

# *Toscana Indicazione Geografica Protetta*

## *Soldera® Case Basse® - 100% Sangiovese - Vintage 2015*

The wine has been produced in 16.654 bottles of 0.750 L and 1.517 bottles of 1.5 L all numbered.

**The wine history through the studies carried out by FoodMicroTeam, Spin-Off of the University of Florence (Prof. Massimo Vincenzini)**

### **The bottle of the wine “Toscana IGT - Soldera 100% Sangiovese – Vintage 2015”**

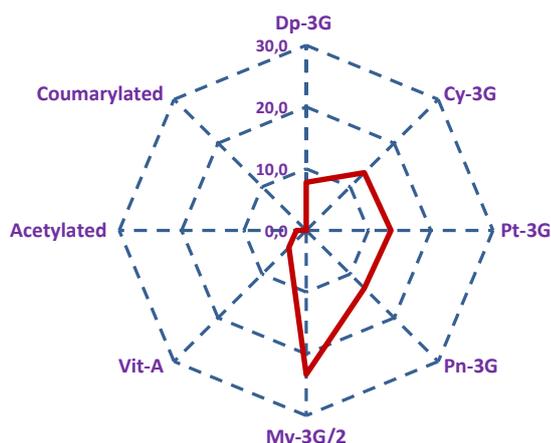
Bordelaise bottle, “special series 15 Soldera - Case Basse”, designed in the early 80s by researchers and by the President of the “Nord Vetri” factory, Mr. Franco Marchini, in order to obtain:

weight of 750 grams for maximum insulation; antique green color, more resistant against ultraviolet rays; accentuated cavity, for a better sedimentation (for our unfiltered wine); inner neck of the bottles made as suggested by Prof. Antonio Pes, with an optimum ratio between the weight of the cork and the bottle neck volume to be saturated.

### **Anthocyanin and sensory profiles**

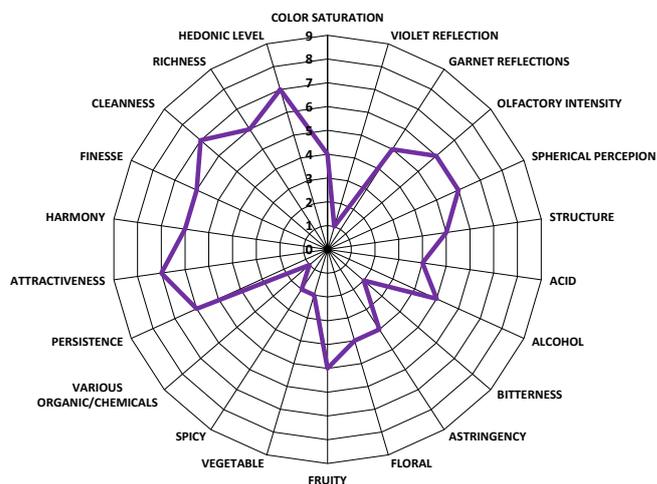
(The data shown below refer to analyses carried out on bottles of the 2015 vintage provided by the estate on October 2019)

The anthocyanin profile of the wine is completely consistent with the profile of a wine produced only with Sangiovese grapes, being characterised by the absence of acetylated and cumarylated anthocyanins (Mangani *et al.*, Am. J. Enol. Vitic., 62: 487-494, 2011).



[Dp-3G= delphinidin-3-glucoside; Cy-3G= cyanidin-3-glucoside; Pt-3G= petunidin-3-glucoside; Pn-3G= peonidin-3-glucoside; Mv-3G= malvidin-3-glucoside; VitA = Vitisin A; Acetylates = sums of acetylated anthocyanins; Cumarylates = sums of cumarylated anthocyanins].

The sensory profile of the wine was assessed with Advanced Big Sensory Test by the *Centro Studi Assaggiatori di Brescia* (Prof. Luigi Odello).

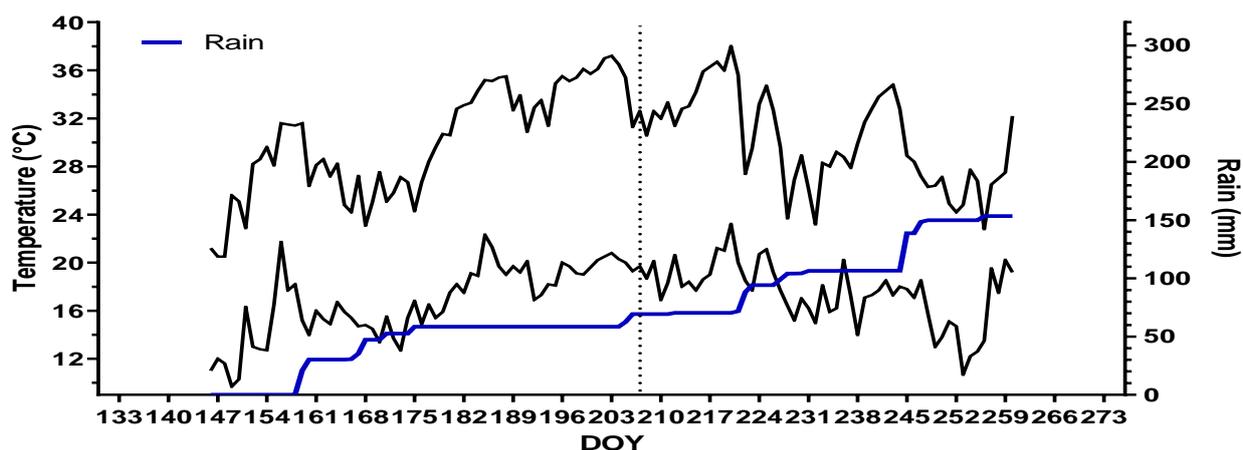


The wine presents a vivid garnet red colour and is characterised by a high spherical perception and persistency. It possesses a noticeable aroma intensity, mainly due to fruity and floral aroma. Astringency and structure are quite well perceived.

### **The history of the wine**

**Meteorological characteristics of 2015 vintage:** during the period between blooming and harvest, of a total duration of 114 days, the weather station in the farm recorded the data shown in the graph below (the longitudinal dotted line represents the beginning of grape veraison). Compared to the company's historical average, it was a vine-growing season in which the Bloom-Veraison phase, lasting 61 days, was characterised by very high temperatures and reduced rainfall, whereas the Veraison-Harvest phase, of a duration of 53 days, was characterised by high temperatures and high rainfall.

**Management of bunch load and quality on vine:** the vineyards have been kept under continuous inspection with the aim to eliminate, from each vine by hand, exceeding or not perfectly healthy bunches.



**Harvest:** was carried out beginning on September 17<sup>th</sup>, on the basis of organoleptic evaluations and physical-chemical indicators of grape ripeness, taking into account both technological (sugars, acidity and pH) and phenol maturity parameters (potential and extractable anthocyanins, polyphenol index, seed maturity).

**Grapes:** exclusively of the Sangiovese variety and in perfect health, as pointed out by the results of microbiological analysis weekly performed on grapes from August to harvesting.

**Selection of grape berries to undergo vinification:** in the wine cellar, the harvested bunches were put on a table for a further selection made by trained workers, then they were conveyed to a “vertical vibrating destemmer-sorter group, the Socma Cube – Primec”. After a final visual selection, only healthy and unbroken grape berries were transferred into the vinification vats by means of a conveyor belt.

**Alcoholic fermentation:** spontaneous fermentation was carried out in truncated cone-shaped Slavonian oak vats, without using commercial yeast starter cultures and without temperature control. During the early stages of the fermentation process, the non-*Saccharomyces* yeast populations (*Kloeckera apiculata* and *Starmerella bacillaris*), usually present on grape berries, reached maximum values of about 3 millions of cells per millilitre. On the fourth day of fermentation (alcohol = 3% v/v), the wine yeast *Saccharomyces cerevisiae* became the predominant species, growing up to more than 30 millions cells/mL, and, hence, it continued regularly the wine fermentation until its completion.

**Malolactic fermentation:** spontaneous fermentation occurred after the end of the alcoholic fermentation and was completed within about 3 weeks. The dominant microbial species was *Oenococcus oeni*.

**Ageing:** carried out in Slavonian oak barrels for about 45 months. Monthly performed chemical and microbiological analyses never found activities or microbial populations able to induce the onset of detectable defects.

**Bottling:** the wine, chemically and microbiologically stable, was bottled without any physical or chemical treatment (clarification and/or filtration) and rested for more than 5 months in bottle before being released.

**Wine:** at bottling, the wine contained sulphites amounting to an average concentration of 45 mg/L of total SO<sub>2</sub> (of which 8 mg/L as free SO<sub>2</sub>), a value that is much lower than the allowed maximum legal limit of 150 mg/L; Glucose and Fructose were absent, demonstrating a complete alcoholic fermentation. Glycerol, a molecule which confers body and softness to the wine, was detected at a concentration of about 10.5 g/L. The color, a definite ruby red with hints of garnet, was exactly what expected for a wine produced exclusively with Sangiovese grapes and subjected to a long ageing.

**Wine preservation:** for an optimum maintenance, wine bottles should be kept upright, with a temperature range of 12-16°C and a minimum humidity of 70%, avoiding sudden change of temperature and direct sun light.