

General Organic Growing Tips

HARDEN PLANTS

Harden off seedlings before transplanting outside to prevent sun and wind burn. To do this give them less water and gradually expand their exposure to the outside over the course of a few days. Not hardening plants will cause sunburn and stunt their growth. If you bought plants from inside a greenhouse they likely have not been hardened yet. Ask them!

SUN AND FROST PROTECTION

Use milk jugs with the bottom cut off or floating row covers (aka remay) over crops to prevent sunburn, to keep off frost, to keep crops a little warmer, or to keep pests away. If the crop needs to be pollinated to produce fruit, remember to remove the covers when the plant flowers.

MULCH

Dry materials that are free of seeds, like straw, ground leaves, sawdust, dried grass clippings, and pine needles (great for acid-loving crops like blueberries and roses) make great mulching materials. Mulch heavy to retain moisture, minimize weeds, and protect the soil. Keep mulch away from the stem of the plant to avoid rot, slugs, and disease.

Experiment with living mulches such as clover and strawberries, especially in the perennial vegetable patch.

ROTATE CROPS

Practice crop rotation by grouping plant families together, giving a 2-3 year gap before planting the same family in that spot again. This will prevent soil born diseases from infecting your plants.

Choose a place that will not interfere with future crop rotation for the perennial vegetable patch such as chives, asparagus, horseradish, sage, thyme, strawberries.

INFRASTRUCTURE

Plan to grow some things upward such as pole beans, squash, cukes, melons, and tomatoes.

Stake early and train the plants grow into it. Early staking reduces stress on the root system. Don't wait until it flops!

Use larger vegetables to protect smaller plants and seedlings by acting as a wind block, shade, or as a climbing support. Be careful not to create unwanted shade.

Utilize the space beneath taller and/or later crops such as tomatoes by planting in lettuce or carrots. Prune excess tomato leaves to improve airflow.

COMPANION PLANTING

Many herbs, flowers, and vegetables combine well to create an environment that will attract beneficial insects and deter pests, and they add aesthetic value! Here is a short list:

Plants That Deter Insect Pests

Alliums - Confuse carrot fly and other pests. Protects against slug damage.

Basil - wards off whitefly when planted amongst tomatoes.

Nasturtium - attracts aphids away from beans.

Lavender - confuses pests.

Lovage- Helps most plants. Tastes like celery and fennel.

Spearmint- Repels aphids and ants. Caution: Can be problematic as it spreads by root quite easily.

Marigold- Repels nematodes underground and leaf hoppers.

Plants That Attract Beneficial Insects

Dill - Attracts hover flies, predatory wasps, honey bees. Trap crop for tomato hornworm.

Cilantro- Attracts tachnid fly.

Sunflower - Attracts butterflies and bees.

Fennel- Attracts ladybugs.

Echinacea (or Purple Coneflower)- Attracts butterflies and bees.

Yarrow - Attracts predatory wasps, ladybugs, and hoverfly's.

Horseradish- An excellent perennial vegetable that attracts beneficial wasps and beetles.

EXTEND YOUR SEASON

Use cold frames, floating row covers, black plastic, and succession plantings to extend your growing season.

WEED AND THIN

WEED: Seedlings don't like weed pressure. Cultivate between plants often to stir up and exhaust weeds. Mark your rows upon seeding to help differentiate baby weeds from seedling sprouts. Telling the difference between tiny plants and tiny weeds can be tricky even for experienced gardeners. If in doubt, wait until the third leaf forms, which is usually quite different.

THIN: Thinning baby seedlings is so hard, for new gardeners especially! We do it to improve quality and production. It is important especially with small crops such as carrots and beets. If you don't thin you'll have smaller carrots! Carrots do not transplant well.

Below are some broad guidelines from Fedco Seeds (fedcoseeds.com) to help you to better plan your garden. Spacing requirements will vary per site and soil quality. Temperature requirements refer to the optimal soil temperature at the time of planting: cool (45-65 degrees F); warm (65-80 degrees F), hot (80-90 degrees F), indoors or out. Some early crops may need extra protection from frost (such as remay cloth or milk jugs).

FEDCO SEEDS VEGETABLE PLANTING GUIDE

Vegetable	Catalog # range	avg. sds/oz	sds/100'	Pkt plants	distance apart	thin to	row spacing	seed depth	min soil temp °F	ideal soil temp	hardiness	planting dates
Amaranth	3000-12	25000	1/16 oz	100'	3"	6"	18"	1/8"	60	70-85	T	June 1
Artichoke	3608	180	T	10 pl	3'	No	2'	1/2"	60	65-85	MH	tp late
Arugula	3020-29	13000	3g	60'	1"	4"	18"	1/4"	50	65-85	MH	May 1/Aug 1
Basil	4413-4470	18000	5g	10-80'	1/2"	4"	18"	1/4"	65	70-85	VT	June 1
Bean, Bush, Dry	200-79,300-85	90	8 oz	25'	3-4"	No	2-3'	1"	60	60-80	T	late May
Bean, Fava	299	17	1#	12'	4-6"	No	2-3'	1"	50	60-80	H	April
Bean, Lima	323-325	65	1#	40-60'	4-6"	No	3'	1"	60	70-85	VT	late May
Bean, Pole	280-97,318,325	65	6 oz	10 pl/oz	6/pole	3/pole	3-4'	1"	60	60-80	T	late May
Bean, Soy	480-99	85	5 oz	10'	3"	No	3'	1"	60	70-90	T	June 1
Beet	2100-99	2200	1/2 oz	20'	1"	2-4"	12-18"	1/2"	40	60-85	H	Apr-July
Broccoli	3300-29	7000	5g	.5g=10'	1"	24-30"	30"	1/4"	50	65-85	MH	tp May/June
Brussels Sprouts	3330-49	5000	5g	.5g=10'	1"	24-30"	24-30"	1/4"	50	65-85	H	tp May/June
Cabbage	3350-99	7500	5g	.5g=10'	1"	24-30"	24-30"	1/4"	40	55-95	MH	tp May/June
Carrot	2000-99	18000	10g	1/8oz=35'	1/4"-1/2"	1"	16-24"	1/2"	40	60-85	H	Apr-July
Cauliflower	3400-40	8000	4g	.5g=12'	1"	30"	30-36"	1/4"	40	55-80	MH	tp May/June
Celery/Celery	3610-49	75000	T	500	8"	No	2-3'	1/8"	40	59-70*	T	tp June 1
Chard	3030-42	800-2000	1 1/2 oz	5-13'	1"	3-6"	18-24"	1/2"	40	50-85	H	ASAP
Chicory	3046-48	1800	T	300 pl	1"	No	2'	1/8"	50	60-85	H	tp late June
Chinese Cabbage	3273-3276	9500	1/4 oz	25'	1/2"	12-18"	24-30"	1/4"	50	70-95	MH	late May
Corn, OP	500-699	100	4 oz	50'	3"	1'	3'	1"	50	60-95	T	late May
Corn, SE	500-699	155	4 oz	50'	3"	1'	3'	1"	50	60-95	T	late May
Cress	3050-58	9000	3g	50-70'	1/2"	1-2"	18"	1/4"	50	65-85	MH	May 1
Cucumber	1200-1399	1000	1/2 oz	11'	2"	4"	3-4'	1/2"	60	65-95	VT	June 1
Eggplant	3650-90	6000	T	40 pl	20-30"	No	30-36"	1/4"	60	75-90*	VT	tp early Jun
Endive	3060-99	18000	5g	40'	1"	8"	18-24"	1/4"	50	60-85	H	Apr-July
Gourds, large	1960-99	175	T	20 pl	6/hill	2-3/hill	6'	1/2"	60	70-90	T	tp early Jun
Gourds, small	1900-59	500	1/5 oz	10 hills	6/hill	3/hill	4-6'	1/2"	60	70-90	T	late May
Kale/Collards	3441-69	7500	5g	40'	1"	12"	2'	1/4"	50	65-85	VH	ASAP-July
Kohlrabi	3470-79	8500	4g	50'	1"	24"	24"	1/4"	50	65-85	MH	tp May/June
Leek	2400-29	10000	T	600 pl	8"	No	2'	1/2"	50	60-80	MH	tp May 1
Lettuce	2700-2999	25000	4g	1g=25'	1/3"	1"	12-18"	1/8"	35	40-80	H	ASAP-Aug
Mâche	3100-19	18000	1/4 oz	30'	1/2"	2"	18"	1/4"	48	50-80	VH	ASAP-Aug
Melon, musk	900-49,1000-99	1200	T	14-20 hills	3/pot	2/hill	5'	1/2"	60	75-95	VT	tp early Jun
Mustard	3220-59	15600	1/8 oz	40'	1"	4-6"	2'	1/4"	50	65-85	MH	Apr-Aug
Okra	3695-99	420	T	30 pl	12"	No	2-3'	1/4"	60	70-90	VT	tp early Jun
Onion/shallots	2440-99	7000	T	450 pl	4"	No	12-18"	1/2"	40	50-95	MH	tp May 1
Pac Choi	3260-70	12500	1/4 oz	30'	1/2"	6-12"	2'	1/4"	50	70-95	MH	May
Parsley	3155-79	18000	1/4 oz	25'	1/4"	1"	12-18"	1/4"	40	50-80	VH	Apr-Aug
Parsnip	2305-10	5000	1/2 oz	25'	1/2"	2-3"	12-18"	1/2"	52	60-77	VH	Apr-July
Pea/snow, snap	700-899	110	8 oz	25'	1 1/2"	No	3-5'	3/4"	40	50-75	plants H	ASAP
Pea/snow, snap for fall crop		110	8 oz	25'	1 1/2"	No	3-5'	3/4"	40	50-75	blossoms,pods	T July
Pepper	3700-3999	4500	T	10-50 pl	12-18"	No	2-3'	1/4"	60	68-95	VT	tp early Jun
Pumpkin	1700-1799	100-280	1/2-1oz	3-8 hills	5/hill	3/hill	6'	1"	60	70-90	T	late May
Radicchio	3186-91	20000	1/2 oz	30'	1"	8-10"	18"	1/8"	50	60-85	H	late June
Radish	2200-99	2500	1 oz	15'	1/2"	2"	18"	1/2"	40	55-85	H	Apr-Aug
Rutabaga/Turnip	2350-99	9000	1/4 oz	40'	1/2"	3-4"	18"	1/4"	40	60-95	H	Apr-July
Scallion	2439	9200	1/4 oz	15-25'	1/2"	1-2"	12-18"	1/2"	50	65-85	MH	ASAP-Aug
Scorzonera	2322	2000	.6 oz	20'	1"	2"	18"	1/2"	50	65-85	H	Apr-Jun
Skirret	2327	17000	2g	10'	1"	1'	3'	1/2"	50	65-85	VH	May
Spinach	2500-99	1400-2600	1/2 oz	40'	1"	2"	12-18"	1/2"	35	45-65	VH	ASAP
Spinach, fall crop	2500-99	1400-2600	1/2 oz	40'	1"	2"	12-18"	1/2"	35	45-65	VH	Aug
Squash, patty pan	1580-99	300	.6 oz	5-8 hills	5/hill	2-3/hill	4'	1"	60	70-90	T	late May
Squash, winter	1600-1699	120-440	1/2-2 oz	3-15 hills	5/hill	3/hill	4-6'	1"	60	70-90	T	late May
Squash, summer	1400-1599	320	1/2 oz	5-8 hills	5/hill	2-3/hill	4'	1"	60	70-90	T	late May
Tomato	4000-4299	9000	T	50-125pl	3'	No	3'	1/4"	50	60-85	T	tp June 1-10
Watermelon	950-99,1100-99	600	T	7-14 hills	3/pot	2/hill	5'	1/2"	60	75-95	VT	tp early Jun
Zucchini	1400-79	180	1 oz	4-6 hills	5/hill	2-3/hill	4'	1"	60	70-90	T	late May

Abbreviations Pkt plants=how many row feet or hills our smallest packet will plant T=transplanted only, in our climate.

tp=transplant pl=plants g=grams, 28.4g=1oz. No=not necessary to thin

*Celery and some varieties of eggplant require fluctuating day and night temperatures for good germination.

Hardiness rating VT=very tender: will not survive frost, can be damaged by temperatures under 40°

T=tender: will not survive frost

MH=moderately hardy: survives light frosts

H=hardy: survives frost generally to the low twenties

VH=very hardy: will overwinter if protected

Approximate planting date: ASAP=as soon as ground can be worked, does not thrive in heat

Approximate planting dates are for our Central Maine climate. Please make appropriate adjustments for your climate, using hardiness as a guide.

Notes: Seed counts are provided as a *guide*, not a *guarantee*. They vary from cultivar to cultivar. Planting rates will vary if intensive methods such as beds are used. Minimum soil temperatures are the lowest that will permit *any* germination. Expect slow spotty germination if you plant below or above the ideal range. For a good stand and quickest emergence plant as close to the middle of the ideal range as possible. If you have specific cultural questions, consult more detailed resources or get in touch with us.

A few seeds with unusually thick or hard coatings may benefit from **scarification** just before sowing. This is accomplished by nicking them with a knife, a pinpoint or lightly scratching them with sandpaper.

Some seeds need to be **stratified** before sowing. This tricks the seed by thinking it has gone through winter followed by the gradual warm-up of spring. It is accomplished by first moistening and then chilling the seed for a specified period of time.