compost; if it's rocky and won't hold water, amend with the Black Gold "Just Coir" coco coir. Tomatoes have large root systems and really benefit from rich, aerated soil.

LOCATION, LOCATION...

Tomatoes are solar-powered sugar factories and love full sun! They require at least 6 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 Compost

a half-trowel of Down to Earth Bio-Live (or All Purpose) Fertilizer

a half-trowel of Espoma Garden Lime

none trowel of Black Gold Organic Worm Castings

so one trowel of Dr. Earth Soft Rock Phosphate

and one Mychorizzae 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 (you can bury 1/3 of the plant); 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 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 tomatoes 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 use stackable square tomato cages, which fold flat for winter storage; they're made of galvanized, powder-coated steel wire which will see you through many bountiful seasons. Stacking 2 cages one on top of the other, and weaving a stake down through them, 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 directed the California Master Gardener Program in Los Angeles for years!)

WATERING

The biggest 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 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 likely need to fill up once a day. If you're in Smart Pots or raised beds, water twice a week thoroughly.

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 taking in night time dew, go ahead and give them a drink. 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), 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%. The OMRI-Listed EarthBox Kits we carry include one red mulch cover along with the two traditional black ones. We also sell packs of Mulch Covers from EarthBox, both in Red & Black.

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.

But if you're growing another container, or in raised beds, we suggest an application of granular fertilizer (we use Down to Earth Bio-Live or All Purpose Fertilizer) at the time of planting out, another application when the plants set fruit and roughly every two to three weeks thereafter.

PRUNING

We are not fans of pruning. Tomato plants begin showing yellowing/spotty leaves starting from the bottom up early on; we do snip those off, but we do NOT pinch out suckers. Tomatoes need sufficient foliage for photosynthesis and to help shield the fruit from sunburn, otherwise known as "sunscald." If too much direct, hot sun ever threatens to burn your tomatoes, and the foliage is sparse, a temporary canopy of shade cloth can save the entire harvest and is a good idea to have on hand.

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 for the spores to land on Tomatoes, Squash, Melon, etc! So, it's important NOT to wet your leaves when watering (which only encourages it); water just the soil, by hand or drip line. We also recommend removing at least the first 8" of leaves from your plants to prevent them from making contact with the soil. And be sure your plants get at least 7-8 hours of sun per day and space them 3' apart. We've tried all the homemade "remedies", and have had little to no success. It's the bane of the summer garden, but don't worry, it will NOT affect tomato production!

Tomato Horn Worms – These prehistoric-looking creatures can eat an entire plant practically overnight, so be on the lookout! Generally you can spot them where you see evidence (eaten leaves and fruit) and simply hand-pick them (sometimes they cling – don't lose your nerve!), and dispose in the trash. You'll often 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 to find them. We recommend and sell Monterey B.T. for both Horn Worms and Cabbage Worms (spawned by those white pretend-

butterflies, which are in fact, cabbage moths, that lay eggs everywhere which hatch small green worms that love to eat!)

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 rot...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 6.75 lb. bags of Espoma Garden Lime, 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, can be seen on our <u>Soils & Products page</u>.

TO SUM UP...

Check your plants daily, pick off any worms you might find, try to keep the foliage dry, keep the Safer 3-in-1 and Monterey B.T. handy, give 'em loads of sun, fertilize regularly, and <u>don't over-water</u>. Things should go smoothly.

Don't forget weather plays a big 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 anything - plants, trees 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
- May 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" 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 tomatoes, NOT of a tomato and a fish, for example! And being Certified Organic, Two Dog Nursery will never use GMO 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 or 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 container gardening 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 find 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 "2020 Varieties 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 Durango 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.)

- Tomatoes are primarily self-pollinating, so I give each plant a gentle shake for a few seconds each morning to help distribute pollen and increase tomato yields.
- Talk to your plants honestly, they're listening. And music... according the *The Secret Life of Plants*, they don't like jazz or rock, but they love Classical music and Indian Classical music, especially Ravi Shankar!
- 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. 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!