



GLOSSARY

ACIDITY: a crisp sensation caused by the free acids found naturally in wines. If they are excessive, the wine is aggressive and green, acerbic, acid, bitter; if they are lacking, the wine is flat. See also Acidity, Total and Volatile.

ACIDITY, TOTAL: total or titratable acidity expresses the concentration of organic acids (tartaric, malic, citric, etc.) in the musts or wine. In Italy it is conventionally expressed in % of tartaric acid.

ACIDITY, VOLATILE: refers to the presence of volatile acids (acetic acids), which are the result of irregular fermentation.

AGING: cycle of wine development, from youth to maturity. It consists of a change in the organoleptic and basic characteristics of the wine, due to phenomena of physical, chemical and biological origin (such as slow oxidation for some wines, or reduction for others).

ALCOHOL: organic compound of the wine produced by sugar transformation, carried out by yeasts. A wine's total alcohol is the sum of the developed alcohol (what is indicated on the label expressed in %, e.g.: 12.5%) and the potential alcohol, that is, what would be obtained if the residual sugars also fermented (sweet wines, e.g.: +/-2). The alcoholic volume of a wine is determined by the percentage of sugar x 0.6 (0.6 ml of alcohol is obtained from 1 g of sugar).

ALCOHOLMETER: instrument, which measures the alcohol content in alcoholic beverages.

ALFISOLS: soils with an evident horizon of alluvial clay accumulation. This usually confers a particular microstructure to the layer, characterized by cutans of clay oriented in one direction. They are evolved soils.

ALLUVIAL (DEPOSITS): detrital material deposited by rivers when they flood.

AMPELIDACEE or AMPELIDEE: family of plants to which the *Vitis vinifera* belongs.

AMPELOGRAPHY: science that describes and classifies vine types and clones and their behavior.

AMPELOLOGY: science, which describes vine cultivation.

ANTHOCYANINS: phenolic pigment, contained especially in red grapes.

ANTI-OIDIUM, FOLIAR CONTACT: a wettable, powdery sulfur used as a contact-type agrochemical against the oidium fungus.

ANTI-OIDIUM, SYSTEMIC: active anti-fungal products that also perform as contact treatment.

AROMA: olfactive sensation of wines, together with elementary scents deriving from many components: acids, alcohol, aldehydes, ketones, esters, etc.

ARRESTED MUST FERMENTATION: halting of the alcoholic fermentation of a must, by addition of either alcohol or sulfur dioxide, or by freezing. Mutizzazione in Italian.

ASPECT: color of a wine, intensity and clarity of a particular color.

BACILLUS THURINGIENSIS: microorganism employed in agriculture because of its toxic action towards certain parasites of the vine.

BACTERIA: microorganisms of numerous species, some of which can develop in wine (for example, acetic bacteria, lactic, etc.).

BARREL: cask made of oak or chestnut, used for conserving wine. Barile in Italian.

BARRIQUE: a receptacle made of oak staves, which can hold varying capacities, according to the different wine-growing regions. The most well-known is the Bordeaux barrique which holds 225 liters.

BASAL FERTILITY: ability of the first buds of the vine shoot to emit flowers, fundamental for production in training methods that use short pruning.



BODY: 1. structure of a wine that is compact, rich in dry extract and alcohol, vinous, complete and dense. 2. to have body: to have unctuousness, consistency and all the elements necessary for the general balance of the wine itself.

BORDEAUX MIXTURE: fungicide mixture of copper sulfate and slaked lime used to combat peronosporas. Poltiglia bordolese in Italian.

BOTRYTICIZED: harvest of grapes effected by Botrytis Cinerea.

BOTRYTIS CINEREA: Botrytis Cinerea: grape fungus responsible for noble rot (which favors the sugar concentration that is indispensable for the elaboration of the syrupy sweet [liquoreux] wines) or gray mold (alteration of the grapes that can result in loss of harvest), according to the climate and vine type.

BOTTLE: Receptacle for liquids made of glass, with a narrow neck. It has varying holding capacities.

BOUQUET: the sum of the tertiary aromas and olfactive sensations that are developed during wine maturation and aging.

BUNGING: sealing of the cask with a bung in order to disinfect it by burning sulfur wicks. Zaffatura in Italian.

CALCIC (HORIZON): layer of accumulation of lime carbonate.

CAMPAIGN: Production campaign: period between September 1 and August 31, used as a reference point for the statistical calculation of alcoholic beverages.

CARBONDIOXIDE: CO₂, acid oxide, gas produced during the fermentation process of alcohol.

CASARSA: training method which generally employs stakes emerging 180-200 cm out of the ground, and a permanent cordon, racked at 120-170 cm. When pruning, 3-6 vine shoots with 6-8 buds are left. These are free and bend downwards under the weight of the grapes. The vegetation is semi-free, and some of the vine shoots are hung on the two lines that have been strung above the cordon.

CASEINE: protein substance found in milk, used for fining wine, especially white wines.

CASK: Receptacle made of staves held together with iron rings. It has varying holding capacities and is designed for the transportation and conservation of wines. Botte in Italian.

CATION EXCHANGE CAPACITY: maximum amount of exchangeable cations from the organic and mineral colloids of the soil.

CHLOROSIS: yellowing of the plant canopy caused by diseases or nutrient deficiencies (frequency order: magnesium, iron, nitrogen, manganese).

CLARIFICATION: operation that aims to eliminate the residual solids suspended in the musts or a cloudy wine. It can be spontaneous clarification or determined by different procedures, such as centrifugation, addition of caseine or other substances, and filtering.

CLASSIFICATION: 1. classification of the vineyards: Current viti-vinicultural legislation of the European Union adopted for selected vine types and authorized to safeguard their authenticity. 2. classification of the cru: classification of the properties following the criteria of quality and rarity. For example: cru extra, exceptional, great cru...; especially, classification of so-called 1855 Bordeaux wines (from the first to fifth cru). 3. Wine classification: According to European Community laws, wines are classified as: table wines, quality wines coming from a determined region, and imported wines.

CLAY: mineral fraction of the soil made up of particles of a diameter smaller than 0.002 mm. Argilla in Italian.

CLAYEY: soil composed mainly of clays. The characteristics of a clayey soil (low permeability to water and air) begin



to manifest themselves when the percentage of clay is at least 250-300 g kg⁻¹(corresponding to clay-loam or clay- sandy-loam textures); the soil is defined as “clayey” only when it is over 400 g kg⁻¹. Argilloso in Italian.

CLONE: plants (vine types or rootstocks), which are homogeneous among themselves and obtained by plant multiplication, starting from a single plant selected for its disease-resistant, organoleptic and agronomic qualities.

COLOR: a soil property that indicates different pedogenetic processes; it is described in pedology using colorimetric charts of Munsell's tables. These enable the characterization of the HUE, the value and the chrome of a soil.

CONCRETION: soil structures similar to nodules, but with a more irregular shape.

CONTOUR TILLAGE: system in which the tillage operations, and consequently the crop rows, follow the contour levels of the hill.

CRU: 1. vine type, which is very often noble (due to the nature of the growing environment). 2. The product that derives from a certain vine type.

CULTIVAR: variety of vine type obtained by selection and kept under cultivation.

CULTIVATION LAYER: minimum thickness of soil free of saturation water, necessary for plant development. Franco di Coltivazione in Italian.

CUTTING (VINE): part of the vine, containing a bud, which is able to make a new plant, if planted. Talea in Italian.

CYCLE: the vegetative cycle of the vine includes three periods: winter (quiescence, the plant's vital processes slow down, it loses its leaves); growth period (in spring, with sprouting, the growth of vine shoots, and blooming); ripening period (in summer, growth of the grapes until harvest).

DEBLOCAGE: opening of the first bottle of the new vintage. Generally referred to the first tasting of the new wine (vino novello) which takes place, by law in Italy, each year on November 6th.

DENOMINATION OF CONTROLLED ORIGIN (DOC): wine produced in a delimited area and processed according to Italy's current regulatory laws, following the indications which specify the vine type to be planted, yield per hectare, the pruning, alcoholic content, vinification processes and organoleptic qualities.

DENSE VINEYARD: vineyard with an elevated vine plant density, higher than 5000 plants per hectare.

DESTEMMER: machine that separates the grapes from the stalk/stem. Diraspatrice in Italian.

DESTEMMING: process that removes stems/stalks from the grape bunches before the fermentation process. Diraspate in Italian.

DISEASES: pathological alterations of the status of living organisms, organic degradation.

DOUBLE LAYER TILLAGE: soil tillage at noteworthy depths (90-100cm) without mixing up the soil. It avoids the uplifting of soil layers that are less suited to host the vine roots.

DRAINAGE: soil's capacity to expel water from rainfall and from other sources.

DRAINAGE- EXTERNAL: indicates the superficial flow of rainwater or of water originating from adjacent areas.

DRAINAGE-INTERNAL: indicates water movement through the soil profile.

EMERGENCY IRRIGATION: water application necessary in cases of severe drought in order to safeguard production.

ENANTHIC: relative to the perfumes and aromas of wine.

ENTISOLS: very young soils, poorly developed and their structure ranges from absent (loose or massive) to weak.

EROSION: indicates the gradual removal of particles of soil from their natural seat.

ESTATE: grape-growing property which includes the vine- yards and the cellar. Tenuta in Italian.



EYE: bud of the vine. Occhio in Italian.

FERMENT: microorganism able to provoke fermentation.

FERMENTATION: combination of chemical processes of converting sugar to alcohol and CO₂ carried out by enzymes contained in the yeast.

FINISH: residual taste characteristics of a wine that are perceived after it has been tasted, also known as the wine's aftertaste. Retrogusto in Italian.

FOLIATION: sprouting of the buds and their development into leaves on the vine, in spring.

FRUIT SET: stage in which the pollinated flowers evolve into fruit. Allegagione in Italian.

FRUITY: a combination of scents in a wine that bring to mind grapes and ripe fruit.

FURAN: an aldehyde, which gives wine a brown hue and a scent of fresh bread.

GENERIC: generic denomination - the most basic control of origin for a wine; that is, the regional one.

GRAFT: agamic method of propagation. It is an operation where a budding part of a plant (called graft) of a different species or variety, is inserted in another plant (called rootstock, or root) to obtain a new type of plant. This is done to make a grapevine more resistant to phylloxera and other pests. Innesto in Italian.

GRAPE MOTH: microscopic moth, also called vine moth. A very damaging parasite to the vine, it eats the pulp of the grapes and favors the presence of gray mold. Tignoletta in Italian.

GRAVES: soil made up of small morenic pebbles, sands and clays.

HABILLAGE: French term for ornaments that decorate the bottle: the label, neck band, etc... (see "Presentation Packaging"). Abbigliaggio in Italian.

HARVEST: picking and gathering of the ripe grapes, in autumn. Vendemmia in Italian refers specifically to the grape harvest.

HECTARE: unit of measure of farm surface equal to 10.000 m² (equal to 2.471 acres).

HIGH-CLEARANCE TRACTOR: a tractor that enters a vineyard straddling a row. It has been adapted to permit machine passage across narrow-row planted vineyards.

HUMUS: decomposed and transformed organic matter, present in the soil. Some fractions, called "labile humus," are subject to mineralization, a natural process which makes nitrogen and other nutritive elements available to the plants. The term "stable humus", though normally associated with the colloidal clay particles, indicates that fraction which is resistant to mineralization. It is directly responsible for the structure and soil exchange capacity.

HYBRID: vine type originating from the sexual breeding of two vines of different species. The hybrids are usually used for rootstocks.

I.N.A.O.: acronym of the National Institute for the Denominations of Origin, which is a French public body responsible for the Denominations of Origin.

INCEPTISOLS: soils with a defined cambic (BW) horizon. This is called alteration or structural horizon; there is evidence of alteration (bluish gray colors bG) that define an intense water regime.

INVASATURA: filling of the vats during racking.

JEROBOAM: large-format wine bottle equal to six ordinary bottles of the Bordeaux region and four of the Champagne region.

KILLER: killer effect: destruction of the yeasts carried out by other yeasts, which release toxins.



LACCASE: enzyme secreted by Botrytis Cinerea, responsible for the noble and gray mold.

LACTIC/lactic acid: natural ingredient of wine, whose concentration increases during the malolactic fermentation process. It gives the wine a rounder and softer consistency.

LANDSCAPE UNIT: a part of a territory with sufficiently homogeneous specific characteristics, where there are similar soils. Also known as Vocation Unit.

LATE HARVEST: later compared to usual, to obtain a super maturation of the grapes. Tardivo in Italian.

LEES: solids or sediment on the bottom of bottles or casks. Fecce in Italian.

LIMESTONE (ACTIVE): finely divided fraction of a soil's limestone content which is readily and easily soluble as a bicarbonate. Calcare attivo in Italian.

LIMESTONE (TOTAL): total amount of limestone carbonates found in the soil, less than 2 mm in diameter. Calcare totale in Italian.

MACROELEMENTS: mineral elements that the vines need yearly in big quantities (25-250 kg ha⁻¹) for their nutrition, such as nitrogen (N), phosphorus (P), and potassium (K).

MAGNUM: Bottle containing 1.5 liters, or twice the amount of two standard wine bottles.

MALOLACTIC: refers to bacteria and enzymes which cause malolactic fermentation.

MATURATION: the development of the grape, which brings about the increase of sugar content and the decrease of acidity.

MESOCLIMATE ZONES: areas circumscribed to a few hectares in which the climate conditions are different from the surrounding area.

METODO CLASSICO TRADIZIONALE or Champenoise: Italian term for the sparkling wine process which includes fermentation in the bottle, typical of the sparkling wines of France's Champagne growing zone or other superior quality sparkling wines.

MICROCLIMATE: 1. climate conditions in a specific area of a vineyard. 2. nature of the climate considered in a specific area.

MICROCLIMATE ZONES: circumscribed areas in which the climate conditions are different from the surrounding area.

MILLESIMAL: vintage year of a wine or year of release of a wine or spirits (aqua vitae).

MOLD: 1. sour rot: alteration of the grapes that rot, developing acetic bacteria. 2. gray mold: disease, of fungal origin, of grapes, which is related to bad climate or grape berry pest attacks. 3. noble rot: alteration of the grapes caused by Botrytis Cinerea, which increases the dehydration and the sugar concentration in the grape. Collectively referred to as Marciume in Italian.

MULCHING: the covering of the soil with different kinds of material (straw, sawdust, plastic film, etc.) to control weed development.

MUST: juice, obtained by pressing the fresh grapes, containing solid particles, and which has not yet fermented.

MUST METER: instrument employed in enology for establishing the quantity of sugar present in the must.

NEWHALL SIMULATION MODEL: system for calculating the soil climate used by Soil Taxonomy.

NOBLE: outstanding vineyard, able to produce excellent wines, such as the DOC/DOCG ones.

NODULE: body with a rounded form, which can be hard or soft.

NOVELLO WINE: wine obtained using a particular fermentation technique and bottled a month and a half, or two, after harvest.

OFF: change in some of the wine's qualities caused by disease or by defects, which provoke the deterioration of the organoleptic characteristics. Also "corked." Alterazione in Italian.



OFFSHOOT: A branch of one plant bent over and partially buried, growing roots and separating from the mother plant to form an entirely new plant. Propaggine in Italian.

OIDIUM: fungus of the Erisifaceae, which is a parasite of the vine.

O.I.V.: acronym of the International Office of the Vine and Wine. It is an international body, with headquarters in Paris, founded to study scientific, technical and economic problems regarding vini-viticultural production.

OPERATIONAL RESOURCES: coordinated set of equipment and manpower needed to carry out the completion of one or more field operations. Cantiere di lavoro in Italian.

ORGANIC MATTER: matter of vegetable and animal origin found in the soil and characterized by different degrees of humification.

ORGANOLEPTIC CHARACTERISTICS: properties of a wine which can be perceived during tasting and evaluate using the senses of sight, smell and taste, both from an objective and an emotional point of view.

OROGRAPHY: study of a landscape's slopes and plains.

POMACE: residual liquid left after the pressing of the grapes.

PANEL: a group of people chosen as a representative sample for a market survey. They undergo a series of tests.

PEDOCLIMATE, ENVIRONMENTAL: soil and climate conditions in which the crop grows and produces.

PEDOGENETIC SUBSOIL: specifies the material of origin of the soil.

PEDOLOGIC HORIZON: it is a soil layer of the profile in which the effects of the pedogenesis are revealed.

PERONOSPORE: fungus that is a vine parasite and produces the homonymous disease, striking the leaves and fruit.

pH: measures the acid index, neutral or alkaline, of a soil and is described by the hydrogen concentration in the soil water solution.

PHOTOSYNTHESIZING WALL: leaf surface in a training form, which, illuminated by the sun, produces energy for the plants.

PHYLLOXERA: an aphid (*Phylloxera Vastatrix*), which is a parasite of the vine and destroys the vine's root. By extension, the term also indicates the symptoms caused by this pest. The numerous studies and research carried out on this phytophage have led to the discovery of a safe and reliable defense system: grafting the European vine on American rootstock.

PHYSIOGRAPHIC UNIT: area with homogenous types and intensity of morphogenetic processes.

PHYTOPATHOLOGIC: relating to plant diseases.

POROSITY: indicates the relation between the empty spaces in soil and the overall volume of the soil.

POTASSIUM: mineral element found in grapes and wine, which is absorbed by the plant from the soil and fertilizers.

POTASSIUM BITARTRATE: acid salt found in grapes and in wine.

PRE EMERGENCE: an active ingredient herbicide, which blocks weeds as soon as they germinate, so that, when applied to a clean field, it remains weed free.

PRESENTATION PACKAGING: The collection of ornamentation decorating the bottle: the label, neck band, etc. Abbigliaggio in Italian, from French habillage.

PRESS: a machine in the winery used to squeeze the fermented pomace to extract its additional juice and/or must.

PRUNING: operation carried out on the vine where part of the vine shoots or the wood structure itself is cut to make it stronger and to allow growth (e.g. fan pruning).

PUCKERY SENSATION: reaction between the teeth and gums, making the cheeks feel stuck together. It is caused by a wine



which is too acid or tannic (astringency sensation). Allappare in Italian.

RACEME: grape bunch; inflorescence made up of a central axis on which pedunculated flowers are inserted.

RANCID: penetrating odor produced by acid fats and fat substances in the oxidation phase. These fats give wine an acrid taste.

REFINEMENT: operations aimed at improving the maturation conditions of a wine during the aging period.

RIPENING: phenologic phase of the grape when berries change from green and acquire their indicative varietal color. The whites become clear to yellow and the red ones become red-violet. Invaitura in Italian, veraison in French.

RITTOCHINO: a method of planting the crop rows following the greatest inclination of the hill.

ROOTED VINES: small vine cuttings which are grafted and take root, generally sold on the market a year after the graft. They are usually for plant propagation and certified virus-free. Barbatelle in Italian.

ROOTSTOCK: hybrid of *Vitis vinifera* and of the American vine on which the vine is grafted to make it resistant to phylloxera. It also helps the vine to adapt to relatively "difficult" soils (high in lime, prone to drought, deficient in some nutrients, etc.). Portainnesto in Italian.

SACCHAROMYCES: monocellular fungi of different species, responsible for alcoholic fermentation, that is, the transformation of glucose into ethyl alcohol.

SALINITY: total amount of soluble salt in soil.

SAMPLEBORING: explorative observation of a soil in which only some of the soil characteristics can be described.

SAND: soil mineral fraction with a diameter ranging from 2.0 to 0.05 mm. Sabbia in Italian.

SCALE OF THE CRU: classification of the cru of Champagne given in percentage (from 80 to 100%) which fixes the suggested sales price of the wines on criteria including production zones and vineyards. **SCENT:** olfactive sensation caused by the emanation of volatile molecules from a body, which varies considerably in the case of wines; it furnishes an indication on the state of aging, health, and preservation of a wine.

SELECTION WINE: wine with an excellent predisposition for aging; wording used on the labels in Spain (vino de crianza). Vino da selezione in Italian.

SHOW VINEYARD: a vineyard designed to project an image, which from a management and functional standpoint has various complications and added costs. Vigneto del giornalista in Italian, literally the vineyard for the journalist.

SILT: soil mineral fraction with a particle diameter, ranging from 0.05 to 0.002 mm. Limo in Italian.

SKELETON: fragments of rocks and boulders found in soil, bigger than 2 mm in diameter. Scheletro in Italian.

SKIN: membrane, which envelops the body of the grape berry. Buccia in Italian.

SOIL GRANULE SIZE: see sand, lime and clay.

SOIL PROFILE: vertical section of the soil, exposing the succession of its layers.

SOIL TAXONOMY: U.S.D.A. system of soil classification.

SOMMELIER: expert responsible for the cellar, the choice and the service of the wines in restaurants, in the cellars of the wine-producers and in some retail stores.

SPECKLING/VARIEGATION: indicates the presence of a dominant color matrix made up of different colors: it goes from bluish-gray to reddish brown to very dark brown. Screziature in Italian.

SPROUTING: development of the vine sprouts from the bud, in spring. Germogliazione in Italian.

SPURRED CORDON: training method where the stakes emerge from the ground for 160-200 cm, with a permanent cordon raked at 60-100 cm. Pruning leaves 1-2 buds and vegetation is managed along a couple of wires. Cordone speronato in



Italian.

STAKING: to fix the vine shoots to iron wires that are pulled between the poles of the vineyard. Palizzare in Italian.

STARTER: small quantity of must containing yeasts to inseminate musts and wines and allow fermentation.

STEM: bearing structure of the grape bunch made up of the peduncle, the principal axis, the secondary ramifications and the pedicels. Raspo in Italian.

STRIP LABEL: issued by vini-viticultural consortiums. After a wine undergoes taste and checking procedures, this attests to the wine's quality.

STRUCTURE: indicates the spatial disposition of the primary particles, their aggregates and the empty spaces found in the soil.

SUCKER, ANTICIPATED: side shoot of the vine originating from a bud which formed on a normal bud during the year. Femminella in Italian.

SULFITATION/SULFITING: technique used for microbiological and chemical protection against oxidation, by exposing the grapes, musts or wines to sulfur dioxide. Solfitazione in Italian.

SULFUR: element used in vinification for antioxidant and antiseptic reasons. Zolfo in Italian.

SULFUR DIOXIDE: SO₂, acid oxide, gas produced by the combustion of sulfur in the atmosphere. It has antiseptic and antioxidant properties.

SULFUR TREATMENT: operation of protecting the vine against Oidium, by treating them with sulfur. Solforazione in Italian.

TANNIC: used to describe a wine containing many tannins, very dry and astringent or pleasing and tightly bound.

TANNIN: class of compound phenols, which are astringent and make the mouth pucker. They are a sign that the wine is well preserved, as they give it an antiseptic quality. The tannins come from the skins and from the lees, and/or from the wood of the casks during aging.

TARTARIC ACID: an acid found in grapes and in wine.

TASTEVIN: small cup used for tasting wine.

TERPENIC COMPOUNDS: volatile hydrocarbons typical of certain vine types (e.g. Riesling, Moscato, etc.). At times they are precursors of aromas.

TERRAIN: part of an estate, a cultivated area, prized for the quality of the soils, which are suited for the production of specific wines. Terra in Italian.

TERROIR: From the French term for terrain, but has become an international concept for the combination of territory, vine type and vinification processes/techniques that determine a wine's unique character.

TEXTURE: indicates the distribution in classes of size of the elementary soil particles with a diameter inferior to 2 mm.

THERMAL REGIME: defines the thermal status of the soil.

TOPPING: 1. cutting of the end top of the vine shoots that exceed the pole height. It is performed only on the high part of the vegetation. This method is referred to in its original English, topping, in Italian usage. 2. green pruning operation with which the tips of the buds are removed to induce bunch growth and ripening. Cimatura in Italian.

TRAINING FORM: natural or forced conformation of the canopy of the vine and tree crops.

TRAVELING GUN IRRIGATORS: they are self-propelled irrigators mounted on trolleys; they are positioned by unrolling a flexible PVC tube, which has an irrigating gun at the end of it. The movement of the irrigator is due to the traction of the flexible hose, which wraps itself around a big pickup reel, placed at the head of a plot of land.

TURNED: alteration of the wine due to bacteria. Characterized by a brown, opaque color, vinegar odor and loss of tartaric acid. Girato in Italian.

USDA: United States Department of Agriculture, which developed the soil system classification known as Soil Taxonomy.



VAT: large receptacle made of wood, cement or steel, used for the fermentation of must or the preservation of wine. Tino in Italian.

VERAISON: color development in the berries, indicating the beginning of fruit maturation. Invaitura in Italian.

VILLAGES: French term which indicates a zone or district belonging to a denomination (i.e. Beaujolais-villages).

VINE PLANT: single vine plant. Ceppo in Italian. VINEYARD: vine-planted surface. Vigneto in Italian. VINEYARD LAYOUT: indicates the distances at which the plants are planted; e.g. 3.00 x 1.00 means that the distance between the rows is 3.00 meters and, on the row, the vines are planted 1.00 meter from each other.

VINIFICATION: combination of the operations through which the grapes are transformed into must, and then, through alcoholic fermentation, into wine. Vinificazione in Italian.

VINTAGE: English term synonymous of year, millesimal, and harvest. Vendemmia in Italian.

VOCATION UNIT: part of a territory with sufficiently homogeneous specific characteristics, where there are similar soils. See also Landscape Unit.

V.Q.P.R.D.: acronym of quality wine produced in a determined area. Current laws of the European Union safeguard the specific qualities of regional products, based on criteria that include: delimited production zone; specific cropping techniques; vineyard extension; vinification methods; yield per hectare; minimum natural alcoholic titration volume; and analysis and evaluation of the wine's organoleptic characteristics.

WATER CAPACITY: maximum level of water contained in a soil which fills both micro and macropores.

WATER REGIME: indicates the soil humidity during the year.

WEEDS: or pest dicot and monocot plants and shrubs (e.g. brambles) whose presence in the vineyard is undesirable, above all because of the competition for water and nutrients. They are also secondary hosts for pest and disease-causing agents

WINE: A product of the partial or whole fermentation of alcohol, starting with crushed fresh grapes or grape must, of which the measured potential alcohol level cannot be less than 10%, with exceptions, ready for consumption and drinkable, made according to law. Vino in Italian.

YEAR: year of harvest. Annata in Italian.

YEAST: complex unicellular fungi that can provoke alcoholic fermentation through the enzymes they produce. Lievito in Italian.

YIELD: production of a quantity of grapes established per hectare.

ZIMASE: enzyme responsible for sugar (glucose and fructose) transformation in ethyl alcohol, during fermentation.