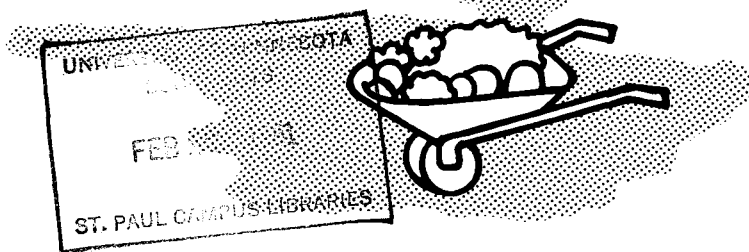


# YARD'N'GARDEN

## Planting the Vegetable Garden

FACT SHEET 101  
C. GUSTAV HARD



Planting your vegetable garden should come after careful planning. It begins with soil preparation and starting plants and continues through till the plants are in the ground and growing. Planting is not difficult, but each step has its concerns and requirements. Failure to follow through properly may result in the failure of the garden.

### Soil Preparation

Soils should not be prepared for planting when they are too wet or too dry. If the soil sticks to your shoes or spading fork, it is too wet. If it breaks into big hard clods, it is too dry. A good test is to compress a small amount of soil in your hand. When the moisture is right, the soil will crumble and break into fine particles. If too wet, it will stay molded in a ball.

Immediately after plowing or spading, the area should be raked or harrowed. A firm, fine seedbed is best, particularly for small-seeded crops. However, guard against packing the soil too much.

The soil can be prepared in late fall if the moisture level is correct. This facilitates earlier spring planting.

### Planting Early Crops

Immediately after your garden plot is prepared, you can sow early, cool-season crops. In marking the rows, stretch a string tightly across the area where you want a furrow in which to sow seed. Chalk lines similar to those used by bricklayers or stonemasons may be used to mark the surface of the soil. Make the furrow the right depth, using the end of a hoe handle. In general, you can sow a little deeper on sandy or dry soils than on clay or moist soils.

Before sowing, treat all the seeds with a dust such as Arasan or Spergon. This inexpensive seed treatment will check such seedling diseases as damping off and will give you more uniform plant stands.

Plants such as head lettuce, cabbage, cauliflower, broccoli, brussels sprouts, and onions can be set in the garden as soon as it is prepared. Wait until danger of frost is past before planting tomatoes, eggplant, peppers, and similar vegetables—usually late May in Minnesota.

After planting seeds early in the garden, cover the row with a black plastic film. This keeps the soil warm and helps hold the moisture closer to the surface so that germination can take place. As soon as germination occurs, remove the plastic film.

### Transplanting

Transplanting is best done in the late afternoon or on a cool, cloudy day. Water the plants well before distributing them. Cut the soil between the plants with a knife so that each plant can be separated easily and removed with a ball or soil attached. Plants grown singly in separate containers or bands can be moved to the garden almost without disturbing the roots.

Scrape the dry surface soil away from the area where the plant is to be set. With a trowel, make a hole large enough to receive easily the root ball of the plant. Firm the soil around the roots and water with a starter solution. Prepare the starter solution by dissolving 1/2 cup of any complete fertilizer such as 5-10-5 in a gallon of water. Apply 1/2 cup per plant at planting time.

Shading plants for a few days with shingles or small boards will keep them from drying out. Lay long spindly tomato plants in long, shallow trenches about 4 inches deep, leaving only the top few inches of the plant exposed.

### Plant Protectors

Some of the tender crops can be seeded earlier by using plant protectors or hot caps. Placing hot caps over the soil one week before planting will warm the soil and help those crops germinate more quickly. Keep the hot caps on until the plants have emerged.

With hot caps, transplanted crops may be set out in the garden a week or two before it would otherwise be safe. Be careful not to keep the caps over the plants after the weather gets warm during the day. If paper caps are used, punch holes in the tops for ventilation.

### Starting Plants Inside

Some vegetables such as tomatoes, peppers, eggplant, and celery need a long growing season and usually will not mature if seeded directly in the garden. Other crops like head lettuce, cabbage, cauliflower, and broccoli must mature before hot weather. It is necessary, then, either to start these crops early in the house or to buy plants at a seed store or greenhouse.

Start seeds in flats that are 3 to 4 inches deep and not so long or wide that they can't be handled easily. You can use sides and ends from peach crates or apple boxes for making flats.

In the fall, fill a bushel basket with garden soil to use for indoor planting in the spring. A good soil mixture contains two parts garden loam, one part sand, and one part organic matter. After it is thoroughly mixed, sift it through a 1/4-inch mesh screen.

Fill the flat with the soil mixture, being careful to firm the soil along the sides and ends of the flat. After filling in the depressions, level the soil about 1/4 inch below the top of the flat. Firm the soil evenly with a brick or small tamper. Then make the rows about 2 inches apart and 1/4 to 1/2 inch deep.

After treating the seed, scatter it uniformly in the rows and label each row with a marker.

Start warm-season crops such as tomatoes in a flat separate from cool-season crops like head lettuce, cabbage, broccoli, and cauliflower. Peppers and eggplant are slow to germinate, so they should not be started with tomatoes. Cover the seeds lightly with sand, screened soil, or peat moss.

Water plants through a muslin cloth stretched over the flat. This will prevent washing of seeds and soil.

Cover the flat with a pane of glass and keep it in a warm room until the seeds germinate. As soon as the seedlings appear, remove the glass and keep the plants in full sunlight. Water carefully.

When the first true leaves appear, the seedlings should be transferred to other flats filled with the same soil mixture. Plant spacing should be 2 x 2 inches for head lettuce, cabbage, cauliflower, and broccoli and 3 x 3 inches for tomatoes, eggplant, and peppers. Make a hole with a dibble (a short, pointed piece of broom handle), and insert the seedlings. Press the soil

firmly against the roots. Keep plants in a sunny window, and water as needed.

Sometimes seed is planted directly in plant bands, berry boxes, or 3-inch squares of inverted sod. These are especially useful for starting cucumbers, melons, and squash, or even beans or sweet corn for an early crop, since these crops will not withstand serious root disturbance when transplanted.

Plants should be gradually hardened before planting in the open garden. Withhold water and lower the temperature to toughen plants.

Vegetable	Planting dates		Planting distances (in inches)				Amount to order per 100 feet of row
	Start seeds indoors	Plant seeds or plants outdoors	Between rows, hand cultivated	Between plants	Depth of seeding		
Asparagus	.....	April 15-May 1	36-48	18-24	6 (plants)		60 plants
Beans, snap (bush)	.....	May 15-July 1	18-24	3-4	1½		2 pounds
Beans, snap (pole)	.....	May 15-July 1	36	36	1½		2 pounds
Beans, dry shell	.....	May 15	18-24	3-4	1½		2 pounds
Beans, lima	.....	May 20-June 10	18-24	4-6	1½		1 pound
Beets	.....	April 15-July 1	18-24	2-4	1		1 ounce
Broccoli	March 1-15	April 15 or June 1	24-30	24	¼ (indoors)		1 packet or 30 plants
Brussels sprouts	March 1-15	April 15 or June 1	24-30	24	¼ (indoors)		1 packet or 30 plants
Cabbage, early	March 1-15	April 15-May 1	24-30	18	¼ (indoors)		1 packet or 40 plants
Cabbage, late	April 15-May 1	June 1	24-30	24	¼ (seedbed)		1 packet or 60 plants
Cabbage, Chinese	.....	July 1	18-24	12-18	½		1 packet
Carrots	.....	April 15-June 15	18-24	2-3	½		1 ounce
Cauliflower	March 1-15	April 15 or June 1	24-30	18-24	¼ (indoors)		1 packet or 30 plants
Celery	Feb. 15-March 1	May 15	18-24	6-8	1/8 (indoors)		1 packet or 100 plants
Chard, Swiss	.....	May 1	18-24	6-8	1		1 packet
Cucumbers	.....	May 15-June 1	48-60	48-60	1-2		½ ounce
Eggplant	March 15-April 1	June 1	24-30	24	¼ (indoors)		1 packet or 12 plants
Endive	.....	April 15	18-24	8-12	½		1 packet
Horseradish	.....	April 15-May 1	24-30	12-18	6 (roots)		20 plants
Kale	.....	April 15-July 15	18-24	12-18	½		1 packet
Kohlrabi	.....	April 15-June 1 or Aug. 1-15	18-24	6-8	½		1 packet
Lettuce, leaf	.....	April 15-June 1 or Aug. 1-15	18-24	4-8	½		½ ounce
Lettuce, head	March 1-15	April 15-May 1	18-24	12	¼ (indoors)		1 packet or 25 plants
Muskmelon	.....	May 20-June 1	60-72	60-72	1-2		½ ounce
Onion seeds	.....	April 15	18-24	2	1		1 ounce
Onion, transplants	Feb. 1-15	April 15	18-24	2-3	½ (indoors)		6 pounds
Onion, sets	.....	April 15	18-24	2-3	1-2		1 ounce
Onion, winter	.....	Aug. 1-15	18-24	1	4		1 packet
Parsley	.....	April 15-May 1	18-24	4-6	¼		1 packet
Parsnips	.....	May 1-15	18-24	3-4	½		½ ounce
Peas	.....	April 15-May 1	18-24	2	2-3		5 ounces
Pepper	March 15-April 1	June 1	18-24	18-24	¼ (indoors)		1 packet or 20 plants
Potatoes, Irish	.....	April 15-June 1	24-30	12-18	4-6		1½ bushels
Potatoes, sweet	April 15 (roots)	June 1	36-48	18-24	.....		150 plants
Pumpkin	.....	May 20-June 1	72-96	72-96	1-2		½ ounce
Radishes	.....	April 15-June 1 or Aug. 1-15	18-24	1-2	1		1 ounce
Rhubarb	.....	April 15-May 1	36-48	36-48	.....		12 plants
Rutabaga	.....	May 15-June 15	18-24	6-8	½		½ ounce
Salsify	.....	April 15-May 1	18-24	2-3	½-1		¼ ounce
Spinach	.....	April 15 or Aug. 1-15	18-24	3-4	1		2 ounces
Spinach, New Zealand	.....	May 1	30-36	12-18	1		1 packet
Squash, summer	.....	May 20-June 1	36-48	36-48	1-2		½ ounce
Squash, winter	.....	May 20-June 1	72-96	72-96	1-2		1 ounce
Sweet corn	.....	May 10-July 1	30-36	30-36	1-2		1½ pounds
Tomatoes	April 1-15	June 1	36-48	36-48	¼ (indoors)		1 packet or 60 plants
Turnips	.....	April 15 or Aug. 1	18-24	3-4	½		1 packet
Watermelons	.....	May 20-June 1	60-72	60-72	1-2		1 ounce

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