

family
**Vegetable
Garden**
series

Extension Bulletin E-824 (26)

Dictionary of Terms

by Elizabeth C. Naegele and
J. Lee Taylor, Department of Horticulture

This dictionary applies to all the bulletins of this series. It defines terms that may be unclear to new gardeners.

A

ammonium nitrate — A high nitrogen fertilizer (33-0-0).

analysis (of a fertilizer) — Tells the amount of nitrogen, phosphorus and potassium in a fertilizer. A fertilizer such as 5-20-20 has 5% nitrogen, 20% phosphorus (in the form of phosphoric acid) and 20% potassium (in the form of potash).

annual — A plant that lasts only one year or growing season, such as tomatoes. Annuals sprout from seed, produce flowers and fruit and then die all in one growing season.

B

biennial — A plant that takes two years to complete its life cycle, such as beets, brussels sprouts, cabbage and carrots. Biennials sprout from seed and produce leaves the first year. The roots live over winter and the next year send up shoots, flower and seed stalks and then die at the end of the second year.

black plastic — A dark plastic material, used for mulching, which does not allow light to penetrate. It usually comes in rolls 2 to 4 feet wide, 1½ mils (.0015 inch) thick.



blanch — To take the color out or make white by excluding the light. For example, tying leaves over cauliflower heads blanches them (prevents them from turning green).

blossom-end rot — A condition in which the blossom end of fruits or vegetables, such as tomatoes, peppers and squash, turns black and rots. It is caused by not enough calcium being taken up by plant roots (due to a lack of moisture in the soil). It occurs most often on the first fruits produced by a plant.



booster fertilizer — A high nitrogen fertilizer recommended for most vegetables. It is applied about midseason, usually by sidedressing. Examples are urea (46-0-0) and ammonium nitrate (33-0-0).

burn (a plant) — The result of applying too much fertilizer to plants or getting it on their leaves. It injures roots, causes browning and wilting of leaves and may kill the plant.

bush (variety) — Short, compact plant varieties, like bush beans or bush squash, which have bush-like growth rather than vining growth.

C

cages — Used for supporting vining plants, such as tomatoes or cucumbers. They are usually made of concrete reinforcement wire or similar fencing.

catalogs (seed) — Booklets put out by seed companies in which seeds, plants and garden accessories are sold through the mail. Catalogs have more plant varieties and information than are normally available at seed racks. They are free and available upon request from seed companies beginning in December. Addresses of companies can be found in farm and garden magazines as well as in Extension Bulletin E-760 (s).

clay — A type of soil made up of very fine particles. It is very hard, has little air space and drains poorly. Clay soils are "heavy" soils.

cloves — The bulb-like sections which make up a bulb, as in garlic.



compost — A mixture of many different materials, such as rotten leaves, manure, lime, etc., mixed together and decomposed. It is mixed with garden soil, especially heavy soil, to loosen it up.

cool season crop — This refers to plants which grow best in cool weather (either in spring or fall), such as cabbage and peas. Most cool season plants can withstand frost. For a spring crop, they are planted when there is still danger of frost. For a fall crop, they are planted in July or late June.

crowns — The roots and dormant buds of one-year-old and older perennial plants, such as rhubarb and asparagus.

cultivate — To loosen or break up the soil around growing plants in order to kill weeds and let air and water enter the soil more easily.



cultivator — A small powered or push-type tiller used to loosen the soil.

cutworm — A caterpillar which cuts off the stem of transplants, such as cabbage and tomatoes, at ground level during the night. Placing paper collars around the base of plant stems will prevent cutworm damage. Insecticides may also be used.



D

damping off — A disease of seedlings started indoors, caused by certain fungi which enter a plant near ground level, producing rot. It is always present in the soil. To prevent it, sterilize soil and containers before planting seeds in them.

disease-resistant — This refers to plant varieties which have been bred to withstand attack from certain diseases. Initials of diseases varieties are resistant to are sometimes printed next to the



variety name. For example, the tomato variety Supersonic has (V.F) printed next to it which means it is resistant to verticillium and fusarium wilts.

drainage or well-drained — Well-drained soils such as sand or sandy loams allow water to flow through easily. This is good drainage.

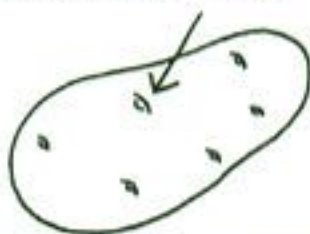
dwarf — This refers to plant varieties which are shorter than standard varieties.

E

ear — The fruiting spike of sweet corn which includes the kernels, cob and husks.

elements — The basic particles which compose matter. Of the more than 100 chemical elements, 16 are known to be essential for plant growth. These include the 13 mineral elements as well as carbon, oxygen and hydrogen.

eye — The bud of a potato tuber.



F

fall crop — This refers to vegetables planted from seed during the summer to be harvested in the fall; they usually grow best in cool weather, such as spinach, cauliflower, broccoli, cabbage, brussels sprouts, etc.

fertilizer — A substance which provides nutrients for plant growth. Fertilizers can be organic (rotted animal wastes, plant materials, etc.) or inorganic (processed substances, such as 5-20-20 fertilizer).

flower stalks (seed stalks) — Long stems on which flowers and seeds form. Certain vegetables, such as lettuce and spinach, will form seed stalks if grown in very hot weather. Biennials, such as carrots and parsley, form seed stalks the second year of their growth if they survive over winter.

foliage — The mass of plant leaves.

food (plant food) — The nutrients needed for plant growth provided by fertilizer. Primary ones are nitrogen, phosphorus and potassium.

fruit — The seed-bearing product of a plant. Many vegetables are actually fruits (for example: tomatoes, peppers, cucumbers and squash).

fungicide — A chemical such as Captan or Maneb used to prevent or control fungus diseases on plants, such as powdery mildew, tomato blight and fusarium wilt.

furrow — A trench in the earth made by a plow or hoe.



G

germinate — To begin to grow or sprout.

growing point — The area(s) on a plant where new growth is starting. The growing point can be the top bud or buds on the stems of some plants; it can also be at ground level, as with grasses.

growth light — A light used to supplement or substitute for sunlight when growing houseplants or transplants indoors. They are generally fluorescent bulbs or special fluorescent-like bulbs. All fit in regular fluorescent fixtures.



grubs — Thick, worm-like insects in the immature stage which later become adult beetles, flies, etc. They eat the roots of many garden plants and are especially numerous in soil which has been in grass.

H

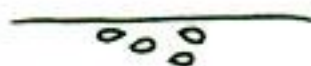
harden off — To get plants grown indoors gradually accustomed to the more severe conditions outside (sun, wind and cooler temperature). This is done by watering less and placing them outdoors on warm spring days and bringing them in at night. Transplants grown indoors should be hardened off before planting in the garden.

harvest — To pick or gather a crop.

head — The top part of a plant, especially when the leaves are tightly folded together in a clump, as in a head of lettuce or cabbage.

herbicide — A chemical which kills or controls weeds.

hill — A group of seeds sown together (not a mound of soil). Some vegetables such as squash are usually planted in hills.



hot caps or hot tents — Small covers placed over plants which let in light but protect the plants from frost and wind after transplanting.

husk — The outer, leaf-like cover enclosing an ear of corn.



hybrid — A crossbred plant or animal. A hybrid is the offspring of a male of one species, variety, etc. and a female from another. Hybrid plants are usually more vigorous than either of the parents. Seeds of hybrid plants, however, should not be saved because they will not produce the same hybrid plant (will not be true to type).

I

insecticide — A chemical such as Malathion that kills or controls insects.

irrigation — Watering with overhead sprinklers, plastic hoses, flooding, etc. to supply growing crops with moisture.

K

K — Symbol for potassium.

kernels — Seeds (really one-seeded fruits) of sweet corn which form on the cob.

L

loam — A good garden soil consisting of a loose mixture of clay, sand and organic matter.

M

mature — The stage at which a vegetable is full grown. Note: maturity and ripeness do not mean the same thing. Some vegetables are ready to eat (ripe) before they are fully mature, such as summer squash, sweet corn and cucumbers.

minerals — Any chemical element or combination of elements occurring naturally in soil, rocks, etc., such as lime. Of the 16 elements needed by plants, 13 are derived from minerals and called mineral elements. The other three (carbon, oxygen and hydrogen) are obtained from water and carbon dioxide.

mulch — Any substance such as straw, leaves, etc. spread on the ground to protect the roots of plants from heat, cold or drought, to keep fruit clean, to prevent weeds from growing and to conserve moisture.

N

N — Symbol for nitrogen.

nitrogen — One of the major nutrients needed by plants for growth. Nitrogen promotes leafy growth and dark green color. In a 50-20-20 fertilizer, the first number stands for the percentage of nitrogen. Thus in a 100-lb. bag of 5-20-20 fertilizer, there would be 5 lbs. of nitrogen. Signs of nitrogen deficiency are pale yellow leaves, especially in the lower portions, and slow, stunted growth.

nutrients — The mineral elements necessary for plant growth: nitrogen, phosphorus, potassium, calcium, magnesium, iron, copper, zinc, molybdenum, sulfur, manganese, cobalt and boron. Plants take these nutrients from the soil. Fertilizers replace them.

O

organic gardening — Gardening without man-made materials such as chemical fertilizers, pesticides, etc. and using only natural materials for fertilizers or pesticides.

organic matter or material — Derived from living organisms. Examples are leaves, grass clippings, rotted plants, animal wastes, etc. Adding organic matter to soil loosens it and improves drainage as well as adds nutrients.

P

P — Symbol for phosphorus.

peat moss — Decomposed plant material (especially some bog mosses) added to a soil mix to loosen it up and/or to help it retain moisture.

perennial — A plant which continues to live from year to year, such as asparagus and rhubarb. A perennial's roots live over winter and send up shoots, flowers and fruit during each growing season.



perlite — A mineral added to soil mixes to improve drainage by loosening up the soil.

pesticide — A substance used to kill or control bacteria, fungi, insects, rodents, weeds, etc. Pesticides include fungicides, insecticides and herbicides.

phosphorus — One of the three major nutrients required by plants for growth. It promotes development of flowers and fruit, as well as root growth. It is the middle number on fertilizer labels; for example 5-20-20. Signs of phosphorus deficiency are reddish purple color on stems and veins of leaves, especially on underside, very thin stems and delayed maturity of fruits.

pinch — To remove the growing point of plants. Pinching out the growing point will make most plants send out side shoots and become bushier.



plow — To loosen and turn the soil for planting. A plow cuts, lifts and turns over the soil.

pole — A tall, thin stick used to support tall climbing plants. Or, a vegetable variety which is tall and climbing, as in pole beans.

pollinate — To transfer pollen from the male to the female parts of a flower. Pollen can be carried by wind, insects or birds to another plant (cross-pollination), or a plant can pollinate itself (self-pollination).

potash — Potassium carbonate, especially from wood ashes. This form of potassium is often applied as fertilizer to plants.

potassium — One of the three major nutrients required by plants. It is the third number on fertilizer labels; for example 5-20-20. Potassium promotes root growth. Signs of potassium deficiency are curling, browning and drying of leaf edges, brown spots throughout the leaf, especially on lower parts of the plant, slow growth and uneven ripening of fruit.

prune — To cut off or trim unwanted branches on plants.

R
recommended varieties — Plant varieties (especially vegetables) considered to be best adapted for growth in a particular climate. These are commonly determined by the agricultural college or university in each state.

ripe — Ready for picking or eating.

root ball — A plant's roots and the soil around them.



rotate — The practice of changing the location of vegetable crops in a garden each year. Plants attacked by the same pests should be rotated to avoid diseases or insects which live in the soil. Also, certain vegetables are heavy feeders of certain soil nutrients and would deplete the soil's nutrient supply if they were planted in the same place every year. A garden plan is helpful in remembering where vegetables were planted from one year to another.

rototiller — A hand-held, motor-driven tiller which churns and loosens the soil to prepare it for planting. It is often used in small gardens instead of a plow.



S
go to seed — This refers to plants, especially vegetables, forming seed stalks. Lettuce does this in hot weather. This reduces yield since lettuce will not form leaves after going to seed. Biennials such as carrots and onions which survive a winter go to seed the second year.

seed potatoes or seed pieces — Small potatoes ready to plant or large ones which may be cut up into smaller portions to plant. Seed potatoes are used for growing new potatoes. Therefore, each piece must contain one or more eyes. Certified seed potatoes are free of disease and will sprout easily.



seed stalks — Stalks on which flowers and then seeds form. When vegetables send up a seed stalk it is the same thing as going to seed.

seedling — A small plant after it has sprouted from seed.



sets — Small onions grown from seed the previous year. When planted, they will mature faster than onions grown from seeds.

shoot — New growth of a plant in the form of a stem and its leaves.

sidedress — The application of a fertilizer along rows or around plants (especially nitrogen around July 4, called a booster fertilizer). It is placed no closer than 4 inches from plants and should be worked into the soil.

silks — Those portions of the female flowers on an ear of sweet corn that run from the end of the ear to the kernels; the hairy or silky strands difficult to remove from between the kernels.

sod — Top layer of soil filled with the roots of grass, weeds, etc. Sod also contains many insects such as grubs, cutworms, earthworms and others. It should be plowed a full year before planting a garden to reduce the number of grubs and cutworms.



sow — To plant seeds.

spear — A young shoot of asparagus.

spindly — Tall and slender, or weak. It is usually caused by growing plants in weak light and/or at warm temperatures. Spindly plants are poor transplants.

stake — To place stakes (usually wooden) near vining plants, particularly tomatoes, and tie the stems to the stakes at various places for support.

starter solution — A fertilizer solution high in phosphorus applied to the soil around transplants when they are placed in the garden. It encourages root growth. A typical starter solution might be 10-55-10.

sterilize — To sterilize soil or containers before planting seeds or plants in them means to kill most disease organisms. This is done by baking soil, treating it with a chemical or soaking containers in a cleaning solution such as chlorox.

successive planting — Planting seeds at intervals of a few weeks so that the harvest period is extended over many



weeks instead of the whole crop becoming ready at once.

sucker — A shoot from the roots or lower part of the stem of a plant such as corn. These are usually not removed.

T

tassels, tasseling — Tassels are the male flowers of a corn plant and produce pollen grains. Tasseling refers to the time tassels appear on the plant.

thin — To reduce the number of plants in a row by removing the extras. Thinnings may be transplanted or eaten if large enough.

till — To plow or work the soil; to cultivate.

transplants — Young plants started from seed and grown indoors. They are then planted in the garden. Tomatoes and peppers are usually started from transplants.

treated — This refers to seed which has been coated with a fungicide to prevent disease from killing it when planted. Seeds planted early in cool, wet soils especially need treating with a fungicide. Sometimes seeds may also be treated with an insecticide.

tuber — A short, fleshy, usually underground stem or shoot with buds (or eyes) such as a potato. Pieces of potatoes having one or more eyes can be planted to grow new potato plants.



tuberous root — A thick, fleshy root like a tuber, but having buds present only at the crown (the stem end) such as a sweet potato. The whole sweet potato must be planted to grow a new plant.

U _____
urea — A high nitrogen fertilizer (46-0-0).

V _____
variety — A plant which has slightly different characteristics from other members of its species. Tomato varieties have different color, taste, shape, texture, days to maturity, disease resistance, etc.

vegetable — Plants or plant parts used for food. Tomatoes, cucumbers, peppers, etc. are called vegetables though they are really fruits.

vermiculite — Used in soil mixes to loosen soil. It is also used as a medium in which seedlings are started.

vining — This refers to vegetable varieties that are climbing plants, such as pole beans or peas. They are usually supported by a trellis, stake or cage.



W _____
warm season crop — This refers to vegetables which grow best in warm weather and which are injured by frost, such as bush beans, melons, tomatoes and others. Most warm season vegetables cannot be planted until May 20 to June 1 in southern lower Michigan.

water soluble — This refers to fertilizers or other materials that easily dissolve in water.



Other bulletins in this series provide additional information on vegetable gardening.

All Michigan 4-H — Youth, Natural Resources and Public Policy, Family Living Education, Agriculture and Marketing educational programs and materials are available to all individuals on a non-discriminatory basis without regard to race, color, creed, or national origin.

Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8, and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, East Lansing, Michigan 48824. Price 5 cents, Single Copy Free. 1P-1-79-40M-UP