



Co-funded by the European Union

Foodscapes as a mirror of environment and culture - A Journey Through Gastronomy, Environment and Identity

Source: <http://amazingearth.me/tag/apple/>



18-22 May

2026





Source: <http://amazingearth.me/tag/apple/>

How to Say Cheers?

Afrikaans – Gesondheid (Geh-soond-hate)

Albanian – Gëzuar (Geh-zoo-ah)

Arabic – في صحتك (Fi-sih-tik)

Bosnian – Živjeli (Zee-veh-lee)

Chinese (Mandarin) – 干杯 (Gan-bay)

Croatian – Živjeli (Zee-veh-lee)

Czech – Na zdravi (Naz-drah-vee)

Dutch – Proost (Proost)

Filipino – Mabuhay (Ma-boo-hay)

Finnish – Kippis (Kipp-iss)

French – Santé (Sahn-tay)

German – Prost (Prost)

Greek – ΥΓΕΙΑ (Yah-mahs)

Hebrew – לחיים (Luh-kai-um)

• Hungarian – Egészségedre (Eg-esh ay-ged-ruh)

Icelandic – Skál (Skowl)

Irish (Gaelic) – Sláinte (Slawn-chuh)

Italian – Salute (Sah-loo-tay) Cin Cin

Japanese – 乾杯 (Kan-pi)

Korean – 건배 (Gun-bay)

Norwegian – Skål (Skowl)

Polish – Na zdrowie (Nahz-droh-vee-ay)

Portuguese – Saúde (Sow-ood-uh)

Romanian – Noroc

Russian – Будем здоровы (Boo-dem Zdor-oh-vee)

Slovak – Na zdravie (Nahz-drah-vee-ay)

Spanish – Salud (Sah-lood)

Swedish – Skål (Skowl)

Thai – ไชโย (Chon-gow)

Turkish – Şerefe (Sher-if-fay)

Vietnamese – Dô (Djo)

Wine & Wine

Regions of the



World

Agenda

Wine: this stranger???

History of the wine

Characteristics of wine: technical aspects

Wine Tourism- Events

Top 10 Wine Regions of The World

Wine is a "cultural product": it can be interpreted and understood as a text, published (or produced) and read (or consumed).... conveying hegemonic and ideological meanings that are communicated and reproduced

It is linked to the notion of "terroir" and its identity as a product of a process that helps the repopulation of rural farms (and not only), the local economy and also becomes a driving force for the development and increase of tourism flows

Useful key words

- **Terroir**: the grape-growing conditions of a particular site, which include the area's climate, soil composition, presence of water, position on a slope and altitude
- **Appellation**: the official title given to a product made in a specific place (or set of places), in a style particular to that place. Most appellations take the form of place names (e.g. Champagne, Barolo, Jerez-Xerez-Sherry).
- **Varietal**: an adjective describing the characteristics of a grape variety, particularly with reference to the wine it makes. This includes: mouthfeel, color, flavor and aroma. The grape varieties most valued by modern wine consumers tend to be those with distinctive varietal characteristics.



History of Wine





4100 B.C.

The Oldest Winery Is Founded In Ancient Armenia

What we know of to be the oldest winery is founded in ancient Armenia. The site was discovered in 2007 by *UCLA researchers*.

3100 B.C.

The Egyptians come in contact with Jews as well as the Phoenicians. It would be the **Phoenicians** who would cultivate the wine and begin to spread it around the world.

1700 B.C.

Wine Was Drank At Least 3,700 Years Ago In Northern-Israel



1200 B.C. – 539 B.C.

The Phoenicians Begin To Trade Across The Mediterranean

The Phoenicians begin to trade across the Mediterranean, including the Middle East (current day Israel) and stretching around the sea from North Africa to points in Greece and Italy. It was during their trading that they also brought with them wine, transported in ceramic jugs, as well as grapevines. During travels, the Phoenicians come in contact with the Jews, who began to use wine to mark religious ceremonies. We first hear the mention of wine in the book of Genesis, when, after the flood, Noah, drunk on wine, exposes himself to his sons.



800 B.C.

The Rise Of Greece & Hellenistic Conquest

The Greeks, having been exposed to wine by the Phoenicians, begin to perfect the beverage. Wine becomes a symbol for trade, religion and health. A god is named in honor of wine: Dionysus. As the Greek city-states begin to rise in power, they colonize other land around the Mediterranean, and, along with their armies, travel with wine. After a new colony was conquered, Greeks would settle the area, bringing grapevines with them. Sicily and southern Italy formed some of the earliest colonies, and the wine then traveled up the boot toward Rome.



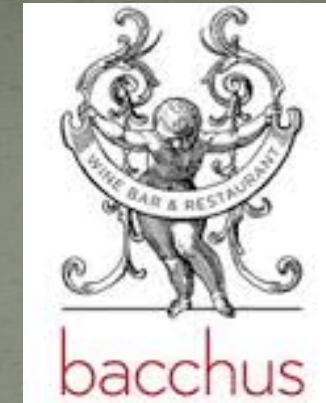
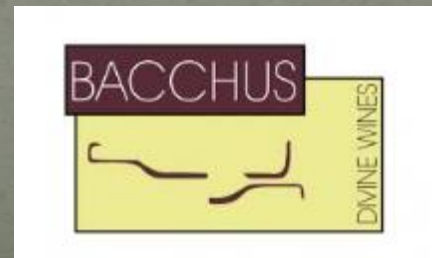
Dionysos in a ship, sailing among dolphins. Attic black-figure kylix, ca. 530 BC

source: VinePair.com

146 B.C.

Rome Conquers Greece & Builds An Empire

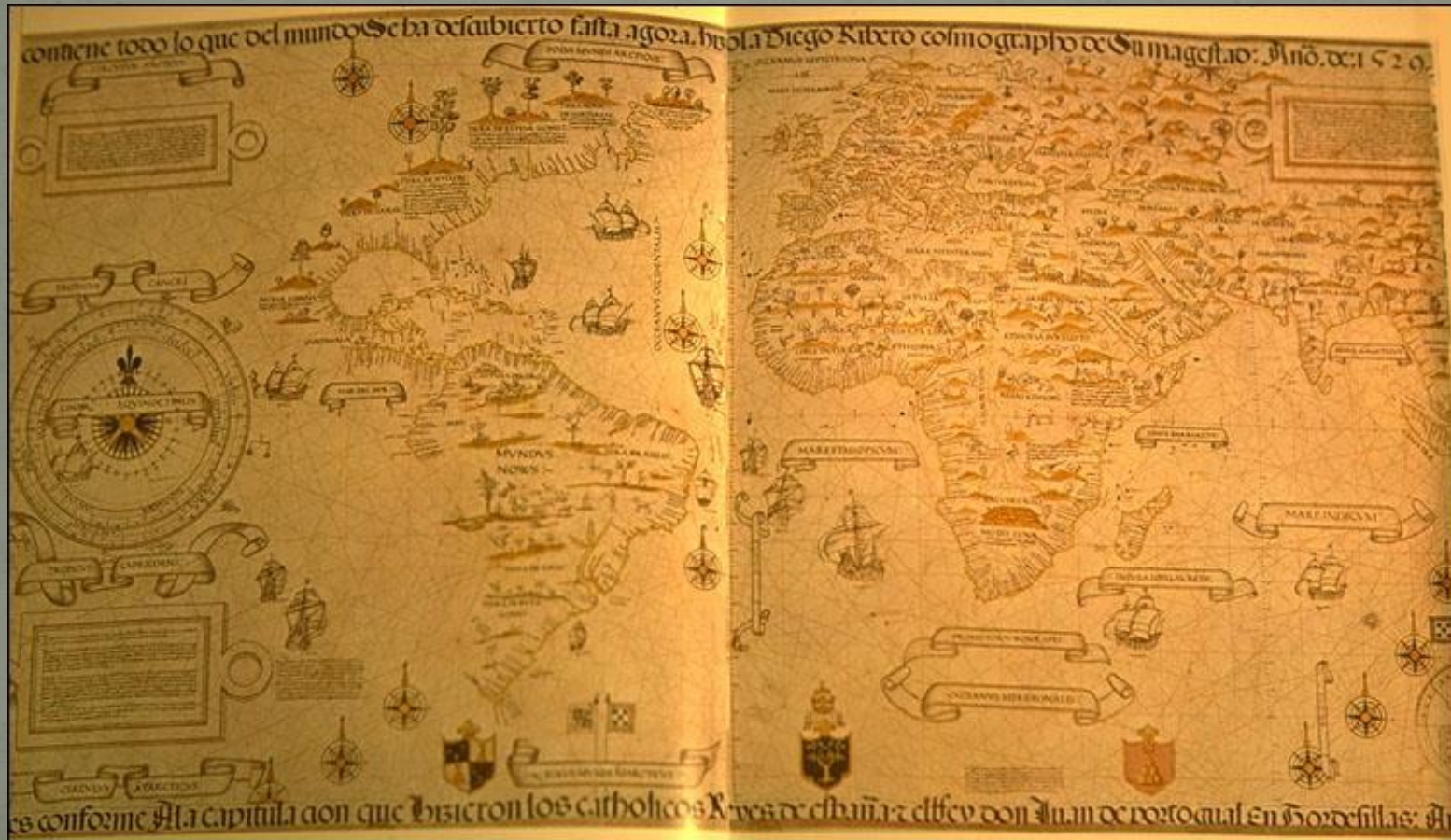
The Romans take wine as their own, creating **Bacchus**, their own god of wine, and made wine a central part of their culture, just as the Greeks had done. They build upon and formalize the Greek's cultivation methods to the point that terroir is recognized and famous vintages (121 BC the most well known) are enjoyed for decades. As the Empire and its troops expand across Europe, Romans plant grapevines in modern day France, Germany, Italy, Portugal, Spain as well as a number of Central European nations.



1492 – 1600

Wine Travels To The New World

Wine travels to the New World and it's brought to Mexico and Brazil by the conquistadors. Wine spreads across South America from these two original locales.



1554

Spanish Missionaries Spread
Across The Americas
Spanish missionaries, traveling
from points North, including
Mexico, establish Chile's first
winery. Presently Chile's
„flagship” wine variety is
Carménère



1556

Spanish Missionaries Travel From Chile To Argentina

Spanish missionaries travel from Chile to Argentina, settling in the Mendoza wine region, and planting the region's first grapes.



1562 – 1564

Wine Briefly Comes To The U.S. In Florida

Wine comes to America, being made for the first time by French Huguenots in Jacksonville, FL. The Huguenots did not bring European grapes with them, but instead used native grapes they found growing in the area. The wine made was not pleasant to the Huguenots, and they stopped making the wine shortly after they began.



Exploration of Florida by Ribault and Laudonniere, 1564

1659

The Dutch East India Company Colonize South Africa

As the Dutch East India Company colonizes South Africa, there is a demand for wine to supply the sailors for their long journey back from Africa to Europe. Vines are planted and wine production begins in Cape Province to fill this need. Later the English would seize the colony.



Jan van Riebeeck arrives
in Table Bay in April
1652.

1769

Spanish Missionary Junípero Serra Travels To California

Spanish missionary Junípero Serra, having traveled from Spain to spread the gospel in the New World, travels to California from Mexico City, opening a mission in San Diego and bringing with him grapes in order to create the region's first wine. Spanish missions then spread across California, and the Franciscan monks bring with them the art of making wine, establishing Sonoma's first winery in 1805.



Mission Basilica San Diego de Alcalá was the first Franciscan mission in The Californias, a province of New Spain. Located in present-day San Diego, California,

Mission San Diego de Alcalá as it stood *circa* 1900. Campanario (bell tower) is missing, and the exposed church, which fell into disrepair.

Source:

[https://en.wikipedia.org/wiki/Mission_San_Diego_de_Alcal%C3%A1#20th_century_and_beyond_\(1901-%E2%80%93_present\)](https://en.wikipedia.org/wiki/Mission_San_Diego_de_Alcal%C3%A1#20th_century_and_beyond_(1901-%E2%80%93_present))

1788

The First Fleet Sails To Australia Via South Africa

The First Fleet, having departed the UK in 1787 in order to travel to Australia to establish the penal colony, makes a stop in South Africa. During the stop the fleet picks up grape cuttings that will be planted in Australia upon the fleet's arrival.



Colour lithograph of the First Fleet entering Port Jackson on January 26 1788, drawn in 1888

1832

James Busby Is Appointed British Resident of New Zealand

James Busby, a British resident living in Australia who is considered the father of the Australian wine industry, is appointed to the position of British Resident of New Zealand by the British government. Busby travels from Australia to New Zealand and brings with him grape cuttings from Australia. He establishes New Zealand's first vineyard in 1836.

A
MANUAL
OF
PLAIN DIRECTIONS
FOR
PLANTING AND CULTIVATING
VINEYARDS,
AND FOR
MAKING WINE,
IN
NEW SOUTH WALES.

BY JAMES BUSBY.

Sydney:

PRINTED BY R. MANSFIELD, FOR THE EXECUTORS OF R. HOWE.

1830.

1870

Basque & Italian Immigrants Arrive In Uruguay

Don Pascual Harriague, a French Basque immigrant plants Tannat vines, which will come to be considered Uruguay's

'National Grape.'



1980 – 2013

China Opens Up Its Economy

As the Chinese economy opened to the world under Deng Xiaoping, imports of French wine arrived, followed by the French themselves, working with local partners to plant vineyards. In 30 years, as China's middle and upper class populations ballooned, the nation has grown into both one of the world's largest consumers and producers of wine.

Source:

www.researchgate.net/publication/326606092_Study_on_current_status_and_climatic_characteristics_of_wine_regions_in_China/figures?lo=1

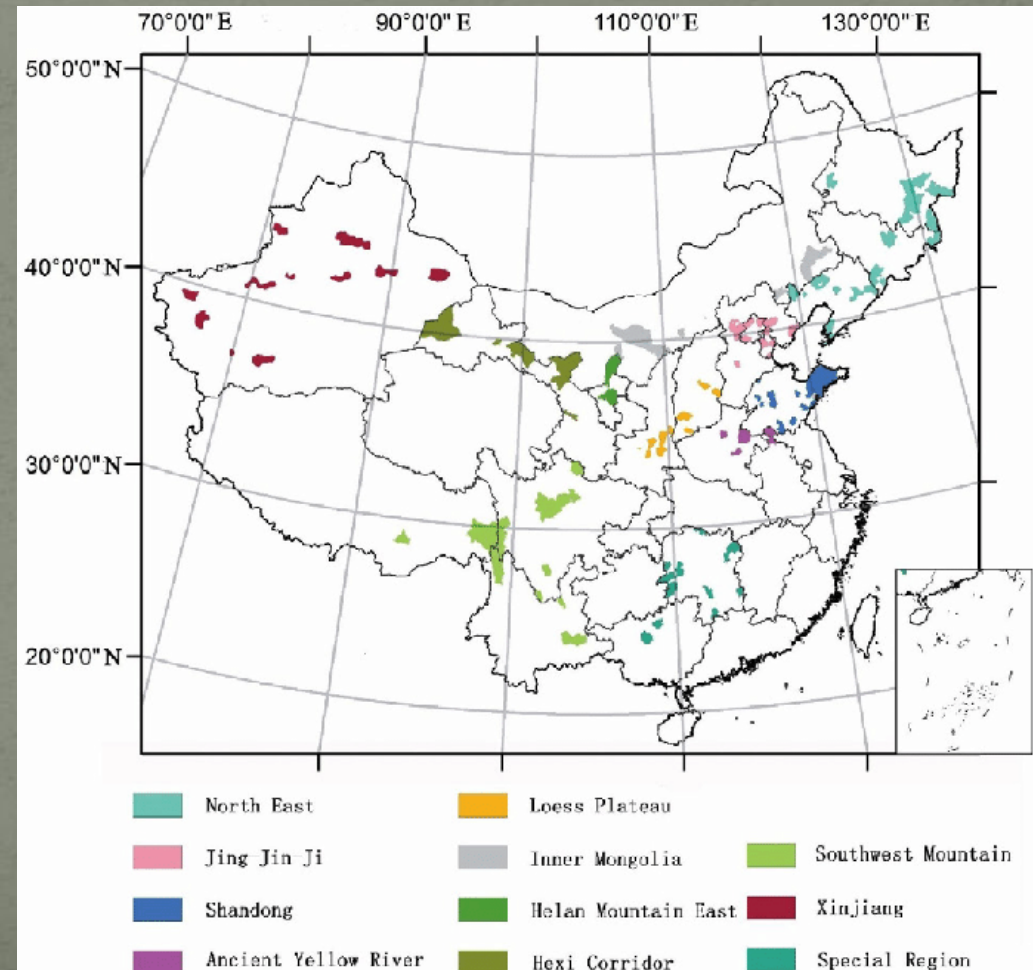


Table 1. Characterization of Chinese viticulture in the worldwide context. Data obtained from the OIV (International Organization of Vine and Wine) reports published in 2018 and 2019; nd: no data are available for these parameters or Chinese vineyards were not ranked on the top list.

| Variables | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2019 Ranking |
|----------------------------------|------|------|------|------|------|------|--------------|
| Vineyard area (kha) | 813 | 859 | 807 | 830 | 855 | 855 | 2 |
| Grape production (thousand tons) | 12.5 | 13.2 | 12.6 | 13.1 | 11.7 | Nd | 1 |
| Table grapes (thousand tons) | 9.4 | 10.0 | 10.1 | 10.5 | 9.5 | Nd | 1 |
| Dried grapes (thousand tons) | 180 | 190 | 165 | 180 | 190 | Nd | 3 |
| Wine production (million hl) | 13.5 | 13.3 | 13.2 | 11.6 | 9.1 | Nd | 10 |
| Wine consumption (million hl) | 17.4 | 18.1 | 19.2 | 19.3 | 17.6 | 17.8 | 5 |
| Wine importation (million hl) | 3.8 | 5.6 | 6.4 | 7.5 | 6.9 | 6.1 | 5 |
| Value (billion EUR) | nd | nd | nd | nd | 2.4 | 2.2 | 4 |



Source: Yu, Y.; Rodrigo-Comino, J. Analyzing Regional Geographic Challenges: The Resilience of Chinese Vineyards to Land Degradation Using a Societal and Biophysical Approach. *Land* 2021, 10, 227. <https://doi.org/10.3390/land10020227>



Figure 1. Vineyards of the Qingtongxia Jinshawan Winery, Ningxia Hui Autonomous Region, China. Photographs provided by Assistant Professor Abo Li.

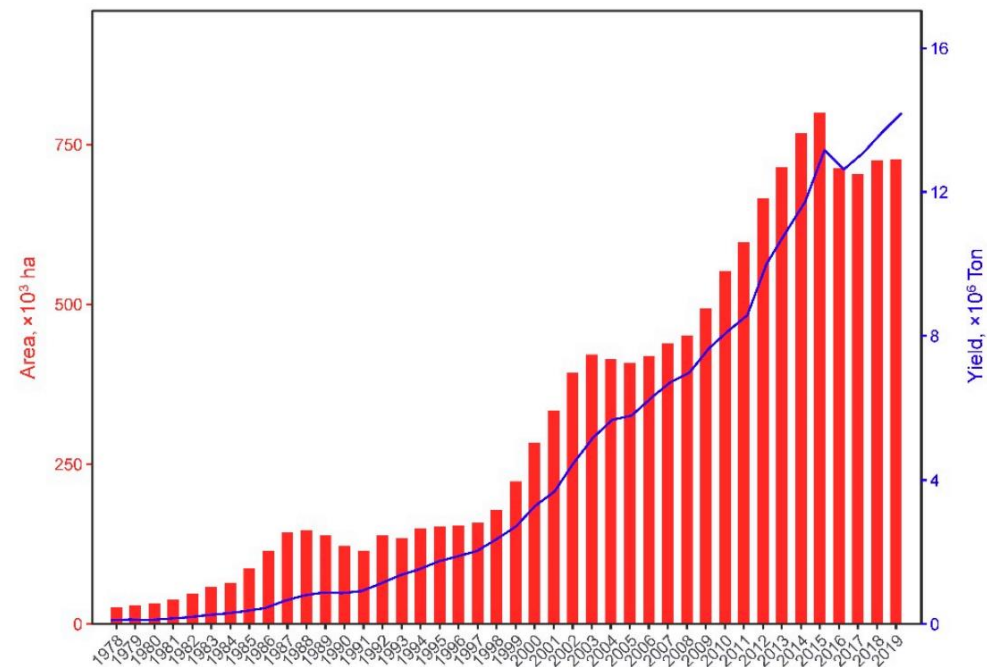


Figure 3. Vineyard area and yield changes from 1978 to 2019 (data from the China Rural Statistical Year Book, 1985–2019, China Statistics).



Generally speaking, every single bottle of wine is made up of 600-800 individual grapes. That's about 10 clusters.

So why do some bottles cost a lot, while others cost a little? It all depends on how many grapes a vineyard is able to produce per **acre**. But how many grapes per acre a vineyard produces depends on a lot of things: how are they farming, what's the climate, what types of grapes are they trying to grow. For the most part, farming practices will be the largest determinant of the yield. If someone is dry farming, running an organic vineyard, and following biodynamic protocols, their vineyard may only produce 2 tons of grapes per acre.

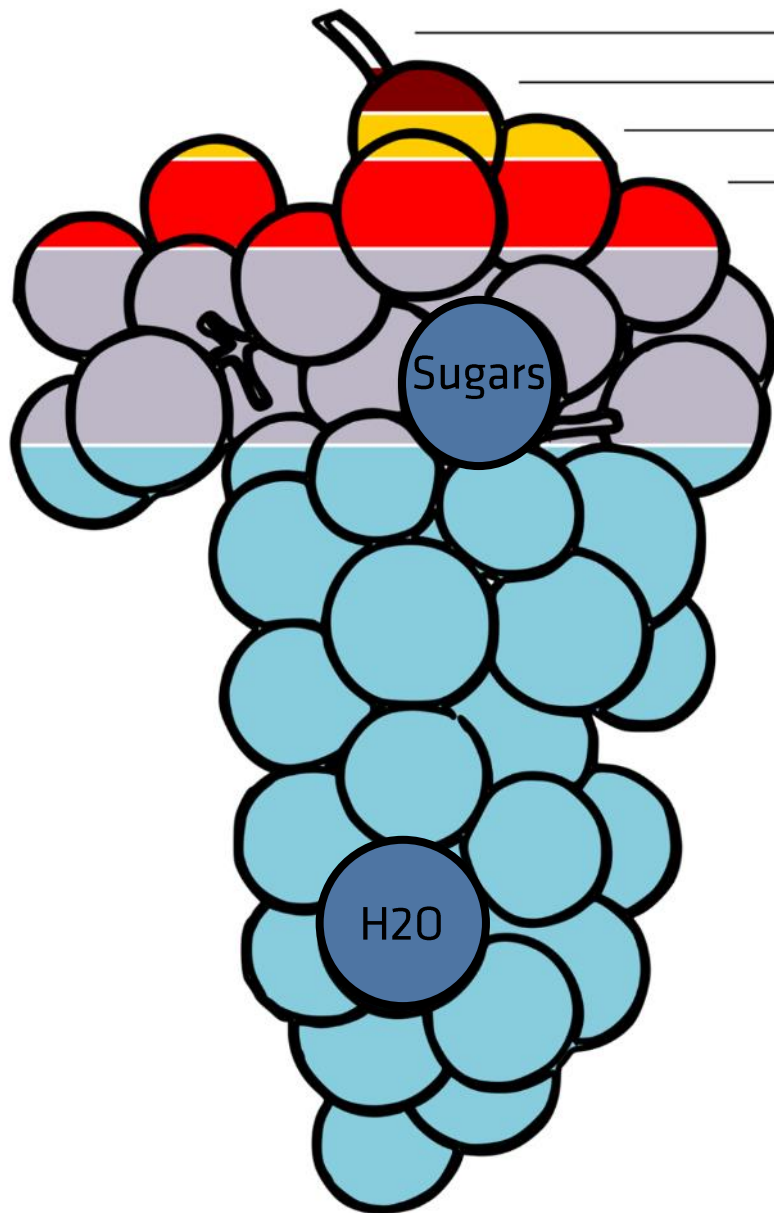
1 acre = 0,40468564224 hectar



. But if the vineyard is being farmed with quantity in mind, using every state-of-the-art tool available, it might be able to produce up to **10** tons of grapes. But how does this all translate back to the bottle? Well, each ton of grapes results in about 720 bottles – that’s 7,200 grape clusters or 432,000 to 576,000 individual grapes. From this, one can easily see how price is impacted. If you’re a vineyard that only produces one or two tons of grapes per acre, you’ll wind up with 720-1,440 bottles, but if you’re getting ten tons per acre, you’re getting 7,200 bottles.

How Red Wine is made?





OTHER

zw. azotowe, substancje lotne

POLIFENOLS 0,05-0,5%

taniny, antocyjany

MINERALS 0,05-0,2%

potas, wapń, sód

ORGANIC ACIDS 0,4-1,0%

winowy, jabłkowy, cytrynowy



Introduction

- Red wine is a type of wine which is made from pure dark colored and high-quality grape varieties.
- The red color of the wine comes from a pigment called **anthocyanin** that is present in the skin of the grapefruit and induces to produce a red colored juice.
- The theme of the red wine production process involves extraction of flavour and color components or substances from the grape skin.
- The basic concept behind red wine making is very simple and easy.
- However, the process may vary considerably depending upon the wine makers and techniques preferred by them.

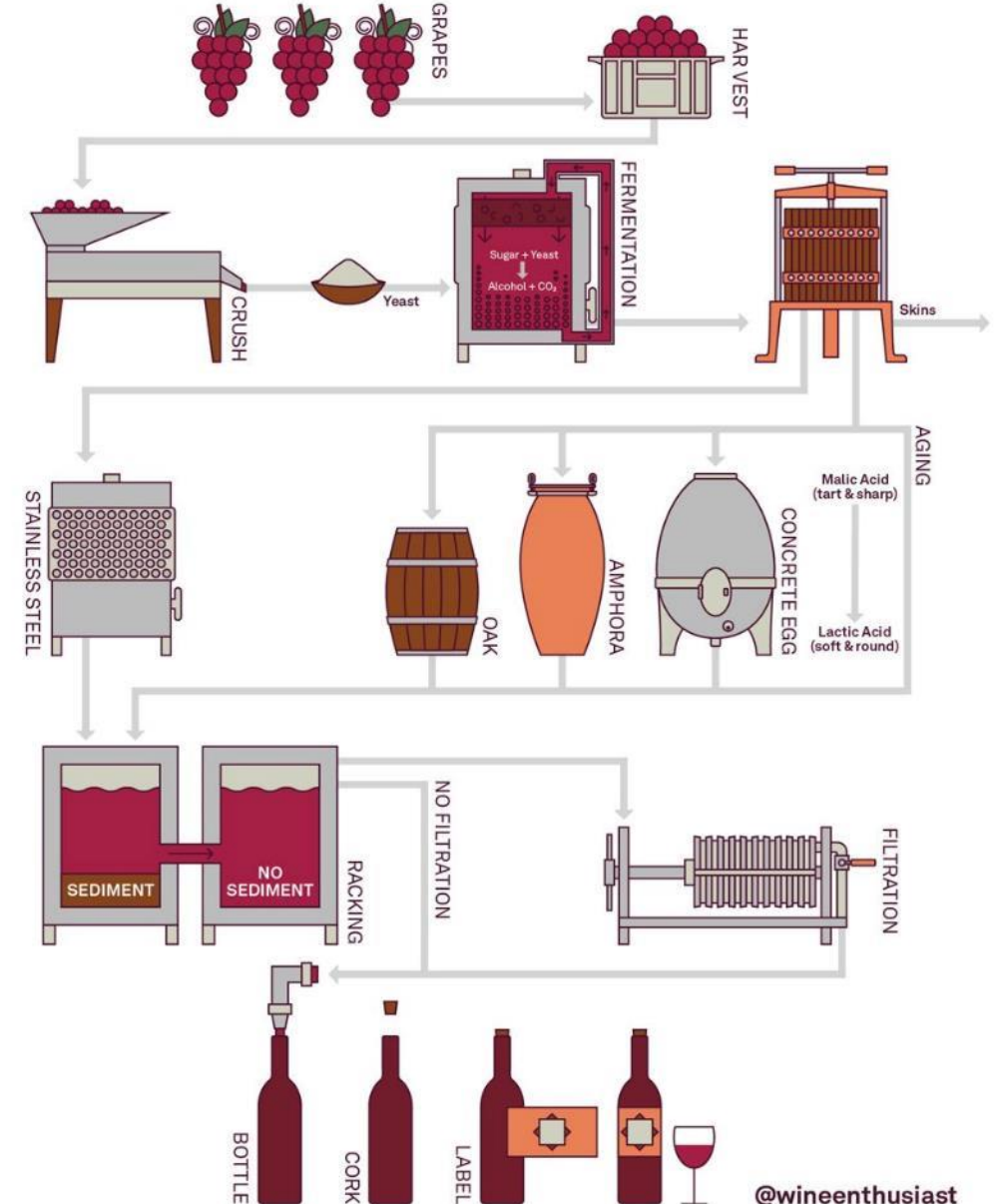


8 step by step process of red wine production

Harvesting or Picking the Grapes

- Crushing the Grapes
- Fermentation
- Maceration
- Pumping
- Pressing the Grapes
- Clarification or Racking Wine
- Aging and Bottling the Wine

How Red Wine is Made





Harvesting or Picking the Grapes

- Harvesting or picking the grapes is the first step in wine making process.
- Sort out the best grapes from spoiled or under ripe fruits before crushing them.
- Then grapes are collected in bins and transported to the winery.





Crushing the Grapes

- By using the mechanical crushing technique, grapes are crushed and destemmed.
- Stomp the grapes into what is commonly referred to as Must – juice and grape solid.





Fermentation

- Fermentation of grapes into wine takes place in which sugar gets converted into Alcohol.
- The addition of yeast turns the sugar in wine into Carbon dioxide, heat and Alcohol.





Maceration

- Maceration is how long the juice and grape solids are allowed to settle, picking up flavour, color and tannin.





Pumping

- During the fermentation grape skin rise to the surface.
- Winemakers must punch down or pump over the “cap” several times a day to keep the surfaces in contact with the grape juice.





Pressing the grapes

- The act of pressing the Must is to separate the juice or wine from grape and grape skin; the remaining solid (pomace) should be sent to pressing again to squeeze out remaining juice.





Clarification or Racking Wine

- Racking is the process by which yeast cells, particles of grape skin are removed from the wine after the fermentation.
- Siphoning the wine from one rack or barrel to new rack allows remaining solid substance to get precipitated at the bottom.





Aging and Bottling

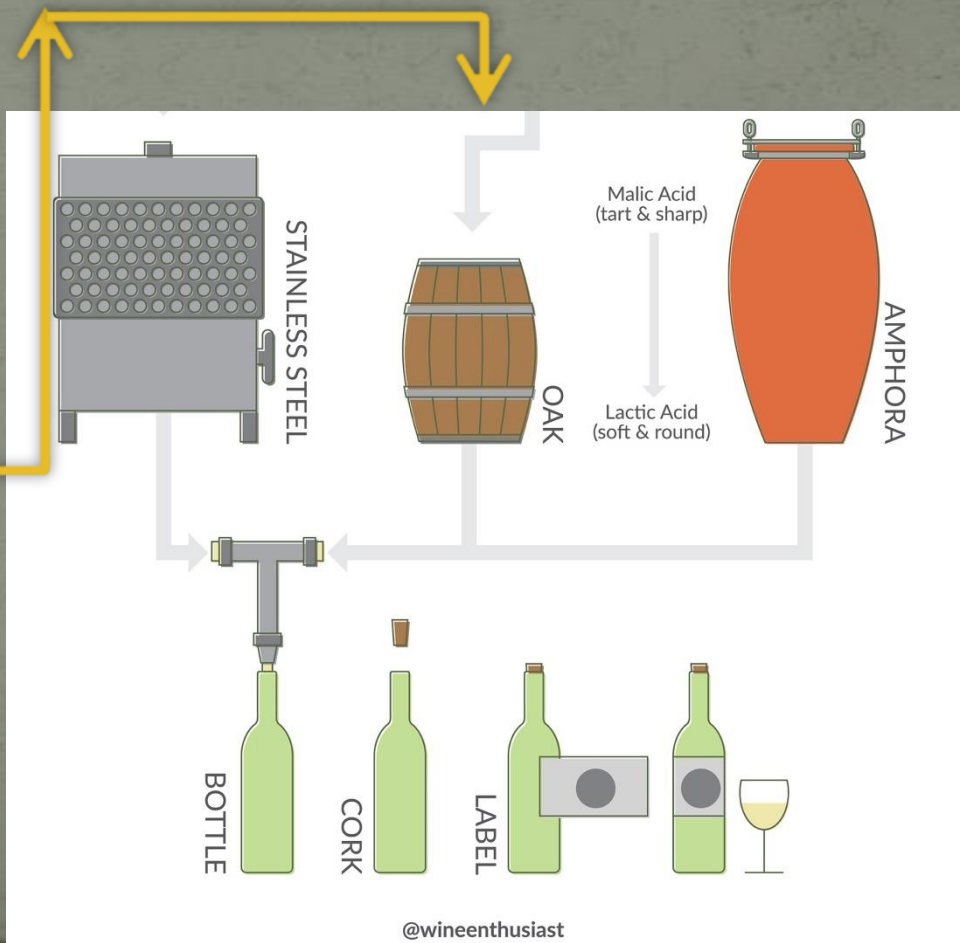
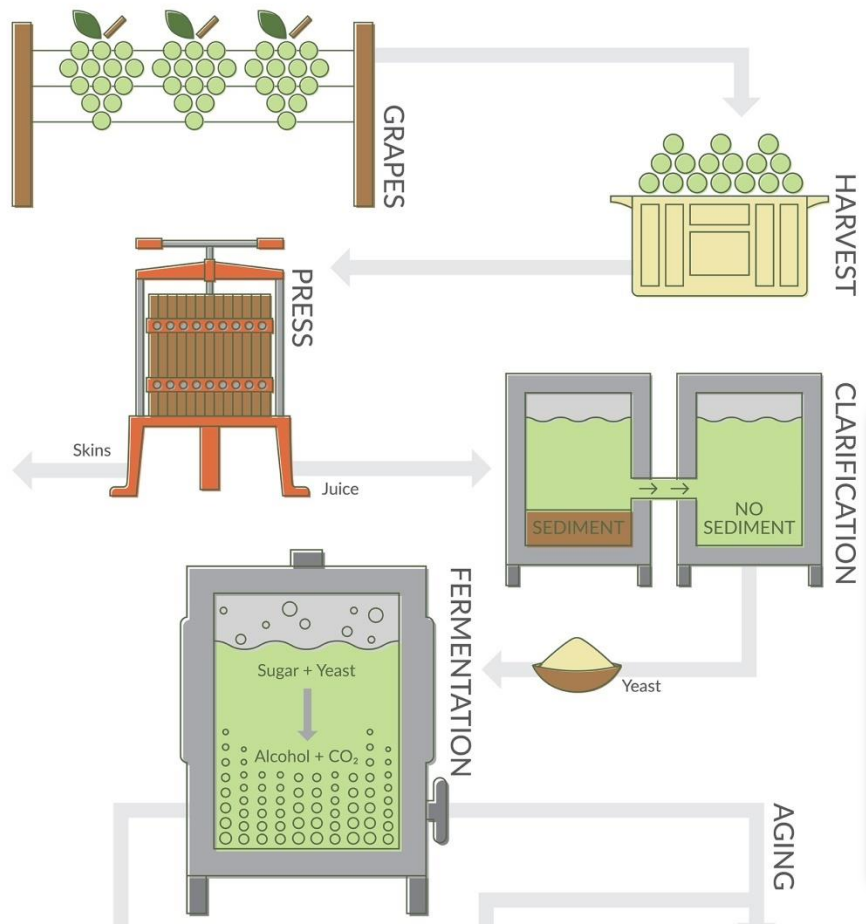
- The final stage of red wine making process is aging and bottling. After clarification, wines are stored in oak barrels, and aging is processed based on the type of wine.
- When the wine has reached its age, filter the wine for removing unwanted debris. Then the wine is bottled for later consumption.



White wine



How White Wine is Made



Wine region-what is it?

- Growing regions where vineyards are planted.
- Located on 6 continents in, 66 countries, in more than 100 areas.
- Mostly between the 30th and the 50th degree of latitude, in both the Northern and Southern hemispheres.
- Grapes will sometimes grow beyond this range and minor amounts of wine are made in some very unexpected places.
- Each year we discover more countries producing wine.



Why understanding wine regions is helpful?

- If you understand a bit about the common wine producing regions, then you know what to expect from a given bottle of wine.
- When you read **a wine label**, if you haven't had the wine before, you can tell a lot about what is in the bottle before even popping the cork.
- By knowing what region a wine comes from, you can often tell in general what grapes may be used in the wine, what the general style may be and other details. While these are of course generalizations since a variety of wine styles are made in each region, they can be a very helpful guide.



There is more than 100 wine regions of The World



- **Africa:** Algeria, Cape Verde, Morocco, South Africa, Tunisia.
- **2 Americas:** Argentina, Bolivia, Brazil, Canada, Chile, Mexico, Peru, United States, Uruguay, Venezuela.
- **Europe:** Albania, Austria, Armenia, Azerbaijan, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, France, Georgia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, Macedonia, Moldova, Montenegro, Netherlands, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom.
- **Asia :** China, India, Indonesia, Iran, Israel, Japan, Kazakhstan, Republic of Korea, Lebanon, Burma, Palestinian territories, Syria, Vietnam.
- **Oceania:** Australia, New Zealand.

What is Wine Tourism?

- Wine tourism involves visiting vineyards, wineries, and wine festivals.
- It combines travel, culture, and gastronomy.
- Often includes tastings, tours, and educational experiences.

Food Tourism and Education

Today's travellers are no longer satisfied with tasting an "iconic dish"

--Interest is growing in more intimate **gastronomic formats**: dedicated tables, direct encounters with chefs and producers, and small, personally curated tastings

-New "taste communities" are also emerging: from *wine clubs* to *shared gardens* and *participatory kitchens*
Spaces where food becomes a catalyst for social connection and a sense of belonging.

A deeper relationship with places, people, and the stories that shape them

-Education is a field characterized by continual transformation
e.g. developments in artificial intelligence are significantly reshaping both teaching practices and learning processes.

-In previous years, the adoption of online education reconfigured classrooms on a global scale.

-Teaching and learning is a dynamic phenomena subject to ongoing change

ALSO, IN THE WINE WORLD

Types of Wine Tourism Events

- Wine festivals and harvest celebrations
- Wine tasting events and fairs
- Vineyard tours and cellar experiences
- Food and wine pairing events

-Growing demand for experiential tourism
-Integration of digital technologies (apps, virtual tastings)

Economic and Cultural Impact

Boosts local economies and rural development
Promotes regional identity and heritage
Supports small wineries and local producers
Encourages sustainable tourism practices

Major Trade Fairs



- Vinitaly (Italy) <https://www.vinitaly.com>
- ProWein (Germany) <https://www.prowein.it>
- Wine Paris & Vinexpo <https://wineparis.com/newfront>
- London Wine Fair <https://londonwinefair.com>
- Vinexpo Asia & America. <https://vinexpoasia.com/newfront>

European Wine Festivals

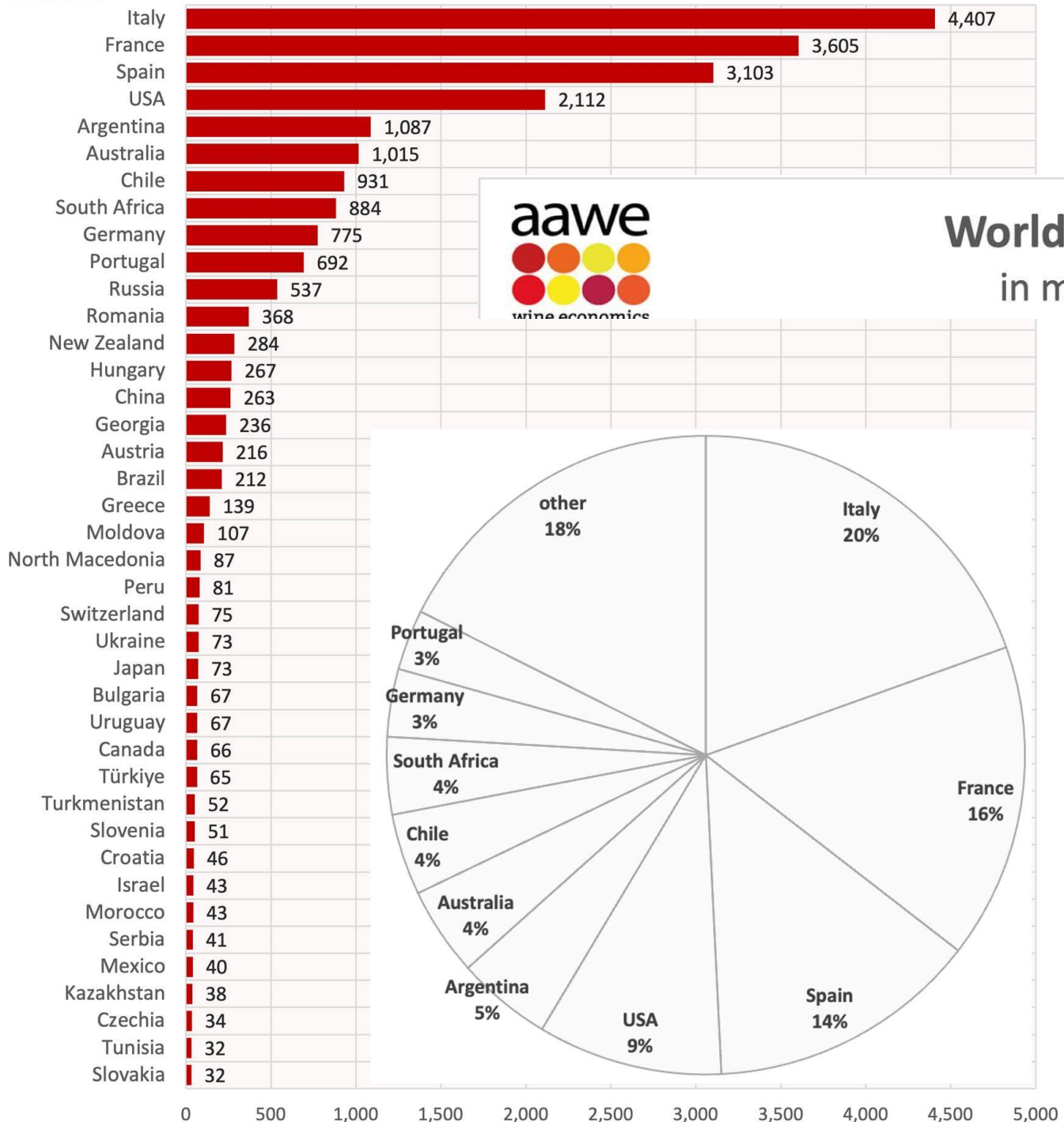
- Bordeaux Fête le Vin <https://www.bordeaux-fete-le-vin.com>
- Merano WineFestival
- Alba Truffle Fair
- Oenorama (Greece)



Top 10 Wine Regions of The World

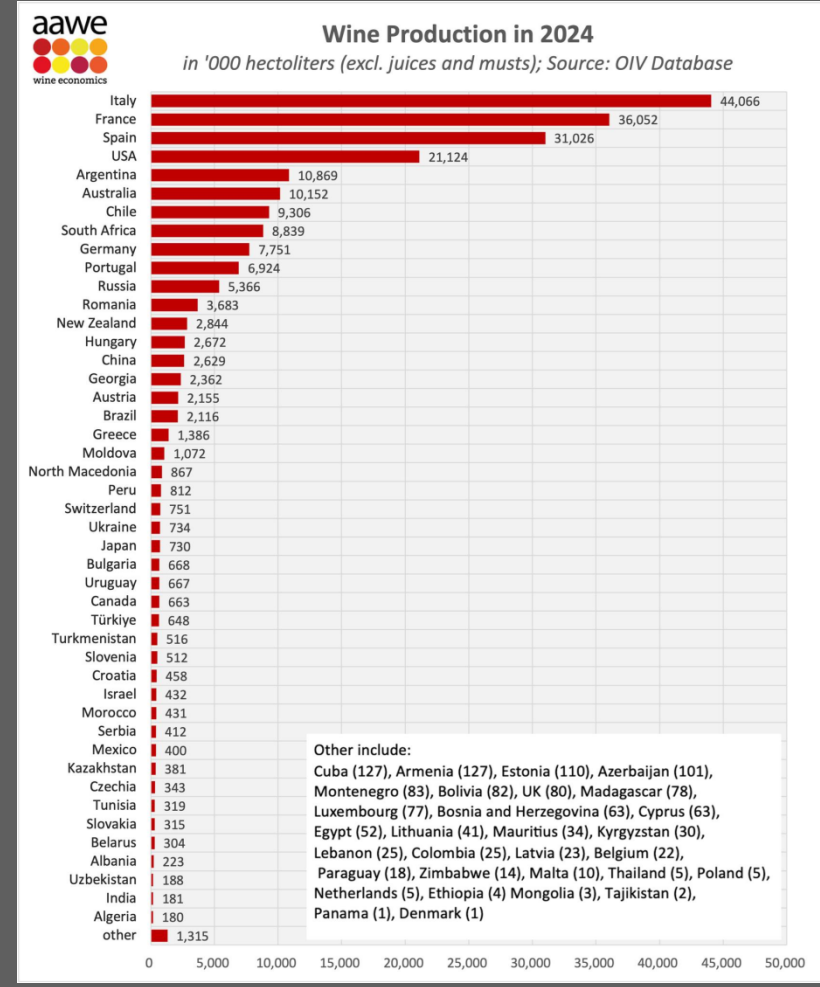


TOP WINE REGIONS OF THE WORLD™



World's Main Wine Producers in 2024

in million liters; Source: OIV Database



Wine Production by Country, Average 2019-2021

grape wine production in '000 hl; Source: OIV Database

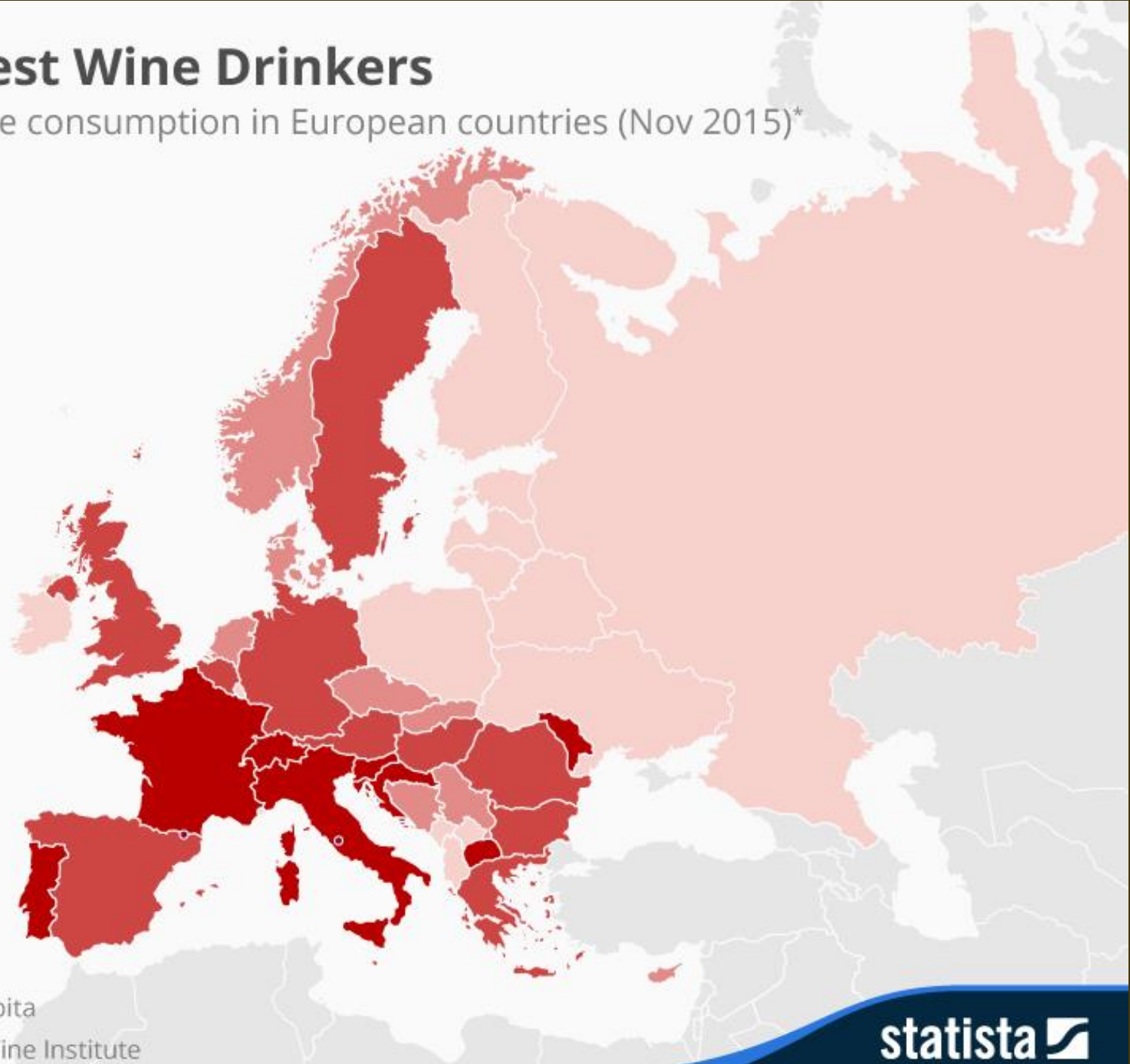
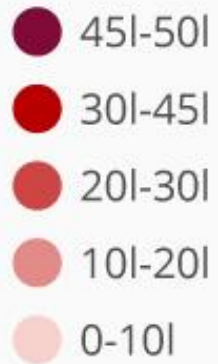


| rank | country | '000 hl | rank | country | '000 hl | rank | country | '000 hl |
|------|-----------------|----------|------|--------------|---------|------|------------------------|---------|
| 1 | Italy | 48,943.7 | 25 | Switzerland | 807.3 | 49 | Lebanon | 100.0 |
| 2 | France | 42,169.7 | 26 | Ukraine | 770.0 | 50 | Luxembourg | 90.3 |
| 3 | Spain | 36,698.7 | 27 | Serbia | 705.0 | 51 | Cyprus | 85.0 |
| 4 | USA | 24,127.3 | 28 | Slovenia | 694.0 | 52 | Bolivia | 84.0 |
| 5 | Australia | 12,563.3 | 29 | Croatia | 676.7 | 53 | Azerbaijan | 83.0 |
| 6 | Argentina | 12,099.0 | 30 | Uruguay | 676.3 | 54 | Montenegro | 80.7 |
| 7 | Chile | 11,904.0 | 31 | Canada | 669.7 | 55 | Madagascar | 78.0 |
| 8 | South Africa | 10,294.0 | 32 | Türkiye | 656.3 | 56 | United Kingdom | 70.3 |
| 9 | Germany | 8,455.7 | 33 | Czechia | 562.3 | 57 | Bosnia and Herzegovina | 66.0 |
| 10 | China | 6,773.0 | 34 | Turkmenistan | 497.0 | 58 | Egypt | 53.3 |
| 11 | Portugal | 6,768.0 | 35 | Morocco | 430.7 | 59 | Lithuania | 35.0 |
| 12 | Russia | 4,525.0 | 36 | Mexico | 400.0 | 60 | Kyrgyzstan | 22.0 |
| 13 | Romania | 4,029.3 | 37 | Kazakhstan | 372.0 | 61 | Latvia | 20.0 |
| 14 | New Zealand | 2,976.0 | 38 | Tunisia | 356.7 | 62 | Paraguay | 17.3 |
| 15 | Hungary | 2,912.7 | 39 | Slovakia | 339.3 | 63 | Belgium | 15.3 |
| 16 | Brazil | 2,453.7 | 40 | Belarus | 316.0 | 64 | Zimbabwe | 14.0 |
| 17 | Austria | 2,441.0 | 41 | Albania | 263.3 | 65 | Malta | 12.0 |
| 18 | Greece | 2,392.3 | 42 | Uzbekistan | 217.3 | 66 | Ethiopia | 8.0 |
| 19 | Georgia | 1,886.7 | 43 | Israel | 200.0 | 67 | Netherlands | 8.0 |
| 20 | Moldova | 1,270.0 | 44 | Algeria | 193.0 | 68 | Poland | 5.0 |
| 21 | North Macedonia | 926.0 | 45 | India | 180.0 | 69 | Tajikistan | 2.0 |
| 22 | Bulgaria | 878.0 | 46 | Cuba | 127.0 | 70 | Denmark | 1.0 |
| 23 | Japan | 823.7 | 47 | Armenia | 122.7 | 71 | Panama | 1.0 |
| 24 | Peru | 813.3 | 48 | Estonia | 110.0 | | | |



Europe's Biggest Wine Drinkers

Annual per capita wine consumption in European countries (Nov 2015)*



Let's visit some Old World
Wine regions



ITALY

- The home of: Moscato, Chianti, Amarone and Prosecco.
- Major Grapes: Sangiovese, Trebbiano.
- Terroir:
 - vineyards are planted anywhere.
 - from sea-level in eastern to around 4200ft (1300m) in the alpine.
- Italian Wine Label Information:
 - **DOCG** (*Denominazione di Origine Controllata e Garantita*): the highest classification for Italian wines. Denotes controlled production methods and guaranteed wine quality. Strict rules governing the production of DOCG wines: the permitted grape varieties, yield limits, grape ripeness, winemaking procedures and barrel/bottle maturation.
 - **DOC** (*Denominazione di Origine Controllata*): the main tier of Italian wine classification, covers almost every traditional Italian wine style. Each DOC titles (there are around 330 individual) meets the stringent law. Those which show consistently high quality earn promotion to DOCG status.
 - **IGT** (*Indicazione Geografica Tipica*): allows a certain level of freedom to Italy's winemakers. Focuses on the region of origin, rather than grape varieties or wine styles.
 - **Vino da Tavola**: 'table wine', represents the most basic level of Italian wine.



ITALY

-Increase in the so-called occasional wine drinkers: from 2006 to today, they have reached 61%.

Population between 35 and 65 years of age, equal to 54% of the total market, which has changed eating habits in the last 20 years, to the disadvantage of wine, which is in fact expelled from the daily table.

-The percentage of so-called "occasional drinkers" has grown in all the groups that historically consume more wine: from 49 to 58% between 35 and 44 years old, from 42 to 50% between 45 and 54 years old, from 32 to 44% between 55 and 64 years old.

-Less important is the growth in the 18-24 age group, however, where occasional workers have gone from 69% in 2004 to 71% in 2024. Il dinamismo della Gen Z

-The most dynamic segment in terms of wine consumption, not in absolute terms of course (and never has been) is precisely that of the so-called generation Z. The incidence of wine consumption, from 2011 to 2024, grew by 8 percentage points from 39 to 47% among those between 18 and 24 years old.

ITALY



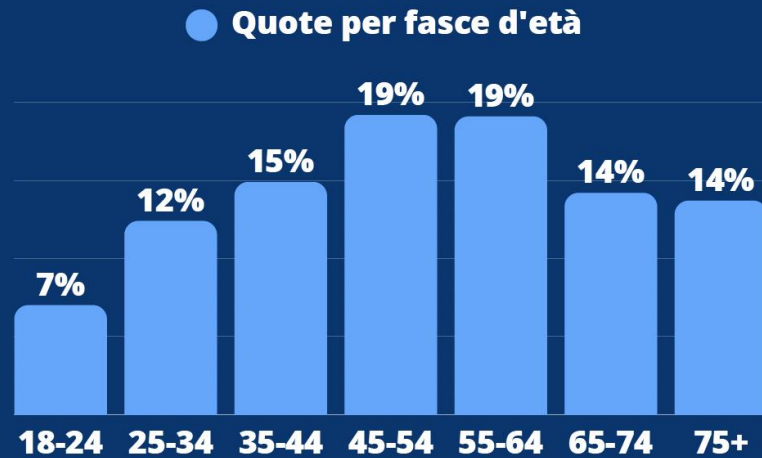
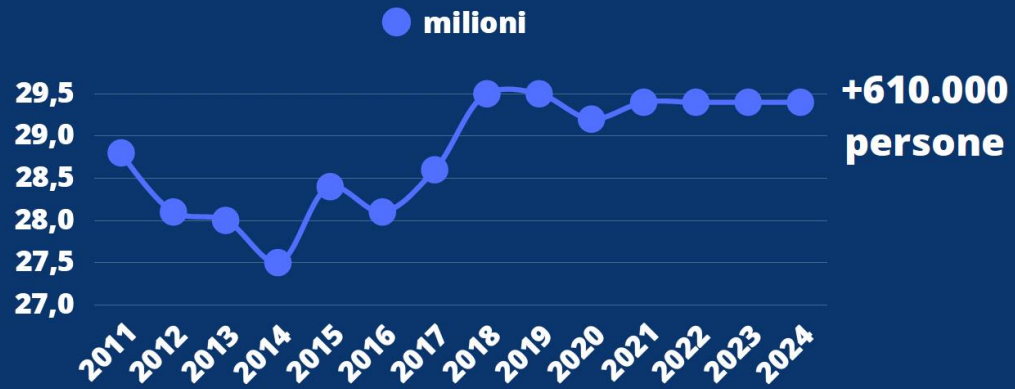
29,4 milioni

55% della popolazione



58%

42%



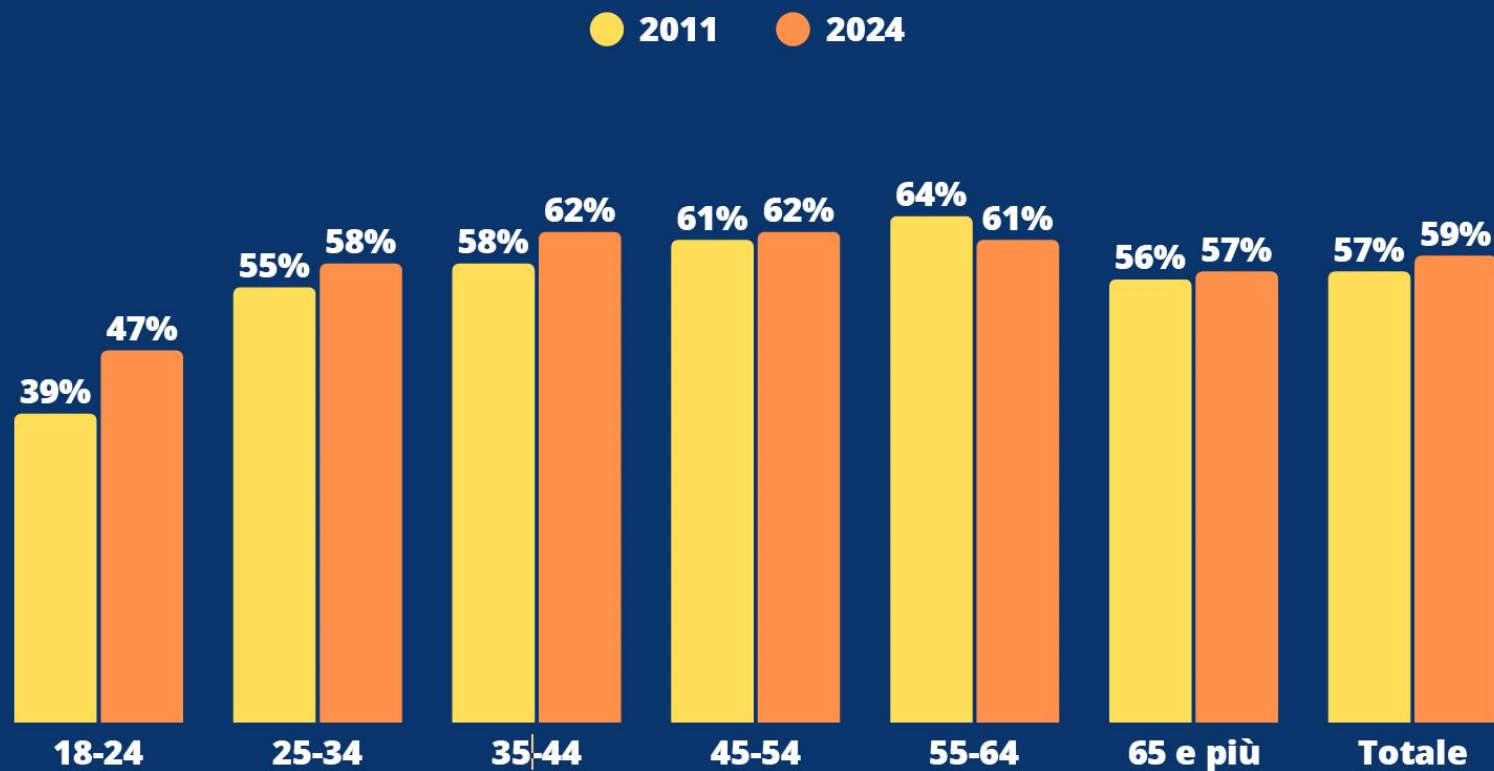
Elaborazioni Osservatorio del Vino UIV su dati Istat

GENERATION Z about 7% of wine consumers in Italy, an audience of about just over 2 million people

.It is the segment of the population that consumes it the most outside the home and, above all, the one that has grown the most in the last 15 years.

Chi beve vino in Italia

Incidenza su totale popolazione della stessa fascia d'età

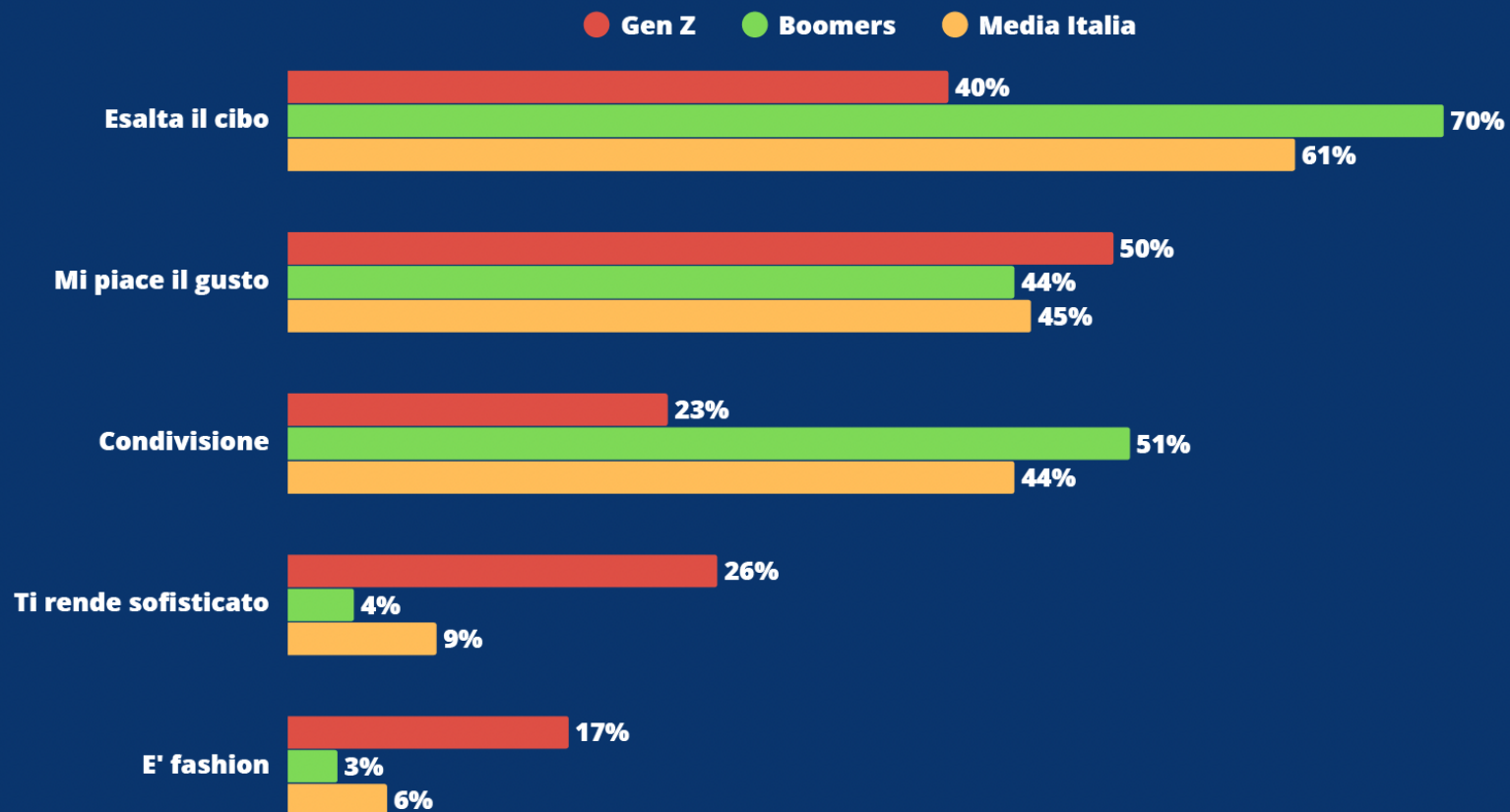


Who drinks wine in Italy

Elaborazioni Osservatorio del Vino UIV su dati Istat

Perché bevo vino: Gen Z e Boomers

Incidenza su totale consumatori di vino della stessa fascia d'età



Elaborazioni Osservatorio del Vino UIV su dati IWSR

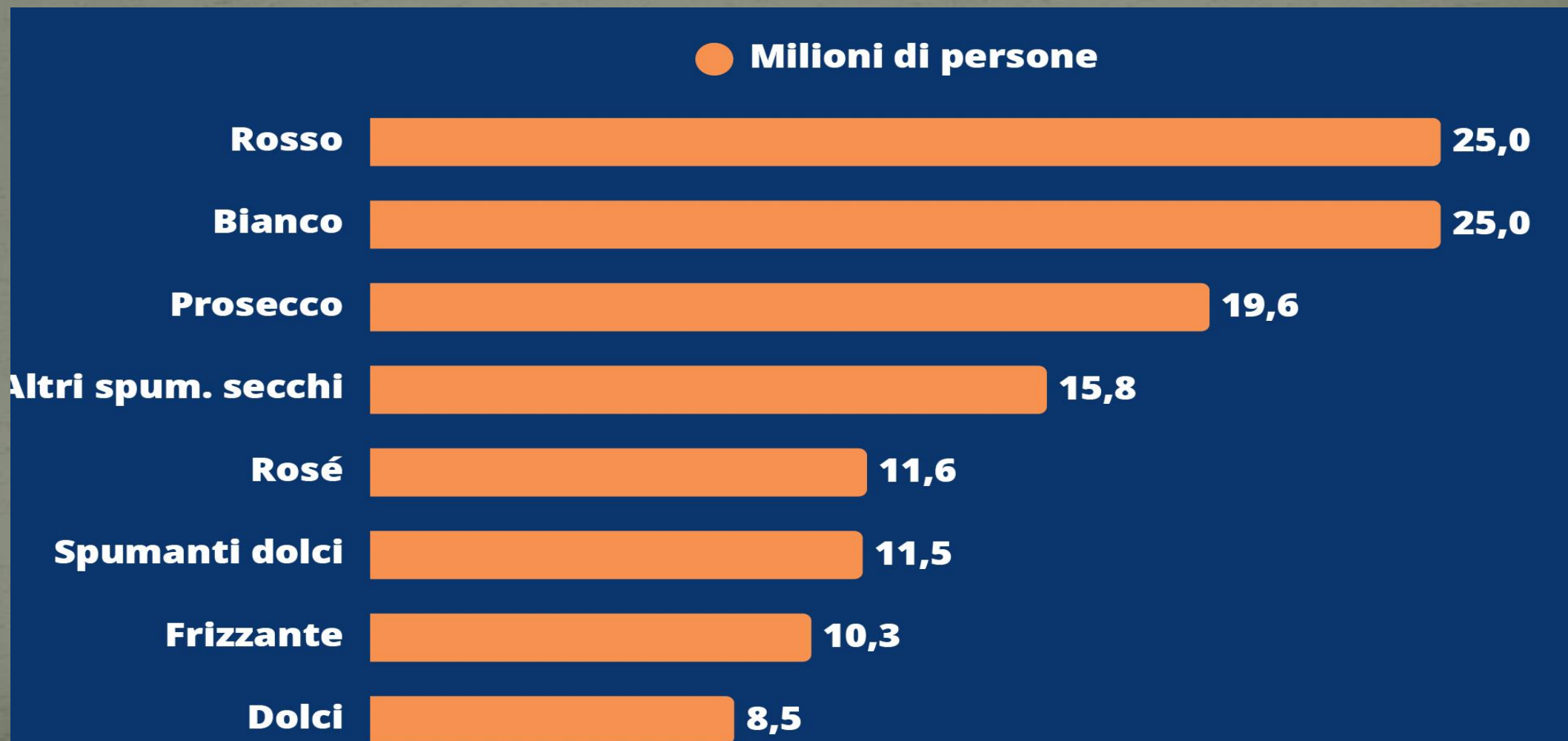
Why I Drink Wine: Z and Boomers

- Enhance the food
- I like the taste
- Sharing
- It makes me sophisticated
- It's fashion

ITALY

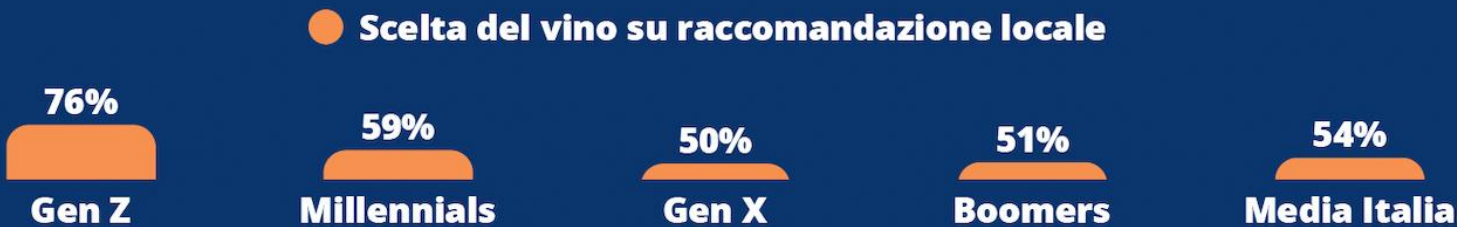
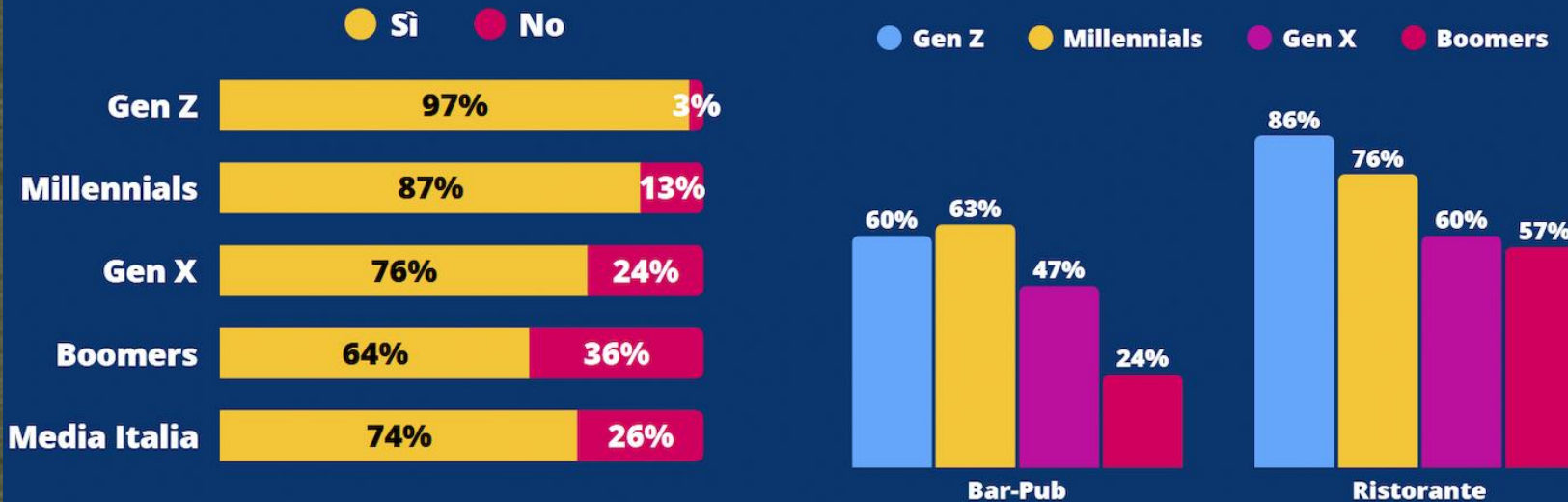
Who consumes what

Consumers



Chi consuma vino nell'On-trade

Incidenza su totale consumatori di vino della stessa fascia d'età

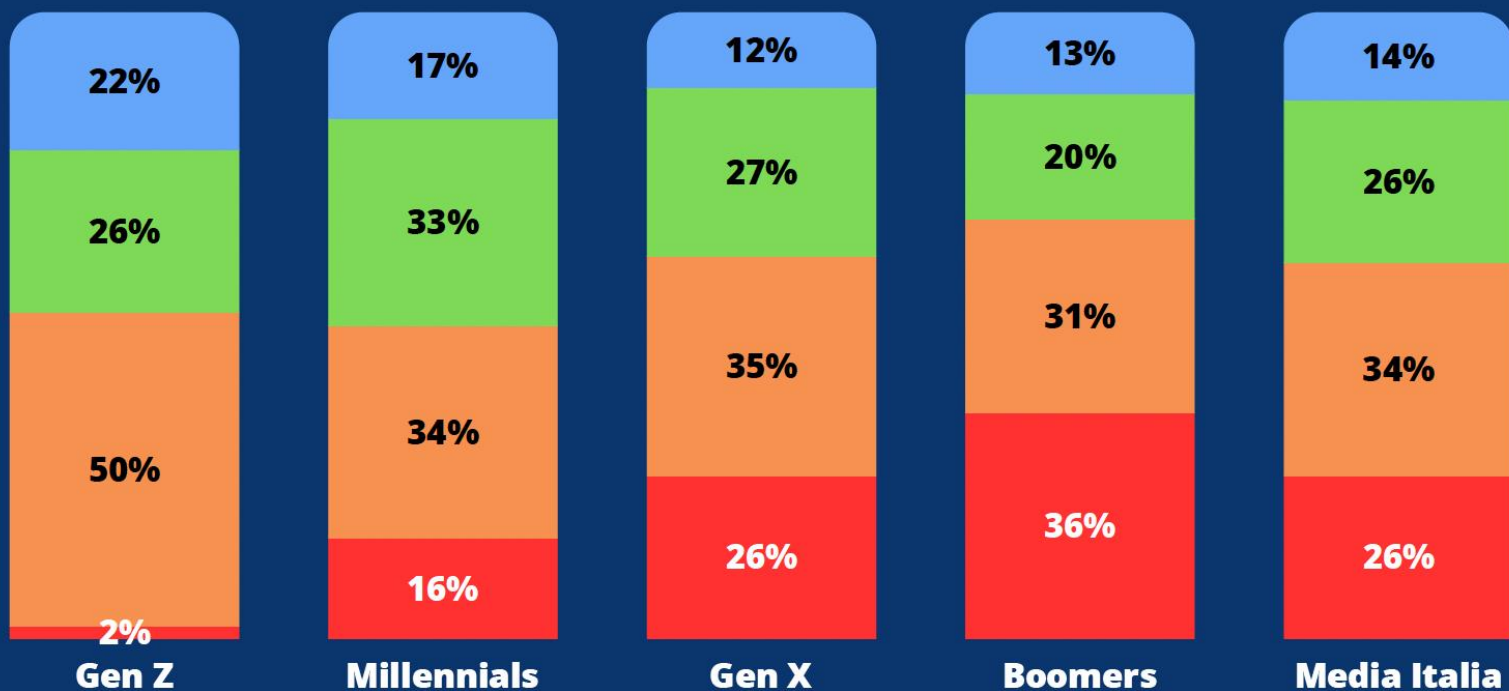


Elaborazioni Osservatorio del Vino UIV su dati IWSR

Who consumes wine in the on-trade

Frequenza dei consumi di vino

● Quotidiana ● 2-5 volte settimana ● 1 volta settimana ● Mensile



Frequency of wine consumption

Elaborazioni Osservatorio del Vino UIV su dati IWSR

CASE STUDY – DOC WINES OF ETNA

LOCAL/GLOBAL DYNAMICS ON THE LANDSCAPE OF ETNA

Etna viticulture has a very ancient tradition.

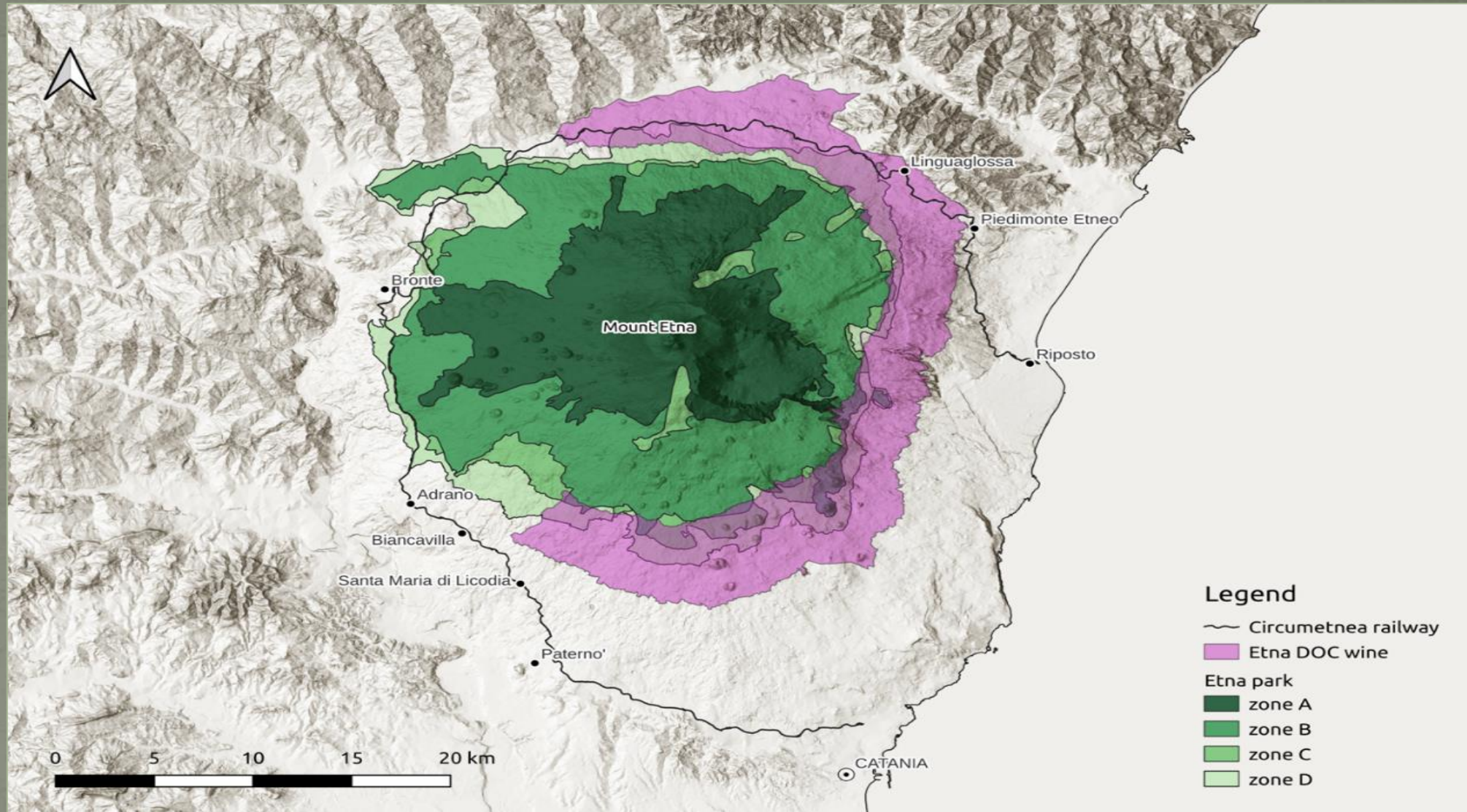
Really, It goes from 28 thousand hectares of vineyards in the 60s to 15.6 thousand in the 70s, to 11 in the 80s to 5 thousand in 2009 (ISTAT data) to 98,000 in 2019

Since 2013 exponential growth of Etna wines

Mapping of the Etna DOC wine area

98,000 ha in
2019

Production area
extended to the
north, east and
south of the
volcano: 20
municipalities in
the province of
Catania
- variability in
terms of
exposure of the
different areas
- Nerello
Mascalese,
Carricante



24 vini DOP, di cui 1 DOCG e 23 DOC, e 7 vini IGT

Applied digital Analysis..Surfing the net: The canteen Etna Doc

Explore these winery Etna Doc websites to evaluate their communication strategies

- <https://monterossowine.wordpress.com/qubosphaera/>
- <https://www.icustodi.it/monte-etna/>
- <https://planeta.it/territories/etna/>
- <https://www.villagrande.it/vigna-etna/>
- <https://www.cantinerusso.eu/locationterroir>
- <http://tenuteparatore.com/>
- <https://vinielisabettaabrami.it/sciaredellalba/territorio/>
- <https://www.palmentocarranco.com/etna/>



Scan me

- Stop to read carefully what you find written on the webpage **territory** or **terroir** or **Etna** or **vineyards**
- Check that they have what a tourist requires: *website in English, basic info, social networks, e-commerce, proposal of experiences*

Virtual Exploration: Through multimedia resources, students undergo a **virtual tour** of the **Etna region**, observing its unique volcanic landscape, agricultural terraces, and historical viticulture

- you can choose to go «haphazardly» around Etna (put yourself in street view mode)
- Or follow the links to Google map (always in Street View mode)
- <https://maps.app.goo.gl/WdQgtXa9bSwiCKz58>
- <https://maps.app.goo.gl/qBmh3rFzgKSyRcwR9>
- <https://maps.app.goo.gl/WeG3NqWgo93gzh837>
- <https://maps.app.goo.gl/8muAmgrxd64N6jg7A>
- <https://maps.app.goo.gl/mtV3Q7BFP4cdV7E68>
- <https://maps.app.goo.gl/MbSrEE3XXX6zAwrt6>
- <https://maps.app.goo.gl/K5T4XDS2HL9atmQ76>



Results of the Content Analysis

Operators/wineries websites



1. Geo-morphological aspects: volcano, carricante, sapling, lava, microclimate, biodiversity.
2. Local aspects, identity of the territory: terroir, tradition, culture, heritage
3. Emotional aspects: passion, beauty,

Importance of 'wine emotions' linked to local tourist experiences

The landscape of Etna and its territorial identity is the object of appropriation to respond to global competition:

-The qualities of the landscape constitute a valuable economic resource, which are extracted, redefined and "consumed" according to the market



4) Strategic Proposal.... Suggestions and innovative experiences – Etna DOC

| Types of tourism experience | Typical places / activities of interest |
|------------------------------------|---|
| <u>Food&wine tourism</u> | Tastings, Cooking classes; Picnic services; Vine trekking |
| <u>Heritage rural tourism</u> | Visits to castles (e.g. Maniace) and lava caves Etna Museum in Nicolosi Religious site (Etna's Sanctuary) Landscape observation points |
| Creative tourism | Photography; Painting Craftsmanship; Music |
| <u>Rural cultural tourism</u> | Rural villages; Trails Farms or farmhouses Eco-museum; Regional parks |
| Sustainable tourism | Parks and naturalistic attractions Sporting, film... events Trekking; cycling.. |



FRANCE

- The home of: Bordeaux, Burgundy and Champagne

- Terroir:

- Champagne: most northerly region, has one of the coolest climates anywhere in the traditional wine-growing world.

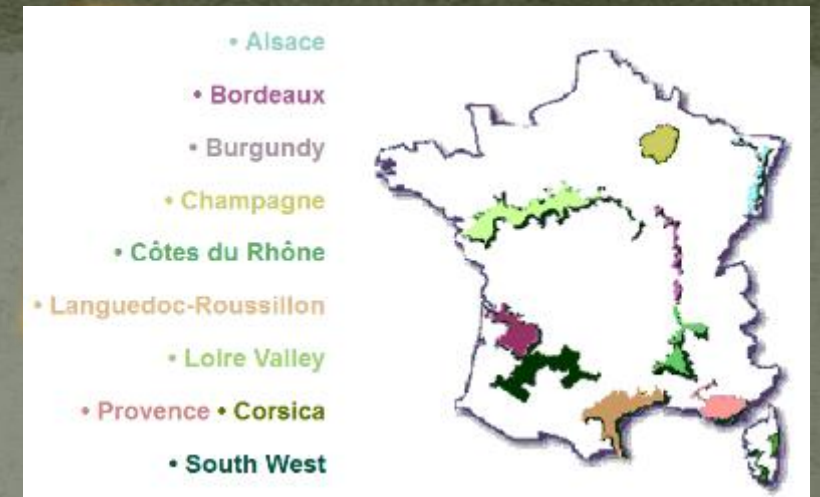
- Bordeaux: the south-west, has a maritime climate heavily influenced by the Atlantic ocean and the various rivers that wind their way between its vineyards.

- Burgundy: eastern region, far from any oceanic influence, have a continental climate, with warm, dry summers and cold winters.

- **AOC (*Appellation d'Origine Contrôlée*)**: the geographical origin, quality and the style of a wine. (F. ex. Burgundy's regional AOC: Bourgogne Blanc = more than 300 parishes; denotes dry white wines made from Chardonnay, Pinot Blanc or Pinot Gris).

- **Vin de Pays** : 'wine of the land, or 'country wine'. Focuses on geographical origin rather than style and tradition, and gives winemakers greater stylistic freedom than AOC.

- **Vin de France** (to 2010: *Vin de Table*): the most basic quality tier for French wine. The least regulated (and least used) of the three categories; Can be made from grapes grown anywhere in France, but their labels do not mention a specific region of origin. Vintage and grape variety statements are optional.



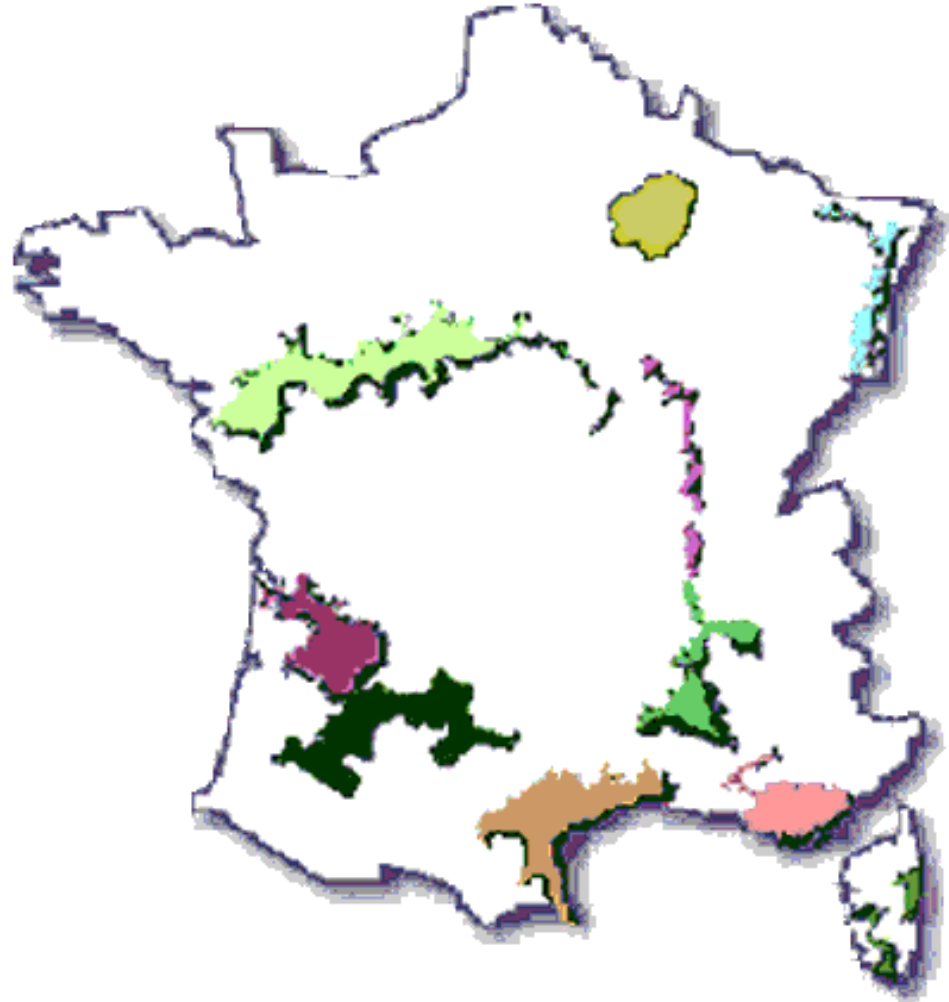
Label

Information:

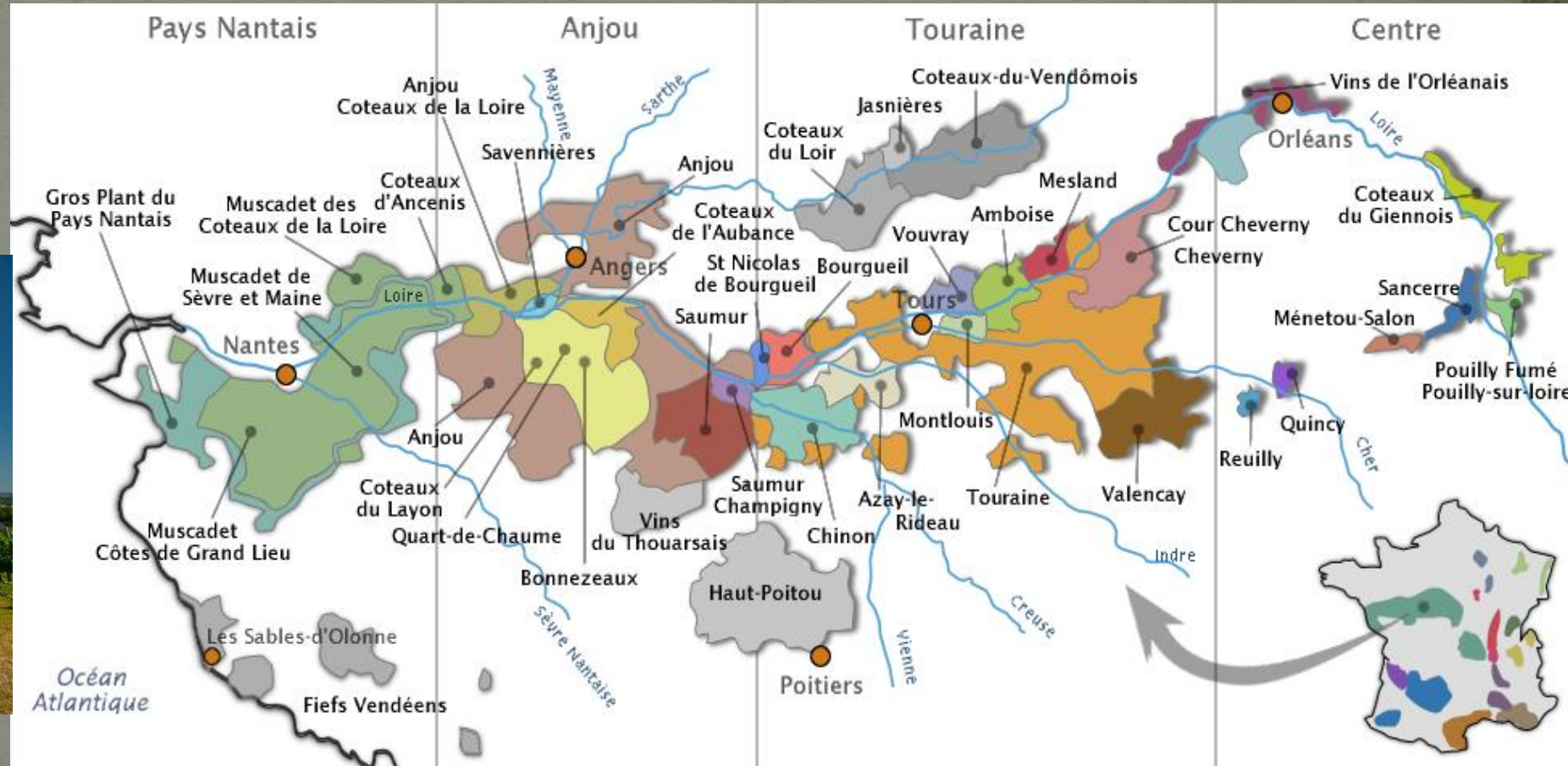
French Wine

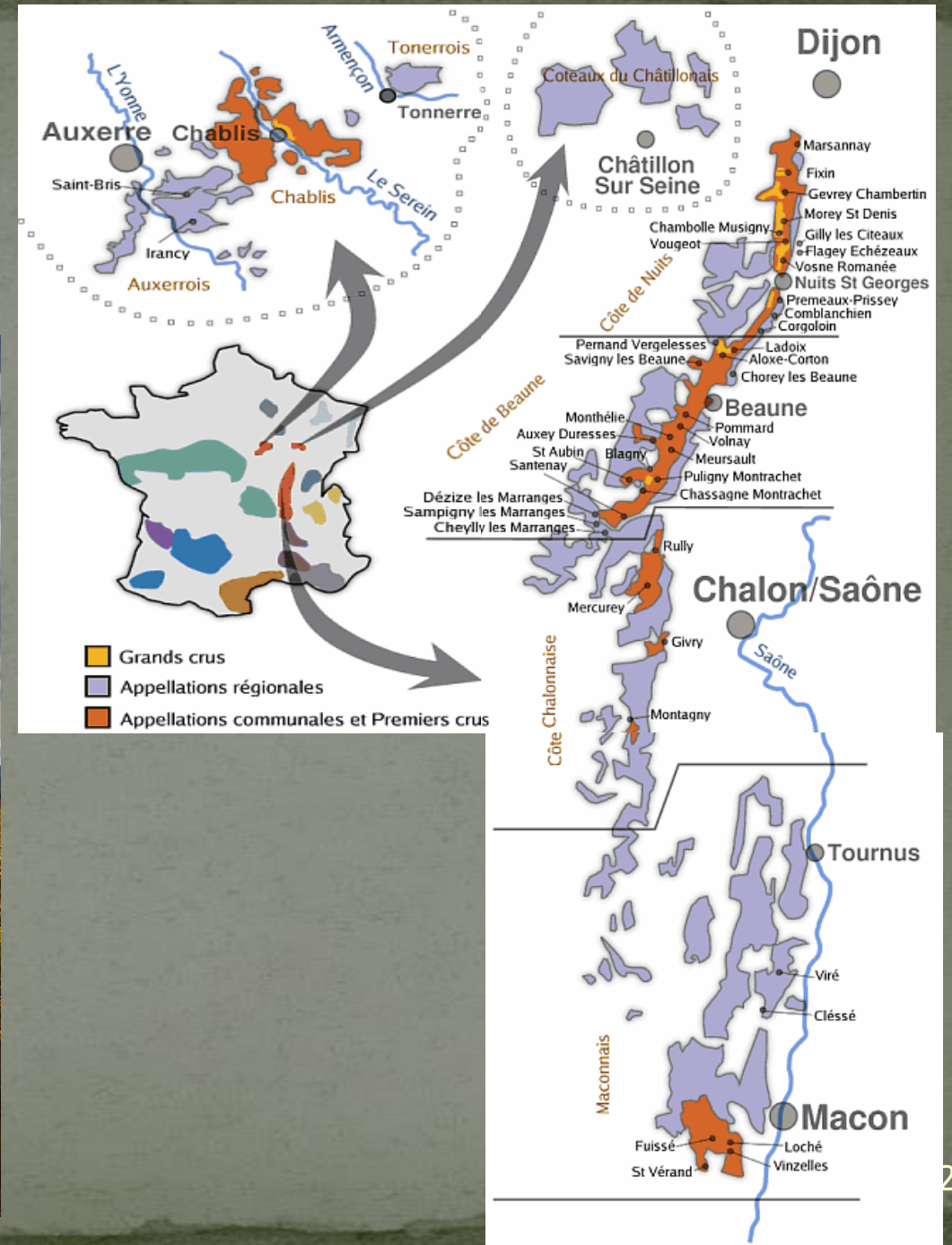
main France wine regions

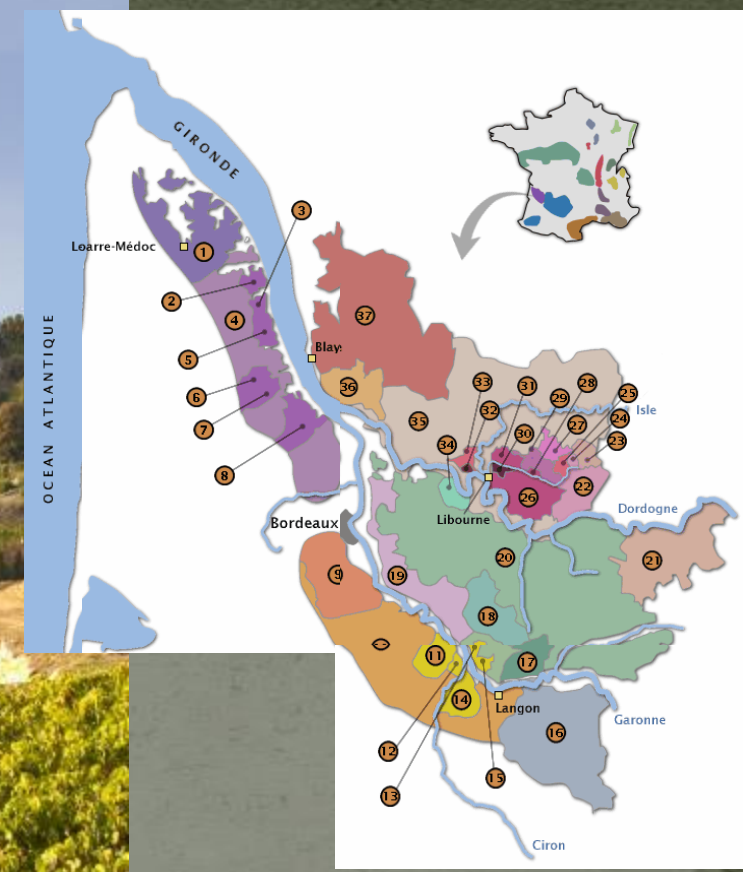
- Alsace
- Bordeaux
- Burgundy
- Champagne
- Côtes du Rhône
- Languedoc-Roussillon
- Loire Valley
- Provence • Corsica
- South West



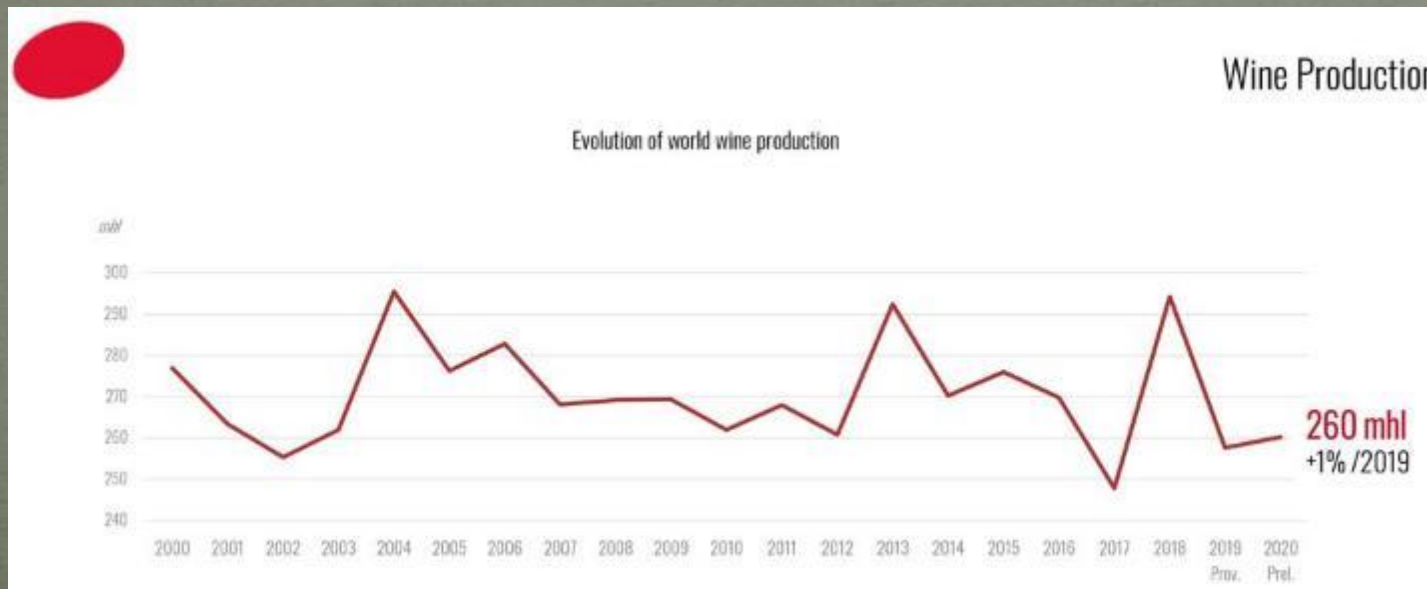
Loire valley wine region







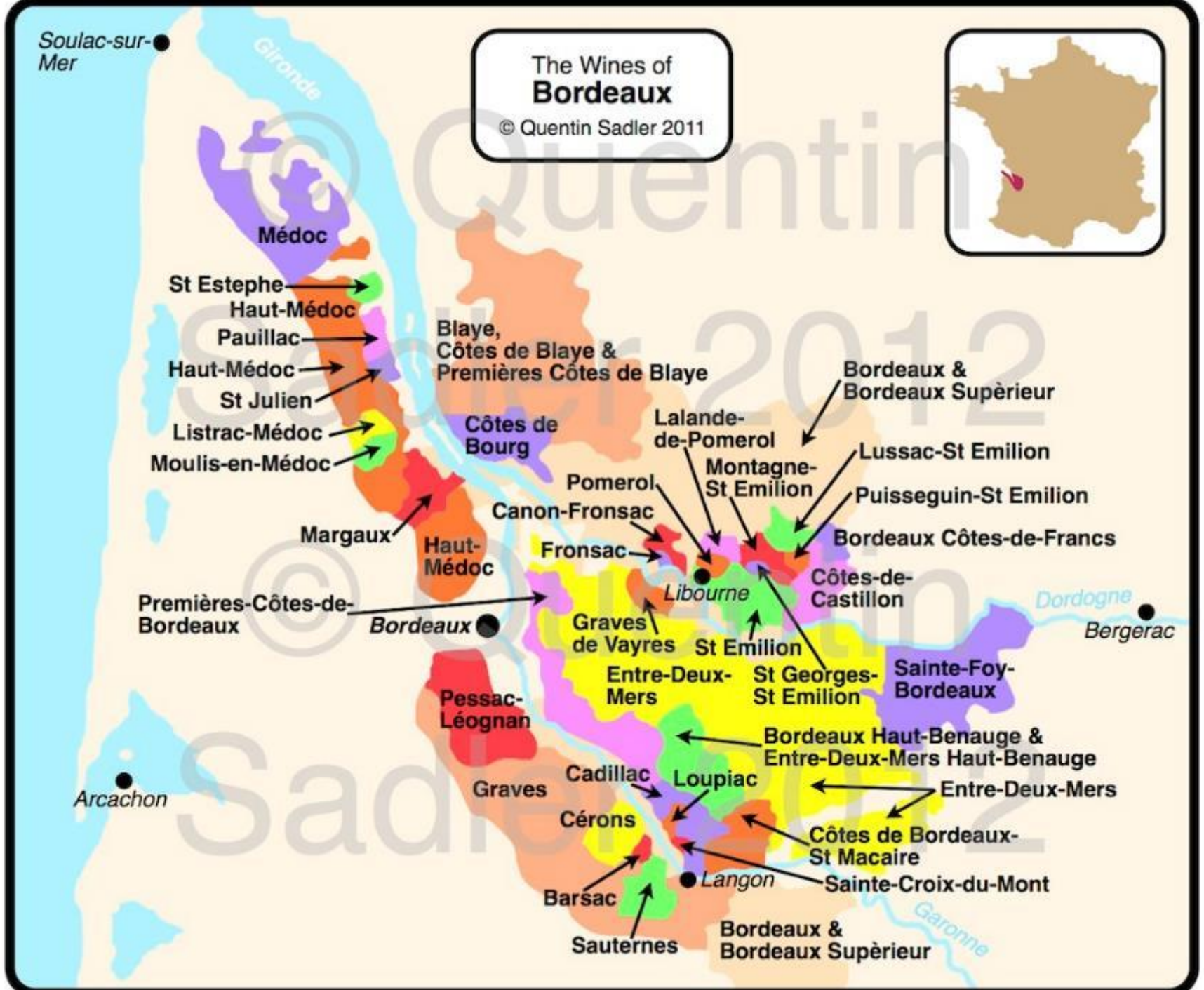
- Total production: **34,7** billion bottles per year. [2019]
- There are just **10** countries producing **80%** of the wine on the planet.
- The top 3 wine regions: France, Italy and Spain produce almost half of all the wine produced in the world. They make enough wine to fill 5,120 olympic-sized swimming pools.



Soulac-sur-Mer

The Wines of Bordeaux

© Quentin Sadler 2011



St Estephe
Haut-Médoc
Pauillac
Haut-Médoc
St Julien
Listrac-Médoc
Moulis-en-Médoc

Blaye,
Côtes de Blaye &
Premières Côtes de Blaye

Bordeaux &
Bordeaux Supérieur

Premières-Côtes-de-
Bordeaux

Bordeaux

Lalande-
de-Pomerol
Montagne-
St Emilion

Lussac-St Emilion
Puisseguin-St Emilion

Margaux
Haut-Médoc

Pomerol
Canon-Fronsac
Fronsac

Bordeaux Côtes-de-Francis

Côtes-de-
Castillon

Dordogne
Bergerac

Graves
de Vayres
St Emilion
Entre-Deux-
Mers

St Georges-
St Emilion

Sainte-Foy-
Bordeaux

Pessac-
Léognan

Bordeaux Haut-Benauge &
Entre-Deux-Mers Haut-Benauge

Entre-Deux-Mers

Arcachon

Graves
Cadillac

Loupiac

Côtes de Bordeaux-
St Macaire
Sainte-Croix-du-Mont

Cérons

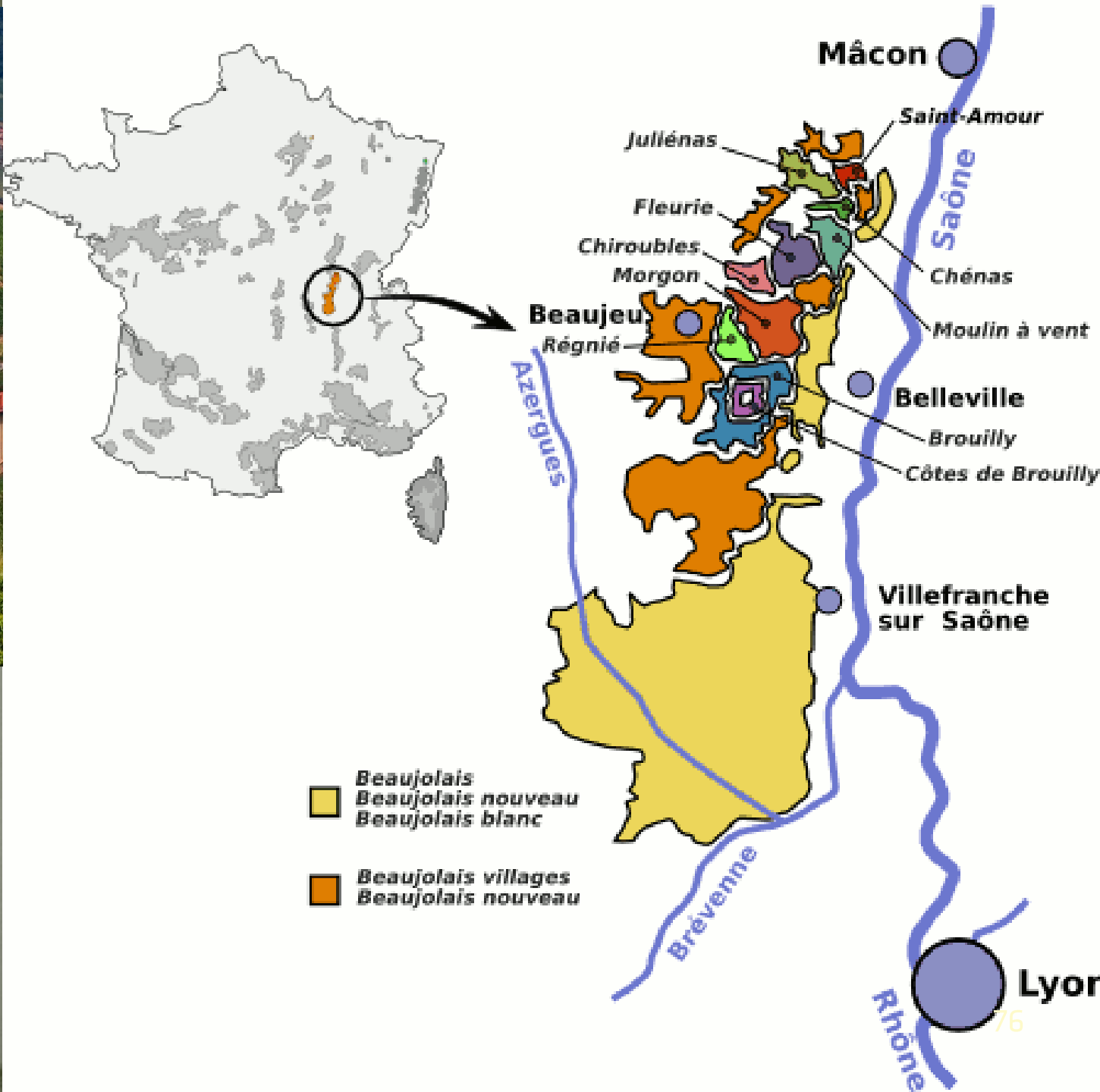
Langon

Barsac

Sauternes

Bordeaux &
Bordeaux Supérieur

Garonne





BURGUNDY



- 1. Chablis
- 2. Côte de Nuits
- 3. Haute-Côte de Nuits
- 4. Côte de Beaune
- 5. Haute-Côte de Beaune
- 6. Côte Chalonnaise
- 7. Mâconnais
- 8. Beaujolais

Burgundy Classifications According to the Monks



Grand Crus - Pope wine - mid slope - moderate amount of topsoil and sufficient rain (i.e. good drainage and enough topsoil)

Premier Crus - Cardinal wine - top of the slope - thinnest topsoil and least rain & bottom mid slope - moderate topsoil and heavier rain

Village Wines - wines for Monks - bottom of the slope - heaviest soils and most rain

SPAIN



- Spanish wines are often labeled according to the **amount of aging the wine** has received. When the label says vino joven ("young wine") or sin crianza, the wines will have undergone very little, if any, wood aging. Spanish Wine Label Information:
- **Crianza** red wines are aged for 2 years with at least 6 months in oak. Crianza whites and rosés must be aged for at least 1 year with at least 6 months in oak.
- **Reserva** red wines are aged for at least 3 years with at least 1 year in oak. Reserva whites and rosés must be aged for at least 2 years with at least 6 months in oak.
- **Gran Reserva** wines typically appear in above average vintages with the red wines requiring at least 5 years aging, 18 months of which in oak and a minimum of 36 months in the bottle. Gran Reserva whites and rosés must be aged for at least 4 years with at least 6 months in oak.

SPAIN

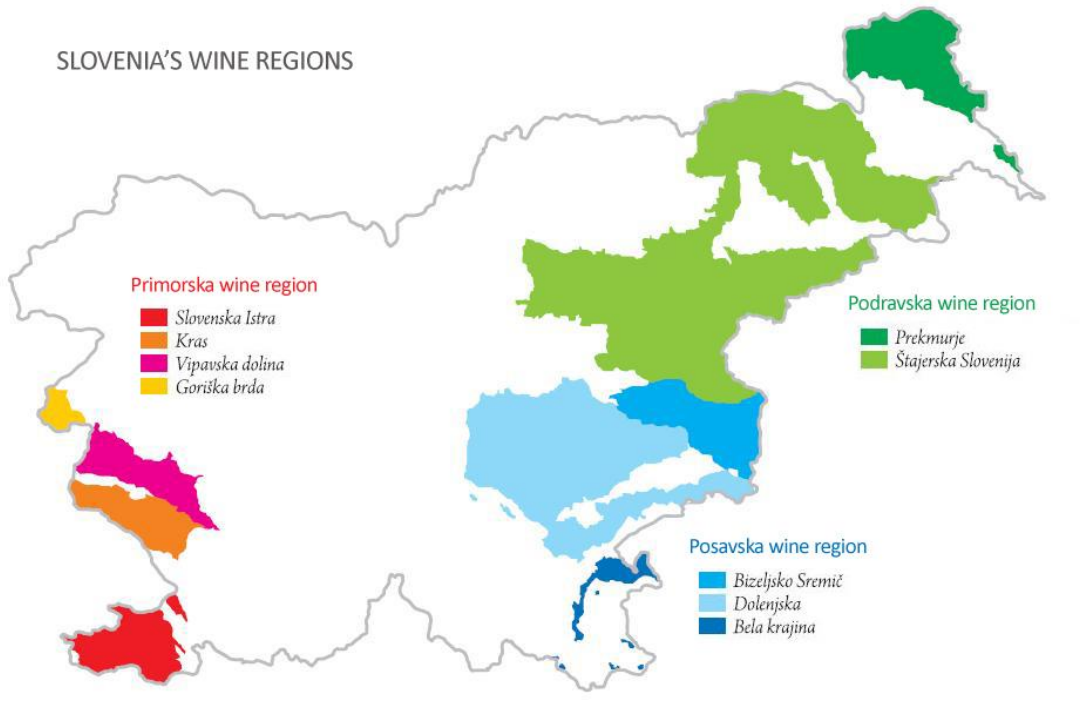


- **The home of:** Sherry, Ribera del Duero and Rioja.
 - All 17 of Spain's administrative regions (*comunidades autónomas*), are home to wine-grape vines
- **Major Grapes:** Tempranillo, Airén.
- **Terroir:**
 - spans seven degrees of latitude (between 36N and 43N)
 - stretches from the warm Mediterranean in the south to the cool, moist, Atlantic-influenced north.
 - two coastlines and various mountain ranges,
- **Spanish Wine Label Information:**
 - **DOCa** (*Denominación de Origen Calificada*): the highest level of Spanish wine classification. Only two regions currently hold DOCa status for their wines: Rioja and Priorat.
 - **DO** (*Denominación de Origen*: the geographical origin and the style of a wine. Wines must **conform** to various production conditions (vineyard management, winemaking techniques)
 - **VP** (*Vino de Pago*): single-estate classification for high-end wineries unable to claim a DO title. (This may occur because the vineyard is outside a DO area, or because the wine style does not conform to the local DO production laws, but is nonetheless of high quality.)
 - **VC** (*Vino de Calidad con Indicación Geográfica*): means 'wine of quality with a geographical indication'. These wines are theoretically a step up in quality from Vino de la Tierra, but are not yet considered to be of DO quality.
 - **VT** (*Vino de la Tierra*): means „wino of the land”. This is a very flexible category, focuses on the *origins* of the wine, rather than its quality or style.



Enotourism in
Slovenia

SLOVENIA'S WINE REGIONS



Hilly vineyards in the wine region of Goriska Brda. Image by Tomislav Medak / CC BY 2.0

- 216 square kilometers of Slovenia is covered by vineyards;
- Slovenia has more than 28,000 wineries, that's about one vineyard or winery for every 70 people with almost all the wine consumed domestically and only ~7% being exported. White wines make up 75% of the production with the major wine regions being the Littoral, the Lower Sava Valley and the Drava Valley.
- There are 7 native (indigenous) wine varieties;
- Production is 90 million liters of wine per year.



Maribor



Maribor, Slovenia's second-largest city, is home to the oldest vine in the world? Although it is over four hundred years old, its Žametna Črnina grapes still produce 25 litres of wine every year;



Portugal and its wine regions



on the base of material elaborated by:



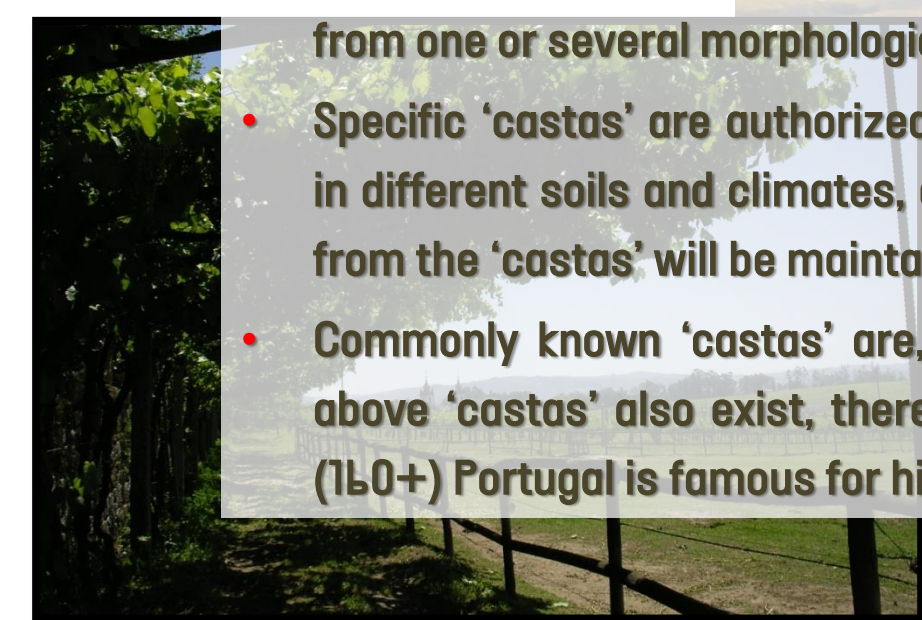

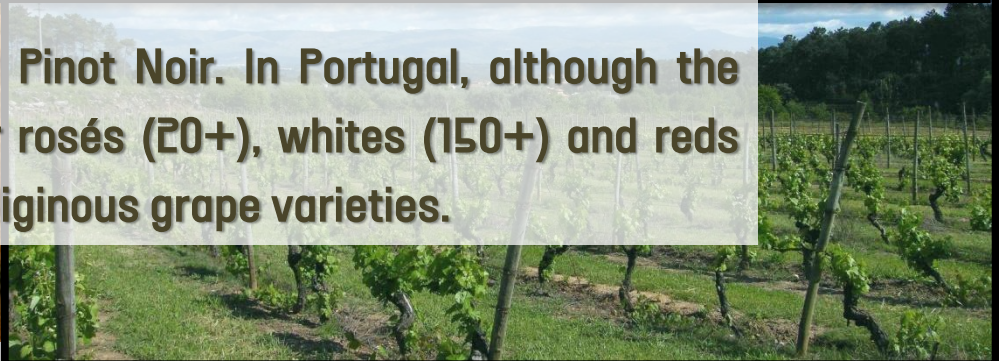


Portuguese winescapes....





Portuguese Wines – History

- Portugal has been producing wine for centuries, ever since the Phoenicians introduced vines in the seventh century BC, probably originally in the Sado estuary, near Lisbon.
 - Regular wine production in Portugal can be traced to when the country was a part of the Roman Empire. Prior its fall, Portugal (Lusitania), exported most of its wine to Rome. Lusitania's wines were famous then, in fact the name Lusitania is believed to have its origin in Lusus, the son of Bacchus.
 - The 'casta' term (meaning the type of grape, variety) has its origin in the Roman, meaning pure, without mixture – *Chaste*. This relates to common characteristics of a set of grapevines, proceeding from one or several morphologically similar plants.
 - Specific 'castas' are authorized and recommended in each wine region, however, the same 'castas' in different soils and climates, originate different wines, although some of the aromatic components from the 'castas' will be maintained.
 - Commonly known 'castas' are, for instance, Chardonnay and Pinot Noir. In Portugal, although the above 'castas' also exist, there are specific local 'castas', for rosés (20+), whites (150+) and reds (160+) Portugal is famous for high number of still cultivated indigenous grape varieties.
- 
- 
- 
- 
- 

Terroir

Atlantic Wines

Vinho Verde, Bairrada, Lisboa

(Atlantic North)

fresh winds and humidity

- . Long vegetative cycle
- . Low to medium alcohol
- . High acidity
- . Light to medium wines
- . Aromatic and floral wines
- . Drink young

Mountain Wines

Douro, Dão, Beira Interior, Northern Alentejo

(Interior North)

warm summers, cold winters

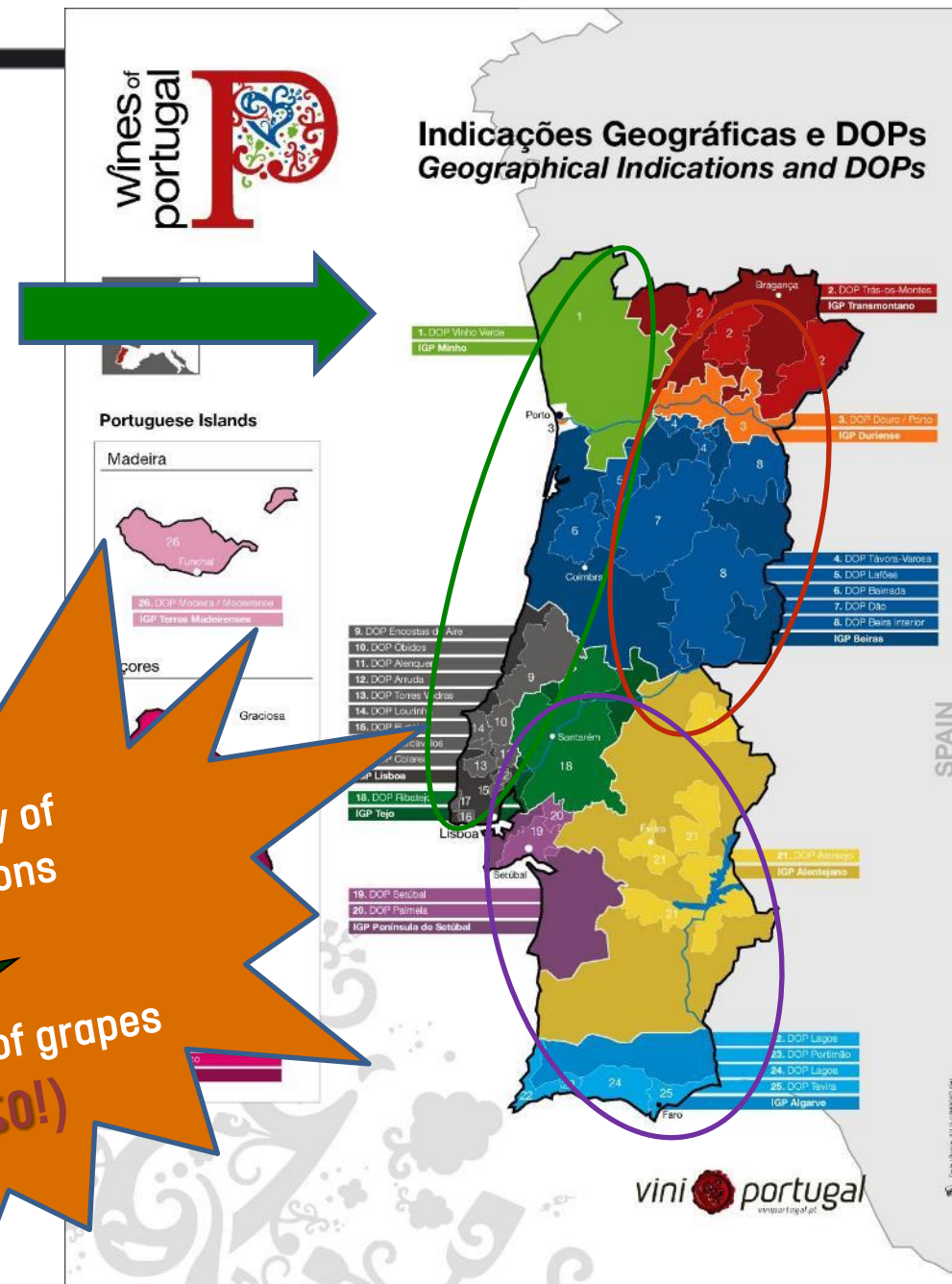
- . Long vegetative cycle
- . Low to medium alcohol
- . Medium to high acidity
- . Full to medium wines
- . Ageing potential

Wines of the Plains

Ribatejo, Terras do Sado, Southern Alentejo, Algarve

(South) warm and dry in the summer, mild winters

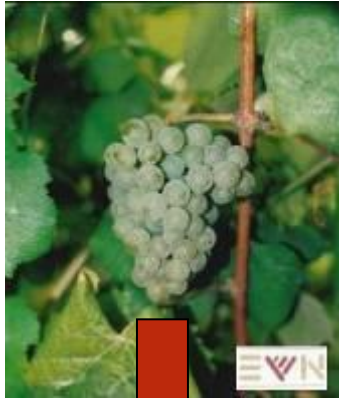
- . Short vegetative cycle
- . Medium to high alcohol
- . Low acidity
- . Drink young or age for a while



Diversity of conditions
↓
Diversity of grapes
(450!)

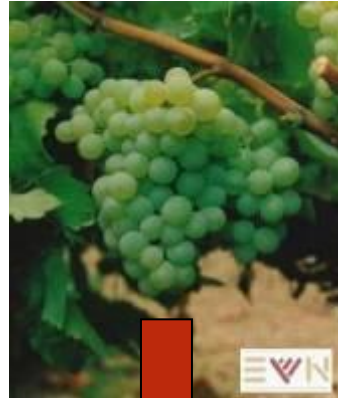
Indigenous White Grape Varieties (some examples)

Alvarinho



•Vinho Verde (Monção Melgaço);
low-yield grape;
•dry, crisp, aromatic wines;
•notes of peach, citrus fruits, apple, and often with mineral character.

Fernão Pires



•The most planted white variety in Portugal (Palmela, Tejo, Sado, Setúbal, Bairrada ...);
•very versatile grape
•crisp, aromatic whites, sparklings, but also sweet dessert wines.

Arinto



•Pederã in Vinho Verde;
•balanced acidity;
•hints of lemon and pineapple;
•with aging potential.

Encruzado



•Widely planted in Dão region;
•floral and mineral aromas;
•usually fermented in oak for more complexity.

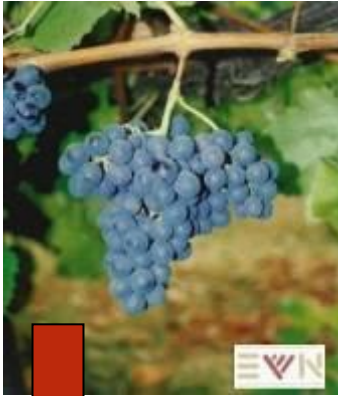
Loureiro



Grown mainly in the upper Minho region along the River Lima valley, Loureiro is a very old grape variety yet is largely responsible for the success of white vinho verde in recent years. Aromatically exuberant, Loureiro (along with Moscatel) is considered the most perfumed of Portuguese grapes, evoking bay leaf, lime tree, acacia, orange and peach. As with Alvarinho, Loureiro is a grape of great typicity, producing varietal wines as well as in blends. In blends with other regional grapes, its exceptional aromatic qualities construct some of the best white wines in Portugal.

Indigenous Red Grape Varieties (some examples)

Aragonês



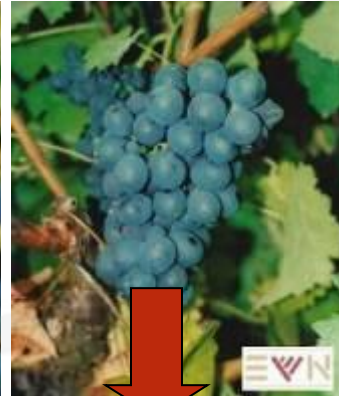
- = Tinta Roriz, or Tempranillo ;
- produces fruity, dark and aromatic wines.

Touriga Nacional



- Low yield; • high concentration of sweetness, aromas, tannins and color; In days gone by Touriga Nacional was the dominant variety in the Dão region, Nowadays it is one of the most popular varieties in the Douro and is considered one of Portugal's finest grapes. Touriga Nacional yields inky, full-bodied, powerful wines with exceptional aromas. It frequently shows blackberry, blueberry, rock rose and rosemary notes. Its renown has caused its spread throughout all regions from the northernmost corners and down to the Algarve, Touriga Nacional wines age well and gain aromatic complexity with barrel ageing.

Trincadeira



- known as Tinta Amarela in Douro and Dão;
- wines with considerable power and balanced tannins;
- notes of blackberry, plum, chocolate, pepper and herbs on the nose.

Baga



- Popular in Bairrada;
- produces full-bodied, tannic and complex wines;
- notes of blackcurrants, blackberries, pepper, herbs and smoke on the nose;
- good aging potential.

Castelão



- Widely planted;
- notes of raspberry and red currant ;
- smooth and easy to drink wines.

VINHO VERDE



Region

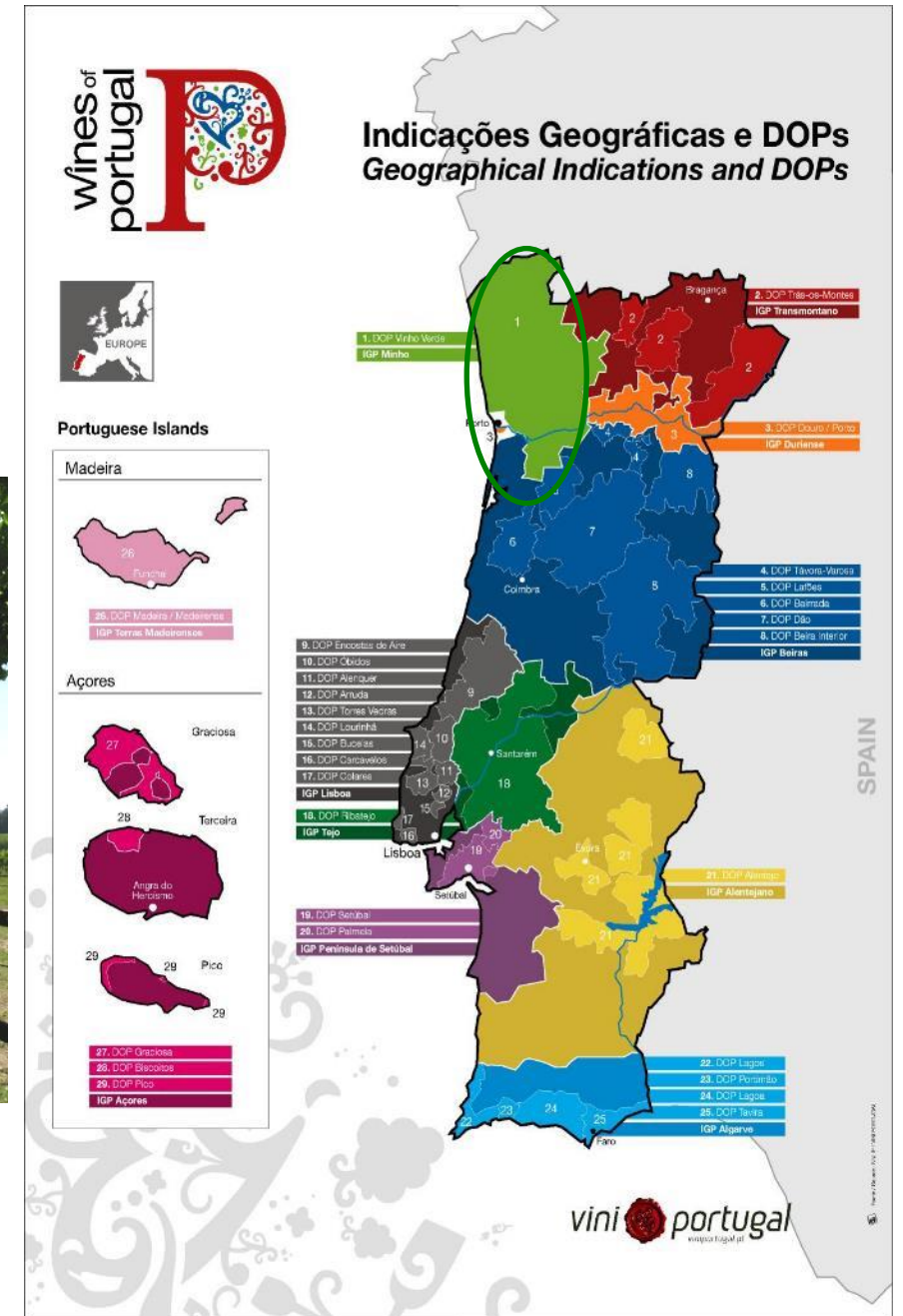
- rolling hills and mountains
- small parcels
(below 0.8 ha)
- very green landscape
(Vinho "Verde")
- Average
28,000 ha planted



Climate

- influence from the Atlantic
- frequent rain falls

Soil - granitic soil,
occasionally schist



ALENTEJO

Region

- vast and rural area of flat plains with occasional low hills;
- large sized properties;
- other traditional cultures: cereals, cork and olives.

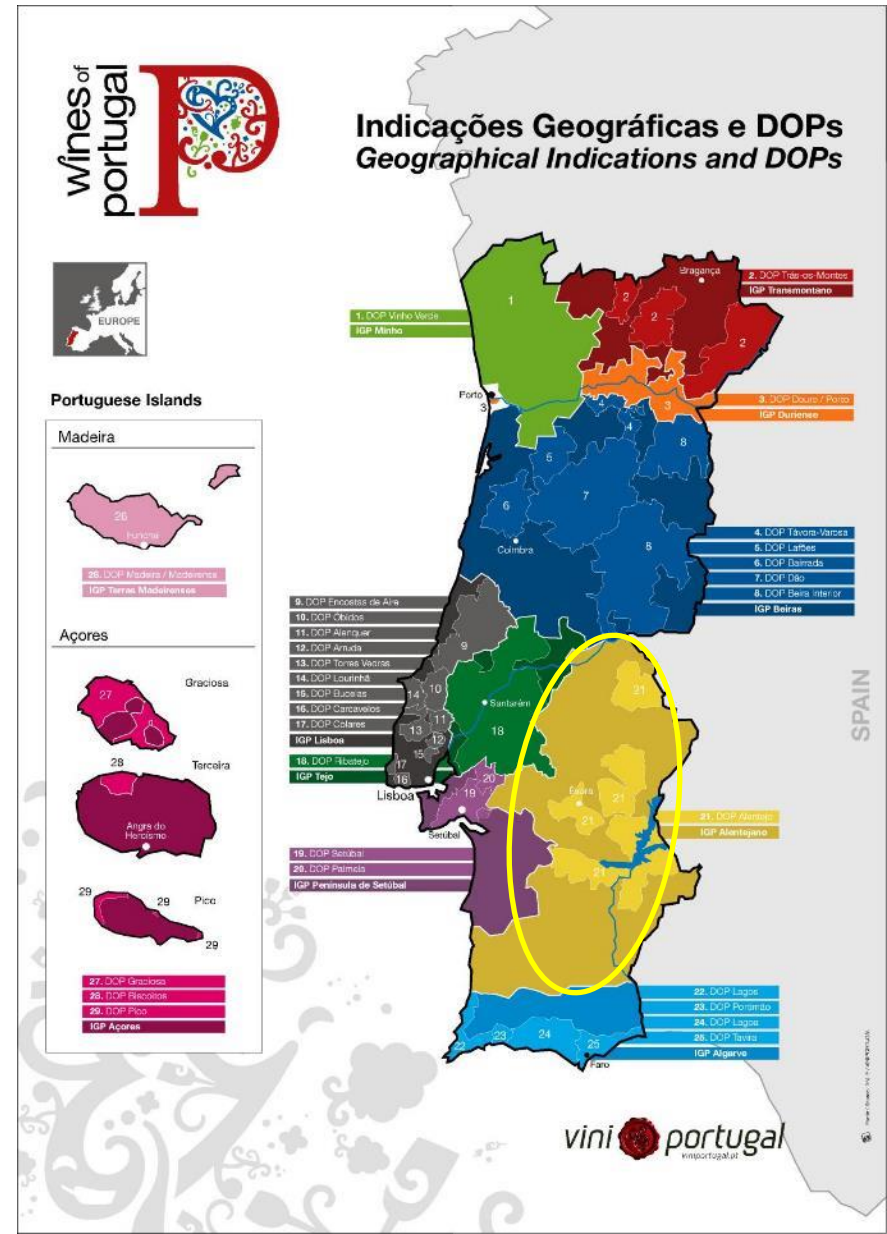


wines of portugal
a world of difference

Climate:

warm and dry

Soil: rich clay soil,
with granite and
schist



ALENTEJO



Varieties: Roupeiro, Antão Vaz, Aragonês, Trincadeira.

Wines: reds are full-bodied, fruity and have good ageing potential.



Península de Setúbal



Within the Península de Setúbal region there are two designated subregions with a higher level of wine classification:

Palmela DOC

Setúbal DOC

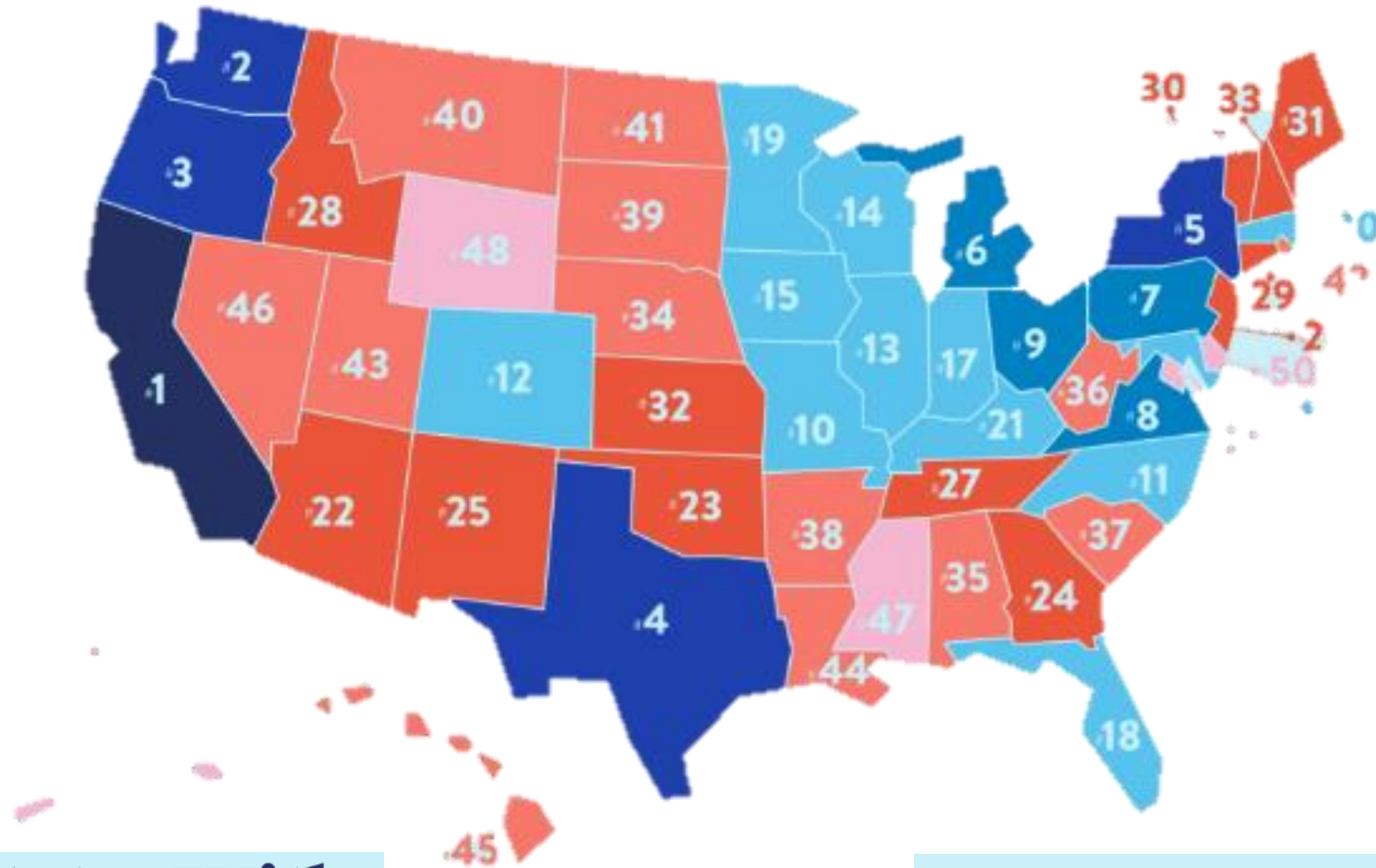
Main varieties: Moscatel de Setúbal, Castelão, Fernão Pires

Wines: - **Early maturing red wines** with notes of red currants and raspberries. Wine with ageing potential.

- **Moscatel de Setúbal** – fortified wine with long ageing time in barrel and with nutty, raisiny and honeyed aromas.



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A



The States With the Most Wineries in America in 2018

MAP KEY (wineries per state)

0-10

11-50

51-100

101-300

301-500

501-1100

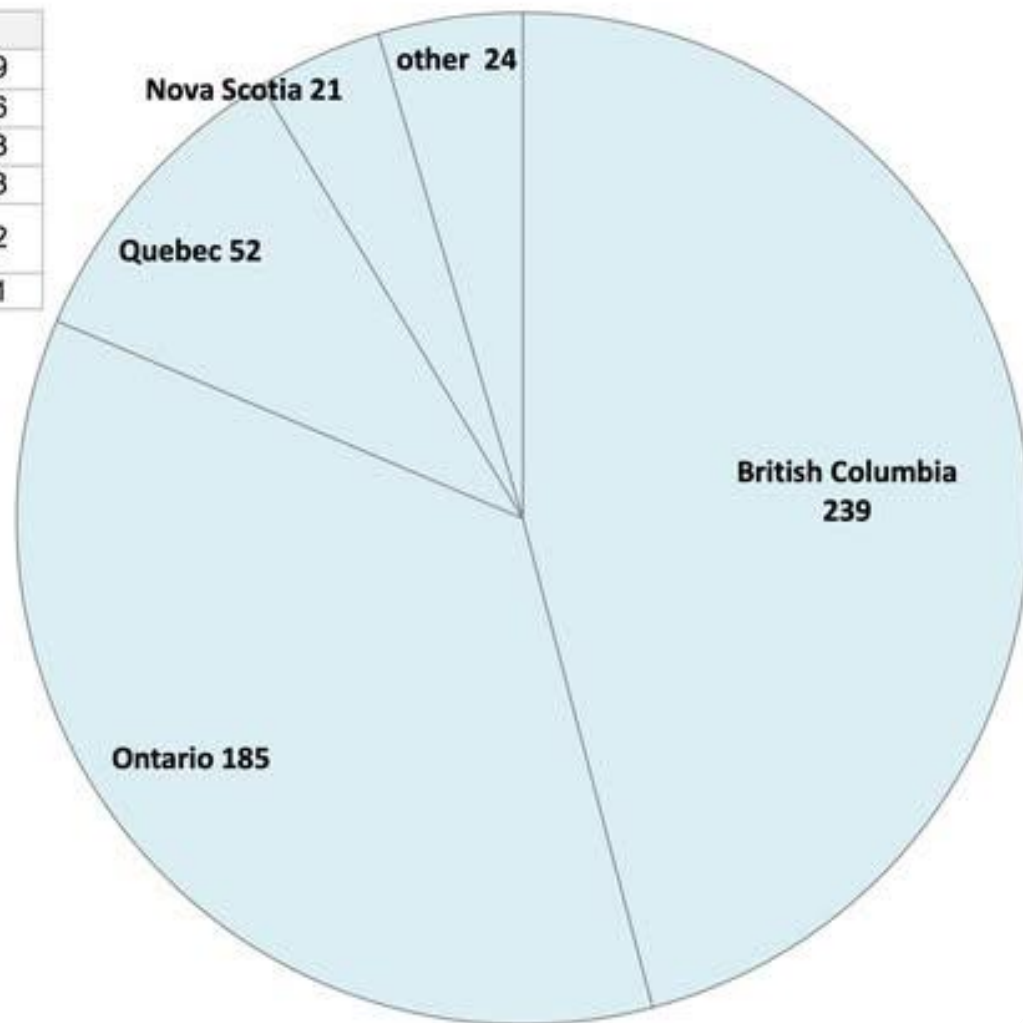
1101-5000

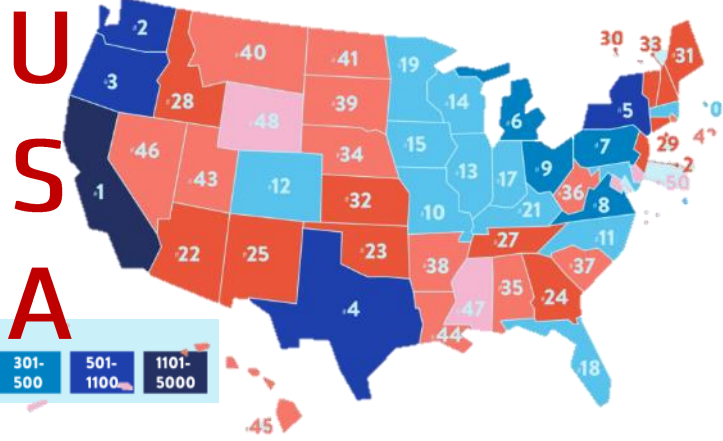


Number of Wineries in Canada by Province, 2024

Source: StatCan/Statista

| | |
|---------------------------|---|
| other | |
| Alberta | 9 |
| New Brunswick | 6 |
| Prince Edward Island | 3 |
| Saskatchewan | 3 |
| Newfoundland and Labrador | 2 |
| Manitoba | 1 |





California

Total wineries: 4,800

Within California, Napa Valley and Sonoma are still the templates that every other wine region is trying to follow. Napa, of course, is known for its world-class Chardonnay, Merlot and Cabernet Sauvignon. Sonoma, in turn, is known for its Pinot Noir, Cabernet Sauvignon, and Chardonnay. But Napa and Sonoma are not the only wine regions within California creating buzz. Central Coast, for example, now boasts its own share of award-winning wineries. One of the new darlings of the wine world is Paso Robles, located approximately halfway between San Francisco and Los Angeles.

Washington State

Total wineries: 1070

The state has a total of 14 different American Viticultural Areas (AVAs), with some of the more popular regions for wine production being Walla Walla and Columbia Valley. Since the 1960s, the state has rapidly increased its wine production capabilities, with wine exports going to more than 40 countries around the world. Washington is now No. 2 in the nation in terms of annual wine production, trailing only California. Popular grapes include Riesling, Chardonnay, Merlot, and Syrah.

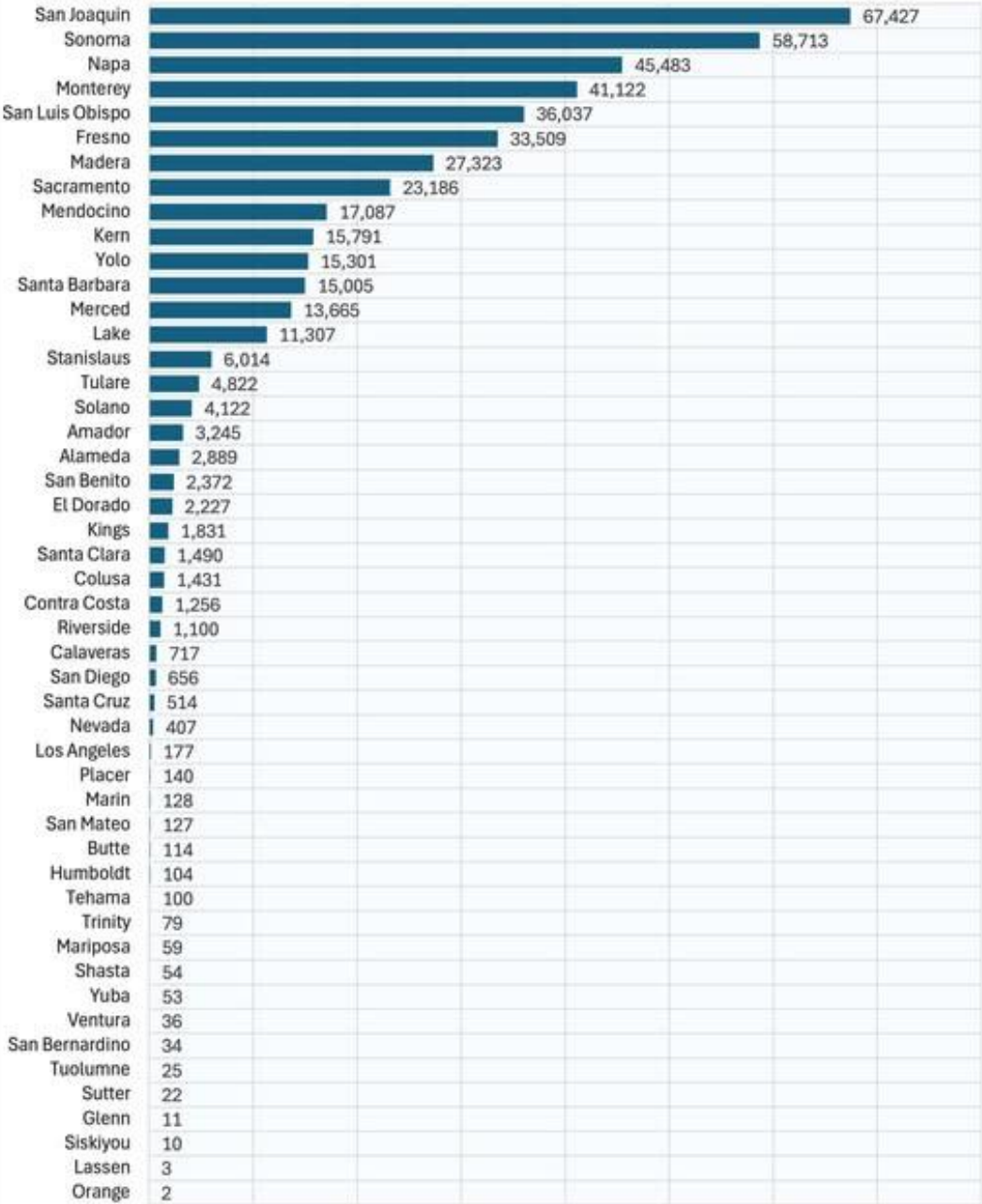
Oregon

Total wineries: 774

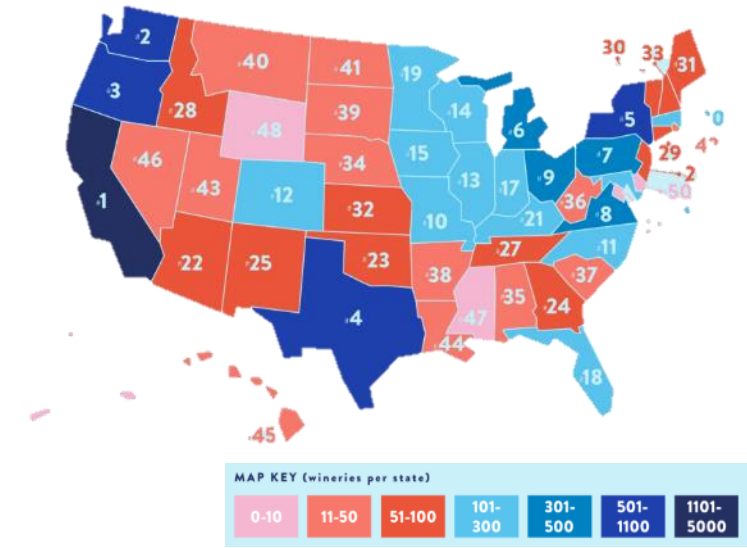
Oregon has a much cooler climate than any of California's wine regions, making it perfect for growing not just Pinot Noir, but also Riesling, Chardonnay, and Gamay. The premier wine region within Oregon is the Willamette Valley, which has gained a worldwide reputation for its stellar Pinot Noir wines. Interestingly, Willamette Valley is located along the same latitude as France's famed Burgundy region, which is also famed for its Pinot Noir.

Wine Grape Area in California, 2023 - By County

in total acres; Source: California Grape Acreage Report 2023 Crop



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S
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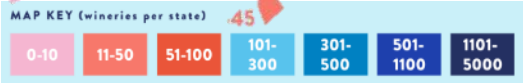
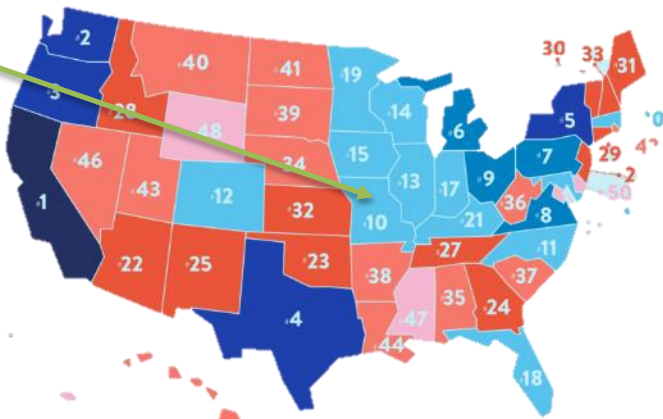


California

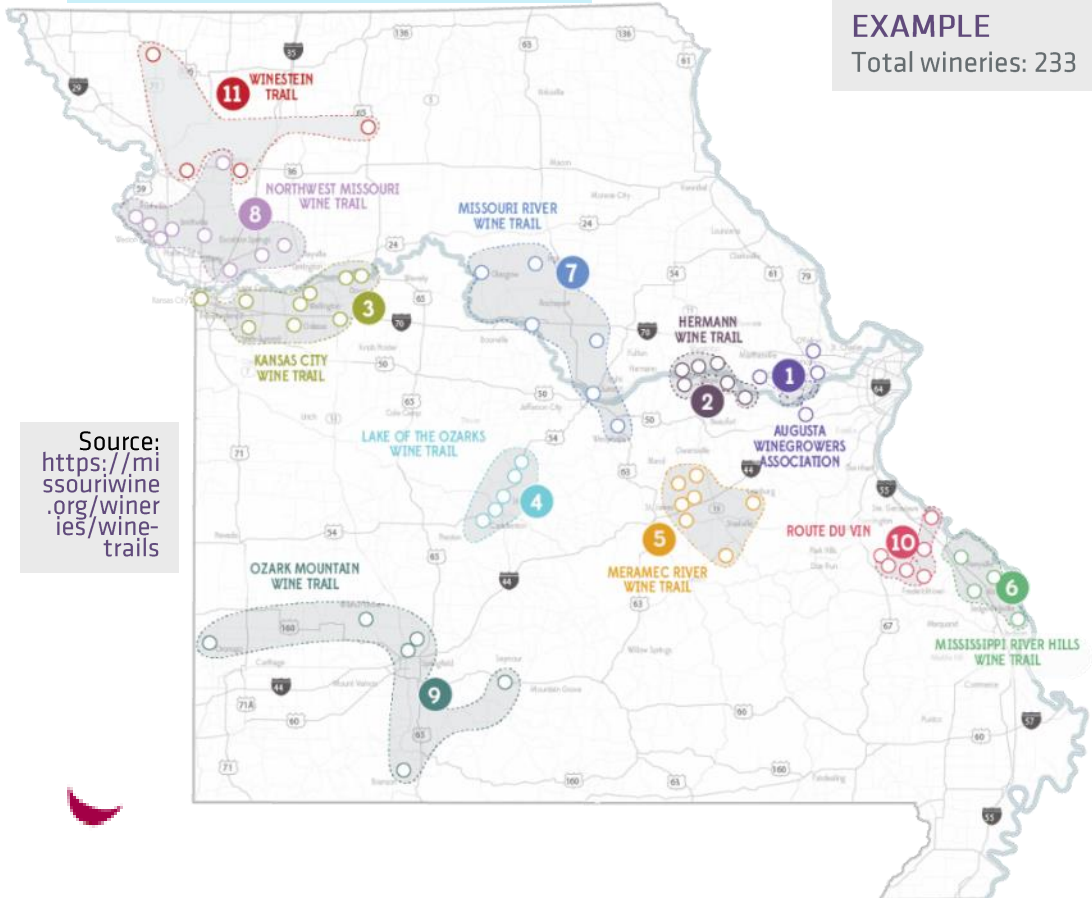
Total wineries: 4.800

Within California, Napa Valley and Sonoma are still the templates that every other wine region is trying to follow. Napa, of course, is known for its world-class Chardonnay, Merlot and Cabernet Sauvignon. Sonoma, in turn, is known for its Pinot Noir, Cabernet Sauvignon, and Chardonnay. But Napa and Sonoma are not the only wine regions within California creating buzz. Central Coast, for example, now boasts its own share of award-winning wineries. One of the new darlings of the wine world is Paso Robles, located approximately halfway between San Francisco and Los Angeles.

U
S
A



Missouri
EXAMPLE
 Total wineries: 233



Source:
<https://missouriwine.org/winerie5/wine-trails>

Augusta Winegrowers Association

The Augusta Wine Growers Association is located in the middle of the first area ever designated as an official American Viticulture Area, (you guessed it) Augusta, Mo. Taste the wines and you'll know why it came first!

The Hermann Wine Trail

This trail is known for thematic events where each winery on the trail features a different Missouri wine and food pairing, such as the Berries and BBQ Trail and Bacon Trail.

Kansas City Wine Trail

The wineries on this trail are all within a short drive (or right in the middle) of Kansas City. Wine country really is closer than you think!

Lake of the Ozarks Wine Trail

Missouri Wine Trail the Ozarks Wine Trail offers scenic beauty paired with fine wine and gourmet food to make for a memorable experience regardless of the season.

Meramec River Wine Trail

The Meramec River Wine Trail is nestled between the beauty of the Ozark Highlands and the picturesque waterways of the Meramec River. You can sample the varying styles of wine and learn about the history the area has cultivated.

Mississippi River Hills Wine Trail

The family-owned wineries along this trail invite you to sample the many varieties the region has to offer while you enjoy the beautiful river hills countryside.

Missouri River Wine Trail

Running through the middle of the Show Me State, this trail offers amazing views of the Missouri River and wines as unique as the people who make them.

Northwest Missouri Wine Trail

The area north of Kansas City has a trail consisting of eight wineries and winds through some charming towns with a lot to offer whether you're a wine lover or just have a case of wanderlust.

Ozark Mountain Wine Trail

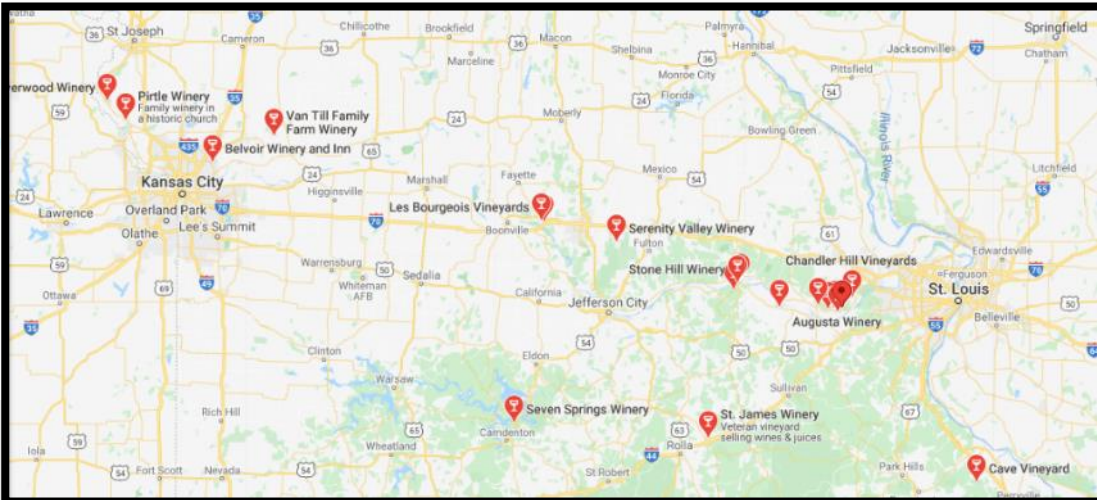
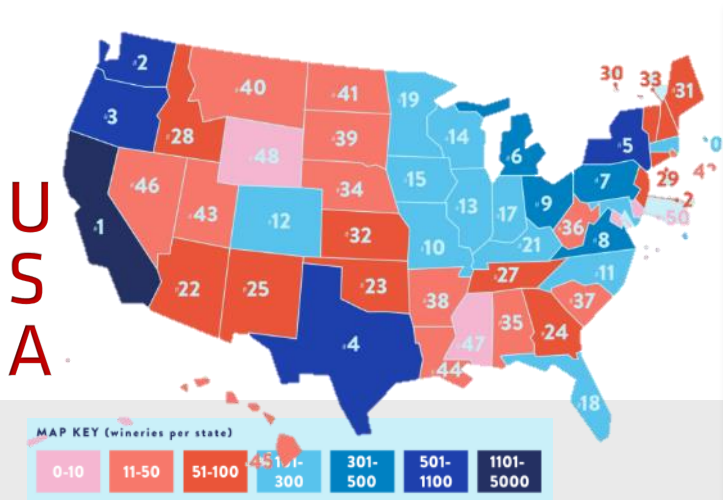
Situated in southwest Missouri, this trail winds through picturesque terrain from Joplin to Seymour. Looking for a break from the hustle and bustle, look no further.

Route du Vin

Located in the Ste. Genevieve area, this trail has a French influence and hosts events like progressive dinners and Jour de la Terre.

WineStein Trail

Located in the northwest part of Missouri, you will enjoy the scenery as you drive between each location along the WineStein Trail.



Virginia

Total wineries: 360

The most famous wine region within Virginia is located around the historic town of Charlottesville, perhaps best known as the home of Thomas Jefferson’s Monticello. The state is known for its nearly 200-day growing season, as well as the presence of premier wineries such as Barboursville Vineyards and Linden Vineyards. Winegrowing has been part of Virginia’s tradition since the Colonial era.

Ohio

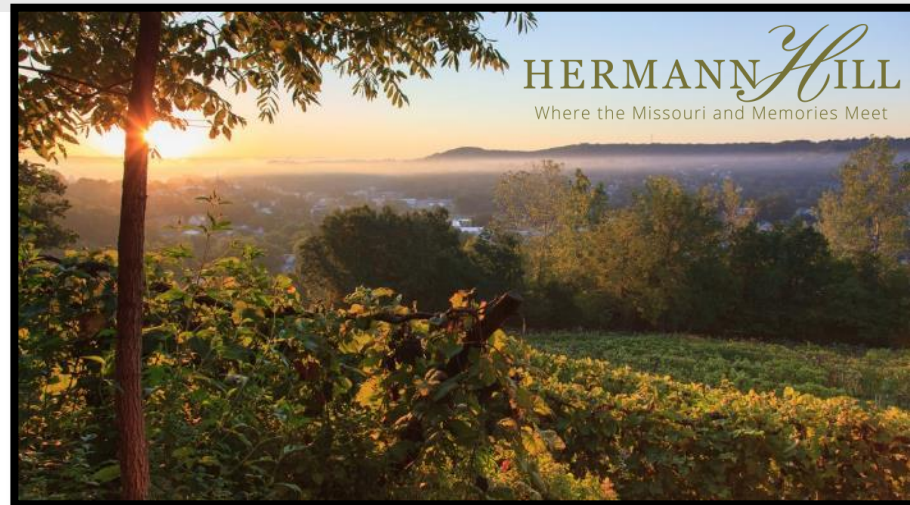
Total wineries: 355

The winemaking tradition in Ohio extends all the way back to the early 1820s. From 1823 to the mid-1860s, Ohio was home to one of the most popular wine industries in the nation and became particularly famous for its plantings of the Catawba grape. However, by the Prohibition Era, Ohio’s wine industry was headed on a downward trajectory and has never fully recovered, despite its proud tradition. One noteworthy winery within Ohio is Markko Vineyards. Overall, there are more than 110 wineries within Ohio.

Missouri

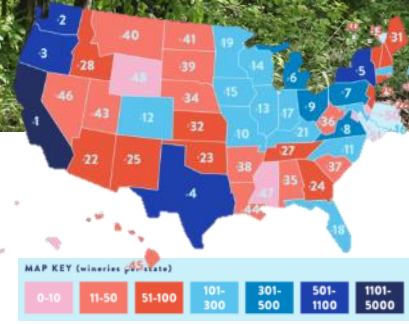
Total wineries: 233

Missouri is perhaps most famous for its “Missouri Rhineland” – a winegrowing region first settled by German immigrants more than a century ago. The first German immigrant winemakers appeared in 1837. By the 1880s, Missouri was the No. 1 wine-growing region in the nation – the Napa Valley of its day. Today, the state boasts more than 90 different wineries, 4 different AVAs, and even a “state grape” (the Norton grape).



Source:
www.hermannhill.com/hermann-mo-wineries

Number of wineries is **growing** every Year



Most of vineyards are ENOtourism establishments



Missouri - example

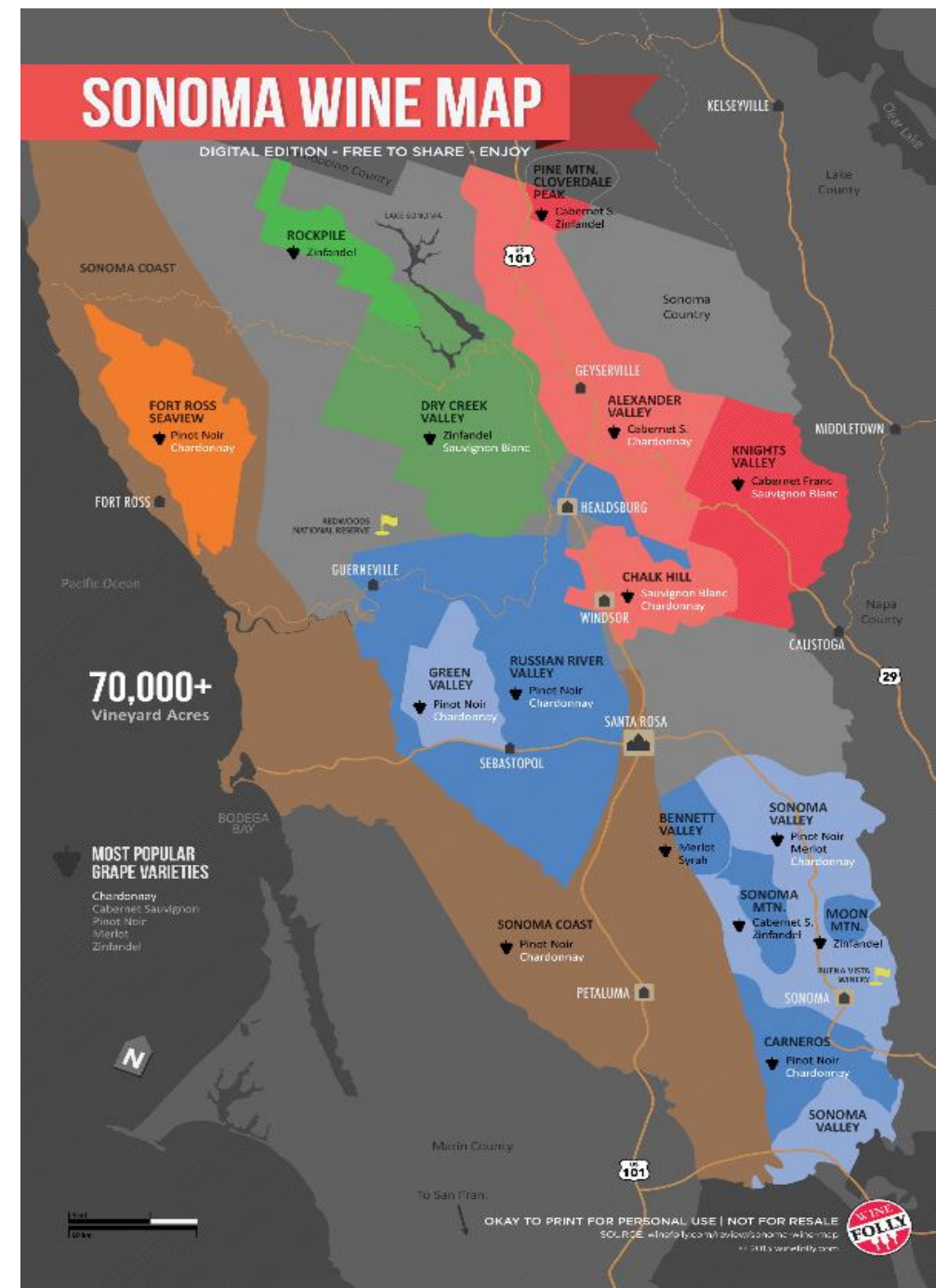
A **Meramec** Vineyards' warm welcome awaits visitors. The setting and products are designed to attract visitors to stop and enjoy the fruit of the wine and the work of human hands. They feature a selection of wines both in the tradition of the European grapes with dry and semi-dry red and white wines and in the tradition of the American grapes with fruity semi-sweet and sweet wines. Visitors can taste the wines, ask questions, browse the attractive gift shop with its gourmet food and wine-related items and Art Gallery with original art from very talented local artists. Meramec Vineyards' Bistro d'Vine features a tasty daily lunch menu with wonderful desserts as well as anytime "tasting plates" of cheese, sausage, olives, and fresh bread for guests as they sit in the bistro, garden, or the covered courtyard. Special musical and entertainment events and catered private parties are held on the grounds and often in the "tank room" where guests dine and sip amid the atmosphere of a working winery. Meramec Vineyards, halfway between St. Louis and Springfield on I-44, is located about 3/4 mile east of the I-44 St. James exit (195) on the north frontage road.

Source:
<https://meramecvineyards.com/>



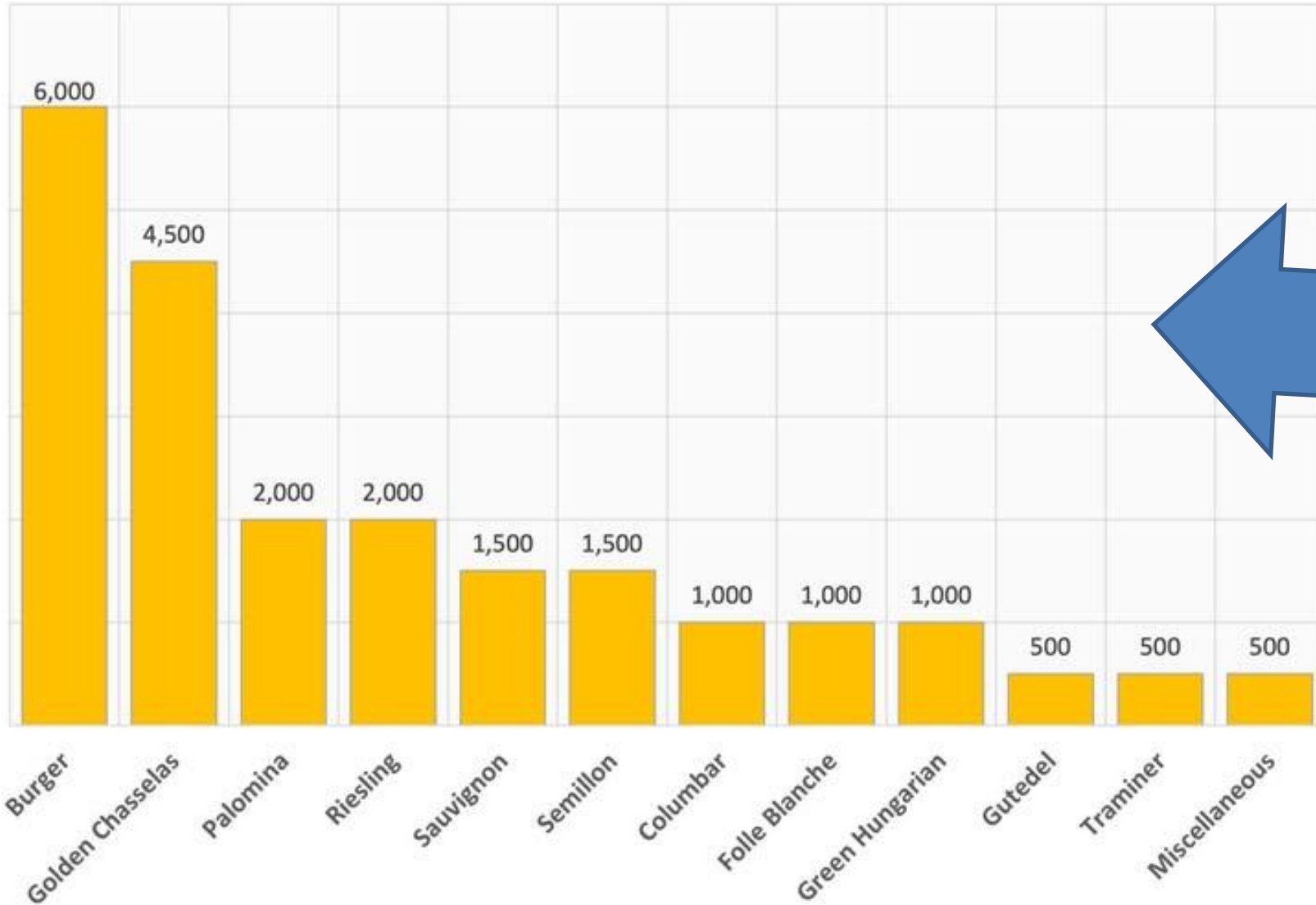
USA, California

- 90% of wine from the United States is from California home of the world's largest wine producer.
- Major Grapes: Cabernet Sauvignon, Zinfandel, Chardonnay.
- Terroir:
 - considerable diversity of soils and climate
 - complex combination of altitude, latitude and proximity to the cool waters of the Pacific Ocean.
 - In summer, the cold inshore waters of the Pacific help to create a fog which is sucked in to fill the space in vineyards.
- USA Wine Label Information:
 - American wine labeling laws are managed by the TTB (Alcohol and Tobacco Tax and Trade Bureau). By law, bottles of United States wine must be marked with a brand name, wine type, alcohol content, bottle volume, sulfite content, and the producer's name and address.
 - **Wine type (class):** the official categories 'table wine', 'dessert wine' and 'sparkling wine'.
 - **AVA (American Viticultural Area):** the specific geographical area a wine comes from (where the grapes were grown).

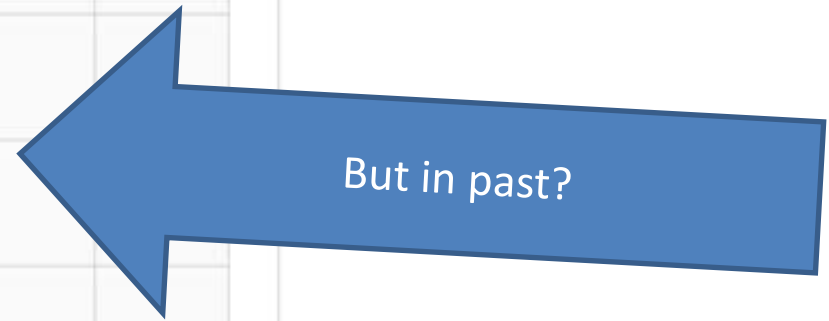


White Grape Varieties in California, 1920

in acres; Source: California Grape Grower, Apr 1, 1922



Major Grapes: Cabernet
Sauvignon,
Zinfandel
Chardonnay.



The most
popular wine in

pinotage

africa

- is a red wine grape that is South Africa's signature variety. It was bred there as a cross between Pinot noir and Cinsaut (Cinsaut was known as "Hermitage" in South Africa during that time, hence the portmanteau name of Pinotage). The alternative name 'Herminoir' was considered
- It typically produces deep red varietal wines with smoky, coffee, chocklet, bramble and earthy flavors, sometimes with notes of bananas and tropical fruit. The grape is a viticultural cross of two varieties of *Vitis vinifera*, not a hybrid. Pinotage is a grape variety that was created in South Africa in 1925 by Abraham Izak Perold, the first Professor of Viticulture at Stellenbosch University, later advancing to Dean of the Faculty of Agriculture.



<https://pinotage.co.za/heritage/>

The most popular wine in africa - Pinotage



- Perold planted the four seeds from his cross in the garden of his official residence at Welgevallen Experimental Farm and then seems to have forgotten about them. In 1927 he left the university for a job with KWV co-operative and the garden became overgrown. The university sent in a team to tidy it up, just as Charlie Niehaus happened to pass by. He was a young lecturer who knew about the seedlings, and rescued them from the clean-up team. The young plants were moved to Elsenburg Agricultural College under Perold's successor, CJ Theron. The one that was doing best was selected for propagation and was christened Pinotage. The first wine was made in 1941.

6%

- The first recognition came when a Bellevue wine made from Pinotage was the champion wine at the Cape Wine Show of 1959. This early success, due to its easy viticulture, prompted a wave of planting during the 1960s.
- The majority of the world's plantings of Pinotage is found in South Africa.
- it makes up just 6% of the vineyard area but is considered a symbol of the country's distinctive winemaking traditions. The grape is naturally high in tannins



Wineries by U.S. State, Mar 31, 2018

Source: Department of the Treasury, TTB

| | | | | |
|-------------------|-------|--|-------------------|----|
| 1 California | 4,807 | | 27 Tennessee | 78 |
| 2 Washington | 1,073 | | 28 Idaho | 74 |
| 3 Oregon | 701 | | 29 Connecticut | 71 |
| 4 Texas | 588 | | 30 Vermont | 66 |
| 5 New York | 577 | | 31 Maine | 56 |
| 6 Michigan | 461 | | 32 Kansas | 55 |
| 7 Pennsylvania | 394 | | 33 New Hampshire | 53 |
| 8 Virginia | 360 | | 34 Nebraska | 39 |
| 9 Ohio | 355 | | 35 Alabama | 38 |
| 10 Missouri | 233 | | 36 West Virginia | 38 |
| 11 North Carolina | 220 | | 37 South Carolina | 37 |
| 12 Colorado | 192 | | 38 Arkansas | 35 |
| 13 Illinois | 156 | | 39 South Dakota | 35 |
| 14 Wisconsin | 152 | | 40 Montana | 32 |
| 15 Iowa | 140 | | 41 North Dakota | 22 |
| 16 Maryland | 131 | | 42 Rhode Island | 21 |
| 17 Indiana | 128 | | 43 Utah | 17 |
| 18 Florida | 115 | | 44 Louisiana | 16 |
| 19 Minnesota | 112 | | 45 Hawaii | 12 |
| 20 Massachusetts | 110 | | 46 Nevada | 12 |
| 21 Kentucky | 102 | | 47 Mississippi | 9 |
| 22 Arizona | 100 | | 48 Wyoming | 9 |
| 23 Oklahoma | 88 | | 49 Alaska | 8 |
| 24 Georgia | 84 | | 50 Delaware | 8 |
| 25 New Mexico | 82 | | 51 Washington DC | 7 |
| 26 New Jersey | 81 | | | |



WINE



- New Zealand wine is largely produced in ten major wine growing regions spanning latitudes 36° to 45° South and extending 1,600 kilometres (990 mi). They are, from north to south: **Northland, Auckland, Waikato/Bay of Plenty, Gisborne, Hawke's Bay, Wellington, Nelson, Marlborough, Canterbury/Waipara and Central Otago.**



New Zealand

New Zealand

- Wine regions:
 - Northland,
 - Auckland,
- Waikato/Bay of Plenty,
 - Gisborne,
 - Hawke's Bay,
- Wellington,
 - Nelson,
- Marlborough,
- Canterbury/Waipara Central Otago.



history

- The wine industry boomed during the Second World War - when duties were raised on imported wines – and expansion continued during the 1950s and '60s, due to a string of legislative concessions by successive governments, including major reductions in the minimum amounts of wine that could be sold by winemakers, approval for more retail outlets, and the licensing of restaurants to sell wine in 1960.
- An outstanding feature of the 1960s and 1970s was heavy investment by overseas companies, Australian and American.
- New Zealand wineries originally set out to serve the small domestic market, operating within a highly regulated economy. But in 1985 the government moved to speed up the removal of barriers against overseas wines, allowing Australian wineries to contest the New Zealand market on an equal footing by 1990.
- Spurred into action by their heavy loss of domestic market share, the winemakers launched a sustained export drive. The value of New Zealand's wine exports has skyrocketed. from \$NZ18 million in 1990 to over \$NZ1.5 billion in 2015.
- New wine companies are mushrooming, from Northland to Central Otago. Thirty years ago, there were fewer than 100 New Zealand wineries; today the ranks have swollen to over 670.

history

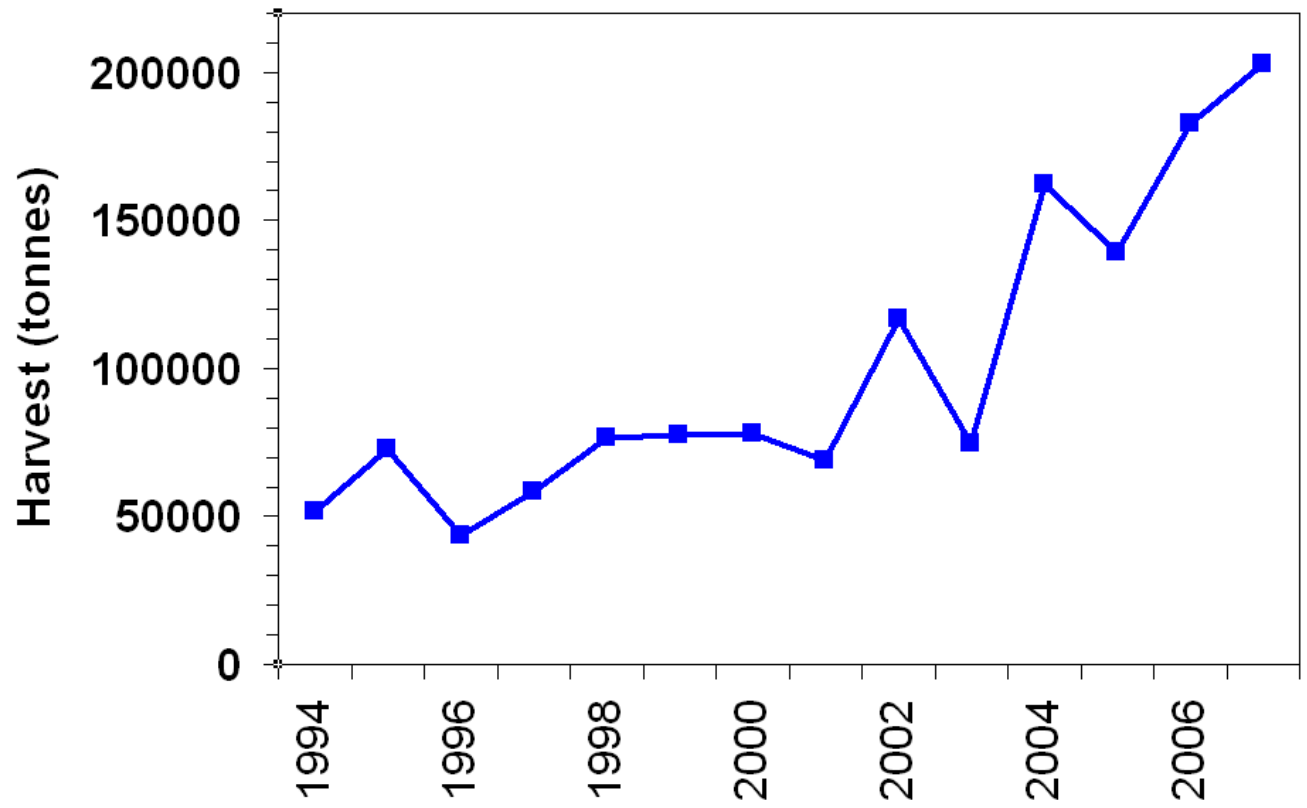
- Wine making and vine growing go back to colonial times in New Zealand. British Resident and keen oenologist **James Busby** was, as early as **1836**, attempting to produce wine at his land in Waitangi. In **1851** New Zealand's oldest existing vineyard was established by French Roman Catholic missionaries at Mission Estate in **Hawke's Bay**. Due to economic (the importance of animal agriculture and the protein export industry), legislative (prohibition and the temperance) and cultural factors (the overwhelming predominance of beer and spirit drinking British immigrants), wine was for many years a marginal activity in terms of economic importance. Dalmatian immigrants arriving in New Zealand at the end of the nineteenth and beginning of the twentieth century brought with them viticultural knowledge and planted vineyards in West and North Auckland. Typically, their vineyards produced sherry and port for the palates of New Zealanders of the time, and table wine for their own community

Wineries by Region [2018]

- Northland 13
- Auckland **119**
- Waikato/Bay of Plenty 15
- Gisborne 21
- Hawkes Bay 79
- Wairarapa 65
- Nelson 38
- Marlborough 145
- Canterbury/Waipara 67
- Central Otago **121**
- Other Areas 09
- Total 692



Statistics



The grape harvest has increased dramatically in the last decade.

TOTAL VALUE OF EXPORTS



\$1.57 BILLION

↑ 10%

PACKAGED
WINE EXPORT

VOLUME
141.2m L 5% ↑



PRICE
7% ↑
\$8.81/L

BULK
WINE EXPORT

VOLUME
71.4m L 1% ↑



BULK WHITE
WINE PRICE
14% ↑
\$4.30/L

SHARE OF TOTAL EXPORTS,
VOLUME



85.6%
SAUVIGNON
BLANC



14.4%
OTHER
VARIETIES

MARKET VALUE



FOB VALUE



USA

\$460.6m
↑ 24%



UK

\$381.8m
↑ 8%



AUSTRALIA

\$361.7m
↓ 0.1%



CANADA

\$107.4m
↑ 13%



NETHERLANDS

\$44.5m
↑ 7%



CHINA

\$27.6m
↑ 2%



HONG KONG

\$17.3m
↓ 2%



GERMANY

\$14.5m
↑ 45%

*figures are in \$NZD

The value of New Zealand's wine exports

How cork is made



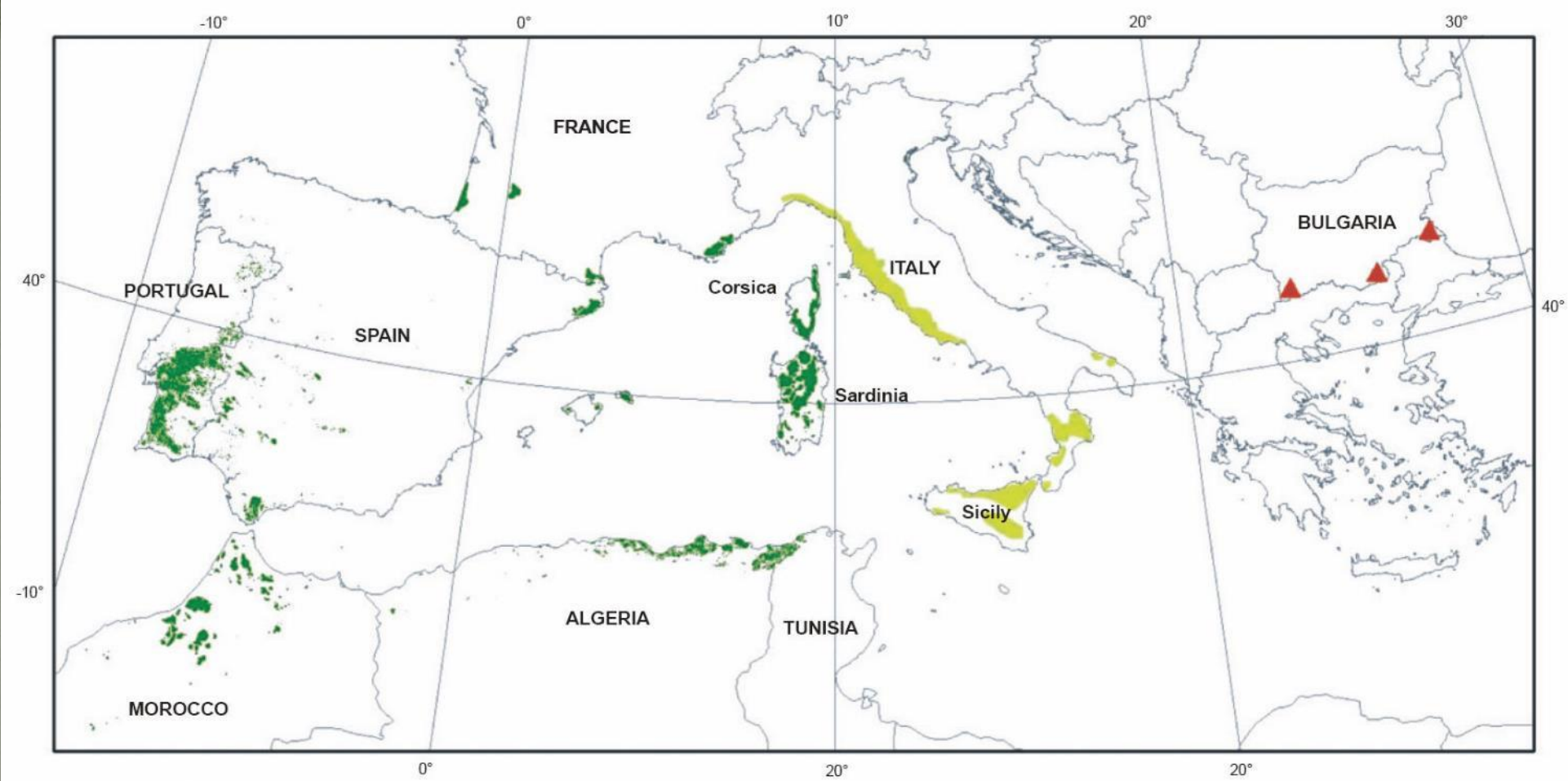
Cork is the bark of the cork oak (*Quercus suber* L), that grows in Mediterranean regions such as Spain, Italy, France, Morocco, Algeria and, most particularly, in Portugal, where there are more than 720 thousand hectares of cork forests.

It can live up to 200 years, despite its bark being stripped around 16 times during its lifetime, at nine-year intervals. So each time cork is harvested, the tree is not killed.




Cork is:

- Very light
- Impermeable to liquids and gases
- Elastic and compressible
- An excellent thermal and acoustic insulator
- Fire retardant
- Highly abrasion resistant



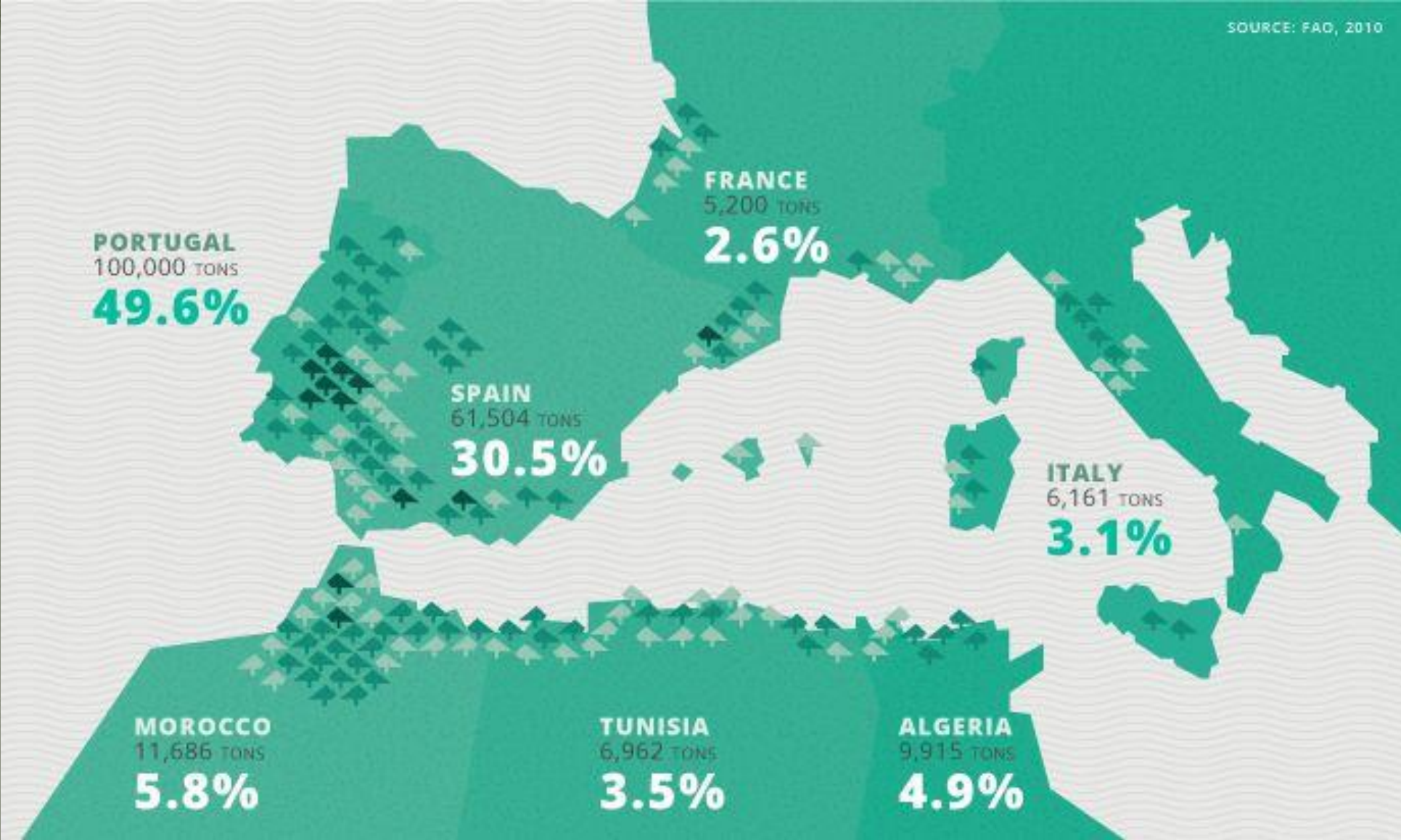


Legend

-  Confirmed distribution
-  Approximate distribution
-  Introduced, somewhat naturalized

0 250 500 Kilometers

Lambert Conform Conic projection.
Mapping: H. Bohbot (CEFE, 2005).





Cork oaks are harvested every nine years, once they reach maturity. It doesn't harm the tree, and the cork bark regrows. Most cork forests are in Portugal and Spain.



The year of harvest is marked on the trunk, so each tree isn't harvested at the wrong time. Cork is a great insulating material, and gives these oaks a chance to survive the forest fires that occasionally happen in the hot Mediterranean summers.



The harvested cork planks are stored before processing. Good cork companies will store them on concrete rather than bare earth, lowering the risk of contamination.



This bark. is quite thin, and won't be used to produce high-quality natural cork. But now there are also technical corks, made up of small pieces of cork fused together, which means that more of the cork bark is suitable for producing wine bottle closures.



Coruche
in

facility

Amorim's

Before processing, the cork planks are put on pallets.
Then they are ready for the first stage in the cork
production process: boiling.





The planks are boiled to soften them, and also to clean them..
Now, to avoid cross-contamination, the water is cleaned, filtered
and replenished regularly, with volatiles being removed on a
continuous basis.



The boiled planks are flatter
and easier to work with





Next the planks are graded and cut into workable pieces (around 30 cm).



These workers are hand-punching corks from strips of bark: these will be high-end corks. Others are machine punched.



What remains after the corks have been punched. This remaining cork can be ground up to make granules that can then be glued together to make agglomerate cork.

The corks are optically sorted: blasts of air are used to send the corks into the right grade bins.





Types of cork stoppers



Natural



Colmate



1 + 1



Agglomerate

Stanimirou Cork Portugal



Colmated corks



Corks are a natural renewable product.
No two corks are the same.



This cork was not dense enough for opening and wine seeped up the sides within a year.

This is called a 'colmated' cork. A low quality cork is improved by filling it in with glue and cork dust.

This cork is lower quality and would most likely break apart when opening a wine bottle.

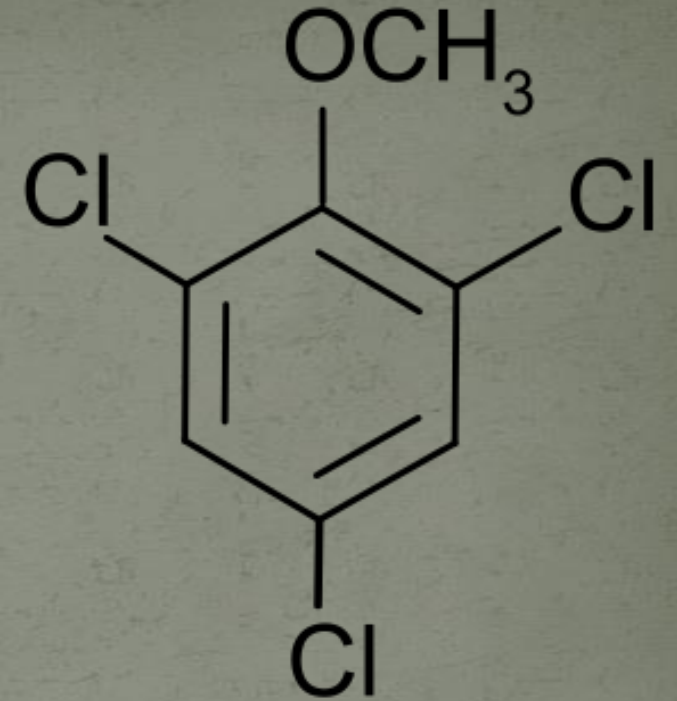
Some cork manufacturers still bleach their corks to make them appear clean. This causes TCA cork taint.

This cork appears to be high quality. High quality corks can cost around 50¢

Cork taint

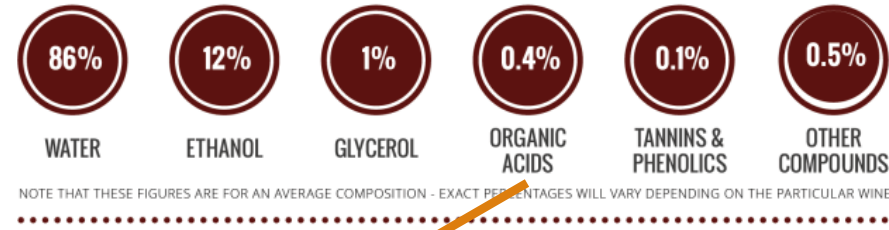
is a broad term referring to a wine fault characterized by a set of undesirable smells or tastes found in a bottle of wine, especially spoilage that can only be detected after bottling, aging and opening.

The chief cause of cork taint is the presence of the chemical compounds 2,4,6-trichloroanisole (TCA) or 2,4,6-tribromoanisole (TBA) in the wine, which in many cases will have been transferred from the cork.



Chemical structure of 2,4,6-trichloroanisole (TCA), the compound primarily responsible for cork taint

THE CHEMISTRY OF WINE



The acids in wine are an important component in both winemaking and the finished product of wine. They are present in both grapes and wine, having direct influences on the color, balance and taste of the wine as well as the growth and vitality of yeast during fermentation and protecting the wine from bacteria. The measure of the amount of acidity in wine is known as the “titratable acidity” or “total acidity”, which refers to the test that yields the total of all acids present, while strength of acidity is measured according to pH, with most wines having a pH between 2.9 and 3.9.

Three primary acids are found in wine grapes: **tartaric**, **malic** and **citric** acids.

THE CHEMISTRY OF WINE



NOTE THAT THESE FIGURES ARE FOR AN AVERAGE COMPOSITION - EXACT PERCENTAGES WILL VARY DEPENDING ON THE PARTICULAR WINE



Tartaric acid is, from a winemaking perspective, the most important in wine due to the prominent role it plays in maintaining the chemical stability of the wine and its color and finally in influencing the taste of the finished wine. In most plants, this organic acid is rare, but it is found in significant concentrations in grape vines. Along with malic acid, and to a lesser extent citric acid, tartaric is one of the fixed acids found in wine grapes. The concentration varies depending on grape variety and the soil content of the vineyard.

THE CHEMISTRY OF WINE

86%

WATER

12%

ETHANOL

1%

GLYCEROL

0.4%

ORGANIC ACIDS

0.1%

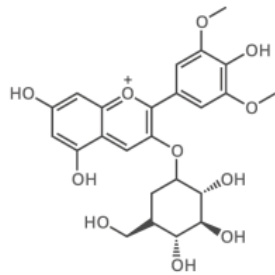
TANNINS & PHENOLICS

0.5%

OTHER COMPOUNDS

NOTE THAT THESE FIGURES ARE FOR AN AVERAGE COMPOSITION - EXACT PERCENTAGES WILL VARY DEPENDING ON THE PARTICULAR WINE

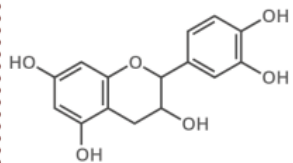
ANTHOCYANINS



MALVIDIN-3-GLUCOSIDE

Anthocyanins are found in the skin of grapes. As soon as the grapes are crushed, they can react with other chemicals in wine to produce polymeric pigments. Anthocyanins on their own are also coloured, but the colour varies depending on pH.

FLAVAN-3-OLS



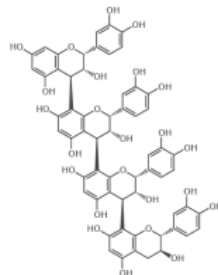
CATECHIN

Flavan-3-ols originate in the seeds of grapes, and are known for their bitterness. In red wine, the amount present can reach up to 800 milligrams per litre. 20 milligrams per litre is the amount required in order for a bitter taste to be imparted.



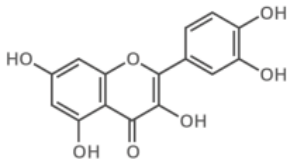
OVER
1000
DIFFERENT
COMPOUNDS

TANNINS



Tannins are polymers of other chemicals within wine. Condensed tannins are polymers of flavan-3-ols, and give red wine its astringency, causing a dry feeling in the mouth after drinking. Changes in tannin structure over time are an important factor in wine aging.

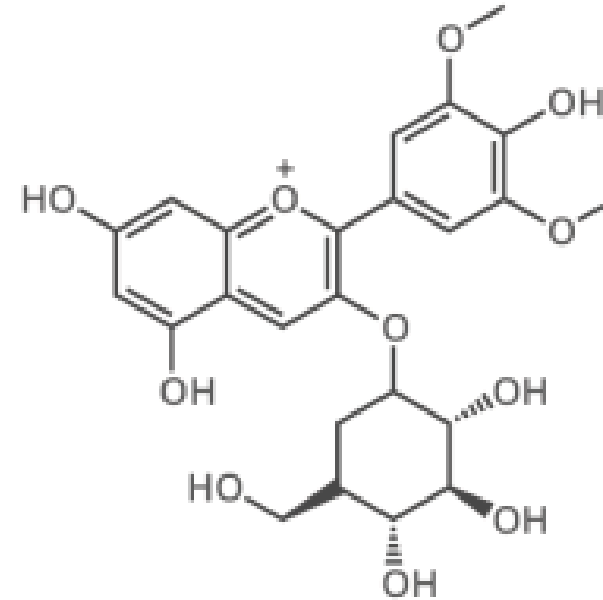
FLAVONOLS



QUERCETIN

Flavonols can help enhance the colour of red wine, via a process called 'co-pigmentation'. These compounds have potential anti-oxidant and anti-carcinogenic effects; however, their concentration in red wine is likely too low to confer any significant health benefits.

ANTHOCYANINS



MALVIDIN-3-GLUCOSIDE

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THE CHEMISTRY OF WINE

86%

WATER

12%

ETHANOL

1%

GLYCEROL

0.4%

ORGANIC ACIDS

0.1%

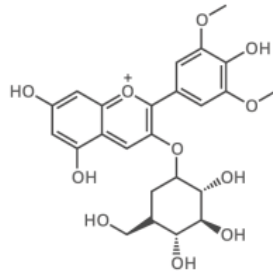
TANNINS & PHENOLICS

0.5%

OTHER COMPOUNDS

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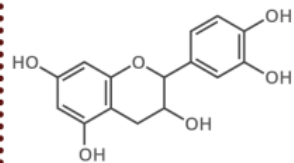
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FLAVAN-3-OLS



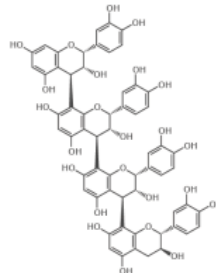
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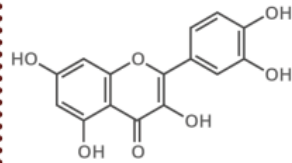
OVER
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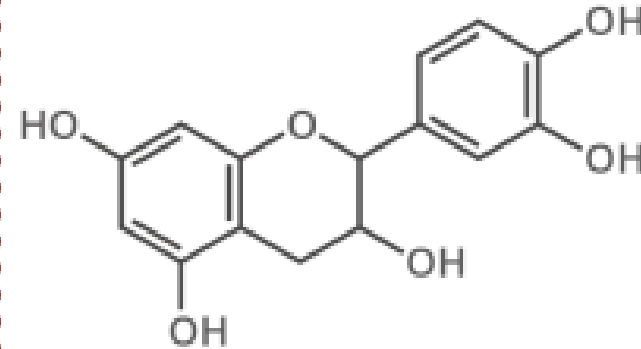
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FLAVAN-3-OLS



CATECHIN

Flavan-3-ols originate in the seeds of grapes, and are known for their bitterness. In red wine, the amount present can reach up to 800 milligrams per litre. 20 milligrams per litre is the amount required in order for a bitter taste to be imparted.

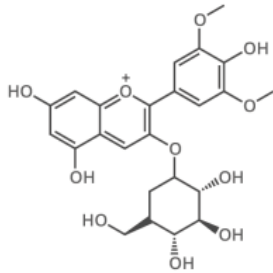


THE CHEMISTRY OF WINE



NOTE THAT THESE FIGURES ARE FOR AN AVERAGE COMPOSITION - EXACT PERCENTAGES WILL VARY DEPENDING ON THE PARTICULAR WINE

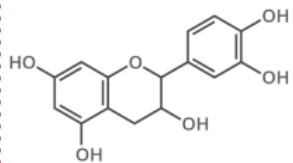
ANTHOCYANINS



MALVIDIN-3-GLUCOSIDE

Anthocyanins are found in the skin of grapes. As soon as the grapes are crushed, they can react with other chemicals in wine to produce polymeric pigments. Anthocyanins on their own are also coloured, but the colour varies depending on pH.

FLAVAN-3-OLS



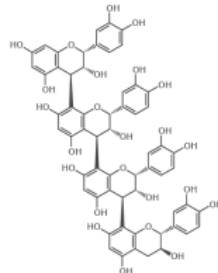
CATECHIN

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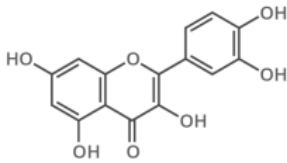
OVER
1000
DIFFERENT
COMPOUNDS

TANNINS



Tannins are polymers of other chemicals within wine. Condensed tannins are polymers of flavan-3-ols, and give red wine its astringency, causing a dry feeling in the mouth after drinking. Changes in tannin structure over time are an important factor in wine aging.

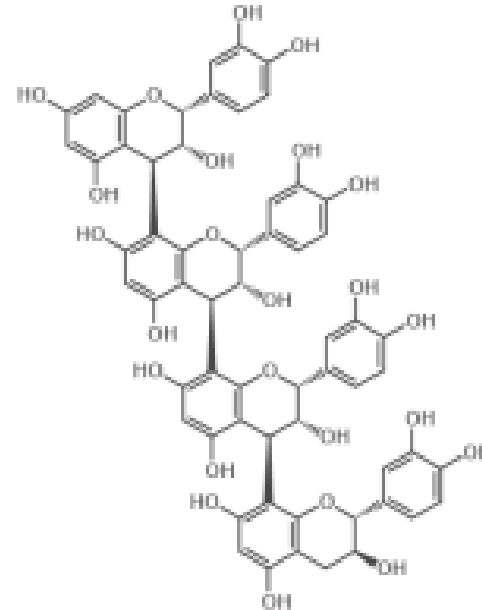
FLAVONOLS



QUERCETIN

Flavonols can help enhance the colour of red wine, via a process called 'co-pigmentation'. These compounds have potential anti-oxidant and anti-carcinogenic effects; however, their concentration in red wine is likely too low to confer any significant health benefits.

TANNINS



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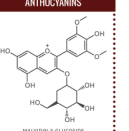


THE CHEMISTRY OF WINE

| | | | | | |
|-------|---------|----------|---------------|---------------------|-----------------|
| 86% | 12% | 1% | 0.4% | 0.1% | 0.5% |
| WATER | ETHANOL | GLYCEROL | ORGANIC ACIDS | TANNINS & PHENOLICS | OTHER COMPOUNDS |

NOTE: THAT THESE FIGURES ARE FOR AN AVERAGE COMPOSITION. EXACT PERCENTAGES WILL VARY DEPENDING ON THE PARTICULAR WINE.

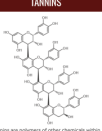
ANTHOCYANINS



MAUVISME & GLUCOSIDES

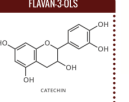
Anthocyanins are found in the skins of grapes. As soon as the grapes are crushed, they can react with other chemicals to form pigments called anthocyanins. Anthocyanins in their most stable form are colorless, but the colour varies depending on pH.

TANNINS



Tannins are polyphenolic compounds that are found in the skins, seeds and stems of grapes. They are responsible for the astringent or 'mouth-puckering' effect of wine. Tannins are also responsible for the darkening of wine over time.

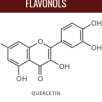
FLAVAN-3-OLS



CATECHIN


Flavan-3-ols are found in the seeds of grapes, and are known for their antioxidant properties. They are also responsible for the astringent effect of wine. Catechins are also found in tea and other plants.

FLAVONOIDS



QUERCETIN

Quercetin is a flavonoid that is found in the skins and seeds of grapes. It is responsible for the astringent effect of wine. Quercetin is also found in other plants and has antioxidant properties.



OVER 1000 DIFFERENT COMPOUNDS

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If you're picking up on grassy notes or peppers, **pyrazines** are the culprit. Pyrazines are aromatic organic compounds responsible for the **herbal** or **vegetal** scents in a wine. In addition, Pyrazines produce deeper, roasty scents like dark chocolate and coffee.



Pyrazines

Does wine smell fresh and fruity, like a fruit salad made with berries? This is the effect of **esters**, a product of acids. Also tropical flavors



Esters

Wines with floral notch (owe their perfumed bouquets to **terpenes**. Terpenes produce fragrant smells like orange blossoms and roses, but they can also smell more earthy, like pine. Terpenes are also found in : marijuana! In fact, rotundones, a type of terpene, can smell just like oregano.



Terpenes

thiols



Like pyrazines, **thiols** conjure up complex flavors like cocoa and a cup of coffee. They're also responsible for the smokiness .

Esters

Table of esters and their smells

from the alcohol (first word)

from the carboxylic acid (second word)

| | methyl 1 carbon | ethyl 2 carbons | propyl 3 carbons | 2-methyl propyl- | butyl 4 carbons | pentyl 5 carbons | hexyl 6 carbons | benzyl benzene ring | heptyl 7 carbons | octyl 8 carbons | nonyl 9 carbons | | |
|---|---|--|---|---|---|---|---|---|---|---|---|---|---|
| methanoate 1 carbon | ETHEREAL |  |  | ETHEREAL |  |  |  |  |  |  | ? | | |
| ethanoate 2 carbons |  |  |  |  |  |  |  |  |  |  |  | | |
| propanoate 3 carbons |  |  |  |  |  |  |  |  |  |  | ? | | |
| 2-methyl propanoate 4 carbons, branched |  | ETHEREAL |  |  |  |  |  |  |  |  | ? | | |
| butanoate 4 carbons |  |  |  |  |  |  |  |  |  |  | ? | | |
| pentanoate 5 carbons |  |  |  |  | ETHEREAL |  |  |  |  | ? | ? | | |
| hexanoate 6 carbons |  |  |  |  |  |  |  |  |  |  |  | | |
| benzanoate benzene ring |  |  |  |  | | |  | ? |  | | | | |
| heptanoate 7 carbons |  |  |  |  |  | ? |  |  |  |  |  | | |
| salicylate from salicylic acid |  |  |  |  |  |  |  | DIFFERENT PEOPLE PERCEIVE DIFFERENT AROMAS! | ? |  | ? | | |
| octanoate 8 carbons |  |  |  |  |  |  |  |  |  |  |  |  | |
| nonanoate 9 carbons |  |  |  |  |  |  |  |  |  | ? |  | | |
| cinnamate |  |  |  | | |  |  |  | | |  |  | ? |
| decanoate 10 carbons |  |  |  |  |  |  | ? | ? | ? | ? | ? | | |



- **Chaptalisation** - is the process of adding sugar to unfermented grape must in order to increase the alcohol content after fermentation. The technique is named after its developer, the French chemist **Jean-Antoine-Claude Chaptal**.
- The legality of chaptalization varies by country, region, and even wine type. In general, it is legal in regions that produce grapes with low sugar content. Chaptalization is prohibited in **Argentina, Australia, California, Italy, and South Africa**.

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