The Italian Winegrape varieties

Vittorino Novello
University of Turin
Italy

vittorino.novello@unito.it
OBJECTIVE:
TO ENPHASIZE THE VARIETAL CHARACTERISTIC OF WINES
WINE QUALITY

Uncontrollable factors
- TERRITORY
- CLIMATE
- VARIETAL CHARACTERISTICS

Controllable factors
- GRAPE QUALITY
- WINEMAKING TECHNIQUES
- WINE AGING TECHNIQUES
Etna

Sicily
Irpinia
Ischia
Valle d’Itria

Apulia
Abruzzo
Liguria
Cinque Terre
IMPORTANT TO KNOW THE RAW MATERIAL
Barbera
**BARBERA**

**Origin:** Monferrato

**Budbreaking:** medium-precox  
**Bearing:** semi-erect, medium leaf  
**Vigor:** medium  
**Training:** plastic, pruning not too much rich, aeration  
**Cluster:** medium-big (250-300 g), tendentially compact, cylinder-cone  
**Maturation:** medium  
**Berry:** medium  
**Skin:** thin but consistent, highly waxy  
**Pulp:** juicy, sweet, acidic  
**Sensibility to deseases:** ≈ powder mildew and gray mildew  
**Productivity:** high and constant  
**Wine:** severe, acidic, not tannic, fine, dry or sparkling  

*Tollerant to drought and wind,*  
*Prefers clay soils less fertil, deep, hilly, good exposition (in the North)*  
*Sensible to frezing and B-deficiency (expecially on light soils)*
Nebbiolo
The 3 morphological types of Nebbiolo

Lampia

Michet

Rosé

Same genotype
(=Bolla, Chiavennasca, Spanna, Picotendro, ecc.)

Distinct genotype
(Chiavennaschino valtellinese)
Where is grown Nebbiolo?

<table>
<thead>
<tr>
<th>Italy (ha)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Valtellina</td>
<td>900</td>
</tr>
<tr>
<td>Valle d’Aosta</td>
<td>26</td>
</tr>
<tr>
<td>Piemonte (60% in prov. CN)</td>
<td>5.300</td>
</tr>
<tr>
<td>Sardegna *</td>
<td>52</td>
</tr>
<tr>
<td>Totale</td>
<td>6.300</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>World (ha)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>160</td>
</tr>
<tr>
<td>Messico</td>
<td>100</td>
</tr>
<tr>
<td>Argentina</td>
<td>206</td>
</tr>
<tr>
<td>Cile</td>
<td>9</td>
</tr>
<tr>
<td>Australia</td>
<td>120</td>
</tr>
<tr>
<td>Nuova Zel.</td>
<td>10</td>
</tr>
<tr>
<td>Sud Africa</td>
<td>15</td>
</tr>
<tr>
<td>Totale</td>
<td>627</td>
</tr>
</tbody>
</table>

* It’s Dolcetto (areas of Luras and Colli del Limbara IGT)
Arneis

**Growing areas:**
In Piedmont: Roero & Langhe
Authorized in Sardinia
Outside: California, Australia

**Synonyms:** Bianchetto or Bianchetta (di Alba) & Nebbiolo bianco.
Growing characteristics

• breaking medium-præcox
• maturation 2nd half of September
• vigorous
• medium & compact cluster
• medium yield
• dry soils
• sensible to mildew
• less sensible to bunch rot

Enological characteristics

• good personality & finesse
• peculiar smell
  • fruit sensations
• reach body, low acidity, tartaric
• good for passito wine
• no good for sparkling

Clones: CVT CN 15, 19, 32
Vermentino/Pigato/Favorita

Origin: unknown

Growing area:
France (2,500 ha): Corsica, Languedoc-Roussillon, Provence
Italy (3,500 ha): Sardinia, Liguria, Tuscany, Piedmont

Synonyms
• in France: Verlantin, Rolle (Midi), Malvoisie (Corsica)
• in Italy: Favorita, Furmentìn (Piemonte), Pigato (Liguria)
N.B.: The Rollo it’s not Vermentino
The Black (nero) Vermentino it’s not a mutation

Wine and table grape

Base of all the white wines in Corse (with Trebbiano)
Grown characteristics
• maturation middle
• vigorous
• fragile shoots
• high productivity (also on laterals)
• good cane pruning
• dry soils, less fertile
• sensible to powder mildew, to rot

Riviera Ligure Ponente
Erbaluce

Origin: Piedmont, Canavese

Growing area
• Turin Province (Caluso, Canavese bianco); Novara province (Coste del Sesia, Colline Novaresi)
• 160 ha DOCG Caluso

Synonyms: Albalus, Albaluce, Greco (Novara)

Ampelographic confusions
Cultural environment
- sunny areas hilly and flat
- soils generally acidic (Piedmont North)

Grown characteristics
- big vigor (pergola trellis)
- low fertility (colure)
- maturation: last 10 days of September
- compact cluster
- low sensibility to gray rot

Enological characteristics
- high acidity
  - sparkling wines
- hard skin
  - passito
  - late harvest

Clones: CVT 29, 30, 55, 71
New cultivars for California?
Albarossa (Chatus [syn. Nebbiolo di Dronero] x Barbera)
Growing characteristics
• breaking medium-praecox (1\textsuperscript{st} half of April)
• maturation medium-late (1\textsuperscript{st} third of October)
• medium vigorous
• cluster: medium or medium-small & compact
• constant and high yield
• needs good exposition on hillsides
• more sensible to powder than downy mildew

Wines
• High alcohol
• High TA
• High phenols
  • More anthocyanins
  • Less tannins
MONTEPULCIANO
Montepulciano (red)

SYNONYM: Sangiovese, Brunello, Prugnolo, Morellone, Cordisco, Malvasia Nera, Sangioveto

GROWING AREA: Abruzzo, Marche, Lazio, Apulia

LEAF: medium-big, pentagonal, lyre-shaped petiole sinus, dark-green color upper side, greyish-green color lower side

SHOOT: medium-good vigor; opened tip; white-green apical leaves
Montepulciano (red)

CLUSTER: medium, conical-cylindrical or cylindrical-conical often with wings

BERRY: medium, ovate

BUDBREAK: mid April

FLOWERING: first half of June

RIPENING: mid October
Montepulciano (red)

WINE CHARACTERISTICS:

- high alcohol, good acidity and phenolic content

- wide range of styles: *rosè*, ‘*novello*’, light-bodied red wine, suitable for ageing

- the best wine: full-bodied, red, with a velvety high flavored and slightly tannic taste
Montepulciano (red)

OUTLOOK OF VARIETAL: increasing plantings

REGISTERED CLONES: R7, AP-MP1, AP-MP3

YIELD POTENTIAL: 10 - 15 t/ha

TRAINING SYSTEM:
- old vineyards: tendone system, spur or cane pruned
- new vineyards: vertical system, spur pruned
NEGROAMARO
Negroamaro (red)

SYNONYM: Negro Amaro, Nero Leccese, Lacrima, Uva Cane

GROWING AREA: Southern Apulia

LEAF: big, pentagonal, lyre-shaped petiole sinus, green color upper side, pale-green color lower side

SHOOT: vigorous; opened tip; pale-green apical leaves
Negroamaro (red)

CLUSTER: medium, conical-cylindrical

BERRY: medium, obovate

BUDBREAK: end of March - beginning of April

FLOWERING: end of May

RIPENING: beginning of October
Negroamaro (red)

WINE CHARACTERISTICS:

- high alcohol, fairly good acidity, low pH, high phenolic content

- wide range of styles: dry rosè, medium-bodied dry wine suitable for ageing

- the best wine: medium-full bodied, red, with intense bouquet of spices, velvety and smooth taste
Negroamaro (red)

PRODUCTION AREAS OF DISTINCTION:
DOC: Alezio, Brindisi, Copertino, Leverano, Lizzano, Matino, Nardò

ROOTSTOCK USED: 1103 P, 157-11, 140 Ru

PREFERRED VINEYARD SITES:
Soil: ‘terra rossa’, brown calcareous
Climate: warm-arid, heat sum. 2230 °C DD, a.r. 720 mm
Negroamaro (red)

OUTLOOK OF VARIETAL: stable plantings

REGISTERED CLONE: VCR10

YIELD POTENTIAL: 12 - 13 t/ha

TRAINING SYSTEM:
- old vineyards: head system, spur pruned
- new vineyards: vertical system, spur pruned
NERO DI TROIA
Growing characteristics
• breaking medium-praeeox (1st half of April)
• maturation medium-late (1st third of October)
• good vigor
• cluster: medium pyramidal & compact (15-20 cm)
• medium yield
• needs good exposition on hillsides
• more sensible to downy than powder mildew
• sensible to ‘favonio’ (warm wind from South)

Wines
• High alcohol
• medium TA
• High phenols
  • anthocyanins
  • Less tannins
SICILIAN VARIETIES

A. Pisciotta
INZOLIA

It’s one of the oldest grapes that lives in Sicily

Cited by Plinium with the name of Irzolia, commonly called “Inzolia vranca” to distinguish it from “Inzolia nigra”, it’s also described by Cupani (1696) and by Sestini (1760).

- Widely diffused in the entire island, it participates to the construction of many white wines.

- In the past was used as table grapes

A. Pisciotta
INZOLIA or Ansonica

- VIGOR: high
- HABITUS: downwards shoot
- PRUNING SYSTEM: Guyot
- PROPAGATION: good with the most important rootstocks
- BUNCH WEIGHT: high (200–400g)
- BERRY WEIGHT: high (2.5-3.0 g)
- PRODUCTIVITY: high
- DISEASE: sensitive to powdery mildew and downy mildew
- BUD BURST: medium-late (beginning-mid of April)
- RIPENING: medium (mid of September)
- MUST CHARACTERISTICS: low acidity, high pH, oxidation problem due to catechins, norisoprenoid aroma (beta-damascenone).
- CULTIVATION AREA: Western Sicily
- NUMBER OF CLONES: 5

INZOLIA is often blended with other varieties because of its appealing perfumes, elegance and a golden yellow color.
ZIBIBBO

Belongs to the large group of 'Muscat' called by the ancients "Vitis Apianae" because sweets and preferred by bees

Presumably cultivated in Sicily since the time of the Phoenicians, this grape was used primarily as a table grape and raisins

The grape is grown mostly in the province of Trapani and in particular the island of Pantelleria

A. Pisciotta
ZIBIBBO or Muscat of Alexandria

- VIGOR: medium
- HABITUS: upright shoot
- PRUNING SYSTEM: Guyot and spur
- PROPAGATION: good with the common rootstocks (very good 775P)
- BUNCH WEIGHT: high (250–500 g)
- BERRY WEIGHT: very high (5.5 g)
- PRODUCTIVITY: medium and rather irregular (also in the lateral)
- DISEASE: slightly resistant to downy mildew and powdery mildew
- BUD BURST: early-medium (mid of March)
- RIPENING: early (mid of August-beginning of September)
- MUST CHARACTERISTICS: terpenic aromatic compounds (linalol)
- CULTIVATION AREA: Pantelleria island and Western Sicily
- NUMBER OF CLONES: no clones

A. Pisciotta
NERO D’AVOLA

- It’s the king of the Sicilian grapes and it’s successfully cultivated all over the island, where it founds its best qualitative expression.

- Nominate by Cupani (1696), the origin still uncertain.

- The name Calabrese probably comes from two ancient Sicilian words “Calea”-“Aulisi”, grape of Avola.

A. Pisciotta
VARIABILITY

Biotipo A

Biotipo B

Biotipo C

Biotipo D

Biotipo F

A. Pisciotta
Nero d’Avola location

A. Pisciotta
Nero d’Avola (red)

SYNONYM: Calabrese, Calabrese d’Avola
Calabrese di Vittoria, Calabrese Dolce

GROWING AREA: South-East and West Sicily

LEAF: big, circular, lyre-shaped petiole sinus, dark-green color upper side, pale-green color lower side

SHOOT: vigorous; opened tip; light-pink, bronze apical leaves
Nero d’Avola (red)

CLUSTER: medium, conical, one wing

BERRY: medium, elliptic or obovate

BUDBREAK: mid April

FLOWERING: beginning-middle May

RI PenING: first half September
Nero d’Avola (red)

WINE CHARACTERISTICS:

- high alcohol, good acidity, high phenolic content

- wide range of styles: rosè, full-bodied wine suitable for ageing

- the best wine: full-bodied, red, with intense bouquet of spices, hazelnut, raspberry and other small fruits, velvety and smooth taste.

- the wines achieve the best with ageing
Nero d’Avola (red)

PRODUCTION AREAS OF DISTINCTION:
all the Sicilian DOC’s, but for Etna

ROOTSTOCK USED: 1103 P, 140 Ru

PREFERRED VINEYARD SITES:
Soils: calcareous
Climate: warm-arid
- South-East Sicily: heat sum. 2250 °C DD, a.r. 600 mm
- West Sicily: heat sum. 2350 °C DD, a.r. 480 mm
Nero d’Avola (red)

OUTLOOK OF VARIETAL: increasing plantings

REGISTERED CLONES: AM28, AM39

YIELD POTENTIAL: 8 - 10 t/ha

TRAINING SYSTEM:
- South-East Sicily: head system, spur pruned
- West Sicily: vertical system, spur pruned
http://www.vitisdb.it/