



Nebbiolo

Synonym: Chiavennasca, Picoutèner (or Picotendro), Prunent, Spanna.

Commonly mistaken for: Chatus, Croatina, Dolcetto, Nebbiolo rosé (See below MAT 4)

Origin: Nebbiolo is a red wine grape typically associated with Piemonte. It was documented as early as the thirteenth century growing widely in this corner of north-west Italy. DNA profiling has shown that Nebbiolo likely hails from Piemonte or Valtellina; the variety is so old that its parents are probably extinct. The name Nebbiolo comes from 'nebbia' (fog). The grape has a prominent bloom that gives it a "foggy" or "frosted" look, hence the name Nebbiolo. Others claim that its name refers to the late autumn fogs that hang over the hills of Piedmonte during the harvest in autumn.

Agronomic and environmental aspects: This variety ripens late in the season and thus needs a hillside site with plenty of exposure, especially in cooler climates, in order to reach maturity. It is very sensitive to soil type and site but in Piemonte performs well on calcareous marls. Grapes grown on lighter sandier soils tend to produce simpler, lighter styles of wine. In Italy traditional training systems are used, such as the modified Guyot (vertical shoot positioned, and long pruning) with 16-20 buds per vine. Bunch thinning is recommended to improve the quality of the final product. Nebbiolo generally prefers a long and late pruning, as it is early budding and thus susceptible to frost.

Diseases, pests and disorders: Susceptible to powdery mildew, but it shows good resistance to downy mildew and botrytis. Particularly sensitive to spring frosts and rain.

Description:

Growing Tip:

Leaf:

fully open, cottony, of silvered white colour with reddish edges.

medium or large size of blade, pentagonal or orbicular shape. Has open V or U-shaped petiolar sinus, rarely lyre shaped; the lateral superior sinuses are bigger and U or lyre shaped, while the inferior (if there are any) are like an open V. The profile is flat and hairless; the connection to the petiole is of a pink colour.

Bunch:

medium or large size; of pyramidal or conical form, with densely distributed berries and with one wing, that in some cases look like a second cluster.

Berry:

of medium dimensions, round or elliptic; thin skin, but strong, of a uniform dark-violet colour, covered by abundant bloom.

Vegetation Growth Habit:

Vigour:

Average bunch size:

Average Bunches per shoot:

semi-erect

medium-high

medium-large (220-300 g.)

≤ 1

Growth Stages:

Time of budburst:

Time of flowering:

Time of veraison:

Time of harvest:

early (approximately 2 days before Chardonnay)

medium-early

medium

late (approximately 1 week after Cabernet Sauvignon)

Wine characteristics:

Nebbiolo can have a haunting fragrance of cherries, roses and tar. While the wines are typically high in acid, tannins and alcohol, making them rather difficult to enjoy in youth; they are suited to long, graceful maturation in bottle. The wine is light in colour, almost Pinot Noir-like, turning garnet more quickly than many other varieties. Its wines are terroir-driven.

Australian Experience:

Despite a strong reputation as an international wine of distinction Nebbiolo has remained quite minor in production in Australia until the last decade or so. In the first years of having these Matura clones in Australia only relatively small numbers were ordered, being planted in places like Adelaide Hills, Beechworth and Heathcote, even Tasmania. More recently our MAT clones of Nebbiolo have picked up a few more followers as understanding of the importance of clonal diversity improves. The majority of new Nebbiolo plantings are going in in the Yarra Valley region coinciding with Australian Nebbiolo maturing as a wine style and the variety gathering more fans.

Available Clones:**Nebbiolo MAT 1**

- The bunch structure and the growing tip show that is one of the biotypes prevailing in Langhe, probably biotype "Lampia".
- The vine has medium-high vigour, with a semi-erect vegetation growth habit.
- The leaf has a medium-large size, 3- or 5-lobed;
- the bunch has medium size and conical form, with round berries.
- Good resistance to botrytis.
- Very early bud burst, approximately a few days before Chardonnay.
- Late Ripening (approx. 1 week after Cabernet Sauvignon)

**Nebbiolo MAT 3**

- Biotype "Lampia".
- Vines of medium vigour.
- It shows a good yield and very good fruit quality.
- This clone has a big bunch and a small berry.
- The fertility is around 0.8-1.1 bunches per shoot.
- Can be susceptible to powdery and botrytis in rainy conditions

**Nebbiolo MAT 4**

- Biotype "Rosè" – **Now known to be a separate variety called Nebbiolo Rosè**
- Vines of medium to high vigour
- Growing tip not so cottony
- Leaves have large size and are 3-5 lobed, the connection to the petiole is of red colour.
- The bunch is medium sized, of conical form.
- The berry shows a characteristic violet colour and is slightly oval shaped
- Shows a low fertility of 0.7-1 bunches per shoot.
- Early budburst, early flowering, late ripening
- Can be susceptible to powdery and botrytis in rainy conditions

**Nebbiolo MAT 5**

- Biotype "Lampia".
- Medium vigour vine
- Leaves medium-large with 3 lobes
- Bunch is medium-large, of pyramidal form with wings.
- The berry has medium-small size and short and oval shape.
- Early budburst, early flowering, late ripening
- Susceptible to botrytis and powdery mildew in rainy conditions



Nebbiolo MAT 6

- Thought to be a sub-type of the Lampia clone
- The vine has medium-high vigour and medium productivity
- The form of tip is half-open. The growing tip is big, typical of “Lampia” biotype
- The berry has small dimension and round shape;
- Not so early bud burst (approximately a few days after Chardonnay).
- Early flowering, late ripening
- Skin has a good colour, but less intense than the other clones.
- Susceptible to botrytis and powdery mildew in rainy conditions.



Nebbiolo MAT 7

- Biotype “Lampia.”
- Medium-high vigour vine
- Medium-large 3-5 lobed leaf
- Medium-large pyramidal bunch but medium-small berries
- Low fertility (0.7-1.0 bunches per shoot)
- Early budburst, early flowering, late ripening
- Susceptible to botrytis and powdery mildew in rainy conditions.



Nebbiolo MAT 8

- Biotype “Lampia.”
- Medium vigour vine with medium-low productivity
- Medium sized 5-lobed leaf
- Medium-large conical bunch, medium to small round berries.
- Low fertility (0.8-1.1 bunches per shoot)
- Early budburst, early flowering, late ripening
- Susceptible to botrytis and powdery mildew in rainy conditions.



Nebbiolo MAT 9

- Thought to be a sub-type of the Lampia clone
- Medium vigour vine with constant productivity
- Med-Large leaf with 3-5 lobes
- Medium-large pyramidal bunch, medium-small short/oval berries
- Low fertility (0.8-1.1 bunches per shoot)
- Early budburst, early flowering, late ripening
- Susceptible to botrytis and powdery mildew in rainy conditions.



Nebbiolo MAT 10

- Biotype “Lampia.”
- Medium-high vigour vine with constant productivity
- Large 3-5 lobed leaf
- Medium-large conical bunch with medium-small round berries
- Low fertility (0.8-1.1 bunches per shoot)
- Early budburst, early flowering, late ripening
- Susceptible to botrytis and powdery mildew in rainy conditions.

Maturity Data Clonal Comparison: Chalmers Merbein Vineyard

	10/2/17	15/2/17	24/2/17	1/3/17	10/3/17	21/3/17	28/3/17
Nebbiolo MAT 1							
Baume	11.7	12.4	13.2	13.2			
pH	3.3	3.46	3.55	3.53			
TA	9.0	7.6	6.5	5.7			
Nebbiolo MAT 3							
Baume	10.1	11.0	11.2	12.2	13.6	13.4	13.6
pH	3.26	3.38	3.38	3.43	3.45	3.30	3.55
TA	9.1	7.9	8.2	6.6	6.2	5.8	5.2
Nebbiolo MAT 4							
Baume	10.9	11.8	11.4	13.2	13.4	14.0	14.0
pH	3.32	3.36	3.34	3.46	3.44	3.50	3.58
TA	9.1	7.9	7.9	6.5	6.9	5.3	4.8
Nebbiolo MAT 5							
Baume	10.1	10.0	11.0	11.2	13.2	13.2	13.8
pH	3.36	3.29	3.39	3.31	3.50	3.40	3.47
TA	8.1	7.6	7.7	7.1	5.7	5.6	5.1
Nebbiolo MAT 6							
Baume	10.5	10.8	11.6	12.2	13.2	13.0	12.6
pH	3.37	3.23	3.36	3.45	3.61	3.63	3.67
TA	8.7	7.6	6.4	5.8	5.0	4.4	4.0
Nebbiolo MAT 7							
Baume	11.8	12.0	12.2	12.6	13.2	13.6	13.8
pH	3.36	3.31	3.43	3.43	3.54	3.50	3.58
TA	8.5	6.8	6.3	6.3	5.5	5.0	4.3
Nebbiolo MAT 8							
Baume	10.0	11.4	12.0	12.2	13.4	13.4	14.0
pH	3.31	3.27	3.45	3.34	3.62	3.54	3.58
TA	8.9	7.4	6.1	5.8	4.8	4.9	4.3
Nebbiolo MAT 9							
Baume	11.2	11.4	11.2	12.0	12.4	13.4	13.0
pH	3.37	3.20	3.34	3.46	3.53	3.53	3.45
TA	8.4	7.8	7.0	6.2	6.2	5.3	5.1
Nebbiolo MAT 10							
Baume	11.3	10.2	11.6	12.4	13.0	13.6	14.0
pH	3.32	3.28	3.33	3.40	3.45	3.44	3.44
TA	9.8	9.1	8.0	8.1	7.4	6.5	5.8

Nebbiolo Bunch & Berry Weight Comparison – Vintage 2005, Euston NSW

Clones	Bunch weight	Berry weight
MAT 1	314 g	1.35 g
MAT 3	305 g	1.37 g
MAT 4	244 g	1.10 g
MAT 5	321 g	1.25 g
MAT 6	239 g	1.21 g
MAT 7	307 g	1.45 g
MAT 8	238 g	1.17 g
MAT 9	323 g	1.46 g
MAT 10	243 g	1.53 g

Principal Viticultural and Physiological Characteristics:

	Vigour (1)	Fertility (2)	Bud Burst (3)	Ripening (4)	Colour of Must (5)
MAT 1	++	0.96	- -	+ -	3
MAT 3	+ -	1.13	+ -	-	4
MAT 4	+	0.87	+ -	-	4
MAT 5	-	1.23	-	++	3
MAT 6	++	1.09	++	+ -	2
MAT 7	+	0.89	+	+ -	5
MAT 8	- -	1.17	+	+	2
MAT 9	+ -	1.02	+ -	-	3
MAT 10	+	0.83	+ -	- -	5

(1) The vigour of these clones can be classified between medium and high, but inside this category can be noted some differences: + (more vigorous); - (less vigorous).

(2) The fertility is expressed in number of clusters per shoot.

(3) The bud burst in this variety is early, approximately 2 days before Chardonnay, but inside this group of clones there are some differences: + (later); - (earlier).

(4) The ripening in this variety is late, approximately 1 week after Cabernet Sauvignon, but inside this group of clones there are some differences: + (later); - (earlier).

(5) The colorimetric range was tested from the juice not by phenolic analysis:

- 1)Very slightly coloured
- 2)Slightly coloured
- 3)Coloured
- 4)Strongly coloured
- 5)Very strongly coloured