

Viticulture Glossary

alternative varieties	Also known as emerging varieties
ampelography	The study of botany that classifies and identifies grapevines. This is done by comparing the shape and colour of leaves and berries and more recently with the addition of DNA fingerprinting.
annual growth cycle	The cycle begins with budburst in the spring, culminating in autumn followed by winter dormancy.
anther	Part of the stamen, the male organ of the flower, that produced the pollen.
anthesis	Otherwise known as flowering - the timing and opening of flowers.
appellation controlee	A French wine name which has been officially defined and protected by law.
Baume	Developed by French pharmacist Antoine Baume in 1768, the Baumé scale is a pair of hydrometer scales used to measure the density of various liquids.
berry/berries	A succulent fruit, usually containing one to four seeds, which do not burst open when ripe.
bilateral cordon training	A vine training system that utilizes two arms, or cordons, extending horizontally from the trunk in two different directions along support wires.
Botrytis bunch rot	Fungus that affects wine grapes.
Brix	Degrees Brix (symbol °Bx) is a measure of the sugar content of an aqueous solution.
budburst	The emergence of new leaves on a grapevine at the beginning of each growing season.
bunch-thinning	The removal of undersized, poorly set or tangled bunches.
bush vine	An old form of vine training which is low to the ground without the use of a trellis.
cane	The mature, brown and woody shoot of the grapevine after leaf fall.
cane pruning	After winter pruning, one or two canes with between 8 to 15 buds of 1 year old wood is left on the vine.
canopy	Includes the parts of the vine visible aboveground - the trunk, cordon, stems, leaves, flowers, and fruit.
canopy management	A range of viticultural techniques applied in vineyards to manipulate the vine canopy. This is performed for vine shape, limiting direct sunlight and disease control, in order to create an optimal growing environment.
capfall	Detachment of the cap (calyptra), opening of flower.
climate	Wine region climates are categorized based on the overall characteristics of the area during the growing season. Examples include Mediterranean, maritime and continental climates.
clone	A vine that has developed differently from other vines of the same grape variety. The clone may have developed through natural selection by adapting to its environment or was artificially bred and developed in a control environment in order to advance favourable characteristics.

Compound bud	Compound (or dormant) buds occur at each node along a vine shoot and comprise primary, secondary and tertiary latent buds. Compound buds that develop in one season can burst in the subsequent season to give a primary shoot, if their node is retained after winter pruning. (If the primary latent bud is damaged, for example, due to frost, the secondary latent bud may burst instead).
continentality	A climate attribute that is inversely related to the degree of water moderation.
cordon	The outward extensions or "arms" of a grapevine extending from the trunk which carries the fruiting grape shoots or spurs.
cordon cut	Wines made from grapes which have partially dessicated (becoming significantly sweeter) on the vine.
coulure	The result of metabolic reactions to weather conditions that causes a failure of grapes to develop after flowering.
cultivar (cultivated variety)	A grapevine selected for desirable characteristics that can be maintained by propagation.
dormancy	The period during a grapevine's growing season where there is no photosynthetic and very little metabolic activity going on.
downy mildew	A major disease of grapevines caused by the fungus <i>Plasmopara viticola</i> which is unique to grapevines.
drip irrigation	A controlled system of irrigation where water is provided to the grape vine drip by drip in precise amounts by a system of pipes and metered valves.
fertilisation	In flowers: joining of the chromosomes of the pollen and the egg cell.
fruitset	Qualitative definition: retention of the ovary on the peduncle as berry, after fertilisation of the ovule. Quantitative definition: proportion of flowers that become berries.
Geneva Double Curtain trellis	A horizontally divided trellis that is specifically designed to allow more light into the fruiting zone while increasing the surface area of the canopy.
geographic regions (appellation)	A legally defined and protected geographical indication used to identify where the grapes for a wine were grown.
graft	The joint made during the grafting of rootstock to the scion of a vine.
grape quality	Grape quality is affected by variety in conjunction with the weather during the growing season, soil minerals and acidity, the time of harvest, and the pruning methods employed.
harvest	The stage when the grape bunches are picked. For winemaking this is when the berries have reached adequate ripeness, primarily measured by sugar, acid and tannin levels.
heat degree days	The average temperature per day (°C) minus 10, multiplied by the number of days in the 7 month growing season (Oct to April in Australia). A base of 10 is used because vines do not function below 10°C.
herbicide	A concoction of chemical or organic chemicals used to control weed growth in the vineyard.
humidity	Expressed as a percentage, the relative humidity is the ratio of the amount of water vapour in the air at a specific temperature to the maximum amount that the air could hold at that temperature.
hybrid	The product of a crossing of two or more <i>Vitis</i> species.

Inflorescence	Reproductive organ of grapevine whereby a collection of flowers are arranged on the rachis.
irrigation	The process of applying extra water in the cultivation of grapevines.
juice	The extractable fluid contents of cells or tissues of grapes.
late harvest	Wines made from grapes left on the vine longer than usual.
lateral shoot	Side shoot that develops from the axillary buds on the stem of the current season's growth.
layering	A long cane from an adjacent vine is used to replace a missing vine. The new vine grows quickly as it is nursed by the mother vine to which it is attached.
leaf removal	The practice of removing basal leaves and basal laterals to expose the fruit zone to light and air movement.
lyre trellis	A "U" shaped trellis system where the canopy is split horizontally, the shoots trained upwards, and there are two distinct fruit zones.
machine-harvest	Mature fruit is harvested with specialized machines that tease the berries off the rachis which is left behind on the cane.
macroclimate	Refers to the regional climate of a broad area.
mesocarp	The part of the pericarp situated between exocarp and endocarp.
mesoclimate	Refers to the climate of a particular vineyard site and is generally restricted to a space of a tens or hundreds of metres.
microclimate	Refers to the specific environment in a small restricted space, such as a row of vines.
millerandage	Occurs when flowers develop abnormally into either seedless berries or live green ovaries.
mulch	A protective cover placed over the soil to retain moisture, reduce erosion, provide nutrients, and suppress weed growth and seed germination.
nematodes	Microscopic, parasitic roundworm that live in or feed on grapevine roots. They can stunt vine growth and cause viral disease.
nutrition	The use of nutrition (levels of nutrients in the vine) can influence fruit set, fruit quality and the quality of the end product.
organic viticulture	can influence fruit set, fruit quality and the quality of the end product.
over-cropping	A vine which bears more fruit than it can ripen in a given season. This usually results in stunted shoots.
ovule	The part of the ovary of grapevine flowers that contains the female germ cell and after fertilization becomes the seed.
pedicel	The stalk of an individual flower.
peduncle	A stalk supporting an inflorescence, which is the part of the shoot of the grapevine where flowers are formed and eventually the bunch.
pericarp	Berry flesh consisting of the exocarp, mesocarp and endocarp.
pesticide	A concoction of chemicals used to eliminate pests in the vineyards such as flies, larvae, moths and spiders.
pests	Pests are living organisms that occur where they are not wanted or that cause damage to grapevines.

pH	The degree of acidity or alkalinity of a solution, the scale being from 1 (very acidic) to 14 (very basic) with 7 as neutral.
phenology	The study of the annual growth of grapevines and how these stages of development are influenced by seasonal variations in climate.
Phylloxera	A minute (ca. 0.75 mm) underground insect that kills grape vines by attacking their roots.
pollination	The process by which pollen is transferred from the anther (male part) to the stigma (female part) of the grapevine, thereby enabling fertilization and reproduction.
powdery mildew	A fungal disease that attacks any green tissue of a grapevine. Symptoms are a greyish appearance on leaves and young fruit.
precision viticulture	The cultivation of grapes using an approach that applies appropriate vineyard management practices according to variation in environmental factors (soil, topography, microclimate, etc.). Typically the approach uses technological tools (GPS, GIS, remote sensing, etc.) to measure local variation, and manages different vineyard areas accordingly to maximize yield and quality, while minimizing risk and environmental impact.
primary bud necrosis	A physiological disorder whereby the primary bud within a grapevine compound bud becomes necrotic.
Prompt bud	A prompt (or lateral) bud is a bud that develops in the leaf axil next to the compound (or dormant) bud; it may or may not burst in the same season it develops, to become a lateral shoot.
propagation	the creation of new organisms from seeds (sexual propagation) or vegetative parts of plants such as grapevine cuttings (asexual propagation).
pruning	The removal of living shoots, canes, leaves and other vegetative parts of the vine. Summer pruning is removal of the shoots through the growing season.
pulp	The flesh of the grape. The pulp contains a majority of the water, sugar, and acid that forms the grape juice extracted from the berries.
rachis	The central axis of the inflorescence that bears the flowers/berries.
refractometer	A device used to measure the sugar content of grapes.
ripeness	The point when a grape has achieved a sufficient balance of sugars and acids.
ripening	The physiological changes that occur as grapes accumulate sugar, colour, flavour and aroma compounds.
rootstock	The lower part of a grafted vine that consistent of the root structure of the plant. Since the phylloxera epidemic of the 19th century, emphasis has been on using phylloxera resistant rootstock but rootstock selection can also control vigour and yields.
row	A number of vines planted in a more or less straight line.
salinity	The saltiness or dissolved salt content of a body of water.
scion	The above ground vine stock that determines the grape variety.
Scott Henry trellis	A vertically split canopy training system which utilises two canes which are tied to an upper wire and the shoots trained upward. There are also two canes tied to a wire 12" below the upper wire and those shoots are trained downwards.
seed	A unit of grapevine reproduction, capable of developing into another grapevine.
self-pollination	Most <i>Vitis vinifera</i> grapevines are hermaphroditic (they have both male stamens and female ovaries) and are therefore able to self-pollinate.

shoot thinning	The removal of unwanted shoots from the vine cordon, head or trunk to in order to maintain a desired canopy configuration.
site selection	There are three aspects that should be considered when selecting a successful vineyard site: climate, soils and proximity to crop hazards.
skin	The outer layer of the grape, which is sometimes referred to as hulls or husks. This is where most of the colour comes from in red wines as well as tannin.
Smart Dyson trellis	A vertically split canopy system where the shoots arise from one cordon. Half of the shoots are trained upwards and the other half are trained downwards.
soil	The upper layer of earth in which grapevines grow. The material is usually black or dark brown and consists of a mixture of organic remains, clay, and rock particles.
spur	A short pruning unit of current season's wood. Usually, two buds are retained at pruning.
spur pruning	The pruning of current season's wood to two buds.
training system	The orientation and placement of a grapevine r to facilitate long-term health while optimizing fruit quality, easing harvest methods and reducing production costs.
terroir	The physical and geographical characteristics of a particular vineyard site that give the resultant wine its unique properties.
titratable acidity	A measure of the amount of acid present in a solution, expressed as grams/litre (g/L).
trellis	The hardware support structure which supports the vine and the crop.
trunk	The main wooden axis of a grapevine that supports the cordon and shoots and is supported by and directly attached to the roots.
undervine management	Under vine management impacts weed species and populations . Practices include mulching, growing an inter-row and/or under vine cover crop or cultivation.
veraison	The onset of ripening and change of colour of the grape berries.
vertical shoot positioning (VSP)	Shoots are set vertically by tucking them between catch wires, resulting in undivided canopies that resemble hedgerows with a narrow vertical canopy.
vine capacity	The total amount of growth (amount of dry matter) produced in a season; fruit, shoots, leaves, roots and increment of old wood.
vine performance	A measure of root and shoot growth, yield, and grape quality.
vineyard	A place where grape vines are grown for production purposes.
viticulture	The cultivation of grapes.
<i>Vitis Vinifera</i>	The genus and species names of our most popular wine grapes.
water stress	The physiological states that grapevines experience when they are deprived of water.
weather	The state of the atmosphere at a particular time in a wine region. Influencing factors
yield	A measure of the amount of grapes or wine that is produced per vine (or per area of vineyard).
yield estimation	Estimation of total amount of crop in a block or entire vineyard.