



WINE

陈正, 胡祺, 文睿琦





01

History of wine



— Ancient Origins (6000 BC – 500 BC)

Caucasus(高加索)

Modern Georgia(格鲁吉亚), Armenia(亚美尼亚) and Iran are considered the origins of wine. Archaeological discoveries have detected wine composition in the remains of clay pots dating back to 6000 BC

Egypt

The murals in the tombs of the Egyptian pharaohs show the process of viticulture and winemaking, wine as a religious ritual and a noble drink.

Ancient Greece

Wine became central to Greek culture and was closely linked to the cult of Dionysus (酒神). The Greeks improved their winemaking techniques and broadened viticulture to the coast (e.g., Italy, southern France).



Golden Age of the Roman Empire (500 BC – 500 AD)



—

The Romans perfected viticulture (such as grafting techniques), oak barrel aging, and established systematic vineyard management. Therefore, viticulture was introduced to France, Spain, and Germany, laying the foundation for the European wine map. At the same time, wine is used in the Christian ritual, giving it a sacred meaning in order to remember the sacrifice of Christ

Globalization of Great Navigation (15th – 18th centuries)

Spanish missionaries brought grapes to the Americas, and the Dutch , planted grapes in South Africa, beginning the history of wine in the New World.



Modern Crisis and Revival (19th – 20th centuries)

In 1863, phylloxera (根瘤蚜虫) was introduced to Europe from the Americas, destroying 90% of vineyards, which was eventually solved by grafting American rootstocks.

Australia, California, Chile and other regions have used industrial production and technological innovation to challenge Europe's traditional position.



Modern Diversification (Late 20th – 21st Century)

Scientific winemaking: temperature-controlled fermentation, stainless steel barrels, and microbiological research to improve quality stability.

New Style Exploration: The Rise of Garage Wine and Natural Wine





02

Wine Manufacturing Process

5 steps from grapes to wine

The Harvest

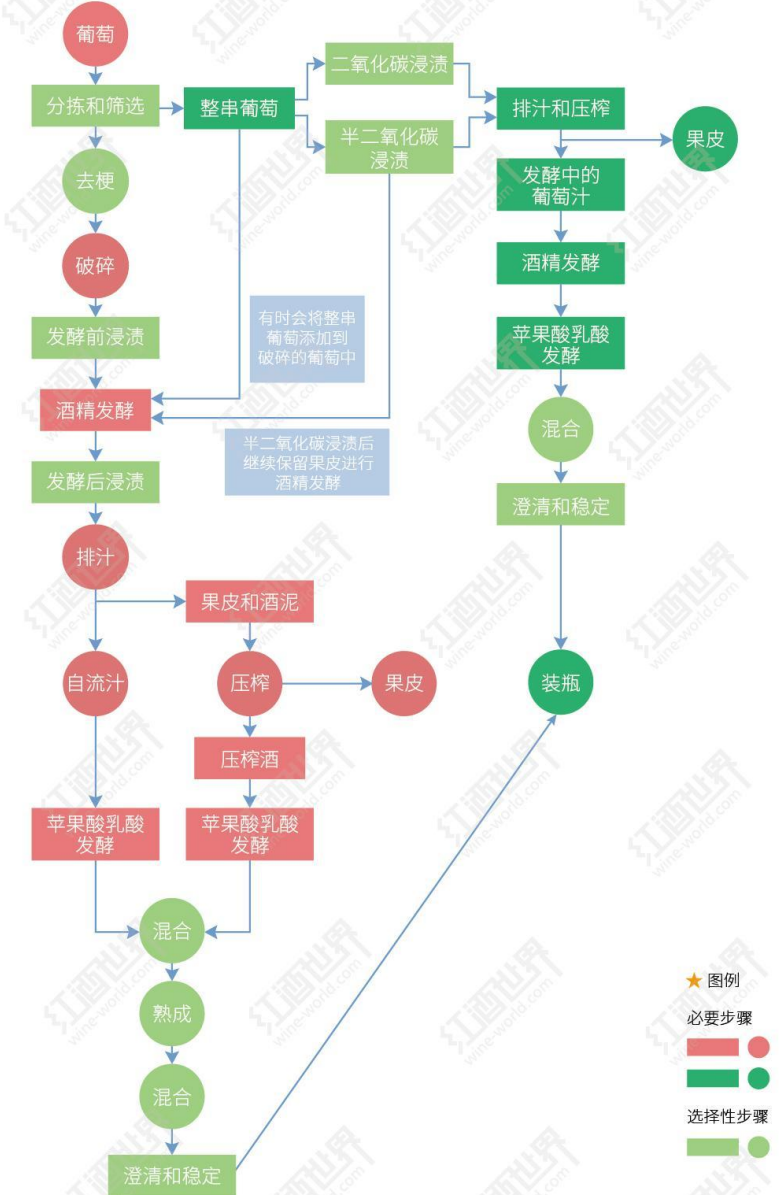
Crush and Pressing

Fermentation

Clarification

Aging and Bottling

红葡萄酒酿造流程图



Reference:

[1] Wine world , zhuanlan.zhihu.com/p/108279979# , 2020.2.21

[2] www.winemonthclub.com/the-wine-making-process

The Harvest : Why does 1982 Lafite hit the headline ?



1982 Chateau Lafite Rothschild

Pauillac, France

Avg Price (ex-tax)

355,317 ¥ / 750ml

★★★★★ 4.5

from 50 User Ratings

95 / 100

14 Critic Reviews

Style

Red - Savory and Classic

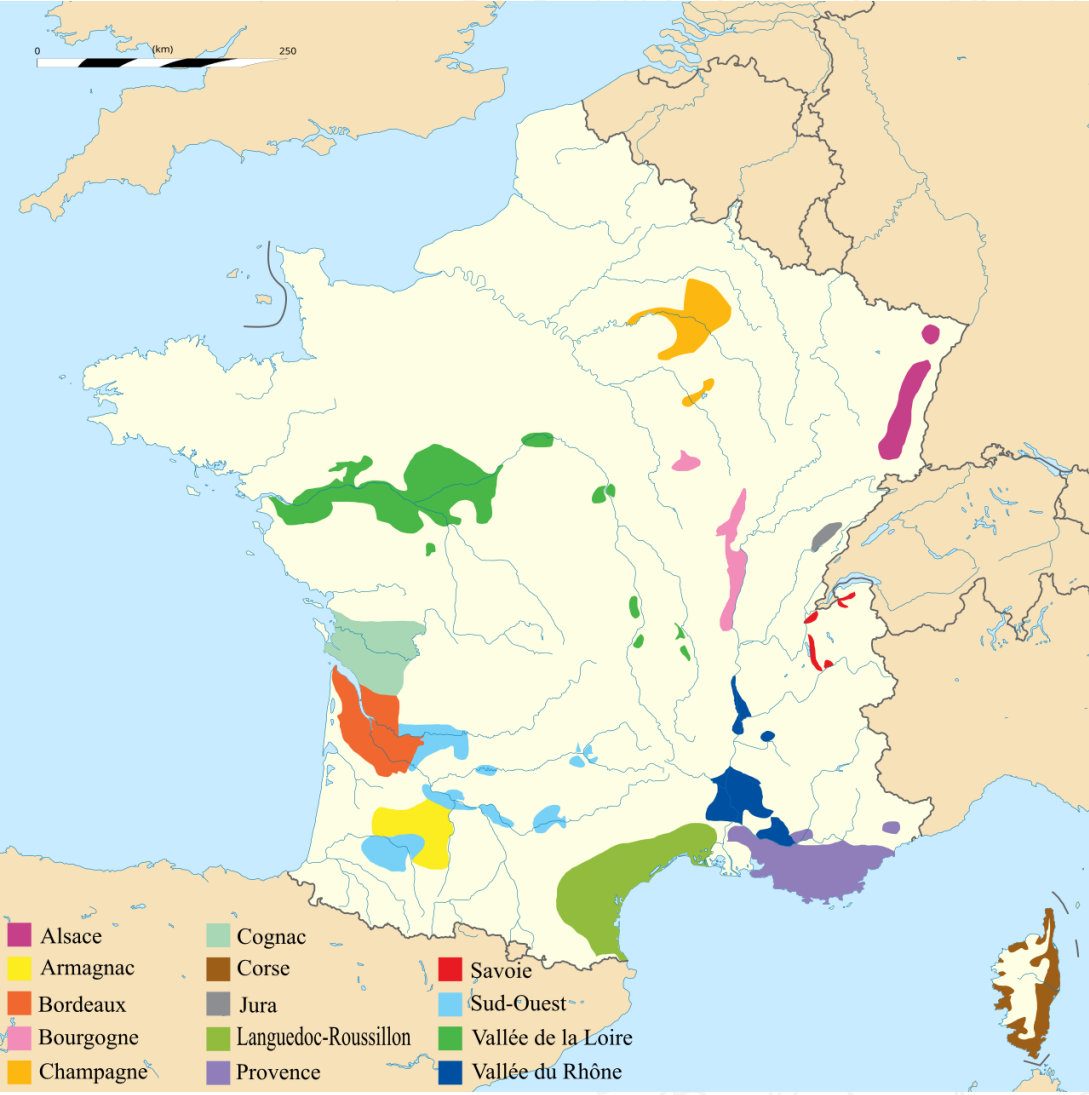
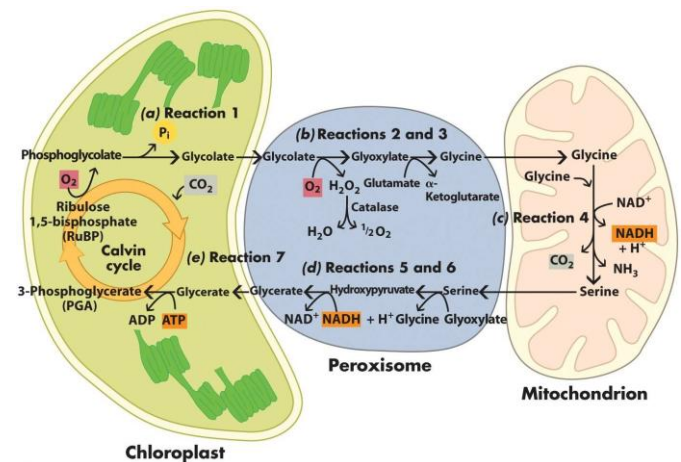
Critic tasting note: (1982 vintage) "The best examples of this are simply great. Elegant, floral, refined, and packed with sweet, spicy, red fruits"

[Learn more](#)



All 2025 2024 2023 2022 2021 2020 2019 2018 2017 2016 2015 2014 2013 2012 2011

Photosynthesis Respiration



Reference:

[1] Archimath - File:Vignobles_France.svg, CC BY-SA 2.5,
<https://commons.wikimedia.org/w/index.php?curid=37093378>



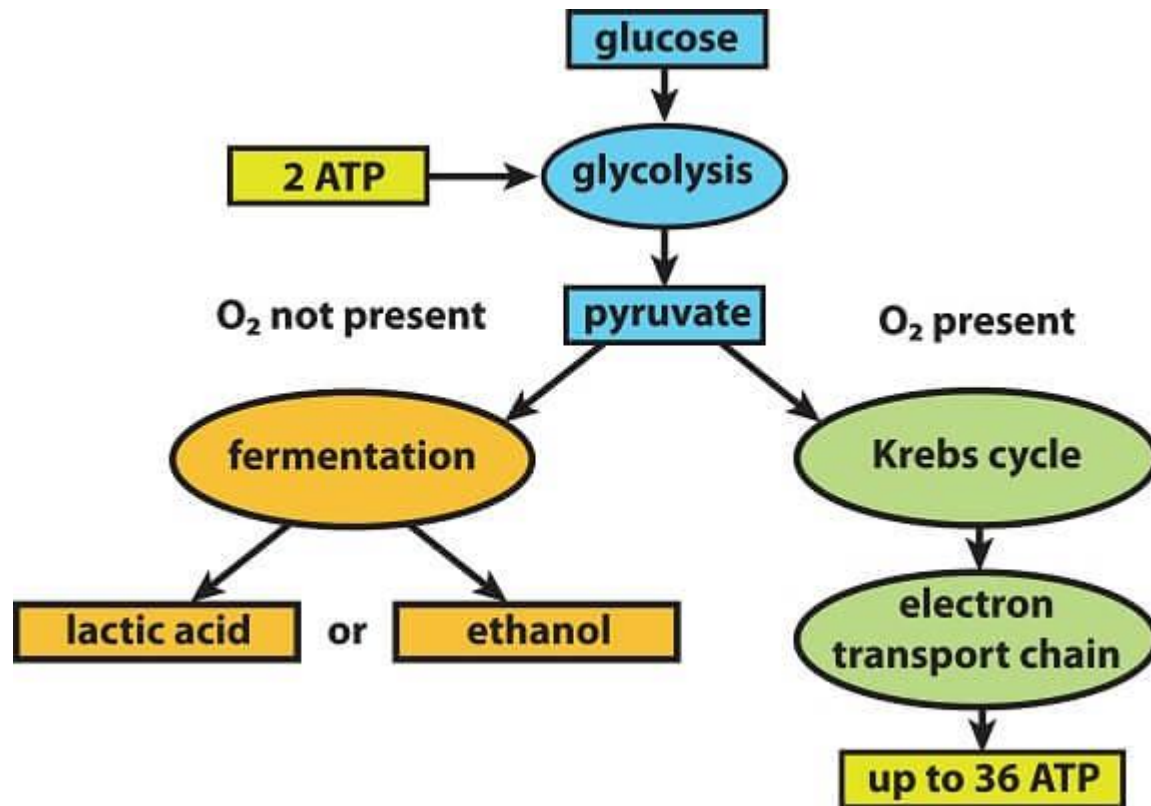
Crush and Pressing: Tech differs , favor varies .

Impregnation:
CO₂ or half-CO₂

The whole bunch of unbroken grapes is placed in a fermentation tank, and then carbon dioxide is injected to expel oxygen, triggering fermentation in the fruit. When the alcohol concentration in the fruit reaches 2%, the skin gradually cracks and the grape juice flows out.



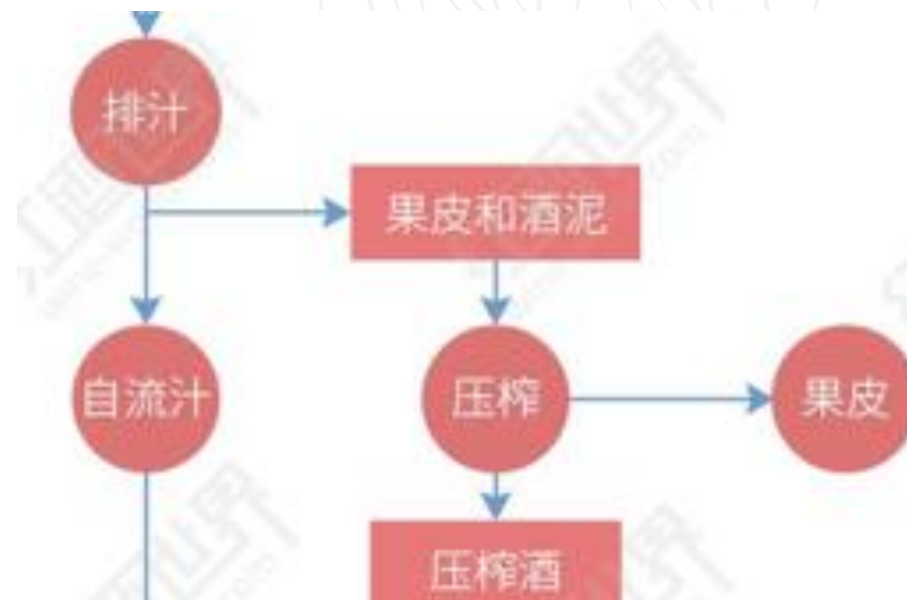
Fermentation: The Magic of Yeast



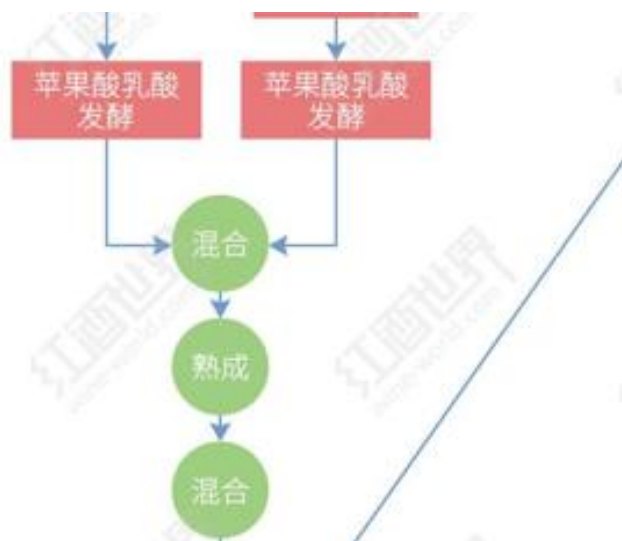
Reference:

[1] <https://biologydictionary.net/wp-content/uploads/2021/01/1-4.jpg>

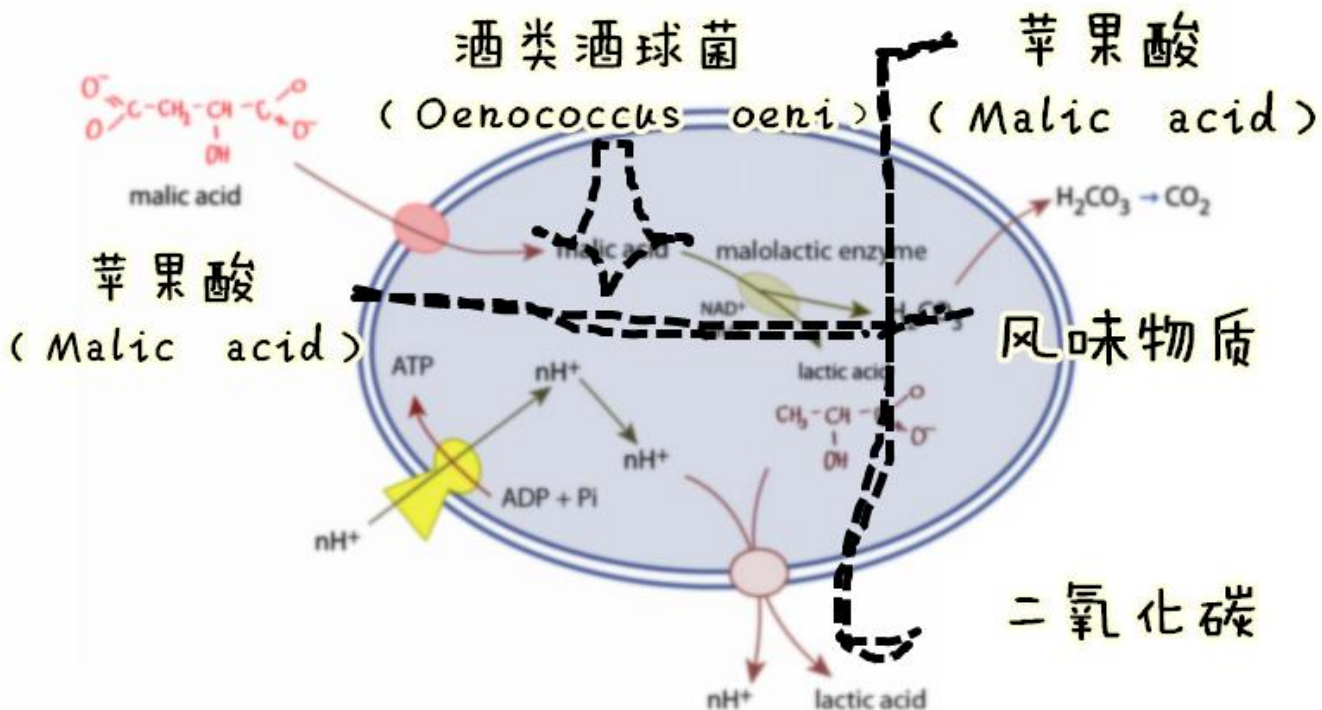
Clarification:



Aging and Bottling: Malic and lactic acid fermentation



Oenococcus oeni can generate fuel (ATP) in an environment such as wine through the decarboxylation of malic acid.





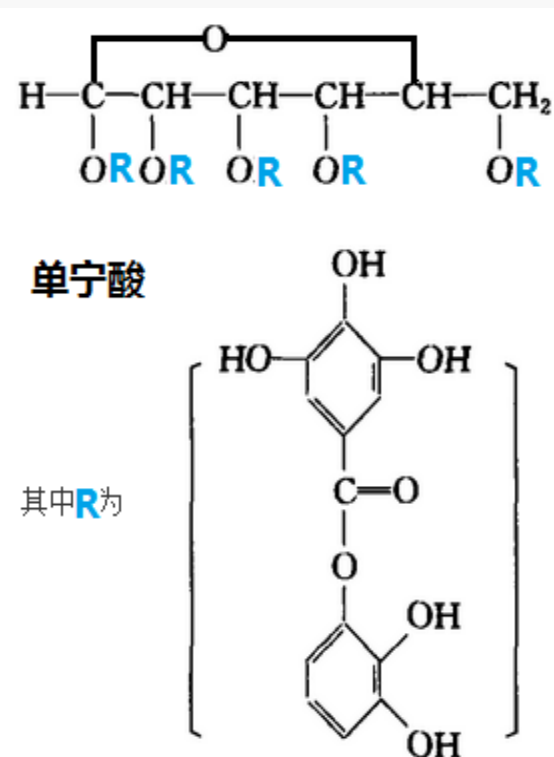
Brands

Tannins单宁

01

Tannins are natural polyphenolic compounds found in grape skins, seeds, and stems.

Main flavor: Dry, astringent



Tastes

02

Intensity

Robust强劲/Soft

Eg. *Sauvignon* 赤霞珠/
Merlot 梅洛

Texture

Velvety天鹅绒/ Coarse
生涩如砂纸(unripe)



Domaine de la Romanée-Conti(罗曼尼·康帝)

Quality Hallmarks:

- 5,000-bottle annual yield (3 vines/bottle)
- Silken tannins 丝绸质感单宁 evolving from violet 紫罗兰 → truffle 松露



Technical Mastery:

- 18th-century manual
= grape treading (4 times /day)
- Precision maceration control (tannin optimization)

Château Lafite Rothschild(拉菲)

Quality Hallmarks:

- Cabernet Sauvignon-dominant blend 赤霞珠混酿
- 20+ year aging potential 陈年潜力
(sandalwood/mineralogy balance 檀木/矿物质平衡)



Technical Mastery:

- Thermoregulated fermentation (28-30°C stainless steel)
-
- Dual pump-over cycles 双次淋皮技术
(anthocyanin enhancement)

Pétrus(帕图斯)

Quality Hallmarks:

- 100% Merlot 梅洛
"liquid velvet 天鹅绒"
texture
- Dark chocolate &
truffle 松露



Technical Mastery:

- Proprietary yeast + 28-day maceration 浸渍
- • Oak chip micro-oxygenation



Penfolds Grange(葛兰许)

Quality Hallmarks:

- Multi-regional blend 混酿 innovation
- American oak fermentation 美桶发酵 (vanilla/coconut signature 香草/椰奶调性)



- Dual-strain yeast succession (EC1118 → RC212)
- Glycosidase activation
= in oak 橡木桶糖苷水解强





The secret to top wine quality is :

- **Using special grapes from specific places**
- **Controlling the fermentation process very precisely**
- **Mixing old and new winemaking techniques**



**Thank you for
watching.**

Signature

