

Vegetable Gardening Basics & Planning

Maggie Rivera
May 2022



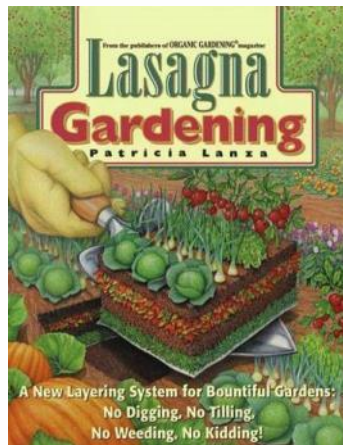
THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES



Starting a Garden

- Kill sod and control weeds
- Cover area with black plastic or cardboard, leaves, and compost
- Dig up the area by hand (shovel/spade)
- Mechanical Tillage
- Trade-offs?
Advantages and disadvantages?



Till / Smother / Solarize



January 2021

In this presentation:

- Choosing crops to grow
- Where to find information on how to grow
- Garden Jargon & Other Tips
- Planning the Garden
- Planting the Garden

What do you want to plant? And when?

Important questions, considerations

- When do the vegetables need to be planted?
Cool season? Warm season?
- Early garden (last frost)
- Fall/Winter garden (first frost)



Some Common Vegetables: General planting dates

Cool Season (March- mid-May)

- Radishes
- Greens: spinach, lettuce, Swiss chard
- Onions
- Peas
- Brassicas: turnips, kale
- Beets
- Carrots
- Early potatoes



Warm Season (mid-May – June)

- Tomatoes
- Peppers
- Vines: cucumbers, pumpkins, squash
- Beans
- Sweet Corn
- Melons
- Late potatoes

JANUARY	FEBRUARY	MARCH & APRIL	MAY	
<p>REVIEW last year's garden map and notes</p> <p>PLAN new garden</p> <p>CHECK saved seed</p> <p>PLANT SEEDS under lights during 4th week: Alliums: Onions, Garlic, Leeks, Shallots</p>	<p>START SEEDS of cold weather vegetables under lights: Broccoli Cauliflower Brussels Sprouts Cabbage</p>	<p>SOIL: test and prepare if workable Prune and spray fruit trees Tidy up + fertilize Asparagus & Rhubarb</p> <p>PLANT STARTS of cold weather vegetables: Broccoli, Cauliflower, Brussels Sprouts, Cabbage</p> <p>DIRECT SEED: Peas, Carrots, Chard, Parsnips, Lettuce, Beets, Celery, Early Potatoes, Spinach, Kale, Radishes</p>	<p>DIRECT SEED: (Before May 20th) Corn</p> <p>AFTER FROST DATE (May 20th)</p> <p>PLANT STARTS: Tomatoes, Peppers, Eggplants</p> <p>DIRECT SEED: Beans, Squash, Melons, Potatoes, Cucumber</p> <p>HARVEST: Rhubarb, Lettuce, Spinach, Scallions, Radishes, Asparagus</p>	
JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
<p>Continue seeding Corn every few weeks</p> <p>REPLACE seeded cold weather crops that are bolting</p> <p>MULCH (mid-month)</p> <p>PICK: Asparagus, Lettuce, Spinach, Onions, Beets, Carrots</p> <p>FERTILIZE: All vegetables (Mid month) Corn (2x this month)</p>	<p>Fertilize corn (2x)</p> <p>2ND WEEK – SEED COLD WEATHER FALL CROPS: Carrots, Parsnips, Cabbage, Broccoli, Brussels Sprouts, Cauliflower</p> <p>HARVEST: Corn, Beans, Cucumber, Summer Squash, Potatoes</p>	<p>SEED: (Mid-Month) Lettuce, Spinach, Radishes, Turnips, Kale (for Fall)</p> <p>HARVEST: Regularly</p> <p>PRESERVE: Vegetables for winter Can, freeze and dry</p>	<p>COLLECT, dry and store heirloom seeds for next year</p> <p>HARVEST and cure winter squash and gourds</p> <p>CLEAN UP garden and tools</p> <p>SET UP garden season extension material</p>	<p>Watch for frost warning (average date: Oct. 15th)</p> <p>HARVEST: Pumpkins (after 1st frost) Parsnips, Brussels Sprouts</p> <p>FINAL CLEAN UP</p> <p>PLANT a cover crop</p>



1. Focus on what brings you joy
2. Eliminate waste

Small
Simple
Slow

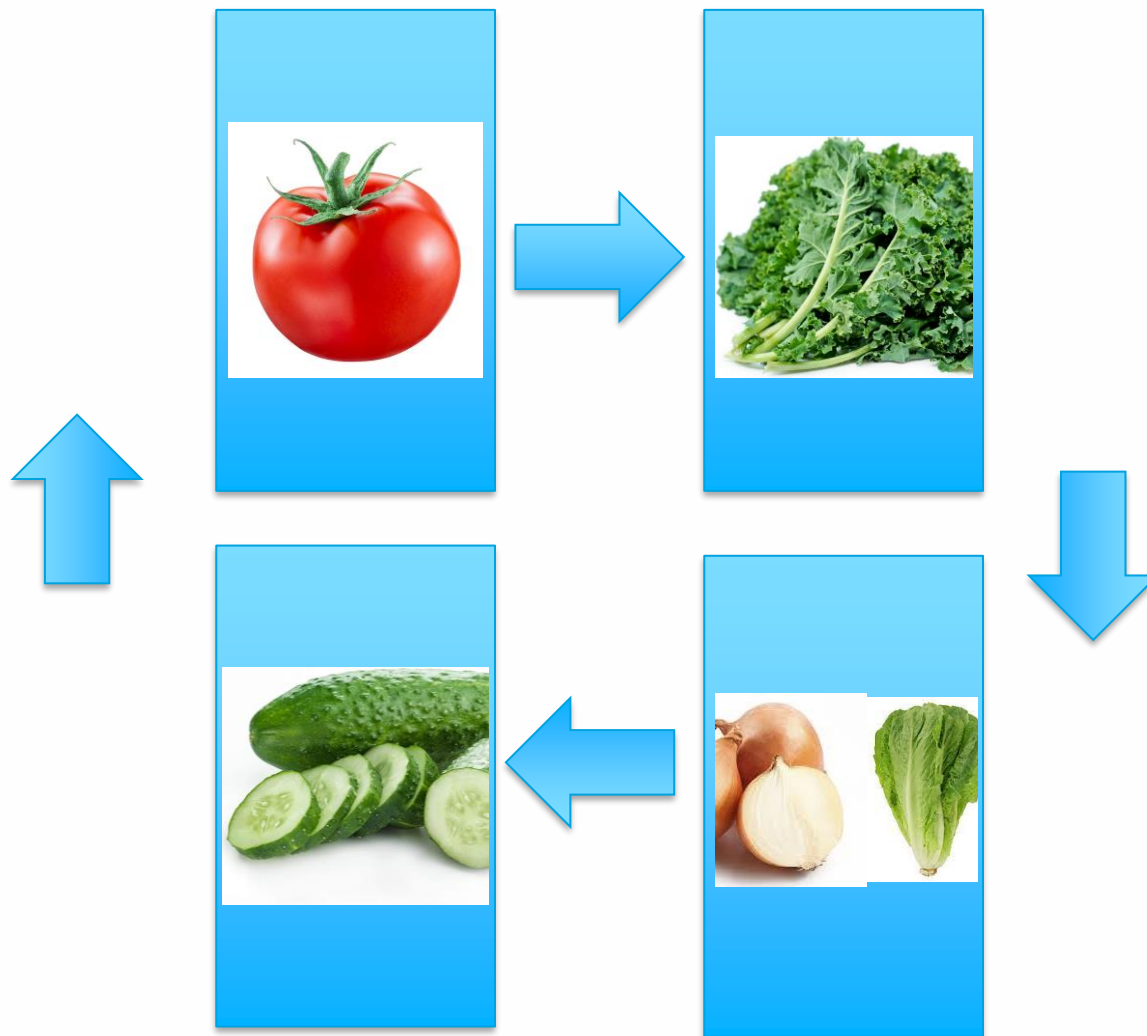
Consider vegetable families



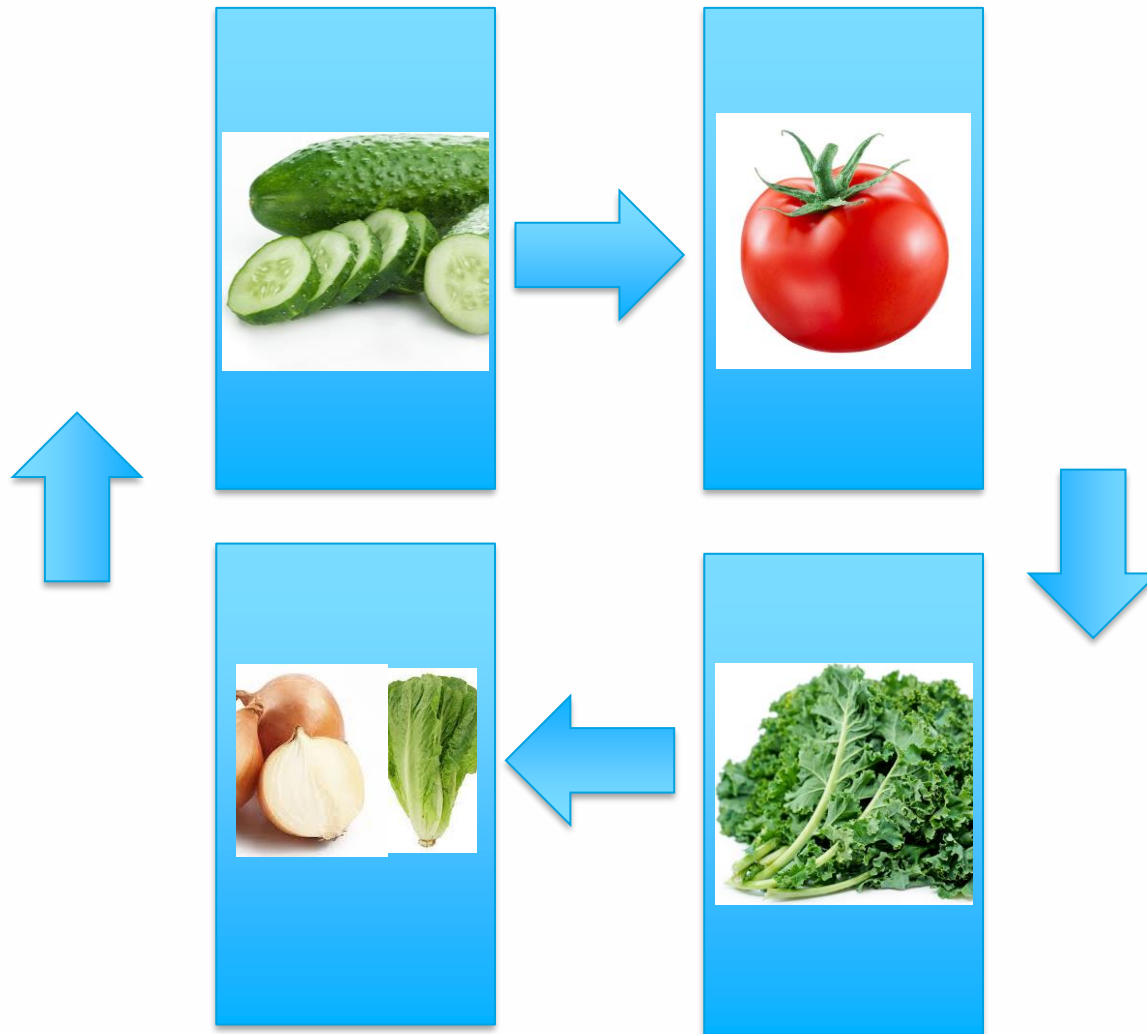
Info
Card!

- Vegetable Families
 - Legumes
 - Bean, peas
 - Goosefoot-
 - Beets, spinach and chard
 - Mustards-
 - Radishes, cabbage, broccoli and turnips
 - Parsley –
 - Carrot, celery and parsnip
 - Nightshade –
 - Tomatoes, peppers and potatoes
 - Squash or cucurbit –
 - Acorn squash, melons, zucchini
 - Composite –
 - Lettuce, Chicory and salsify
 - Lily –
 - Onions and garlic
 - Grass –
 - Sweet Corn
- Rotate families to help manage soil-borne disease and insects.

Crop Rotation



Crop Rotation



Plan Your Garden on Paper

A 10' X 10' is recommended for beginners.

Consider space needed between plants and between rows of plants (spacing will be indicated on seed package).

Crop rotation: group plants by families and change their location every year.

Crop Rotation

Grow crops of a specific family in different areas of the garden to avoid diseases and nutrient depletion.

See <http://ohioline.osu.edu> for more information.

Families of Vegetables

BRASSICAS or CRUCIFERS*

Cabbage Cauliflower
Broccoli Kale Kohlrabi
Brussels Sprouts

NIGHTSHADE FAMILY*

(Solanaceous)
Tomato Pepper
Potato Eggplant

PEA FAMILY (Legumes)

All Beans and Peas

GOURD FAMILY (Cucurbit)

Cucumber Squash
Pumpkin Melons

PARSLEY FAMILY

Carrot Fennel Parsley
Celery Parsnip Celeriac

* Most sensitive to disease

MUSTARD FAMILY

Rutabaga Turnips
Horseradish Radish
Chinese Cabbage
Mustard Greens

AMARYLLIS FAMILY

Onion Shallot
Leek Garlic

GRASS FAMILY

Sweet Corn Popcorn

GOOSEFOOT FAMILY

Beet Spinach
Swiss Chard

COMPOSITE FAMILY

Lettuce Endive Salsify
Jerusalem Artichoke

What do like to eat/grow?



Mellow Star
(F1) Shishito Pepper Seed



Caraflex
Organic (F1) Cabbage Seed



Giant of Italy
Parsley Seed



Delicata JS
Organic Delicata Squash Seed



Carmen



Parade
Organic Onion Seed



Hakurei
(F1) Turnip Seed

<https://www.kitazawaseed.com/>

<https://www.rareseeds.com/>



Harvest Factors

	Labor	One-time	Continuous
Pole Beans	High		X
Bush Beans	High	X (2 weeks)	
Head Lettuce	Low	X	
Leaf Lettuce	High		X
Cherry Tomato	High		X
Roma Tomato	Low	X (2 weeks)	
Zucchini	Low		X



Simple, fit
your life &
resources!

Share in Small Groups

Let's talk Garden Jargon
there is a lot of it in growing
resources such as seed
packets,
seed catalogs and other

Perennial

A plant persists for many growing seasons, Generally the top portion of the plant dies back each winter and regrows the following spring from the same root system; think “PERmanent”



Annual

A plant that only grows for one season in your climate; think I have to plant it every year or annually.



Where Will You Plant?



How does a perennial affect your planning?



Seed Packet

“Seed directly outdoors in a sunny location. Sow a few seeds around a 12 inch diameter hill. After germination, thin to 3 seedlings per hill. May also be started indoors 3-4 weeks before planting outdoors. Transplant with care. Keep fruits picked to encourage production. Ideal for sautéing, baking, steaming or serving fresh in salads or with dips.”

Garden Jargon



Garden Jargon



Bolt

Garden Jargon

To thin



Garden Jargon



Transplant, start, plug

Garden Jargon



To hill

Garden Jargon



Broadcast

Garden Jargon



Furrow with Direct Seed (DS)

Resources for Growing Information

- Seed Packet
- Seed Catalog
- Other Resources

LOT#93322 PACKED FOR
PRODUCT OF USA 2

GARDEN CEBOLLÍN

This easy to grow, perennial heirloom can be tucked into any small space in the greens with mild onion flavor for use in dishes. The pretty purple flowers attract

Fácil de cultivar, este heirloom perenne puede estar metido en cualquier pequeño espacio en la cocina. Los verdes de la cosecha con las papas asadas, pescados y platos atraen mariposas y abejas.



Zone Map
(mapa de zonas)



Full Sun

Sol Completo



Moderate

Moderada

This hermetically sealed pack
Este paquete herméticamente sellado

To learn more, visit us at:
Para aprender más visite:

www.seedsofchange.com

Seeds of Change
P.O. Box 4908
Rancho Dominguez, CA 90220
Certified Organic by Oregon Tilth

Plantation Products LLC., 202 S. Washington St. Norton, MA 02766 © 1992

A dainty and greatly esteemed plant, bearing an abundance of small, misty white flowers. Blooms in summer.

Days to Germinate	Depth to Sow	Seed Spacing	Growing Height	Type
10-14	1/8 in	2-3 in	18 in	Annual

Sow seed in sunny location after danger of frost. Press seed firmly into soil surface and keep moist.

Thin seedlings when they are 3-4 inches in height, with the final spacing of the plants 8-12 inches apart.

Garden Hints: Used to contrast and highlight other colorful flowers, in beds or arrangements. Sow at two week intervals for continuous display.



OUTDOOR PLANTING DATES

Zone 1	Sept.-Feb.
Zone 2	March-June
Zone 3	April-June
Zone 4	May-June

SKU 3400143 V-1499



SPINACH

Spinacia oleracea

CULTURE: Spinach grows in a wide range of soils if moist and fertile, but is sensitive to acidity; pH should be at least 6.0, preferably 6.5-7.5.

SOWING DATES: Spinach germinates best in cool soil. Begin sowing in early spring as soon as the ground can be worked. Summer sowing in soil over 85°F (30°C) risks low or erratic germination. If sowing has to be done during warmer weather, irrigating can help cool the soil and improve germination. Sow in mid to late summer for a fall harvest. Spinach can also be planted from late summer until freeze-up in protected structures for fall, winter, and spring harvest. Using floating row covers offers additional winter protection.

PLANTING AND HARVEST: For baby leaf: Sow in a 2-4" wide band, 3/4" apart, about 40 seeds/ft. Clip small leaves in 3-5 weeks, depending on time of year and speed of growth. Triple-rinse leaves, sort out cut and broken leaves, and package. For a continuous supply, sow every 7 days. For bunching and full size: Sow 10 seeds/ft., 1/2" deep, rows 12-18" apart. Harvest spinach full size but before bolting, cutting just below root attachment for "rooted spinach", or cut higher for "clipped spinach".

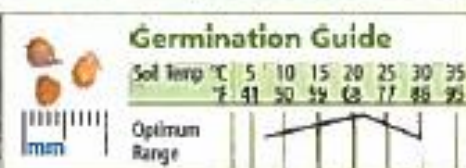
STORAGE: Store at 32°F (0°C) and 95% relative humidity for 10-14 days.

AVG. DIRECT SEEDING RATE: For full-size leaves: 10M/1,000', 290M/acre at 10 seeds/ft. in rows 12-18" apart. For baby leaf: 1M/25', 25M/125', 1,200M/acre at 40 seeds/ft. in rows 18" apart.

SIZED SEEDS: Standard except where noted.

SEED SPECS: SEEDS/LB.: 24,800-45,800 (avg. 38,800).

PACKET: 1,000 seeds, sows 100'.



Spinach Resistance Codes

(Cv) Cladosporium Leaf Spot
(DM) Downy Mildew

HR = High Resistance IR = Intermediate Resistance

Spinach



SMOOTH-LEAF

Space (F1) 644 25 days.

(HR: DM, IR: Cv.) ⑤

Tried and true variety. Medium dark green leaves are upright and smooth to slightly savoyed. High resistance to downy mildew races 1-3, 5, 6, 8, 11, 12. PKT \$4.25; 5M @ \$1.11/M; 10M @ \$0.79/M; 50M @ \$0.71/M; 100M @ \$0.59/M; 500M @ \$0.51/M; 1,000M @ \$0.48/M.

Gazelle (F1) 2550X 26 days.

(HR: DM.) ⑤

Best suited for fall/winter harvest. Dark green, smooth, oval-to-round leaves with good flavor. Long stems, very uniform leaf shape and plant habit. Suitable for baby leaf and bunching. High resistance to downy mildew races 1-13. PKT \$4.25; 5M @ \$1.11/M; 10M @ \$0.79/M; 50M @ \$0.71/M; 100M @ \$0.59/M; 500M @ \$0.51/M; 1,000M @ \$0.48/M.

Corvair (F1) 2571G 27 days. (HR: DM.)

CG ⑤

Organic three-season spinach. Very dark-green, uniform, oval leaves. Slow bolting. Upright plants hold well. High resistance to downy mildew races 1-11, 13. PKT \$4.45; 5M @ \$1.27/M; 10M @ \$1.00/M; 50M @ \$0.90/M; 100M @ \$0.78/M; 500M @ \$0.69/M; 1,000M @ \$0.67/M.

Red Kitten (F1) 3516 28 days. (HR: DM.) ⑤

Medium green leaves with red veins. For baby leaf production in the early spring or full-size bunching in the fall and winter. Uniform, smooth leaves are borne on fairly upright plants. High resistance to downy mildew races 1-13, 15. PKT \$4.25; 5M @ \$1.42/M; 10M @ \$1.16/M; 50M @ \$0.92/M; 100M @ \$0.79/M; 500M @ \$0.73/M; 1,000M @ \$0.68/M.

Woodpecker (F1) 644X 28 days.

(HR: DM.) ⑤

Medium dark-green, upright plants. A great variety for late spring and summer harvests as it has been slow to bolt in our trials. High resistance to downy mildew races 1-15. PKT \$4.25; 5M @ \$1.11/M; 10M @ \$0.79/M; 50M @ \$0.71/M; 100M @ \$0.59/M; 500M @ \$0.51/M; 1,000M @ \$0.48/M.

Seaside (F1) 3927 30 days.

(HR: DM, IR: DM.) ⑤

Slow-bolting variety for spring and summer. Seaside has upright, dark green leaves, that are somewhat spade shaped. Stays small, which extends the baby leaf harvest window. High resistance to downy mildew races 1-12, and intermediate resistance to race 14. PKT \$4.25; 5M @ \$1.11/M; 10M @ \$0.79/M; 50M @ \$0.71/M; 100M @ \$0.59/M; 500M @ \$0.51/M; 1,000M @ \$0.48/M.

Intensive Spacing for Raised Beds

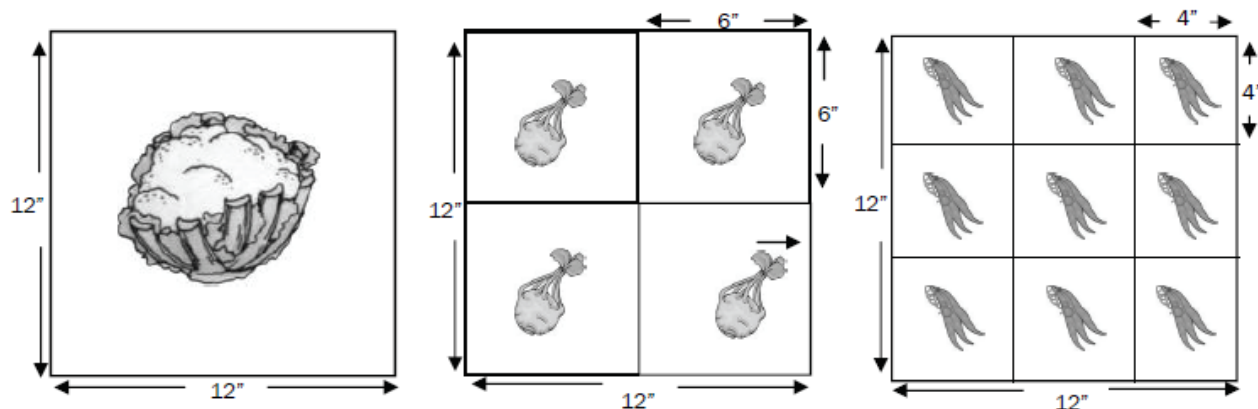
Intensive garden spacing is a great way to increase your return in the garden. This concept uses all the space in the beds eliminating the need for rows and paths. Intensive spacing not only increases the return but also helps control weeds and save on water.

Distance Between Plants

Asparagus	12-18"	Endive	8-12"	Peppers	12-15"
Basil	12-18"	Garlic	3"	Potatoes	10-12"
Beans, lima	3-4"	Kale	6-8"	Pumpkins	24-36"
Beans, snap	3-4"	Kohlrabi	3-6"	Radishes	2-3"
Beets	2-3"	Leeks	2-3"	Sage	12-18"
Brussels sprouts	15-18"	Head lettuce	10-12"	Spinach, other	2-4"
Cabbage	15-18"	Leaf lettuce	3-6"	Squash, summer 1	8-24"
Carrots	2-3"	Mustard	3-4"	Squash, winter	24-36"
Cauliflower	12-15"	New Zealand spinach	10-12"	Sunflower	18-28"
Chinese cabbage	6-9"	Okra	10-12"	Sweet potatoes	10-12"
Collards	10-12"	Onions, bulb	3-4"	Swiss chard	6-9"
Corn	8-10"	Onions, bunching	2-3"	Tomatoes	18-24"
Cucumbers	12-18"	Parsley	4-6"	Turnips	2-4"
Dill	6-10"	Parsnips	3-4"		
Eggplant	12-18"	Peas	1-2"		



NOTE: The less distance between plants, the greater the efficiency. Using beans as our example, if you space them equidistantly 4" you will yield up to four times more plants, than yielded in conventional rows spaced 30" apart with plants spaced 4' apart in the same square-foot area.



Seed Packet

- Description of plant
- Suggestions
- How to prepare
- Days to germination (8-10)
- Days to harvest (50-58)
- How deep to plant
- Spacing requirements
- How to Preserve



Seed Catalog

- All American Standard, AAS Winner
- Resistance Codes
- Germination Guides (soil temp)
- Days to baby, days to maturity; peppers vs lettuce
- Day length! Onions, We want intermediate or long day onions.



Cleveland, longest day of the year is 15hrs and 11mins

Onions Demystified

Short-day Onions –will start forming bulbs when the day length is between 10 & 12 hrs.

Intermediate or day-neutral Onions –will bulb somewhere between 12 & 15hrs

Long-day Onions –will start forming bulbs at 14 to 16 hrs.

What does the south's growing season look like due to temperature?

When would they want to harvest their onions?

Pelleted Seeds

**Pelleted
Seeds**



Unusual Order Times

- Garlic (order in July/August)
- Sweet potatoes/potatoes (order Jan/Feb/March)
- Onion/leek sets (order Jan/Feb/March)
- Asparagus Crowns (order early spring or late summer for planting in spring or fall)

Planning the Garden

- Plan for space
 - Length (in row)
 - Width (between row)
 - Or grid
- Plan for time
 - How many crops can you get out of one bed?
 - How can you plan for a continuous harvest of lettuce?



Planting/Use of Space



Wide rows: works well for greens, salad crops

Using vertical space: staking and trellising

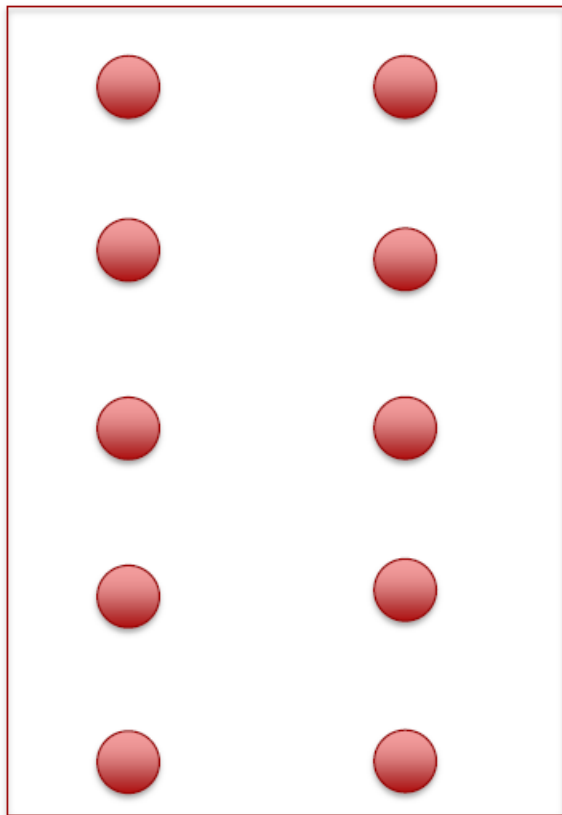
Interplanting: example corn and pumpkins/squash

Succession planting: cool season like radishes, followed by warm season like peppers

Raised beds

Give me Space!

Traditional



Intensive

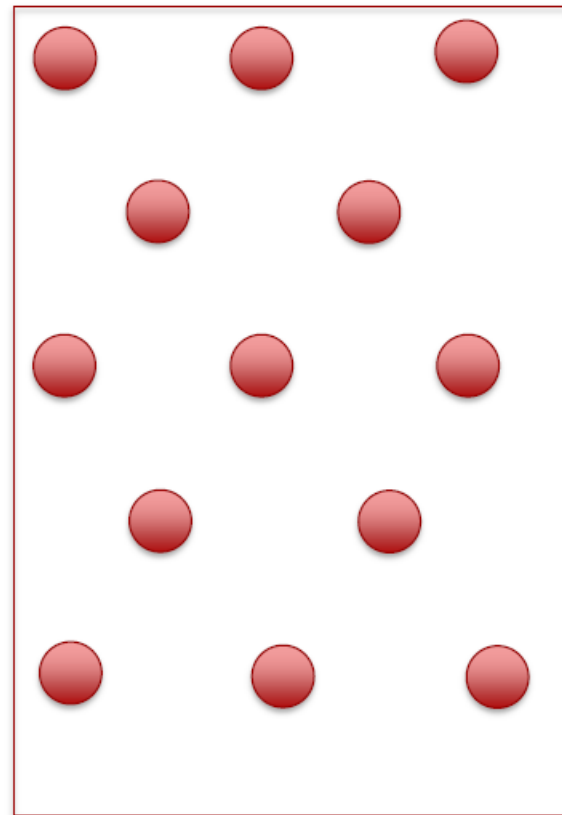


Table 1: Vegetables Seeded Directly in Garden

Vegetables	When to Sow or Plant	Depth In Inches	Seed per 100 feet	Days to Maturity	Planting Distance In Inches		Estimated Yield per 100 feet of Row
					In the Rows	Between Rows*	
Asparagus, crowns	March-April	6-8**	60 crowns	No harvest first year	18	48-60	30 lbs.
Beans, bush snap	May 15 to August 1	½-1	1 lb.	50- 60	4	24	50 lbs.
Beans, green shell	May 15 to July 1	½-1	1½ lbs.	60-100	4	24	
Beans, dry shell	May 15 to June 1	½-1	1 lb.	90-100	4	24	50 lbs.
Beans, bush lima	May 20 to June 10	½-1	1 lb.	65- 85	6	24-30	50 lbs.
Beans, pole snap	May 15 to June 1	½-1	½ lb.	65- 90	24	36	
Beans, pole limas	May 20 to June 1	½-1	¾ lb.	70-100	24	36	
Beets	April 15 to July 15	½	½ oz.	50- 70	3	18	100 lbs.
Cabbage, Chinese	August 1	¼	1 pkt.	80- 90	15	24	80 heads
Carrots	April 1 to July 15	¼	½ oz.	55- 75	3	18	100 lbs.
Chard, Swiss	April 1 to April 10	½	½ oz.	50- 60	8	24	50 lbs.
Collards	April 1 to August 15	¼	1 pkt.	65	15	24	50 lbs.
Corn, Sweet	May 1 to July 1	1-2	4 oz.	64- 90	9	24	100 ears
Cucumber	May 10 to June 1	1-2	½ oz.	50- 70	15	60	12-15 fruit/ plant
Endive	August 1	½	1 pkt.	90-100	15	24	50 lbs.
Kale	April 1 to August 1	½	1 pkt.	50- 70	18	24	75 lbs.
Kohlrabi	April 1 to August 1	½	¼ oz.	50- 70	4	18	100 lbs.
Lettuce, leaf	April 1 to August 1	¼	1 pkt.	40- 50	6	18	50 lbs.
Lettuce, head	August 1	¼	1 pkt.	60	12	24	50 lbs.
Mustard	April 1 to August 15	¼	1 pkt.	40	8	24	50 lbs.
Muskmelon	May 15	1-2	½ oz.	70-100	30	60	50 fruits
Okra	May 1	½	½ oz.	65	15	30	
Onions, seed	April 1	½	1 oz.	110-150	2	18	50-100 lbs.
Onions, sets	April 1	1-2	2 lbs.	100-140	3	18	
Onions, winter	Sept. 1 to October 1	1-2	3 lbs.	—	2	18	
Parsley	April 1 to April 10	⅛-¼	1 pkt.	55- 60	6	18	50 lbs.
Parsnips	April 1	½	½ oz.	130-140	3	24	100 lbs.
Peas	April 1	½	1 lb.	50- 60	1	18	40 lbs. (pods)
Potatoes, early	April 1	3-4	10 lbs.	90-110	9	24	100 lbs.
Potatoes, late	May 15	3-4	9 lbs.	110-140	12	24	
Pumpkin	May 20	1-2	½ oz.	90-110	60	84	75 fruits
Radish	April 1 to August 1	½	1 oz.	25- 35	1	18	25 lbs.
Rhubarb	April	2-3	50 crowns	365	30	36	
Rutabaga	July 1 to July 15	½	¼ oz.	100-120	6	24	150 lbs.
Salsify	April 1 to April 10	½	½ oz.	140-150	2-3	18	75 lbs.
Spinach	April 1 and Sept. 1	½	½ oz.	40- 50	6	18	50 lbs.
Spinach, N. Zealand	April 10 to May 1	½	½ oz.	60- 80	15-18	30	
Squash—							
Bush	May 1 to June 1	1-2	½ oz.	50- 65	36	84	
Summer Vine	May 1 to June 1	1-2	½ oz.	50- 65	60	84	
Winter	June 1 to June 15	1-2	½ oz.	60-110	60	84	100 fruits
Turnips	April 1 to June 1 and Aug. 15	½	½ oz.	50- 60	3	18	100 lbs.
Watermelon	May 20	1-2	½ oz.	110-130	96	96	

* Adjust row spacing as necessary to accommodate equipment used for cultivation.

** Two inches of soil cover at planting. Gradually fill trench 6-8" deep with soil.

Intensive Spacing for Raised Beds

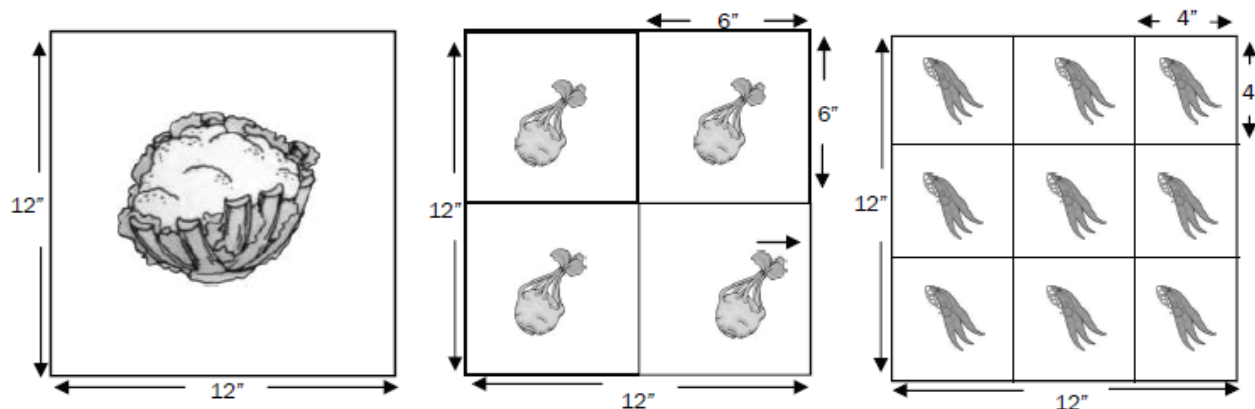
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Frost Dates

[https://www.ncdc.noaa.gov/cgi-](https://www.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl?directive=prod_select2&prodtype=CLIM2001&subnum%2520to%2520Freeze/Frost%2520Data%2520from%2520the%2520U.S.%2520Climate%2520Normals)

[bin/climatenormals/climatenormals.pl?directive=prod_select2&prodtype=CLIM2001&subnum%2520to%2520Freeze/Frost%2520Data%2520from%2520the%2520U.S.%2520Climate%2520Normals](https://www.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl?directive=prod_select2&prodtype=CLIM2001&subnum%2520to%2520Freeze/Frost%2520Data%2520from%2520the%2520U.S.%2520Climate%2520Normals)

Freeze / Frost Occurrence Data

All probabilities in whole percent. See notes for probability level description.

- Indicates the probability of occurrence of threshold temperature is less than indicated probability.

State And Station Name	Thresh old (F)	Spring (Date)			Fall (Date)			Freeze Free Period (Days)			P rob ab il ity (4)
		Probability Level (1)			Probability Level (2)			Probability Level (3)			
		90	50	10	10	50	90	10	50	90	
Ohio											
CLEVELAND HOPKNS INTL AP	36 32 28	Apr24 Apr14 Apr04	May10 Apr30 Apr17	May27 May16 Apr30	Sep24 Oct08 Oct23	Oct07 Oct23 Nov04	Oct20 Nov07 Nov17	170 194 219	149 175 201	128 156 183	41 33 24

Classification of Vegetable Crops According to Their Adaptive Field Temperatures

Cool-season		Warm-season	
Hardy ¹	Semi-Hardy	Tender	Very Tender
Asparagus	Carrot	Snap bean	Cantaloupe
Broccoli	Cauliflower	Sweet corn	Cucumber
Cabbage	Chinese cabbage	Tomato	Eggplant
Horseradish	Lettuce		Lima bean
Onion	Potato		Okra
Pea			Pepper
Spinach			Pumpkin
			Squash
			Watermelon

¹Hardy crops are most tolerant of cool temperatures and frost. Very tender crops are most susceptible to frost and cool temperatures.

Garden Maps

Planning in space

	<-4 ft->		
			8 ft

Crop planted for Bed 1: _____

Crop planted for Bed 2: _____

Crop planted for Bed 3: _____

Crop planted for Bed 4: _____

Garden Maps

space & time

Sample Plan for a Small Vegetable Garden
(10 ft. × 15 ft.)

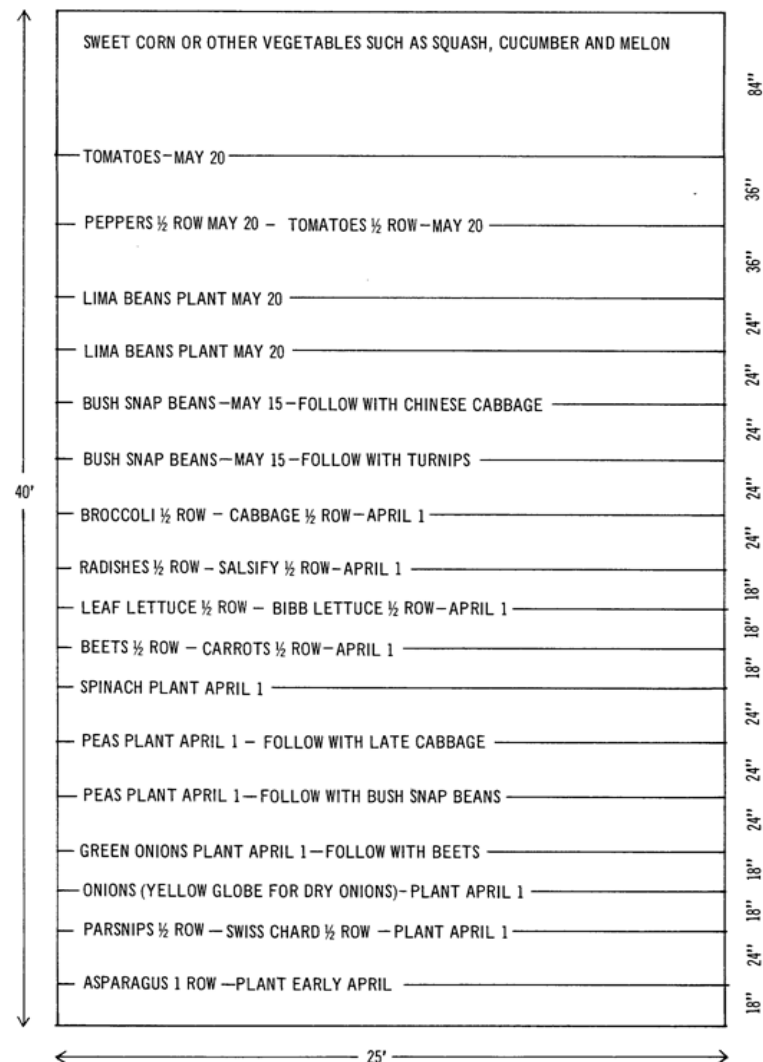
12"	Crop	Planted*	Succeeded By	Planted
Row 1 24"	Beets	4-20	Cabbage	7-19
Row 2 24"	Potatoes	4-20	Spinach	8-30
Row 3 18"	Spinach	4-20	Tomatoes	6-7
Row 4 18"	Peas	4-20	Snap Beans	7-19
Row 5 18"	Carrots	4-20	Snap Beans 6-26	Lettuce 8-20
Row 6 18"	Green Onions	4-20	Green Peppers	6-16
Row 7 18"	Leaf Lettuce	4-20	Broccoli	8-1
Row 8 18"	Onions for Mature Bulbs	4-20	Squash	7-6
Row 9 12"	Cabbage/Radish	4-20		

* Planting dates need to be adjusted from season to season as required by prevailing weather conditions. Also planting dates vary from the southern most to the northern most parts of the state.

THE OHIO STATE

Sample Plan for a Large Vegetable Garden
(25 ft. × 40 ft.)

SAMPLE FAMILY VEGETABLE GARDEN PLAN
(To be used as guide for your specific needs)



Garden Maps

space & time

Mt Barnston OUTDOOR PLANTING SCHEDULE FOR SPRING AND SUMMER CROPS

Crop	Weeks Before	Last Spring Frost	Weeks After
Very Early Spring	8 6 4 2 0 2 4 6 8 10 12 14 16		
(capitata group)			
8/31 9/4 9/28 10/2			
0 2 3 4 5 6			
95 H			
storage no. 4			
70 H			
71 H			
75 H			
Late Spring (after last spring frost)			
Cucumbers			
Cucumbers			
Eggplant			
Muskmelons			

Harden of
 T-transplant
 Re: Row cover (mat in mm),
 H: Harvest
 D: Direct seed

	3/23	4/6
10	9	8
20	11	14
30	10	10
40	5	5

Cabbage

B. olivacea

(Capitata group)

chinese cabbage

Q 10' OC for Family Sized Apartment
harvest

CO 125

Notes
Covers
When to

Q-5

What will you grow in each bed in the Fall?

Garden Maps

space & time

	<-4 ft->		

Crop planted for Bed 1: _____

Crop planted for Bed 3: _____

THE O

Crop planted for Bed 2: _____

Crop planted for Bed 4: _____

Starting Seeds/Transplanting

- Start your own or purchase transplants?
Advantages and disadvantages
- Factors to consider include timing, soil mix, lighting, temperature, fertilization, watering
- Plants need to be “hardened off” before transplanting into the garden
- Use of cold frame
- Transplanting: consider timing, type of vegetable, weather conditions

Plan for transplants if doing your own



Slow!

Table 2: Vegetables Started from Plants

Vegetables	Start	Move Plants to Coldframe	Set Plants in Garden	Days to Maturity from Setting Plants	Planting Distance In Inches		Estimated Yield per 100 feet of Row
					In the Rows	Between Rows*	
Broccoli	Feb. 20	March 15	April 1	80	18	24	50 lbs.
Brussels sprouts	June 1-10	None	July 1	120	24	24	50 lbs.
Cabbage, early	Feb. 20	March 15	April 1	50	15	24	180-240 lbs.
Cabbage, late	May 15-June 1	None	July 15	75-80	18	30	
Cauliflower	June 1-10	None	July 15	100	24	30	45 heads
Celery, early	Feb. 1	None	April 20	90	6	24	200 stalks
Celery, late	April 15	May 15	July 1	110	6	24	
Eggplant	March 20	April 15-20	May 15**	80-90	24	36	150 fruit
Lettuce, head	Feb. 20	March 1	April 1	60	12	24	50 lbs.
Tomatoes	April 1	April 20	May 15	50	24	36	250 lbs.
Peppers	March 20	April 10	May 15	70	18	24	300 peppers
Sweet Potato	April 10	None	May 20	120	12	30-36	

Note: The planting dates are for normal seasons in central Ohio. Spring planting dates will be about 2 weeks earlier for southern Ohio, and 2 weeks later for northern Ohio.

* Adjust row spacing as necessary to accommodate equipment used for cultivation.

** Or after danger of frost is passed.

Planning the Garden

Websites

- <https://www.gardeners.com/on/demandware.store/Sites-Gardeners-Site/default/KGP-Design>
- <http://www.vegetablegardeningonline.com/>

Apps (android) search “garden plan”

- Planter
- My Vegetable Garden
- Garden Organizer



Planting the Garden, seeds

- Depth: general thumb rule, no more than 1.5 - 2 times the size of the seed
- Cover with soil, you want soil to seed contact.
- Water! Must keep newly planted seeds moist for germination.
- Observe, check seed packet or catalog to know days to germinate.
- Spacing: pay attention to requirements, think about the adult plant.



Planting the Garden, plants

- Make sure the transplants are hardened off, meaning they are acclimated to the current weather (temp/wind).
- Carefully remove seedling from container, being careful of roots, you want seedling to be level with surface
- Place seedling in the hold, surround seedling with displaced soil, give a gentle press to the soil around.
- Water, maybe feed the seedling to kick start growth.



Planting the Garden

- Using string to make rows straight and use space
- Use the end of a tool to make a furrow for a line of seeds.
- Make a dibber out of a rake replacement handle
- Do you want rows or staggered/grid planting.



Planting the Garden



Planting the Garden

True Temper 48 in. Tapered Rake Replacement Handle

\$5.48 Sold by 

[Available nearby](#)



Resources for Help

MGV Garden Questions Answered

- Community Garden Mentor On Demand
Answering Services, 216-245-5305

- Telephone Hotline

<https://cuyahoga.osu.edu/program-areas/master-gardener-volunteers/do-you-have-gardening-question>

Call-back Service (330) 599-7728, leave your voicemail.

- Ask a Master Gardener Online

<https://extension.osu.edu/ask-an-expert/ask-master-gardener>

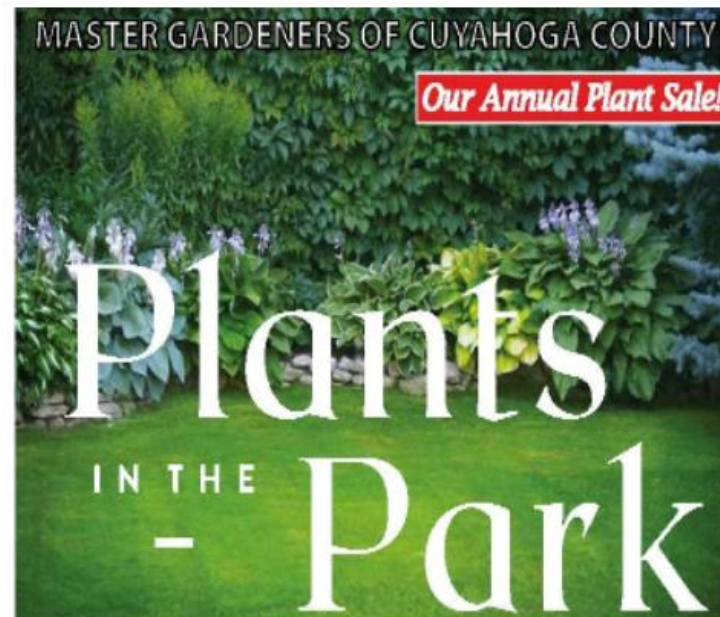
Plant Sales Coming Up

- May 14th



Plant Sales Coming Up

- June 4
- Metro Health
Main Campus follow-up
sale on Sunday/Monday



JUNE 4th, 2022
KIWANIS PAVILION
6363 SELIG DRIVE
Independence, Ohio
9AM-1PM
CASH, CHECK OR CHARGE

- Perennials, vegetables & herbs
- Trees & shrubs
- Help finding the perfect plants
- Ask a Master Gardener your gardening questions
- Unique gardening accessories
- New plants stocked all day long
- Natives and pollinators

Garden Jargon

Seed – can be a noun and a verb/action.

Sow – another word for the action, to seed.

Start/started – can mean seed indoors, also used for baby plant (a start).

Transplant – can be a noun and a verb/action. Noun meaning baby plant and verb meaning the action of putting the baby plant into the ground outside, sometime unto a larger pot (aka pot-up).

Thin/thinning – removing some micro plants to allow for space for others to grow.

Hill – can be a verb or noun. The action to bring the soil up around plant from both sides (potatoes); cluster of plants, 2-3 plants close together (zucchini).

Harvest/pick – all ways to say harvest, by a particular methods

Prepare soil/bed – act of breaking up large clods to a fine texture and smoothing for a flat planting surface.

Garden Jargon

Direct seed (DS) – to place the seed direction in the ground outside either in a furrow or hole.

Furrow— a trench that you will fill with seed or transplant and cover with appropriate amount of soil

Pelleted seed – has a coating to help the seed germinate (can be organic or not)

Packet/lb/M – all ways seeds can come/ordered. Packet has different numbers seed catalog will tell you; if comes by weight (lb or oz) it will tell you how many seeds are in weight; M means thousand, 2M two thousand.

Bolting – means that a plant goes to flower unexpectedly/quickly, grows stalk to flower.

Staking – to use a variety of materials, string/twine, wood, fence posts, metal rods to support plants

Broadcasting – scattering seed across a surface, usually large. Usually followed by raking to incorporate seed and watering to start germination.