

Updated 02/21

# GARDEN PLANNING

*Vegetables, Herbs & Berries*

# VEGETABLE GARDENING GUIDE

## Herbs, Vegetables & Berries

This guide provides information on common edible herbs, vegetables, and berries with height, recommended spacing, sun needs, and where applicable, the size and color of fruit.

Companion plants can aid plant growth by providing extra resistance to pests or improving flavor. Companion plants are listed where available, as well as non-compatible plants, which should not be planted near the selected plant. The hardiness level of plants is based on our location in Urbana, IL, which is Zone 5b.

A grid page allows space for planning and an extra grid for larger spaces is located at the back of the document.

Spacing can be flexible and recommendations in this chart are not equivalent to square foot gardening.

### KEY GARDENING TIPS

- ✓ Plan your garden ahead of time.
- ✓ Use fertilizer and amendments such as compost, worm castings, or other organic soil matter.
- ✓ Avoid putting fertilizer directly on the plant roots, stems or seeds.
- ✓ Try not to plant the same vegetable in the same location every year, as this can deplete the soil of specific nutrients as well as increase susceptibility to recurring pests.
- ✓ Avoid overwatering. You will know you're overwatering when the soil is always wet.
- ✓ Thin out plants when small to avoid hurting roots and crowding plants.
- ✓ Eliminate weeds before they take over.
- ✓ When possible, water in the morning to allow moisture time to soak into the soil before evaporating and to allow leaves to dry.

### CHOOSING A LOCATION

Choose a garden spot with full or near full sunlight for best results. Soil should be well drained and not shaded or competing with trees and shrubs. If space is an issue, some spots with light shade can still be used. Plants grown for their leaves or their roots can often tolerate some shade.

If the soil does not drain well, consider amending the soil to lighten it or using raised beds.

### TYPES OF SOIL

Loam is a great growing soil. It holds its shape when compressed and crumbles when compressed further. It is composed of sand, clay, silt, and organic material. If you're starting with this soil, you're in good shape, although a good compost is beneficial to any soil.

Clay-heavy soil is likely to be slow draining. When compressed, it creates a dense material that is difficult for plants. It tends to hold water and also stays colder for longer as the temperature warms in the spring. Clay soil needs amendments which help it to be lighter and drain well.

Sandy soil drains very easily and holds less nutrients. It must be fertilized and watered more often. It has a tendency to erode and warms quickly. Sandy soil does not compress into a compact shape. This type of soil needs amendments that help it to retain moisture and improve nutrients.

#### *Amendments for loosening heavy soil:*

Peat moss, manure, compost

#### *Amendments for helping soil to retain moisture:*

Manure, peat moss

#### *Amendments for enriching the soil:*

Compost, manure

# IMPROVING YOUR SOIL

## FERTILIZER

On most fertilizers, you will see a set of numbers. These numbers are the NPK ratio and represent the percentage of nitrogen, phosphate, and potash, which are nitrogen, phosphorus and potassium.

**Nitrogen (N)** is necessary in order for plants to grow. Adding nitrogen helps plants grow quickly but too much can result in a lack of flowers or fruit. On tomatoes, too much nitrogen will give you a leafy tomato plant with no vegetables. On spinach, it might be exactly what you want.

**Phosphorus (P)** aids in root growth, development of flowers. Too much phosphorus creates a lack of growth and too little can mean dead leaves. This ingredient is especially nice for plants that produce fruit or plants that have edible roots.

**Potassium (K)** aids in development by controlling the plant's carbon dioxide intake and helping the plant to be healthier. Too much potassium can block nitrogen and phosphorus and too little can lead to unhealthy plants that struggle with disease.

A fertilizer with a 2-4-2 number would have 2% nitrogen, 4% phosphorus, 2% potassium, and 92% filler. Natural fertilizers often have lower numbers. The number system is based on nutrients that are immediately available in the fertilizer, and many nutrients from natural products take some time to process in the soil as a more slow-release type of fertilizer.

## AMENDMENTS

Fertilization is great for your plants, but if your soil isn't draining or able to retain nutrients, it will do little to maintain the health of the plants.

Adding organic matter is a great way to balance the soil so that it drains, provides nutrients, and holds the right amount of moisture.
















We stock Better Earth compost, a plant-based compost from Peoria, IL that is made of organic ingredients for adding nutrients, retaining moisture, and suppressing pests and disease. In a soil blend, mix no more than 30% compost into the soil. In raised beds, mix no more than 25% compost. Worm Castings are another great addition which can be added into the soil at the time of planting for a natural fertilization.

We also carry peat moss, which is a great all purpose growing medium that can be added into the soil. Our varieties of peat moss include options with and without fertilizer.



# PLANT REFERENCE SHEET

## Edible Herbs

PLANT	SIZE	SPACING	SUN	POLLINATION / PESTS	COMPANIONS	NOT COMPATIBLE	HARDY
<b>Basil</b>	12-36"	4-8"		Bees, butterflies, deer resistant	<i>Tomatoes</i>	<i>Sage</i>	No
<b>Cilantro - Calypso</b>	12-18"	2"		Butterflies	<i>Basil, Parsley</i>		No
<b>Dill - Fernleaf</b>	36-54"	18"		Deer resistant		<i>Fennel</i>	Can self seed
<b>Lemon Balm</b>	24-36"	20-24"		Bees, resists deer	<i>Most plants</i>		Yes
<b>Lemongrass</b>	36-60"	24-36"		Bees, resists deer			No
<b>Oregano</b>	12-24"	8-10"	 	Bees, resists deer			Can self seed
<b>Parsley - Italian</b>	24"	12-24"	 	Bees, hummingbirds	<i>Tomatoes, Corn, Asparagus</i>	<i>Mint, Lettuce</i>	Biennial
<b>Pineapple Mint</b>	12"	18-24"	 	Bees, butterflies, hummingbirds, resists deer	<i>Oregano, Marigolds</i>		Yes
<b>Rosemary</b>	36"	8-24"		Bees, butterflies, resists deer	<i>Cabbage, Beans, Sage, Carrots</i>		No
<b>Sage</b>	24"	20"		Bees, resists deer			Some
<b>Tarragon - French</b>	18-24"	18-24"		Resists deer			Yes
<b>Thyme - Summer</b>	6-12"	12-18"		Bees, resists deer	<i>Tomato, Eggplant, Potato, Blueberries, Strawberries</i>		Yes

# PLANT REFERENCE SHEET



## Vegetables

PLANT	SIZE	SPACING	FRUIT	SUN	POLLINATION / PESTS	COMPANIONS	NOT COMPATIBLE
Bell Pepper - Better Belle	24-30"	18-24"	Green / 3.5-4.5"		Self pollinating	Basil, Chives, Dill, Parsley, Tomato, Garlic, Eggplant, Onion	Hot Peppers
Bell Pepper - Golden California	22-26"	18-24"	Yellow / 4-5"		Self pollinating	Basil, Chives, Dill, Parsley, Tomato, Garlic, Eggplant, Onion	Hot Peppers
Jalapeño - Early Hot	14-18"	18-24"	Green / 3"		Self pollinating	Basil, Chives, Dill, Parsley, Tomato, Garlic, Eggplant, Onion	Sweet Peppers
Pepper - PeppiGrande Red Sweet	30-34"	18-24"	Red / 5-6"		Self pollinating	Basil, Chives, Dill, Parsley, Tomato, Garlic, Eggplant, Onion	Hot Peppers
Pepper - Sweet Banana	18-24"	18-24"	Yellow / 6 x 1.5"		Self pollinating	Basil, Chives, Dill, Parsley, Tomato, Garlic, Eggplant, Onion	Hot Peppers
Pepper - Sweet California Wonder	18-24"	18-24"	Red & Green / 3.5-4"		Self pollinating	Basil, Chives, Dill, Parsley, Tomato, Garlic, Eggplant, Onion	Hot Peppers
Tomato - Amish Paste	36-42"	24-36"	Red / 8-12 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Better Boy Slicer	36-40"	24-36"	Red / 16 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Big Beef Beefsteak	5-7'	24-36"	Red / 12-16 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Big Daddy Slicer	5'	24-36"	Red / 15 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Brandywine Beefsteak	40-48"	24-36"	Red / 14 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Bush Early Girl Slicer	6-8'	24-36"	Red / 6-8 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Celebrity Slicer	36-48"	24-36"	Red / 7-8 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Cherokee Purple Beefsteak	4-6'	24-36"	Deep Red / 10-12 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Fourth of July Slicer	55"	24-36"	Red / 4 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Fresh Salsa Paste	36-40"	24-36"	Red / 4-5 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Health Kick Cherry	24-30"	24-36"	Red / 4 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Husky Red Slicer	48"	24-36"	Red / 7 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli

# PLANT REFERENCE SHEET









## Vegetables

















PLANT	SIZE	SPACING	FRUIT	SUN	POLLINATION / PESTS	COMPANIONS	NOT COMPATIBLE
Tomato - Lemon Boy Slicer	6-8'	24-36"	Yellow / 7 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Mobey Grape	24-36"	24-36"	Red / 2"		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Mr. Stripecy Beefsteak	8-10"	36"	Red & Yellow / 12-24 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Patio Cherry	24"	18-24"	Red / 3-4 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Red Grape	48-60"	24-36"	Red / .5- 3/4 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Roma Paste	4-6'	24-36"	Red / 3"		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Rutgers Slicer	4-5'	24-36"	Red / 7 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - San Marzano Paste	4-6'	18-24"	Red / 5-6 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Sungold Cherry	48-60'	24-36"	Yellow / 1 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Sun Sugar Cherry	7-9'	36"	Yellow / .5-1"		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Super Sweet Cherry	60-72"	36"	Red / 1 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Sweet 100s	8-12"	36"	Red / 1"		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Tiny Tim Cherry	12"	18-24"	Red / 3/4 - 1"		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Tumbler Cherry	24-28"	24-36"	Red / 1-2"		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Tomato - Tumbling Tom Cherry	6-8' H x 30" L	10"	Yellow / 1-2 oz		Self pollinating	Peppers, Basil, Parsley, Garlic	Cabbage, Fennel, Broccoli
Eggplant - Asian Delite	24-42"	24-36"	Purple / 9-12"		Self pollinating	Tomatoes, Peppers, Potatoes	
Watermelon - Sugar Baby	Vine	2'- hills 6'- rows	Dark Green / 8-10 lb		Self pollinating	Tomatoes	

# PLANT REFERENCE SHEET

## Vegetables

PLANT	SIZE	SPACING	FRUIT	SUN	COMPANIONS	NOT COMPATIBLE
Zucchini - Golden	24-30"	36"	Yellow / 6-8"		Beans, Dill, Garlic, Marigolds, Mint, Oregano	
Zucchini - Dark Green	24"	Row - 4-6" (thin) Hill - 6'	Green / 8-10"		Beans, Dill, Garlic, Marigolds, Mint, Oregano	
Zucchini - Easy Pick Squash	36-52"	48"	Gold / 6-10"		Beans, Dill, Garlic, Marigolds, Mint, Oregano	
Squash - Butternut	24-48"	8' hills	Tan, 12-18"		Corn, Lettuce, Melons, Peas	Cabbage, Potato
Squash - Early Prolific Straightneck	24-30"	3' hills	Yellow / 6-8"		Corn, Lettuce, Melons, Peas	Cabbage, Potato
Swiss Chard - White Giant	24-30"	12-18"	Green & White		Cabbages, Herbs, Lettuce	Pole beans, spinach, sunflowers

## Berries

PLANT	SIZE	SPACING	SUN	COMPANIONS	NOT COMPATIBLE
Blackberry - Triple Crown	5'x5'	3'		Blueberries, Bee Balm, Mint, Lemonbalm	
Blueberry - Blue Crop	8'x8'	4-8'	 	Basil, Thyme	
Blueberry - Bluejay	7'x4'	4-8'	 	Basil, Thyme	
Blueberry - Duke	7'x7'	4-8'	 	Basil, Thyme	
Blueberry - Sweet Heart	3'x3'	4-5'	 	Basil, Thyme	
Raspberry - Heritage	5'x2'	3-4'		Yarrow, Artemesia, Chamomile, Onions, Garlic, Chives	Potatoes, tomatoes, eggplant, strawberries (all within 5 years)
Raspberry - Red Heritage	5'x2'	3-4'		Yarrow, Artemesia, Chamomile, Onions, Garlic, Chives	Potatoes, tomatoes, eggplant, strawberries (all within 5 years)
Raspberry - Latham	5'x2'	3-4'		Yarrow, Artemesia, Chamomile, Onions, Garlic, Chives	Potatoes, tomatoes, eggplant, strawberries (all within 5 years)
Raspberry - Black Jewel	3'x3'	3-4'		Yarrow, Artemesia, Chamomile, Onions, Garlic, Chives	Potatoes, tomatoes, eggplant, strawberries (all within 5 years)
Raspberry - Jewel	3'x3'	3-4'		Yarrow, Artemesia, Chamomile, Onions, Garlic, Chives	Potatoes, tomatoes, eggplant, strawberries (all within 5 years)
Strawberry - All Star	9"x18"	12"		Lettuce, marigolds, onions, chives, sage, spinach	Tomatoes, melons, peppers, mint, eggplant, okra, potatoes
Strawberry - Jewel	9"x18"	12"		Lettuce, marigolds, onions, chives, sage, spinach	Tomatoes, melons, peppers, mint, eggplant, okra, potatoes



