



7 GARDEN SUCCESS TIPS

TIP 1: THINNING IS IMPORTANT

Since you will be planting intensively (see “Plant Spacing” handout), it’s important to make sure you thin. Thinning should take place as soon as the seeds come up, generally 1-3 weeks after planting.

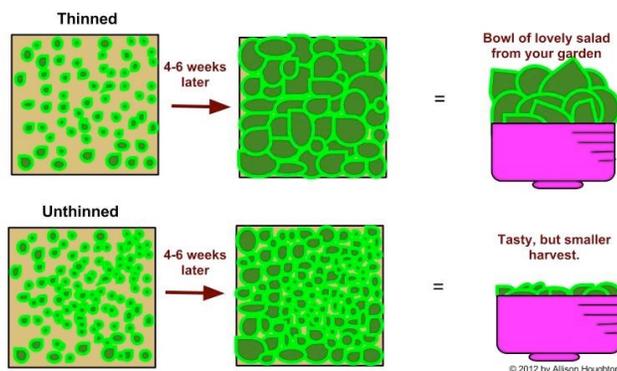
NOTICE HOW THIS CHARD IS SPACED

Several inches exist between each plant. Each time the outer leaves are harvested, space opens up to allow each plant to get even bigger. Had these plants not been thinned, the chard would only grow to half its potential.



TO THIN OR NOT TO THIN

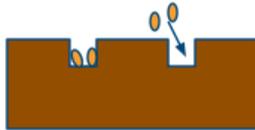
Thinning is counter-intuitive. Pull out plants to have a bigger harvest?! Perhaps that is why so many beginning gardeners are hesitant to do it! But in this case less plants equals more. Individual plants need enough space to grow, otherwise their growth might actually be stunted, resulting in a much smaller yield, as shown below. Thinnings need not go to waste! Use these micro-greens to top your salads and dishes.



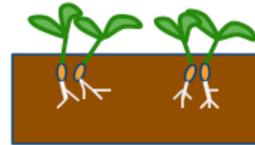
THINNING ROOT CROPS

It's important to thin root crops and fruiting crops (tomatoes, eggplant, etc.) because they will produce less if not spaced properly. Spacing will depend on the type of plant. For example, 16 carrots can grow in one square foot, whereas tomatoes will be 2-3 plants per row of 4 1x1 foot squares.

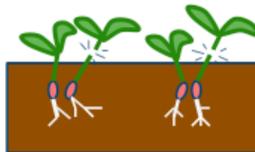
1. Since not every seed is guaranteed to sprout, we put 2 seeds in each hole. That way we can be relatively certain we'll get a plant in each space



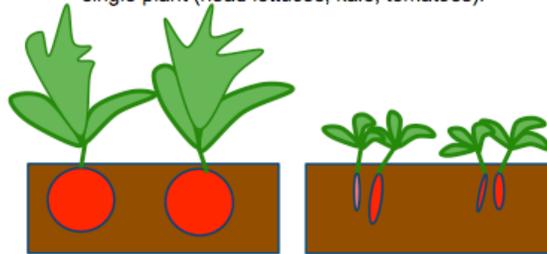
2. With some water and time, the seeds will begin to sprout.



3. Time to thin these guys! Pinch off the second plant so only one remains in each space. Do this as soon as they emerge (1-3 weeks after seeding).



4. Thinning reduces competition of nutrients and root space. It is especially necessary for root crops like carrots and radishes but is also important for getting a full, large single plant (head lettuces, kale, tomatoes).



Thinned

Not Thinned

Just LOOK at the difference!

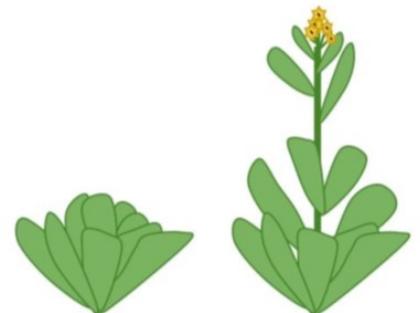
TIP 2: BOLTING

Cool weather greens such as lettuces and other greens get leggy and produce flowers in warmer weather: this is bolting. Lettuces become bitter when they "bolt" and are often considered inedible at this point. Greens such as arugula, spinach, mustard, and kale may get more flavorful or spicy, but are still edible.

Some plants like kale and chard are biennial. They take 2 years (or they must go through a winter cold spell) before they bolt, meaning they can produce all season long through cool and hot weather.

HOW TO DELAY BOLTING

It is a good idea to harvest plants before they bolt. Delay bolting by pinching off flowers as they appear. This is useful with any greens except lettuce (which is too bitter to eat once it begins bolt).



TIP 3: HARVESTING REGULARLY

(BEANS & TOMATOES)

Did you know that if you don't pick your beans regularly, the plant gets the signal to stop producing? So pick your beans as they are ready! That means at least once a week in the height of the season. If the harvest is too much, consider only maintaining a few plants by picking them regularly. Beans that are intentionally left unmaintained can dry on the vine and be collected later as seeds or to be cooked and eaten at a later date.

On the left, Farmer Jason is picking tomatoes that are 1-2 days from being ripe. They finish ripening easily on their own in a day or two, and getting them off the plant keeps it healthy and productive.

On the right, is his harvest from this garden: Sungold (orange cherry), Early Girl (red), Wapsipinicon Peach (fuzzy, yellow), and Green Zebra (striped green and

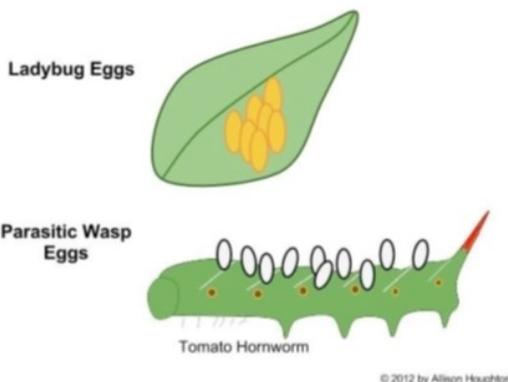


TIP 4: IDENTIFYING INSECT EGGS

Being able to identify a handful of insect eggs, can prevent pests and encourage predators. Here are some eggs of some common garden bugs that we see fairly regularly in our garden.

BENEFICIAL BUG EGGS

Delay any pest management that would harm them.

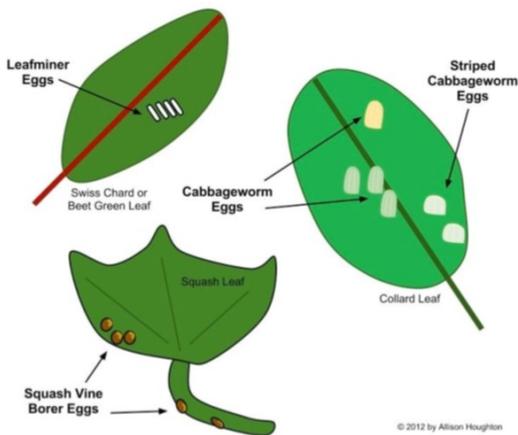


Ladybug eggs - Smooth oval, translucent eggs that are yellow to light orange and laid in clusters. Usually laid on the undersides of leaves. If you see these eggs and aphids are present at same time, just wait for the ladybug larvae to hatch. These alligator-like larvae are voracious aphid eaters, even more so than the adults.

Parasitic Wasp - Oval, opaque, white eggs that are typically laid on the back of a living host. We see these most often on Tomato Hornworm Caterpillars. If you see them, leave the caterpillar in your garden.

BAD BUG EGGS

Remove them from leaves to prevent further problems.



Leafminers - Eggs are tiny, white, pill-like and come in rows of 2 - 6 on the undersides of leaves of spinach, chard, and beets. Once they hatch, the worms burrow into the leaf making it look puffy and discolored. Catching them early can really help young chard.

Cabbageworms - Tiny translucent green to yellow eggs often on leaves of plants in the cabbage family: broccoli, collards, Brussel sprouts, and kale. In clusters of a dozen or more or scattered individually over leaf surface. Striped cabbageworm eggs are similar, but a little more rounded and translucent white.

Squash vine borer eggs - Eggs like brown to orange-brown sesame seeds laid individually on the lower parts of stems of zucchini and other squash plants. They are sometimes found on leaves. Eventually they hatch and the larvae bore into the stems of the squash, causing leaves to wilt and die back.

TIP 5: FOLIAR FERTILIZING

We use foliar fertilizers, meaning fertilizers applied to the leaves. We use a spray bottle or watering can to wet leaves with various fertilizers. This directly provides much-needed nutrients and beneficial microbes during times of heaviest production.

COMPOST TEA

We spray compost tea on our gardens every 1-2 weeks in the late spring through the summer. Compost tea increases the beneficial bacteria and fungal populations in your garden and supplies some of the nutrients your plant is using heavily during this time. Compost tea boosts your plants' "immune systems", and decreases the likelihood of fungal/bacterial diseases from taking hold. An excellent preventative.

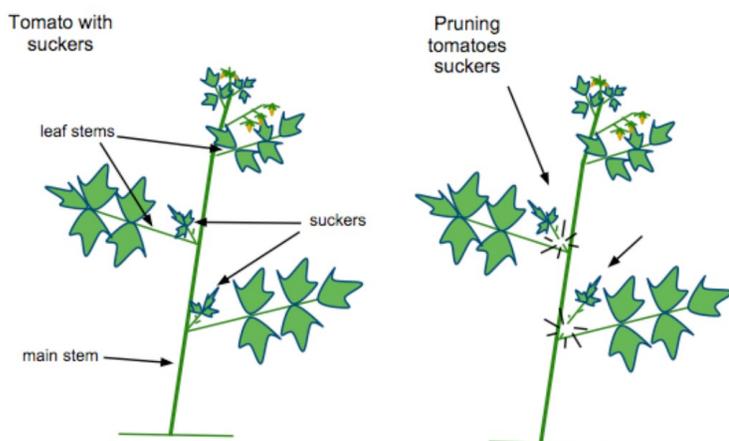
NEPTUNE'S HARVEST FISH & SEAWEED BLEND

We typically dilute this blend in water and apply to leaves (and soil) with a hand sprayer or watering can on the leaves and soil. If possible, alternate with compost tea.

BLOSSOM END ROT (CALCIUM) SPRAY

When the first tomatoes of the season are beginning to ripen, we sometimes see Blossom End Rot caused by a calcium deficiency in the soil (or your plants not being able to access calcium that is there: not enough beneficial microbes!). Calcium is very important for fruit development. Spraying the leaves with a calcium spray like "Rot Stop" if you see blossom end rot or just before you expect to see signs of it, can help prevent blossom end rot from being too much of a problem.

TIP 6: PRUNING INDETERMINATE TOMATOES



Suckers grow between the main stem and the leaf stems. To prune, pinch suckers off at the base. Be careful to make a clean break and not to strip away plant tissue from main stem.

There are 2 different types of tomatoes: determinate and indeterminate. Indeterminate tomatoes grow an undetermined number of tomatoes and branches and need pruning. Determinate tomatoes are more compact with a set number of leaves and fruits, and should not be pruned.

Look up your variety in a seed catalog or the back of the seed packet to find out whether it is determinate or indeterminate. A good resource is Johnny's Selected Seeds website or catalogue. When you buy tomato starts ask whether they are determinate or indeterminate.

WHY PRUNE?

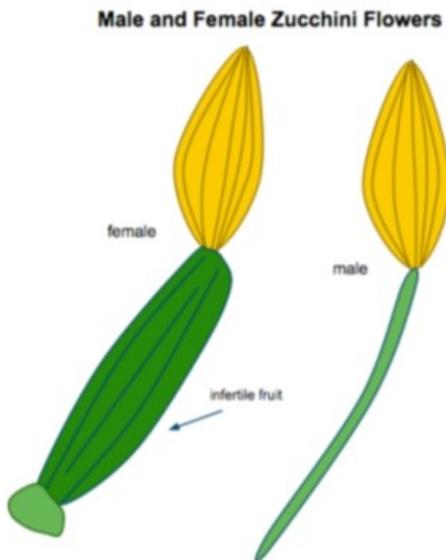
Each sucker has the potential to produce more flowers, leaves and suckers. If left alone, your tomato will become a bushy, lush plant, but with few fruits. Pruning indeterminate tomatoes boosts fruit production.

Pruning is surprisingly simple. Pinch off the suckers along the main vine. Be careful not to pinch off the top of your plant! Doing this once every 1-2 weeks is fine. If you miss one, and it begins to produce small fruits, leave it. The plant has already invested a lot of energy into that branch. Pruning doesn't have to be perfect, just enough to encourage more fruit production.

TIP 7: HAND POLLINATING SQUASH & ZUCCHINI

Zucchini and Squash (Summer and Winter varieties) often need to be hand pollinated to ensure a good harvest. With fewer bees around in the city and suburbs, hand-pollinating might mean the difference between a big harvest and no harvest at all.

Squashes have male and female flowers, and both must be present for successful pollination. The female flower has an infertile zucchini at its base, and needs pollen from a male flower (long, thin stem) otherwise the tiny zucchini will shrivel up and fall off.



HOW TO POLLINATE BY HAND

Pinch off a male flower (the flower with the tall and skinny stem) and pull back the petals so that the pollen-loaded stamen is exposed. Open the female flower's petals and thoroughly dust the inside of the female flower with the bright yellow pollen from the male.