

THE ORGANIC GARDEN (part 1)

"To plant a garden is to believe in tomorrow." - Audrey Hepburn

A. What is an organic garden?

1. Organic is a labeling term that indicates that food has been produced using approved methods; no prohibited substances for at least 3 years
2. Synthetic fertilizers and GMOs are not allowed
3. Animal and crop waste materials are allowed
4. Weeds, pests, and diseases are controlled by physical, mechanical, or biological controls
5. Organic seeds and plants should be used if available

B. Planning is the first step

1. Choose crops wisely
 - a. Plant what you like (flowers), plant what you eat (vegetables)
 - b. Don't plant more than you can eat
 - c. May not want to plant every seed in the packet
 - d. Save and reuse seeds
2. Read seed packages carefully
 - a. Follow spacing guidelines on seed packages
 - b. Determine the spacing needs of the plants you want to grow
3. Make a working diagram of your garden plot
 - a. Use graph paper to draw your plan according to scale
 - b. Draw out your plan for planting
 - c. See what you have room to grow
4. Use successive planting - planting the same crop 2 weeks apart, especially with early crops like lettuce and radishes
5. Use intercropping - plant early maturing crops between rows of longer maturing crops
6. Decide which plants to start indoors and which to plant directly into the garden bed
 - a. Not all seeds should be started indoors
 - b. Plants started indoors include broccoli, cabbage, cauliflower, head lettuce, eggplant, herbs, pepper, tomato, cucumber, cantaloupe, watermelon
 - c. Planted seeds should remain indoors for the first 3 to 4 weeks of growth

C. Planting seeds indoors

1. Use sterile containers
 - a. New containers such as small plastic cups or peat pots
 - b. Old containers but sterilize them first in a disinfectant made of 1 part bleach and 9 parts water
2. Fill pot with sterile plant growing medium
3. Push 1 or 2 seeds into the growing medium and sprinkle with water

D. Caring for seedlings

1. Temperature
 - a. Growing medium temperature is often lower than air temperature
 - b. Most plants germinate best in 70 to 80 degree temperatures
 - c. To raise temperature, cover container with clear plastic wrap
 - d. Remove plastic wrap once seeds germinate
2. Water
 - a. Some containers dry out more quickly than others, so will need to water more often
 - b. Check often for dryness by pushing your finger into the growing medium
 - c. Add water a little at a time - don't flood the plant
 - d. If seedling turns yellow or wilts, you may be over watering
3. Light
 - a. Vegetable plants need direct sunlight
 - b. Place containers in a window that gets light a majority of the day (10 to 12 hours is best)
 - c. Fluorescent lights can be used for additional light; place them close to leaves (6 to 12 inches)
 - d. If seedling gets tall and spindly, it is not getting enough light

E. Preparing the garden bed

1. Do not prepare the soil if it is too wet
 - a. Test soil by taking a handful and squeezing it
 - b. If soil forms a ball that can be easily crumbled, then it is right for planting
2. Loosen the soil
 - a. Use a spade or shovel and dig to a depth of 6 inches
 - b. Turn the soil over and rake smooth

F. Soil amendments for an organic garden

1. Organic fertilizers

- a. Come from remains of living organisms, both plant and animal
 - *Examples: sterilized or seasoned manure, blood meal, cottonseed meal, fish emulsion, sphagnum peat moss
 - b. Fertilizer bag is labeled with N (nitrogen), P (phosphorus), and K (potash)
 - c. Numbers following each letter show percentage of the element in the bag and should be balanced
 - d. Always follow directions on fertilizer bag
 - e. Figure square footage of garden and add amounts recommended on the bag
2. Compost
 - a. Biological decomposition of organic material
 - b. Improves the texture of soil
 - c. Add 1 to 2 inches
 3. Add soil amendments
 - a. Spread amendments on top of soil
 - b. Using a spade, dig down 4 to 6 inches and turn the soil and amendments over
 - c. Using a rake, break up clumps, smooth the soil, and water

G. Soil Don'ts

1. Never walk on the garden bed
2. Never work soil when it is wet
3. Never overwork the soil
4. Never apply fertilizer without reading and following directions on bag
5. Never add fresh manure or household pet manure to soil

H. When to plant outdoors in Northern Illinois

1. Cool season crops in late April or early May; soil temperature 35 to 45 degrees, air temperature 60 to 65 degrees
2. Warm season crops between May 15 and June 5; soil temperature 50 to 65 degrees, air temperature 65 to 85 degrees
3. May 15 is the last average frost date for our area

I. Sowing seeds

1. Mark out straight rows
2. Put a stake at each end of row and tie a string tightly between the stakes to make cultivation, insect control, and harvesting easier
3. Follow directions on seed packet for spacing and depth of planting
4. Make shallow furrows using a hoe or other garden tool

5. Place seeds by hand evenly down the row
6. If growing sweet corn, squash, melons or cucumbers, place several seeds in one spot at intervals along the row
7. Group quickly maturing veggies together so space can be used for later crops
8. Arrange by height; taller crops on the north of shorter crops
9. Put plants that vine (cucumbers, melons, squash) on the outside edges of the bed
10. Cover seeds and firm the soil
 - a. Pack soil around seeds by gently tamping the soil with your hands or the back side of the rake or hoe
 - b. Firming the soil around the plant prevents drying of the soil and keeps rainwater from washing away the seeds
 - c. Firming the soil provides good seed to soil contact which will help seeds germinate faster
11. Water lightly
12. Thin the plants while they are young; remove the weakest plants

J. Planting purchased plants

1. Using plants shortens the time before harvest
2. Buy plants that are healthy, stocky, medium sized and disease-free
3. Don't buy plants with spots on the leaves, brown lesions on the stems, or knots on the roots
4. Inspect plants carefully to make sure they are insect free
5. Avoid plants that are wilted, yellow, spindly, or have a lot of roots coming out the bottom
6. Lift plant gently out of container and check to make sure the roots aren't circling the plant
7. Both seeds and plants need an inch of water a week
 - * a tuna fish can makes a good water gauge

K. Transplanting seedlings

1. Harden off any plants that have been started indoors from seed
 - a. Need to get plants used to outdoor temperatures
 - b. Place plants close to the house because this is a warmer climate
2. Transplant on a cloudy day or in the evening
3. Handle plants with care
 - a. An hour before transplanting, water plants
 - b. Remove plants without disturbing the roots and keep as much of the soil as possible

4. Dig a hole large enough so that the plant sits slightly deeper than it grew in the container
5. Place plants in the hole, cover the roots, and tamp down the soil around the plant
 - * If plants are spindly, place them in the hole at an angle
6. Water after planting
7. If there is a threat of frost after planting, cover the plants
 - a. Baskets, boxes, or jars can be used
 - b. Remove covers during the day so plants can get ventilation

References:

1. *University of Illinois Extension Master Gardener Manual, University of Illinois College of Agriculture, Consumer and Environmental Sciences*
2. www.extension.illinois.edu/veggies/planting.cfm

Resources:

1. *Chicago Botanic Garden, Plant Information Office*
847-835-0972
plantinfo@chicagobotanic.org
2. *Jan Keevil, Certified University of Illinois Extension Master Gardener*
jankeevil@aol.com

SUMMER GARDEN PLANTING DATES

April 10 - 25

asparagus, crowns
cabbage, seeds
collard
kohlrabi
leek, seed
lettuce, leaf
mustard greens
onion, seeds
onion, sets
pea
potato
radish
rhubarb, plants
spinach
turnip

May 25 - June 1

bean, lima
cucumber
eggplant, plants
muskmelon
okra
pepper, plants
potato, sweet
pumpkin
squash
watermelon

Successive Plantings

bean, snap
beet
carrot
corn, sweet

April 25- May 10

beet
broccoli, plants
Brussels sprouts, plants
cabbage, plants
carrot
cauliflower plants
chard, Swiss
Chinese cabbage, plants
leek, plants
lettuce, head, plants
onion, plants
parsley
parsnip
radish

Successive Plantings

kohlrabi
lettuce, leaf
radish

May 10-25

bean, snap
corn, sweet
spinach
tomato, plants

Successive Plantings

lettuce, leaf
radish

FALL GARDEN PLANTING DATES

June 1 -5

Brussels sprouts
cabbage, seed
kale
kohlrabi
pepper
potato
squash, summer
tomato

Successive Plantings

bean, snap
corn, sweet
cucumber

June 25 - July 5

bean, snap
beet
broccoli, plants
cabbage, plants
carrot
cauliflower, plants
Chinese cabbage, plants
endive
okra
rutabaga

July 15 - 25

Chinese cabbage
kohlrabi
lettuce, leaf
mustard greens
radish
turnip

August 10 - 20

lettuce, leaf
mustard greens
radish
spinach