

glossary

Abscission Layer – A layer of specialized cells that facilitate the separation of fruit from the plant or allow a deciduous tree to shed leaves.

Anthocyanin – A class of red, purple, and blue water soluble pigments found in plants. Anthocyanins are the main pigment in temperate fruit.

Antioxidant – Molecules found in some plant based foods that are believed to provide health benefits by halting an oxidation chain reaction that might cause damage to cells.

Astringency – A sensation in the mouth, caused by the constriction of mucus membranes, set off by tannins found in some fruits. The sensation can be described as dryness or choking.

Breed True – An organism that always passes a certain physically expressed trait to its offspring

is said to breed true. This phenomenon happens because the pairs of alleles responsible for the trait are the same in the parent and therefore there is no chance of variation.

Brix – A unit used for reporting dissolved solids in solution. In fruit, the figure usually corresponds to sugar content.

Cane – Long, woody stem of berry bushes that sprouts from a central crown. Canes rarely live more than 4-8 years.

Carotenoids – Common orange or red pigments found in plants and algae. Carotenoids are fat soluble and include the compounds that give the red color of tomatoes and the orange color of carrots.

Circumboreal – A region that exists in northern parallels around the globe just below the arctic.

Clone – A plant that is genetically identical to the parent plant, usually as a result of asexual propagation.

Crown – The totality of the above ground parts of a plant can be referred to as the crown, but typically the crown is the area where above ground parts meet the below ground parts. Frequently this is the area where new shoots originate.

Cultivar – a cultivated cultivar of a plant that has distinctive traits that can be passed onto the next generation by either seed propagation or asexual propagation.

Cyme – A cluster of flowers in which the flower on a terminal bud opens first and secondary flowers form on lateral stems.

Determinate – Determinate cultivars produce a full crop at once as opposed to indeterminate cultivars which will produce continually throughout the growing season.

Dioecious – A plant that does not have the male and female parts on the same plant but instead individual plants are either male or female.

Dormant – The state in which a plant or seed is alive but not actively growing.

Drupe – See “Stone Fruit”.

Ellagic Acid – A plant-based antioxidant common in strawberries and fruit of related species that is purported to provide health benefits. The U.S. Food and Drug Administration does not support these claims.

Gamma Linolenic Acid – A plant-derived Omega-6 fatty acid with a long history as a folk medicine.

Graft – When two different plants fuse together. For propagation, an upper part of a plant, called the scion, is attached to a rootstock, and two grow together. Grafting is only successful if scion and rootstock belong to the same species or closely related species.

Hardiness Zones – Standardized zones on a map that are based on average minimum temperatures within each zone. The zone designation can help growers determine whether a plant will survive winters in their growing zone.

Hybrid – A plant that is the result of the cross-breeding of two different species or varieties.

Indeterminate – A plant that continues to grow and produce flowers throughout the growing season, as opposed to a determinate cultivar which flowers and fruits at one time.

Interspecific - Between species. An interspecific hybrid is a hybrid between two species.

Invasive – A non-native species that is highly successful to the detriment of other, usually native, species. The loss of native species to non-native potentially leads to environmental degradation.

Leggy – Having long, floppy branches or stalks. This is usually a result of cultural conditions that cause a plant to grow excessively tall, frequently without the ability to support itself. Low light causing a plant to “reach” towards the light is a common cause.

Maceration – Fruit and seeds are mashed together to promote seed germination.

Macronutrients – Elements required by plants or animals in large amounts.

Micronutrients – Elements required by plants or animals in small amounts.

Native – Plants that developed and exist in a certain place over long periods of time. Also known as indigenous plants.

Nutraceutical – A nutrient derived from a plant or food that is purported to provide health benefits. The term “nutraceutical” is not defined by law in the United States.

Pectin – A naturally occurring carbohydrate found in firm fruit like apples that can be extracted to serve as a thickener when making jams or jellies.

Pemmican – A Native American food, now part of Canadian cuisine, made from pulverized, dried meat protein and dried fruit mixed with animal fat. Traditionally, pemmican stored well, was nutritious, and easy to transport. This made it a popular food for fur-traders and expeditions.

Phytonutrient – A natural chemical found in plant-based foods. There are more than 25,000 identified phytonutrients and many provide health benefits when consumed. Carotenoids and lycopene are examples of phytonutrients.

Pome Fruit – The fruit of apples, pears and their close relatives. The fleshy and edible part of a pome is formed where the ovaries, floral tube and calyx cup all fuse together.

Pustule – A raised spot or bump on a plant that is the result of a fungal infection.

Raceme – An indeterminate (see indeterminate in this glossary) flower produced on a single stalk. As the stalk grows, it produces new flowers so that the oldest flower is at the base and the newest, near the tip.

Release/Cultivar Release – A plant breeder propagates and sells a new cultivar to the public.

Rootstock – In plant propagation, the rootstock is the lower part of the plant onto which the upper part (the scion) is grafted.

Root Sucker/Suckering – A sprout that grows from a bud in the underground roots of the “mother” plant.

Scion – In plant propagation, the scion is a branch or bud of a parent plant that is grafted onto a rootstock.

Self-infertile – A mechanism in a flowering plant that prevents self-fertilization, also known as self-incompatibility.

Sepal – A part of a flower that sometimes remains on the ripened fruit, such as the small leaf-like structures on the bottom of an apple or pear. Before the fruit develops, the sepals enclose the petals of the flower.

Spore – Microscopic reproductive cells of fungi.

Stone Fruit – A fruit that contains a large “stone” or “pit” in which the seed is found. Stone fruit are also known by the botanical name, drupe. Cherries, apricots, and almonds are commonly known drupes.

Tissue Culture – A variety of techniques used to grow plant tissue in a growing medium to produce clones, which are genetically identical offspring.

Valeric Acid – A simple acid often used as a precursor to flavor compounds. Pure valeric acid has an unpleasant odor.

Cultivar – A group of plants within a species that have distinctive traits. The distinctive traits are passed onto the next generation even when propagated by seed.

Vegetative Propagation – The propagation of a plant using non-sexual methods such as tissue culture or cuttings. The offspring produced with vegetative propagation are genetically identical to the parent plant as opposed to sexually propagated offspring involving the use of cross-pollinated seed.

Vestigial hairs – Small hairs that likely evolved from more prominent hairs or thorns that may have served some earlier purpose.

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