

Characteristics of recent released clones selected by DiSAAA-A in Tuscan Coast line premultiplied by TOS.CO.VIT

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At the conclusion of the research project “enhancement and renewal of viticulture in the province of Grosseto”, “Sangiovese selection in the area of Morellino di Scansano” and “enhancement of candidate clones of Tuscan grapevines” have been homologated in 2007 four clones of Ansonica and five clones of Vermentino and in 2011 three clones of Sangiovese (Scalabrelli and Di Collalto, 1999; Scalabrelli *et al.*, 2004, Scalabrelli *et al.*, 2005, Scalabrelli *et al.*, 2012).

Main traits of Ansonica clones

I-Cosa 1. Large conical bunches of medium firmness, elliptical-short berry Medium size, and greenish-yellow, slightly amber. Bud fertility below the average (1.18); bud break medium earliness, slightly more precocious ripening. Medium-high vigour. Pale straw yellow wine, with notes of tropical and fruity floral, light citrus, hazelnuts and honey, sapid and structured, the most appreciated by the panel. Quality Clone requires control of production. Suitable to produce structured white wine, even with aging.

I-Settefinestre 1. Conical bunches, sometimes winged, less than average size, medium sparse and separated, berry green-yellow, amber, slightly elliptical-short, slightly coarser than Cosa1 clone. Medium bud fertility (1.34). Time of bud break and ripening are slightly later than the average of the population. Higher vigour of clone Cosa 1, production lower than the average. Pale straw yellow wine, with notes of almond, slightly fruity and floral, with a good structure, flavor, freshness and agreeableness. Clone less productive, suggested for the production of assembled wines, especially with the previous clone.

I-Settefinestre 2. Bunches large, conical, mildly sparse, elliptical-short, medium size, green-yellow, amber. Bud fertility (1.46) and yield above the average. Average earliness of bud break and ripening. Medium-high vigour; pale straw yellow wine tropical fruity, note of floral and slightly spicy, soft nutty and honeyed notes, medium-bodied, balanced and pleasant. Clone productive of good quality, able to bring aromatic complexity, suitable to produce also varietal wines.

I-Settefinestre 3. Bunches of medium size, broad conical shaped, of medium size, largest of the clone Settefinestre 1 and smaller of clone Cosa 1; berry elliptical-short, medium size, yellow, amber. Production and fertility of the buds below average (1.20). The earliness of bud break and time of ripening are like the average of the population; medium-high vigour. Pale straw yellow wine, with Mediterranean spiced and nutty, with hints of fruity and honey, balanced structure and good pleasantness. Clone of intermediate level of production and quality, suitable to produce white wines ready to drink and for assemblage.

Main traits of Vermentino clones

I-Sirena 1. Time of bud break like the population mean, average vigour and low productivity, mean bud fertility (1.26), medium-small cluster, short conic shape and medium tightness, medium berry size, spherical shape and, firm skin. Earlier ripening compared to the population average (7-10 days), sugar accumulation influenced by territorial environment. Straw yellow wine, good structure, floral and fruity, palatable, sapid, with slightly bitter final, suitable for short aging.

I-Marem 1. Bud break timing similar to the population mean. Earlier ripening compared to the population average (7 days). Medium high plant vigour and fertility (1.40) yield lower than the population average. Loose bunch with a wing more evident, the berry is slightly smaller than the average, the skin is firm. It exhibits low sensitivity to the bunch rot. Sugar accumulation higher than the reference population. Straw yellow wine with notes of ripe fruit, citrus and spicy Mediterranean (very pronounced). It maintains high qualities of freshness, good body, suitable for the production of wines with a good structure which can be subjected to a medium aging period.

I-Marem 3. Bud break contemporary to the population. Earlier ripening than the population average (7days). Medium-high vigour and bud fertility (1.46) lower yield to the average. Bunch medium-small of truncated cylindrical shape, with a short wing, medium loosen. Berry short- medium ellipsoidal, good tolerance against botrytis. Accumulation of sugars compared to the reference population. Wine with aromatic complexity, good freshness, texture and excellent balance, suitable for producing structured wines and wines ready to drink.

I-Sileno 1. Bud break slightly earlier than the average of the population. Later ripening as compared to the average (about 10 days). Low vigorous and very productive, Medium-low bud fertility (1.31). Very large, composed and tight cluster, large berries. Sugar accumulation potential slightly below the average of the population. Straw yellow wine, perfume with notes of fresh fruitiness and marked by spicy Mediterranean, fresh, light structure, suitable for the grapes and the production of wines ready to drink and sparkling wines.

I-Sileno 3. Bud break slightly earlier than the average of the population. Later ripening (about 10 days after the avg.). Low vigour and fertility (1.25). Very large, composed and tight cluster, large berry, higher yield. Accumulation potential of sugars is below the average of the population. Straw yellow wine, aroma with notes of fresh fruitiness and marked by spicy Mediterranean, fresh, light structure, suitable for the assemblage with other clones for the production of wines ready to drink and sparkling wines.

Main traits of Sangiovese clones (selected in the DOCG area “Morellino di Scansano”).

I-CHI 8. Production is on the average, plant vigour slightly below the average, bud fertility above the average. The bunch is medium-small, conical-winged and tightness on the average. Berry of spherical shape, uniform black blue color, waxy and thick skin, very rich in polyphenols and anthocyanins. The wine has an intense ruby red color, with intense fruity notes with evidence of red fruits and floral notes, well-structured and balanced suitable to aging.

I-CHI 10. Production and vigour on the average, bunches short, conical, rather compact. Berry black blue uniform, ellipsoidal, skin resistant, thick and waxy. It ripens on II-III decade of September. Ruby red wine with floral notes, spicy and fruity, with a good structure, balanced, suitable to aging. Clone suitable to the assemblage with other clones.

I-CHI 13. Bunch of size below the average, conical shape moderate compactness, sometimes winged. Berry medium-small size, ellipsoidal shape, blue black color, waxy and thick skin, rich in color. Ripening time in the second half of September. Intense ruby red wine with distinct notes of red fruit, good structure and balance, suitable to the production of assembled red wines to be aged.

These new clones of *Ansonica*, *Vermentino* and *Sangiovese*, possess different productive, qualitative and sensorial characteristics, some of which are complementary, therefore, they can respond to several growing and oenological requirements, allowing the establishment of polyclonal vineyards to achieve the wine target using the best combinations.

References

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