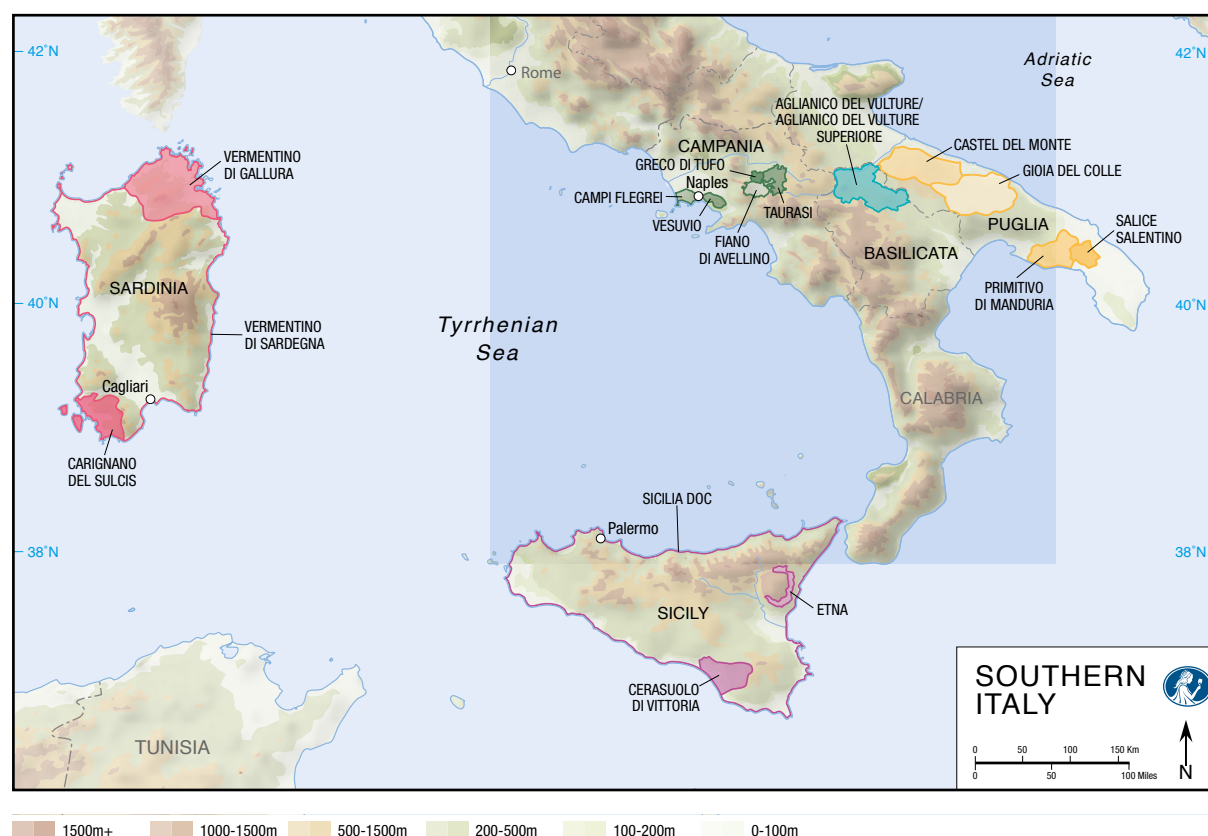


19. Southern Italy

In this section, the wines of Campania, Basilicata, Puglia, Sicily and Sardinia will be covered.



19.1. Campania

Campania is south of Lazio and sits between the Mediterranean Sea and the Apennine Mountains providing a number of sites suitable for growing ripe, healthy grapes. Most viticulture is on slopes and at altitudes of 200–600 m. There is a range of soils. In Roman times, Falernian wine (unknown varieties) from northern Campania was famous for its quality and ability to age. Now the region is known for its three white local varieties – Falanghina, Greco and Fiano – and for the black variety Aglianico, especially from Taurasi DOCG.

THE GROWING ENVIRONMENT AND GRAPE GROWING

Campania has a warm Mediterranean climate. Inland vines are planted on slopes up to 600 m altitude, providing a cooling influence. Many of the varieties grown are late ripening. They can be threatened by cold and rainy early autumns. Frost in spring can be a problem where vines are planted in frost pockets or lower slopes and valley floors.

Soils

There are three main soil types in Campania. The DOC(G)s are given here by the principal soil type:

- Limestone and clay soils in the hills, providing a good balance between fast drainage and water retention. This area includes the three best known denominations:
 - **Fiano di Avellino DOCG**, white wine made with Fiano
 - **Greco di Tufo DOCG**, white wine made with Greco
 - **Taurasi DOCG**, red wine made with Aglianico
- Volcanic and sandy soils in the volcanic areas around Naples:
 - **Campi Flegrei DOC** with tuff, pumice and sandy soils, typically fast draining: the wines are made principally from the white variety Falanghina and the black Piediroso (for reds and rosés).
 - **Vesuvio DOC** (which includes wines labelled Lacryma Christi)¹ with similar soils: the wines are made principally from the white variety Coda di Volpe and the black Piediroso.
- Alluvial sediments in the large area between Naples and Benevento with a number of denominations: Sannio DOC (the province of Benevento) and Beneventano IGP, all making wines from a range of Campanian and Italian varieties.

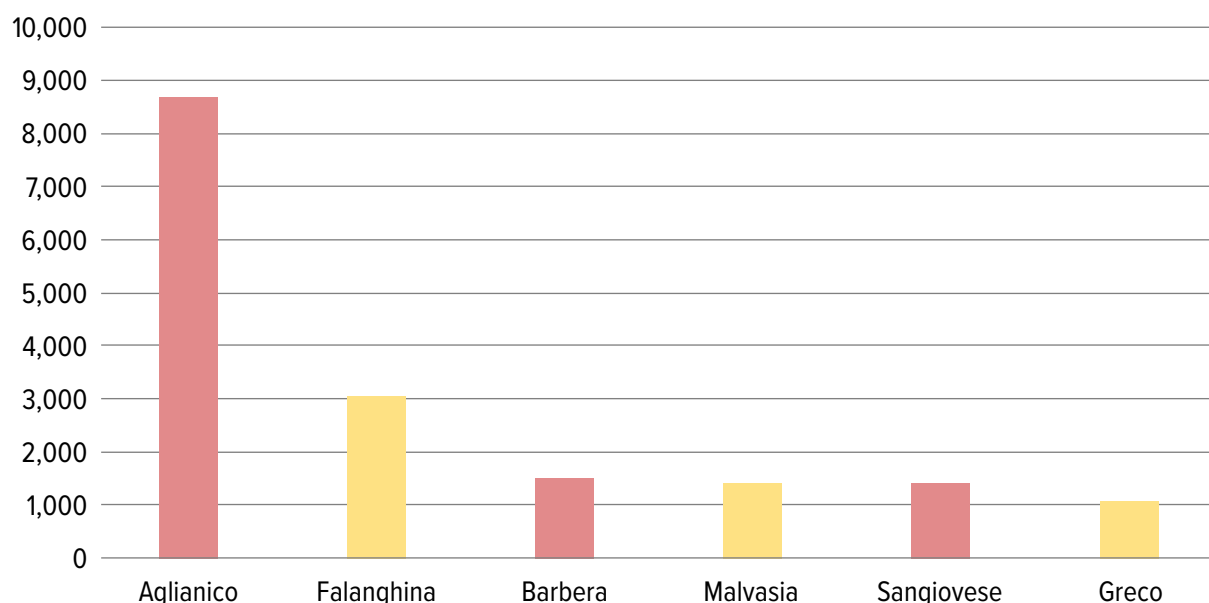


Sandy soils with pumice in Campi Flegrei

GRAPE VARIETIES, WINEMAKING AND DENOMINATIONS

Campania is notable for wines made with local varieties. Most of them are 100 per cent varietal or 85 per cent plus an authorised blending variety. Barbera and Sangiovese are also grown for local consumption and bulk wine.

Campania, top varieties, hectares, 2020



Source: Italian Wine Central²

Falanghina

Long considered merely as a workhorse variety, Falanghina is important both for being the most grown white variety in Campania (second only to the black Aglianico) and for its rise in popularity around the world since the 1980s especially in the hospitality sector. Falanghina has good resistance to disease but the fruit can begin to shrivel at the end of the season and therefore choosing the correct harvest date is important.

It is mid- to late-ripening, which means it is occasionally threatened by autumn rain. The wines have medium intensity apple and white peach fruit with herbaceous notes (grass) and have medium (+) acidity. Nearly all wines are unoaked. The wines range from acceptable to very good quality and are inexpensive to mid-price.

Falanghina del Sannio (maximum yield 84 hL/ha), the largest DOC featuring Falanghina, accounts for one-third of Campania's plantings of the variety. The Campi Flegrei produces lower alcohol wines, 12–13 per cent, due to windier conditions than inland. Maximum yields for Campi Flegrei Falanghina is also 84 hL/ha.

Greco

Greco is a challenging grape to grow as it is prone to grey rot and to both mildews and has low vigour and productivity. However, it is tolerant of heat and is drought-resistant, making it suitable for a warm region. Vines either are trained with the Guyot system or are cordon-trained and spur-pruned, allowing some mechanisation on less steep slopes. The grapes are picked around the first week of October, giving a long season to develop depth of flavour.

The variety is particularly associated with the **Greco di Tufo DOCG**. This is a small but densely planted area with limestone and clay soils, offering a beneficial combination of good drainage and water retention. ('Tufo' does not refer to a type of soil; it is simply the name of the principal town in the DOCG area.) The maximum yield for the DOCG is 70 hL/ha. Greco is less grown in Campania than Falanghina but more than Fiano. As a heat-tolerant and drought-resistant variety, it is attracting interest in countries with warming climates and water restrictions.

The wines are deep lemon in colour, high in alcohol with an oily texture, with floral, stone fruit and smoky notes. Most wines are unoaked and the best can age in bottle. Quality is very good, with some outstanding examples, and prices range from mid-price to premium.

Fiano

Fiano is a potentially high-quality white variety that has only one-third of the plantings of Falanghina but is held in very high regard, especially for the wine coming from the Fiano di Avellino DOCG. It was rescued from neglect by the Mastroberardino family after the Second World War. Guyot and cordons with VSP are commonly used as training systems. It is sensitive to both forms of mildew but has thick skins and so can resist botrytis even though it is late ripening (harvested in mid to late October).

Within the **Fiano di Avellino DOCG**, maximum yields are 70 hL/ha. The wines have medium (–) to medium intensity floral, peach and hazelnut aromas and flavours, with medium (+) body, medium to medium (+) acidity and a waxy texture. Fiano is grown in a range of soils with resulting different expressions. Lighter, fruitier wines come from open, sandy, soils (with fast drainage) and weightier wines from clay-dominated soils (high water retention). Quality is very good to outstanding and prices range from mid-price to premium. The best wines can age for 8–10 years in the bottle. Most wines are aged in stainless steel tanks but some producers make a small- production wine aged in wood.

Aglianico

Aglianico is a black variety that is early budding (and therefore vulnerable to spring frost) and late ripening. It requires a long season for the tannins to ripen. It is a vigorous variety and yields have to be controlled if its quality potential is to be realised. It is prone to botrytis bunch rot and therefore vulnerable to rain late in the season. Despite its name ('hellenic'), DNA



Vineyard in Taurasi with clay soil



Aglianico just before picking for Taurasi DOCG

analysis does not support the traditional view that it is a Greek variety and it is probably an ancient grape from Southern Italy. It is mostly planted on spurred cordons or cane-pruned with VSP and at medium densities, enabling some mechanisation.

The wines have medium (+) to pronounced intensity rose, red plum and blackberry aromas, high acidity and high tannins which can be softened either by ageing in high-quality small barrels or long ageing in traditional large oak casks, plus bottle age.

In Campania, Aglianico produces high-quality wines on the cool slopes (200–600 m), these cooler sites creating a longer season and more intense flavours. The most important denomination for Aglianico is **Taurasi DOCG**, with a minimum 85 per cent Aglianico.

Maximum yields are 70 hL/ha. The DOCG requires three years of ageing, a minimum of one of which must be in wood (four years including 18 months in wood for Riserva). For fully ripe skins and pips, the grapes are picked at the end of October and early November. The wines are made with long maceration on the skins (20 days or more) and aged French oak barriques or, as in the past, in large oak casks. The wines are very good to outstanding in quality and mid-priced to premium in price. Sales are divided between Italy and exports with the USA being the most important market.

Piedirosso

This is an old Campanian red variety, probably from the Vesuvius area, making pale ruby wines, with fresh, medium (+) acidity, medium tannins and red plum and red cherry fruit.

It is grown mainly in the area around Naples (**Campi Flegrei DOC** and **Vesuvio DOC**) including the islands of Ischia and Capri. In the two DOCs it has to form at least 50 per cent of



Vineyard under Vesuvius

the grapes used but in practice most of the wines are 100 per cent. It is adapted to the heat and drought (and flourishes here with only 600 mm of rainfall per year and windy conditions), and has open bunches with thick-skinned berries (and so resists botrytis). It is little troubled by powdery or downy mildew thanks to the dry and windy conditions in the growing season. In the two DOCs mentioned, many vines are planted on their own roots (phylloxera is present but does not spread in the sandy soils) at low densities. It used to be trained very high with many bunches for high volume production but the producers have now moved to Guyot or spurred cordons to achieve better fruit quality with greater fruit concentration. It is harvested late but still produces wines of only 12–13% abv.

Piedirosso is used partly to make early-drinking, varietal wines and partly to soften Aglianico-based wines where it adds perfume and freshness. Most wines are aged in stainless steel or old oak with a few growers ageing their top wines in new French oak barriques. Markets are principally local (the region, Naples and its tourists) but with some international interest because of the theme of volcanic wines. Prices are in the range of mid-priced to premium.

WINE LAW AND REGULATIONS

The individual DOC(G)s and their markets have already been commented on. They are complemented by province-wide DOCs for a whole province, e.g. Irpinia DOC for the province of Avellino and Sannio DOC for the province of Benevento. These DOCs include a wider range of varieties that can be grown and less stringent production rules.

WINE BUSINESS

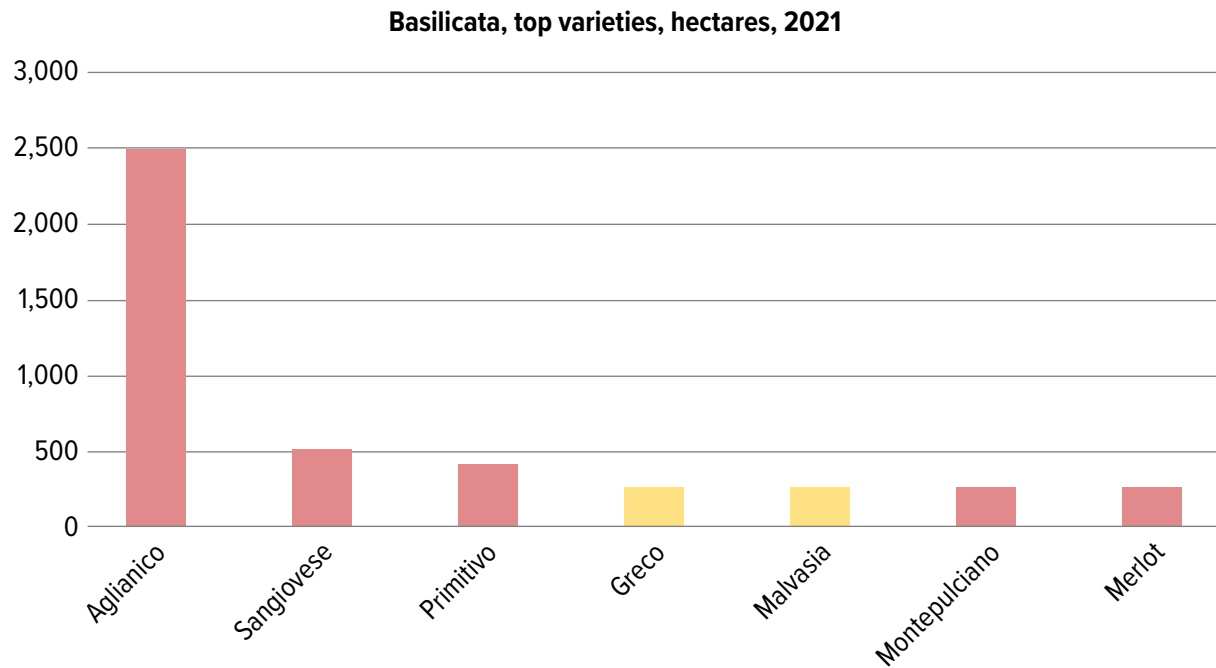
Campania has a number of large private companies that have vineyards across multiple denominations and provinces. Mastroberardino played a significant role in the recovery and commercialisation of the Campanian varieties, Terredora is an offshoot from the same family, while Feudi di San Gregorio has done much to update the image of Campanian wine. In some provinces, co-operatives are very important. For example, La Guardiense (see picture) in the province of Benevento is a 1,000-member co-operative that makes about 15 per cent of the production of the province as a whole.



La Guardiense Co-operative, Benevento

19.2. Basilicata

Basilicata sits between Campania and Puglia. Most wine production is of IGT or simple 'wine' quality. Its most important denomination, Aglianico del Vulture DOC, is to the east of Monte Vulture, an inactive volcano. Here, potentially high-quality, structured red wine is made from the Aglianico variety, which accounts for nearly one-third of all plantings in the region. Across the region, small amounts of wine from other varieties (e.g. Italica) are made, mainly for local consumption.



Source: Regione Basilicata³

THE GROWING ENVIRONMENT, GRAPE GROWING AND WINEMAKING

As noted, **Aglianico del Vulture DOC** is Basilicata's most important wine. For the general characteristics of Aglianico, see [Campania](#). The wine must be 100 per cent Aglianico with a maximum yield of 70 hL/ha and one year of ageing. In the Vulture DOC, Aglianico is grown on clay, limestone and volcanic soils (stony, lava, ash layers). The volcanic layers provide excellent drainage while the clay and limestone hold water, helping to give the wines access to enough



Monte Vulture



Clay, limestone, lava and ash soils

water despite the only adequate amount of annual rainfall (550 mm). The climate is warm Mediterranean with cooling influences from altitudes up to 600 m, resulting in high day/night temperature differences. Breezes from the Balkans are a further cooling factor. These factors help to retain acidity and to extend the growing season, creating wines of high aromatic intensity.

As noted above, Aglianico requires a long ripening season. It is picked in October and into November depending on the year, resulting in high flavour intensity. Wines are increasingly being aged in French oak barriques, a proportion of which may be new, rather than traditional large oak casks. These powerful wines have red plum and blackberry fruit, a full body, high acidity, usually high alcohol and high tannins, and are capable of extended bottle ageing. The wines are very good to outstanding in quality and mid-priced to premium in price.

There is also **Aglianico del Vulture Superiore** which is a **DOCG** (maximum yield is restricted to 52 hectolitres per hectare, minimum three years of ageing, one in wood; Riserva, five years of which two in wood). Some producers use this category (e.g. d'Angelo), others (e.g. Elena Fucci) prefer to sell their wine as DOC and release it, for example, two years after the harvest.

WINE LAW AND REGULATIONS

The DOC and DOCG rules have been summarised already.

WINE BUSINESS

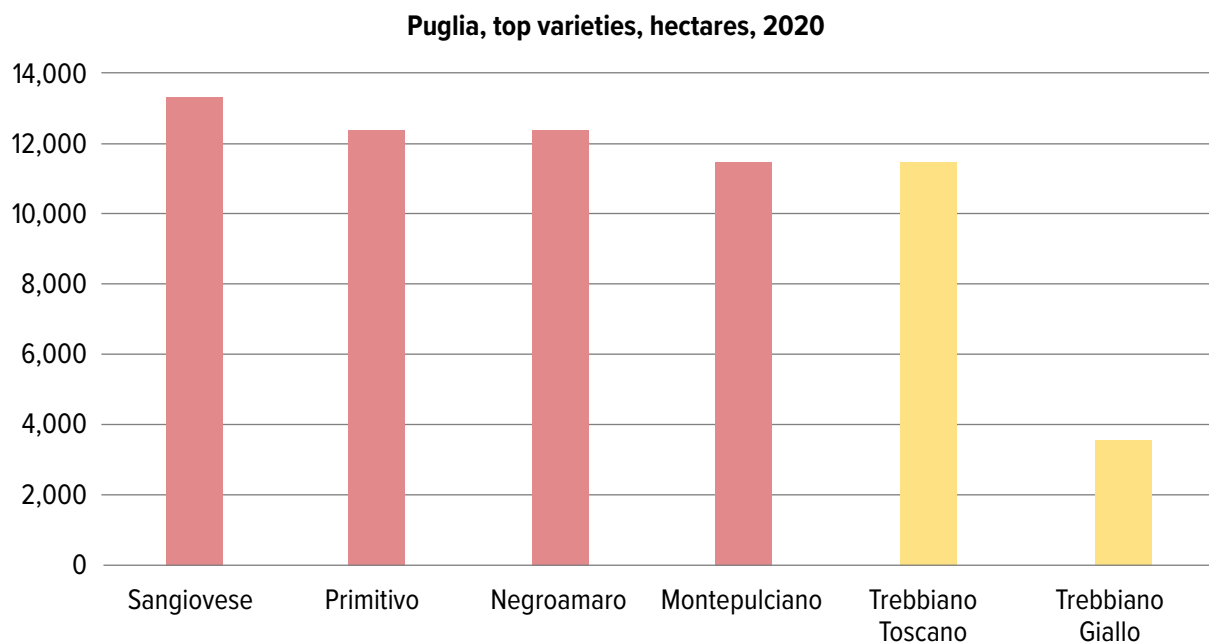
Sales of Aglianico del Vulture are divided between Italy and the export markets that are led by USA, Japan, China and northern Europe. Some growers are joining forces to promote

their wines together. For example, *Generazione Vulture* is a group of young growers keen to promote their region and its wine. Significant producers include the long-established Paternoster (now owned by Tommasi from the Veneto), d'Angelo and Elena Fucci.

19.3. Puglia

Puglia, the 'heel' of Italy, is south of Abruzzo and is surrounded on three sides by the Mediterranean Sea. With a hot Mediterranean climate and moderating breezes from the sea, it is well suited to volume wine production as the region's low rainfall reduces the threat of fungal diseases, soils are fertile and irrigation is permitted. Historically, much wine was exported to cooler areas of Italy and beyond to add alcohol and body to wines. Today, while much inexpensive wine is still made, growers are seeking to raise quality and to increase the prices of their wines. A range of mainly black Italian and local grape varieties is grown.

THE GROWING ENVIRONMENT, GRAPE GROWING, WINEMAKING AND DENOMINATIONS



Source: Italian Wine Central⁴

Large volumes of mainly black grapes, including Sangiovese and Montepulciano (see [Tuscany](#) and [Marche](#) respectively), are grown in Puglia for bulk wine. Two forms of white Trebbiano varieties are also grown for inexpensive white wines. In addition, three black varieties are typical of the region: Primitivo, Negroamaro and Nero di Troia.

Primitivo

This high yielding variety, also known as Zinfandel in California, buds early. It is prone to spring frosts and to drought. In rainy or humid conditions, it is susceptible to poor flowering and fruit set. In addition, the fruit can ripen unevenly, with both more and less-ripe berries in the bunches. These issues are a challenge for growers with regard to meeting demand in a predictable way and with regard to cash flow. The variety accumulates sugar easily and hence tends to produce high alcohol wines. The grapes have a tendency to dry on the vine as

harvest approaches, adding to the high alcohol, and growers need to judge when to pick to avoid overly jammy or dried fruit flavours. As the bunches typically contain ripe and under ripe fruit, strict sorting is required to produce high-quality wines, adding cost.

Primitivo in Puglia

In Puglia, Primitivo is often picked in August, thus avoiding autumn rains. The bunches of Primitivo are looser with smaller berries, giving them more disease resistance than Zinfandel in California.⁵ Older vines in Puglia are typically bush trained and planted at low density, providing some shade for the fruit. The low density makes best use of the low rainfall. Newer vines and those for inexpensive wine are trellised (cordon-trained or cane-pruned with VSP) to enable mechanisation.



Low density bush vines



Old vine Primitivo

Winemaking

Inexpensive wines are typically vinified at warm fermentation temperatures with maceration on the skins for 7–10 days to extract flavour, colour and medium to high levels of tannin. They are aged for a short period (six months) in stainless steel or large casks. Premium wines will have longer on the skins for greater structure. They are often aged in French oak barriques for 12 months, adding to cost.

The two main DOCs are:

- **Primitivo di Manduria DOC** – As the grape variety is named, there must be a minimum of 85 per cent Primitivo. The maximum yield is 63 hL/ha; Riserva category must be aged for two and a half years, including nine months in wood, with a minimum 14% abv.
- **Gioia del Colle DOC Primitivo** – The wine must 100 per cent Primitivo. The maximum yield is 52 hL/ha. The Riserva category must be aged for two years (no requirement for ageing in wood) and have a minimum 14% abv. While this hilly area is slightly cooler (250–500 m above sea level), both DOCs make full-bodied, high alcohol wines at Riserva level.

The wines have medium (+) to pronounced, ripe to jammy red cherry and strawberry fruit, medium acidity and medium to medium (+) tannin. Quality is right across the range with many acceptable to good wines as well as some very good and a few outstanding wines. Top producers include Gianfranco Fino (Primitivo di Manduria) and Polvanera (Gioia del Colle).

Primitivo has had mixed fortunes in recent decades. Many vineyards, including many old vines with high quality potential, were removed under the EU wine pull scheme. Since then, the variety has become more popular again, partly through the success of Californian Zinfandel.

Negroamaro

This variety, also written as Negro Amaro, is widely grown on the eastern side of the Salento peninsula, the so-called heel of Italy. It is a high yielding variety with good resistance to diseases and to drought. These characteristics, combined with an ability to retain acidity, make it highly suitable for growing in a hot climate. As with Primitivo, in the past it was used to add alcohol and body to wines of cooler regions.

The most important DOC is **Salice Salentino**. Salice Salentino Rosso DOC requires a minimum 75 per cent Negroamaro or if the variety is on label, 90 per cent. The maximum yield is 84 hL/ha, which can result in wines of low concentration and flavour intensity. Riserva wines must be aged for a minimum of two years with at least six months in large wood casks.

Red wines are typically macerated on the skins for 7–10 days. They are aged either in stainless steel for a short time (six months) for inexpensive wines or for a year in oak for mid-priced to premium wines. The wines have black plum and black cherry fruit, medium to high alcohol, medium acidity and medium (+) tannins.

Negroamaro is also used to make rosé wine (*rosato*), which is deep pink-orange in colour. This is very popular as a summer drink in the region and the wider Italian market. Wines are mainly good to very good quality and inexpensive to mid-priced, with a few premium wines. Significant producers include Agricola Vallone and Leone de Castris (including for its *rosato*).



Negroamaro *rosato*

Nero di Troia

This variety, also called Uva di Troia, is mainly grown in central and middle parts of Puglia. It is a late-ripening variety and is prone to downy mildew. Unlike Primitivo and Negroamaro, it needs a long season to develop its full colour and to ripen the tannins, which means it is at risk from autumn rain. Additionally, berries on bunches ripen at different times, which makes costly repeated passes through the vineyard and/or sorting a necessity for higher quality wines.

The wines have medium intensity red cherry and redcurrant fruit with a black pepper note, high but fine-grained tannins and medium (+) acidity.

The most important PDO for Nero di Troia is Castel del Monte. Where the variety is stated on the label, the wine must contain a minimum 90% Nero di Troia. Two versions exist:

- Castel del Monte DOC: maximum yield of 91 hL/ha. These are mainly aged in stainless steel for a short time, about 6 months
- Castel del Monte DOCG: Riserva only. Maximum yield 70 hL/ha. Maturation for two years, including one in wood. The wood is likely to be either French oak barriques or large casks.

Generally, wines range from good to very good, with a few outstanding examples, and are in the mid-priced to premium range. Top producers include Rivera and Torrevento.

WINE LAW AND REGULATIONS

The regulations for PDO wines have been covered under the key grape varieties.

WINE BUSINESS

Puglia continues to produce large volumes of inexpensive wine.

Less than 10 per cent is classified as PDO and 60 per cent is classified simply as 'wine'.⁶

Co-operatives remain important, investing in winemaking equipment. The largest co-ops have the scale to market their wines throughout Italy and abroad. For example, Cantine Due



Large tanks

Palme has 1,200 members, growing across 2,500 ha of vineyards. Quality in recent decades has been improving owing to a combination of local companies and investment by well-established Italian companies, such as Antinori at their Tormaresca estate.



Investment in new large casks

19.4. Sicily

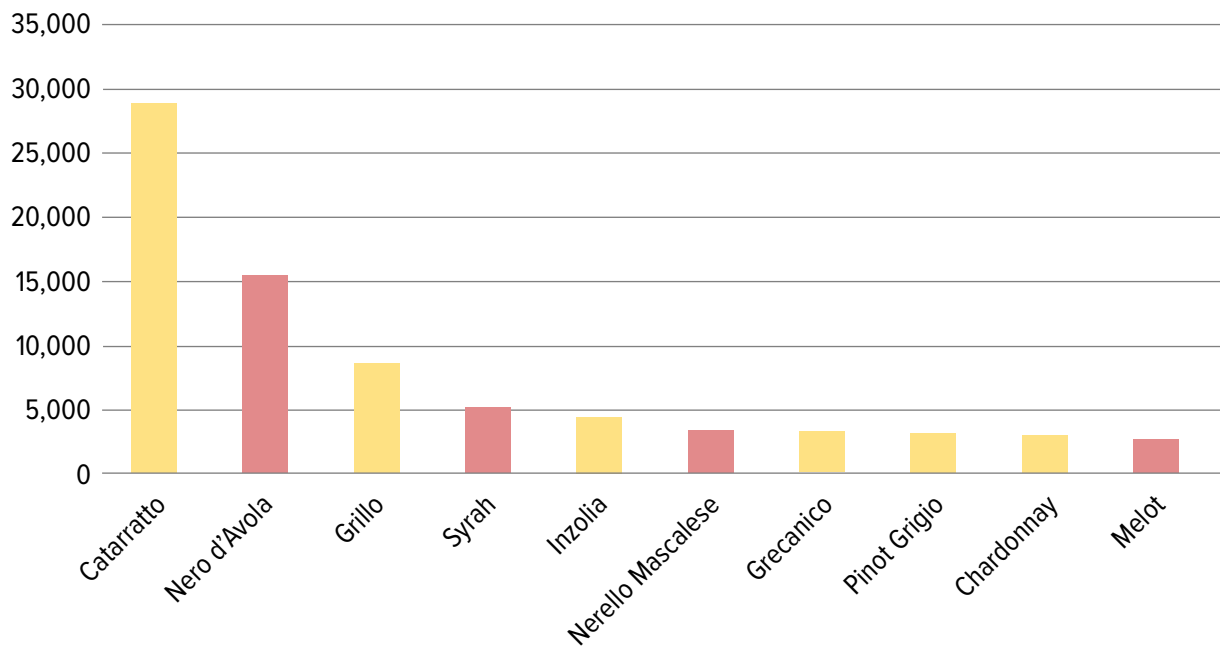
Sicily, a large island at the toe of Italy, has a long history of wine production going back to ancient Greek settlements. Today it produces both large volumes of bulk wine and distinctive PDO wines. Local grape varieties dominate, especially the white Catarratto and the black Nero d'Avola. While Sicily's reputation for rising quality was initially based around international varieties, it now equally known for its local varieties, especially Nero d'Avola and Nerello Mascalese.



Vineyards with olive groves and arable farming

THE GROWING ENVIRONMENT, GRAPE VARIETIES, WINEMAKING AND DENOMINATIONS

Sicily, top varieties, hectares, 2021



Source: Dipartimento Regionale Dell'Agricoltura, Sicilia⁷

Sicily in general has a warm Mediterranean climate, highly suitable for grape growing. However, some areas have particular microclimates due to local factors such as altitude (particularly Etna). Low rainfall necessitates irrigation, especially in high volume production areas.



Vines with irrigation

Catarratto, Grillo and Inzolia are local white varieties that produce mainly inexpensive dry white wines, as well as Marsala, a type of fortified wine. They are mainly blended either with each other or with Chardonnay. The wines are typically fermented at medium temperatures and aged in stainless steel for 6 months before bottling and early release to maintain primary fruit.

Catarratto

This variety is notable for being high yielding and disease resistant. It has light intensity lemon and herbal notes, high acidity and medium alcohol. The wines are typically inexpensive and acceptable to good quality.

Grillo

This variety is a natural cross between two other varieties grown in Sicily, Catarratto and Moscato. It is moderately high yielding and heat resistant and has good disease resistance. As such, it is very suitable for Sicily's warm, dry climate. Care has to be taken not to over-expose the bunches as this can lead to a loss of aroma. The must oxidises easily and therefore modern wines are made using protective winemaking techniques (in contrast to many wines of the past and to Marsala). The wines are full-bodied, with medium intensity lemon and floral notes, medium alcohol and high acidity. Most Grillo is good to very good in quality and inexpensive to mid- price. Marco de Bartoli, early champion of the variety, produces an oak aged example, which is premium priced.



Spraying against powdery mildew

Inzolia

Inzolia, also known as Ansonica, is an early ripening variety, with good drought resistance. It needs to be picked early to retain acidity. The wines have medium (–) intensity lemon fruit, medium acidity and a medium body. The medium acidity makes it a useful blending partner

with the higher acidity of Catarratto and Grillo. The wines are inexpensive to mid-priced and mainly acceptable to good in quality, with some very good examples. Best producers include Valle dell'Acate and Principi di Butera.

Catarratto, Grillo and Inzolia are allowed in many of the DOCs within the island. To take a typical example, Alcamo Bianco DOC (north-west corner of the island) requires a minimum of 60 per cent Catarratto with the other specified varieties, local or international, making up the blend. Maximum yield is 84 hL/ha, resulting in some wines of low flavour intensity. Other DOCs give a minimum percentage for any one variety or for a combination of the three varieties.

Moscato

Muscat of Alexandria, locally known as Zibibbo, is a heat- and drought-resistant variety used to make wines in a range of styles, especially on the island of Pantelleria, which is closer to Tunisia than to the rest of Sicily. Here intense sunlight, heat and drying winds mean that only the most drought-resistant varieties can flourish. Low bush vines are planted in individual planting holes (to about half their final height) to conserve water and give some protection from the wind.

Wines are made in three styles on Pantelleria:

- **Dry** – fermented in stainless steel, released early to retain aromatic Muscat character
- **Late harvest** – picked a week later than for dry wines with the fermentation being stopped to retain residual sugar for a sweet style
- **Passito** – made with semi-dried grapes, traditionally sun-dried, with high levels of residual sugar.

The challenge is to balance sweetness with sufficient acidity. Some companies pick most of the fruit early (for optimum acidity) and then dry it in the sun for 20–30 days. These dried berries are later added to the must of very ripe fruit picked at the end of the season.

The *passito* wines are deep lemon in colour with pronounced aromas of cooked orange, apricot and honey. They are sweet with high alcohol. The wines are very good to outstanding in quality and premium and super-premium in price. Top producers include Donnafugata for all three styles.

For [Carricante](#), a further notable white grape variety in Sicily, see below on Etna.

Nero d'Avola

By far the most planted black variety in Sicily, Nero d'Avola (also known as Calabrese) grows well in a hot climate. As a late-ripening variety, it is often grown close to the ground to maximise the heat, though it is an adaptable variety that also grows satisfactorily in damper, cooler sites. It is a very vigorous variety (requiring a lot of canopy management, that adds some cost) and is susceptible to powdery mildew. It can suffer from uneven flowering that can affect yields from year to year.

The wines are medium to deep ruby in colour with red cherry to black plum fruit, medium (+) to high tannins and medium to medium (+) acidity. At moderate yields the grape can produce very good to outstanding quality wines with concentration, which are typically aged in small oak barrels and are mid-priced to premium in price. At high yields, it produces acceptable to good wines, stored for a short period in stainless steel (6 months) and they are inexpensive to mid-priced.



Young Nero d'Avola vines

Much Nero d'Avola is made as a varietal wine. It is an option in many Sicilian DOCs (maximum yield is in the range 70–77 hL/ha) and often produced as IGT or in the 'wine' category. It is also blended with the black Frappato variety in Sicily's only DOCG wine, **Cerasuolo di Vittoria DOCG**, and with international varieties. In the red (not rosé) wine, Cerasuolo di Vittoria, Frappato adds strawberry and herbal aromas and fresh red fruit. For this DOCG wine the blend is 50–70 per cent Nero d'Avola and 30–50 per cent Frappato, with a maximum yield of 52 hL/ha, resulting in wines with very good concentration.

Top producers of varietal Nero d'Avola include Gulfi (for single vineyard wines) and Feudo Montoni. For Cerasuolo di Vittoria blends, top producers include Cos and Planeta.

Nerello Mascalese

This variety is grown for volume wine production often at high yields across Sicily but in the last two decades the wines made from this variety grown on Etna have become highly regarded wine. It buds early (making it vulnerable to late spring frost); yields can vary from year to year due to coulure; and is late ripening and therefore can be affected by early autumn rain. At altitude on Etna (400–1,000 metres above sea level) it has a very long season, adding to the intensity of flavours. The variety is prone to powdery mildew and botrytis bunch rot. Care has to be taken to deleaf around the fruit zone at the right time in cooler sites on Etna. If deleafing is too early, then the berries can be burnt by the sun; if not done soon enough the fruit may never ripen fully, leading to unripe flavours and harsh tannins. As this is a moderately high tannic variety, musts are typically kept for a relatively short time on the skins (10–15 days) to avoid over-extracting tannins. However, some top producers, e.g. Graci, keep the wine on the skins for much longer (30–90 days) believing that this results in smoother tannins.



Vegetative vine growth in front of Mount Etna



Nerello Mascalese before véraison

Nerello Mascalese typically produces wines with medium to pale ruby colour (depending on the level of extraction), high intensity aromas and flavours of red cherry and violet with herbal earth notes, high acidity, medium to high tannins (depending on extraction) and the high end of medium alcohol.

In **Etna Rosso DOC**, the blend is a minimum of 80 per cent Nerello Mascalese, with the remainder being provided by Nerello Cappuccio. The latter provides colour and red berry fruit in blends. The best wines on Etna are typically from very old vines (60–100 years), providing high concentration but low yields, contributing to high costs. Equally, most vineyards are on moderate to steep slopes, meaning that work has to be done by hand, adding to cost. Maximum yield for Etna Rosso is restricted to 56 hL/ha. The Riserva category requires



Hillside vineyard, Etna



Old vine, Etna

four years of ageing, of which one must be in wood. The wines are pale ruby in colour, with medium intensity red cherry fruit, high acidity and medium (+) to high tannins. They are usually aged in large, neutral oak casks or 500–600 litre barrels, rather than in new small barrels. The wines are typically very good to outstanding in quality and mid-price to premium in price.

Carricante

This variety is the main part of the blend in **Etna Bianco DOC**. While the DOC requires only 60 per cent Carricante, better producers use up to 100 per cent; those who blend will do so with Catarratto. Carricante is prone to the common fungal diseases. It grows successfully at high altitudes (up to 1,000 m) where black grapes would fail to ripen. The large diurnal range produces wines with high acidity. The wines are normally put through malolactic conversion to reduce the acidity. The wines are typically aged in old oak for additional texture. The wines have medium intensity lemon and green apple flavours, high acidity and medium alcohol. The quality and price ranges are the same as Etna Rosso, but the volumes are much lower.

WINE LAW AND REGULATIONS

In 2011, the former IGT Sicilia became **Sicilia DOC**. This DOC covers a large range of varieties and combinations of varieties (e.g. Grillo-Viognier or Nero d'Avola-Syrah). Maximum yields are high (white wines 91 hL/ha, red wines 84 hL/ha), resulting in some wines of low flavour intensity. The initial implementation of the DOC did not include the usual requirement to bottle the wine in the region of production as large volumes of wine were shipped to northern Italy for bottling, leading to the criticism that the standards for the new DOC were not high enough. However, this had now been rectified.

WINE BUSINESS

Sicily is unusual in Italy in that the wine business is led by a small number of large and influential private companies (for example Planeta, Donnafugata and Tasca d'Almerita, the three founders of Assovin Sicilia, see below). It also has important co-operatives, for example, Settesoli which with 2,000 growers and 6,000 hectares has 7 per cent of all Sicilian vineyards.⁸

In the past, much of Sicily's wine production was transported to Italy in bulk to add alcohol and body to wines from cooler climates or to be bottled in other Italian regions. It continues to be a large producer of bulk wine, with about 25 per cent of its wine production being bottled.⁹

There has been a rapid and large scale take up of the new Sicilia DOC especially for Grillo and Nero d'Avola varieties. In 2021, it had 25,000 hectares and bottled 720,000 hL, 43 per cent of all packaged Sicilian wine. It has grown by nearly 600 per cent since the first full year of production in 2013. Aided by the dry and windy climate, in 2021, 27 per cent of the vineyard area was certified organic.¹⁰

Sicily now offers both inexpensive wines and mid-priced to super-premium wines. Apart from offering good value, Sicilian wines became better known through two main varieties: the 1990s was a period when Nero d'Avola sales increased significantly. However, the boom was



Large volume winemaking

short-lived thought to be due to a drop in quality in the wines on offer. In this century, Etna Rosso has created great interest in markets with specialist wine retail and specialist wine bars.

Ninety wine businesses, representing more than 80 per cent of Sicilian bottled wine by value,¹¹ are members of Assovini Sicilia which promotes Sicilian wines around the world and organises the annual tasting of newly released wines (Sicilia En Primeur).

19.5. Sardinia

Sardinia is an island off the coast of Tuscany and south of Corsica. Its complex history is reflected in the point that two of its most important varieties (Cannonau, i.e. Grenache Noir, and Carignano, i.e. Carignan) are widely grown in the warmer parts of southern Europe. The white Vermentino is the most important white variety, while the black Monica and white Nuragus are grown mainly for local consumption.

Sardinia has a warm Mediterranean climate with low rainfall during the growing season. It has adequate rainfall for grape growing in parts of the island (e.g. in the north-west corner) but low rainfall in the south-east corner makes irrigation more of a requirement. However, there is an island-wide scheme to make water available to farmers, including grape growers.

Cooling influences include altitude (most of Sardinia is hilly). Sites which are open to winds from the sea are affected by the drying character of these warm winds but are less susceptible to common fungal diseases.

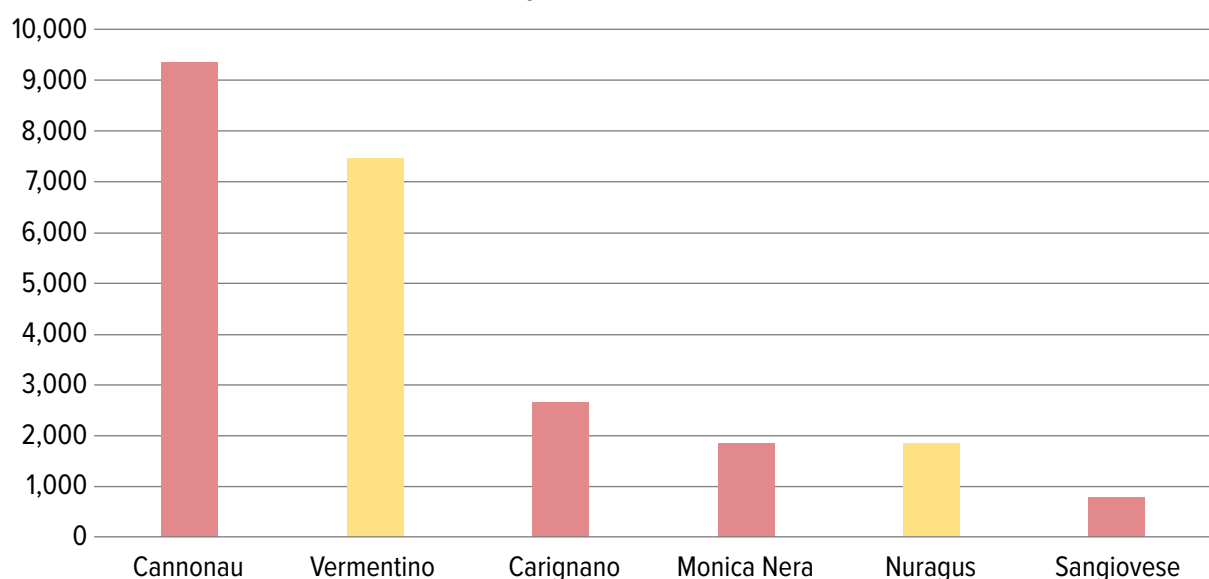
Sardiana continues to have a significant number of vines trained as bush vines. Newer vineyards may have trellising (replacement cane with VSP or cordon-trained, spur-pruned).



Irrigation system in vineyard

GRAPE VARIETIES, DENOMINATIONS AND WINEMAKING

Sardinia, top varieties, hectares, 2020



Source: Italian Wine Central¹²

Cannonau

This is the Sardinian name for Grenache Noir (see [The Rhône Valley](#)). The most important DOC is **Cannonau di Sardegna** which can be grown in any part of the island, though there is a more restricted Classico zone encompassing two provinces. Maximum yields are 77 hL/ha for the entire DOC (resulting in some wines of low concentration) and 63 in the Classico zone. Riserva wines must be aged for two years, six months of which must be in wood (12 months in the case of Classico). The wines are good to very good in quality and inexpensive to mid-priced. Dry and sweet fortified wines are also made from Cannonau and sold locally. Top producers include Sella & Mosca and Argiolas.

Vermentino

The white variety Vermentino is early budding making it susceptible to spring frosts. It is also prone to downy mildew and the European grape moth. It ripens in mid-season, making it less prone to late season rain. It grows best on sunny, exposed sites with poor soils. The wines typically have medium intensity lemon and acacia aromas, with riper examples showing tropical fruit notes, a light to medium body with medium alcohol and medium (+) acidity. Most wines good to very good in quality and are mid-priced to premium priced.

The wines are typically made by gentle pressing of the grapes, a short period of skin contact (24 hours), fermentation at cool to mid-range temperatures in stainless steel to retain primary fruit and a short period of ageing (3–4 months) in neutral containers on the fine lees. Some very good wines are aged on the lees for six months for a fuller body. The wines are mainly aged in stainless steel partly due to cost but also to avoid overwhelming the delicate aromas.

The most important PDOs are:

- **Vermentino di Sardegna DOC**, which again can be grown anywhere on the island. High yields of up to 112 hL/ha are allowed, leading to some wines of low concentration and flavour.
- **Vermentino di Gallura DOCG**, the north-east corner of the island is Sardinia's only DOCG. This restricts yields to 63 hL/ha.

Carignano

This variety (see South of France: [Carignan](#)) is mainly grown in the south-west corner of the island, where, as a heat and drought-resistant variety, it can thrive despite high summer temperatures, low rainfall and drying winds from the sea (which also reduce the threat of fungal diseases). Low fertility sandy soils also help to restrain its natural vigour. The main PDO is **Carignano del Sulcis DOC**. Some vineyards are still in production with ungrafted vines up to 100 years old, resulting in very low yields and high quality wines. The most common form of training is the bush vine and this is a requirement for the Superiore category within the DOC. Bush vines are suited to the dry climate of the area and restrain the natural vigour of the variety. Limited irrigation is permitted to allow vines to grow adequately in the period of vegetative growth but not assist them after véraison during the final ripening of fruit. The DOC allows up to 77 hL/ha resulting in some wines of low flavour concentration, while the Superiore category limits yield to 52.5 hL/ha.

Inexpensive wines are typically fermented at warm temperatures and macerated on the skins for 7–10 days and are aged for 3–4 months in large neutral containers (cement, large oak casks). Mid-priced and premium red wines by contrast will be macerated on the skins for around 15 days at warm fermentation temperatures for fuller extraction of colour, flavour and tannins and aged in French oak barriques for 12–18 months.

Both the Superiore and Riserva (available for the basic DOC as well as Superiore) categories require two years of ageing. The wines range from good to very good in quality with some outstanding wines, with prices from inexpensive to premium. Best producers include Agricola Punica and Santadi.

WINE LAW AND REGULATIONS

Rules for the named PDOs have been given above.

WINE BUSINESS

Sardinia, like other southern Italian regions, has had to change from being a seller of bulk wine for blending. Sardinian regional and EU funding encouraged the growth of co-operative wineries in the late twentieth century. However, vineyard area reduced dramatically when EU subsidies were available to remove uneconomic vineyards. It is now concentrating on creating a distinctive identity around its most important grape varieties. Two-thirds of the wine produced is classified as PDO.¹³ Sardinia has important and high-quality co-operatives, such as Cantina Santadi, which in the past was advised by the eminent oenologist Giacomo Tachis. Exports of Sardinian wine by value have remained flat for nearly all of the decade to 2021.¹⁴

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