|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 国家/地区 | 产区 | 子产区 | | 气候 | 洋流山脉河湖天灾 | 白品种及风格 | 红品种及风格 |
| Portugal | Vinho Verde |  | | Moderate maritime | Fungal diseases, high pergola traditionally, now high cordon with VSP | **Alvarinho, Loureiro, Arinto** | 很少 |
| Douro |  | | Warm continental | Spring frost, summer rain and hail  Terraced vineyards (Socalcos) | 不很有名，不管 | **Touriga Nacional**, Touriga Franca, Tinta Cão  **Tinta Roriz (Tempranillo),** Tinta Barroca |
| Bairrada |  | | Warm maritime | Rainfall during harvest | Bical, Maria Gomes | **Baga, Touriga Nacional, Alfrocheiro** |
| Dão |  | |  | Cold, wet winter and warm, dry summer.  Some altitude, large diurnal range. | Encruzado | Touriga Nacional, Tinta Roriz, Alfrocheiro,  **Jaen (Mencía)** |
| Lisboa VR |  | | Warm maritime | Very sandy, some places no phylloxera | Local and international | Local and international |
| Alentejo |  | | Continental | with hot summers, north cooler, central and south dry warm | **Arinto**, Antão, Roupeiro | **Aragonês (Tempranillo), Trincadeira,**  **Alicante Bouschet** |
| Alentejano VR |  | | Continental with hot summers |  | 书上没写 | Trincadeira, international |
| Spain | The North West | Rías Baixas | | Moderate maritime | Fungal disease like mildew and rot, pergola | **Albariño** | 书上没写 |
| Bierzo | | Moderate with maritime influence |  | 书上没写 | **Mencía** |
|  | Castilla y León VdlT | | 书上没写 | North of Meseta Central | 各种 | 各种 |
| The Duero Valley | Rueda | | Moderate continental |  | **Verdejo**, Sauvignon Blanc  Lemon, peach flavor, high acidity. Not for ageing. | 书上没写 |
| Toro | | Continental | Higher altitude, large diurnal range | 有，具体没写 | **Tempranillo**  Deep colour, hith acidity, high tannin=full body, high concentration, good ageing potential |
| Ribera del Duero | | Continental | cut off from any maritime influence by a ring of mountains. High altitude, large diurnal range  Vineyards on highest part of Meseta Central | 有，具体没写 | **Tempranillo**  Deep colour, hith acidity, high tannin=full body, intense dark fruits and new oak, significant ageing potential, premium price |
| The Upper Ebro | Rioja Oriental | | Less maritime | Hotter summer, more severe winter. Lower altitude, flatter terrain, little ocean influence, annual rainfall can be low, draught | **Viura**, simple, fresh, fruity or deeply coloured with tertiary character | **Garnacha, Graciano** |
| Rioja Alavesa | | 没写 | Higher altitude, lower rainfall due to mountains to the north, some Atlantic influence | 一样 | **Tempranillo, Graciano, Mazuelo**, classic style overt oak flavours, lighter fruit, long ageing potential. Modern style ripe fruit, long maceration shorter oak maturation. |
| Rioja Alta | | Similar with Alavesa | Similar with Alavesa | 一样 | 一样 |
| Navarra | | Similar to Rioja | cooler and wetter north near the mountains. | 少量 | Tempranillo等，风格跟rioja 一样 |
| Calatayud & Cariñena | | Warm continental | Low rainfall | 没写 | **Garnacha, Cariñena** |
| Spain | Catalunya | Catalunya | | 没写 | 没写 | Cava varieties + international | 没写 |
| Penedès | | Three climatic zones: warm Mediterranean in the coast, cooler inland, moderate in the hills. |  | Cava varieties + international | international |
| Priorat | |  | Inland hills. Long hot dry summer with low rainfall  Bush trained vines on sleep slopes. | 没写 | **Garnacha, Cariñena**, international,  Deep colour, high tannin, high alcohol with pronounced dark fruits and toasty French oak notes. |
| Castilla-La Mancha | La Mancha | | Extreme continental climate | In Meseta central, drought | **Airén**, international | **Cencibel**=tempranillo, international |
| Valdepeñas | | 跟La Mancha类似 | 跟La Mancha类似 | 跟La Mancha类似 | 跟La Mancha类似 |
| The Levante | Valencia | |  | Hot and dry. Drought resistant variety | **Muscat of Alexandria** sweet fortified wine. | **Monastrell**=Mourvedre, deep colour, full body, high alcohol, medium to low acidity |
| Jumilla & Yecla | |  | Hot and arid. Drought resistant variety | 没写 | 跟Valencia一样 |
| Italy | Trentino-Alto Adige | Alto Adige | | Moderate continental | Cool influence from the Alps, short dry summers | **Pinot Grigio**, dry, light to medium body, high acidity and citrus green fruit flavours.  Gerwurtz, Cha, Pinot Blanc | Schiava |
| Trentino | | Similar to Alto Adige | Warmer, flatter terrain | Chadonnay, Pinot Grigio | Merlot, Teroldego |
| Friuli-Venezia Giulia | Collio, Colli Orientali, Friuli Grave | | Moderate continental in the north, warm maritime in the south. | North cooled by air from the Alps,  South affected by the Adriatic Sea. | Pinot Grigio, Friulano | Merlot |
| Veneto | Soave | | Warm continental | Moderate rainfall.  Foothills in the north, large diurnal range  flat plain in the south, moist air and fog from River Adige. | **Garganega**, medium to high acidity, medium body, pear, red apple and stone fruits. Not for ageing. | 没说 |
| Valpolicella | | 跟Soave一样 | 跟Soave一样 | 没说 | **Corvina**, pale, lower tannin, light body with cherry flavours. Amarone all are high, red berry and spice flavours. |
| Piemonte | Barolo DOCG | | Moderate continental | Long cold winter, thunderstorm, hail and fog in summer. Spring frost.  North mountains provide rain shadow | 无 | **Nebbiolo** ONLY, pale colour, high acidity and very high tannin, sour cherry, violet and tar flavours. At least 3 years ageing, including 1.5 years in oak |
| Barbaresco DOCG | | Similar to Barolo | Lower altitude than Barolo | 没说 | Riper fruit, less concentrated than Barolo. 2 years maturation, 9 months oak. |
| Barbera d’Asti DOCG | | 没说 | 没说 | 没有，DOCG名称限制了品种 | **Barbera**, both youthful fruity and barrel-aged are made. |
| Dolcetto d’Alba DOC | | 没说 | 没说 | 没有，DOCG名称限制了品种 | **Dolcetto**, very deep colour, low acid, high tannin, black plum, red cherry and dried herbs. Both youthful and barrel-aged. |
| Cortese di Gavi DOCG | | 没说 | 没说 | **Cortese**, pale, light body, high acidity, drink young. | 没有，DOCG名称限制了品种 |
| Tuscany | Chianti | |  | Hilly terrains, cooling effect from Apennine mountain | 少量 | **Sangiovese**, high acid, medium to high tannin, red cherry, red plum and dry herbs, no stipulations for oak maturation. Chianti Classico 1 year maturation, Riversa 2 years, 3 months bottle ageing. Gran Selezione single estate, 30 months maturation |
| Italy | Southern hills (BDM, VNDM) | | warmer climate | Lower altitude, maritime breezes from the coast moderate temperature | 没说 | Sangiovese, more intense, higher in alcohol, fuller bodied. BDM only uses Sangiovese, 5 years maturations, 2 years in wood. VNDM is a blend on Sangiovese, 2 years maturation，注意不是贵腐，与Alsace的SGN不要混了 |
| Coastal plains (Toscana IGT, Bolgheri DOC) | |  | Sea breezes | Vin Santo, made throughout Tuscany, dried grapes from local varieties. Sweet and oxidative. | Black Bordeuax, international. Super Tuscan under Toscana IGT or recent Bolgheri DOC |
| Umbria |  | | Similar to Tuscany, more continental | No influence from the Mediterranean. | **Grechetto, Trebbiano** in Orvieto DOC, simple, light body, fairly high acidity. | Sagrantino in Sagrantino di Montefalco DOCG. Deep colour, full body, high acidity, LOTS of tannin. |
| Marche |  | | 没说 | Eastern side of Apennine. | **Verdicchio**, Verdicchio dei Castelli di Jesi DOC, simple fresh, high acidity early drinking. some can age. | Blends of Montepulciano and Sangiovese. |
| Lazio |  | | 没说 | Cooled by altitude and nearby lakes | **Malvasia, Trebbiano**, Frascati DOC, wine of rome, simple, light body, quite high acidity | 没说 |
| Abruzzo |  | | 没说 | 没说 | 没说 | **Montepulciano**, Montepulciano d’Abruzzo. Deep colour, high tannin, medium acidity, fruity. Both simple and concentrated. 注意不要和Tuscany的Montepulciano搞混，两者没有关系。 |
| Campania |  | | Mediterranean | Varied landscape with mountains, valleys and coastal plains. | **Fiano**, Fiano di Avellino DOCG, medium acidity, fully body, stone fruit and melon, both young and age.  **Greco**, Greco di Tufo. High acid, light body, apple stone fruit, both young and age. | **Aglianico**, in Taurasi DOCG, deep colour, high tannin, high acidity, one of Italy’s finest grapes. Big potential. |
| Basilicata |  | | 没说 | Mountainous, vineyards high altitude. | 没说 | **Aglianico**, Aglianico del Vulture DOC, 没有Taurasi有名 |
| Puglia |  | | Hot climate |  | 没说 | **Negroamaro**, Salice Salentino DOC, deep colour, full body, medium acidity and tannin, high alcohol.  **Primitivo** + Negroamaro in Puglia IGT  Simple fruity bulk dry red. |
| Sicilia | Terre di Sicilia IGT, Sicilia DOC | | 没说 |  | international | **Nero d’Avola**, international |
|  | Etna DOC | |  | Active volcano with high altitude | Etna Bianco, mineral, relatively high acid, rich texture. | Etna Rosso, high acidity, relatively high tannin, red fruits, dried herbs. |
| Greece | Naoussa PDO |  | | Hot mediterranean | Strong wind, drought, free of fungal diseases.  Altitude have cooling effect. | 没有 | Red from **Xinomavro** ONLY, like Nebbiolo. Great potential for ageing. |
| Nemea PDO |  | | Hot mediterranean | Strong wind, drought, free of fungal diseases.  Altitude | 没有 | Red from **Agiorgitiko** ONLY. High tannin, low acidity, red fruit |
| Santorini PDO |  | | Hot mediterranean | Very strong wind, drought, free of fungal diseases, Basket-like training | **Assyrtiko**, high acidity with ripe citrus and stone fruits, Vinsanto style also made. | 没写 |
| Hungary | Tokaj |  | | Moderate continental | Carpathian mountains block cold north wind, Two rivers moderate climate and provide conditions for botrytis. Vineyards at foothills. | Furmint, Hárslevelű, Sárga Muskotály. Furmint very high acidity, not very aromatic, provides structure and ageing potential. Hars and Sarg provides grapey, spicy aromatics. |  |
| Chile |  |  | | Warm Mediterranean | Almost no weather hazards, affected by latitude from the Andes and proximity to the coast, which is cooled by Humboldt Current. El Nino and La Nina influence. |  |  |
| Coquimbo Region | Elqui Valley, Limarí Valley,  Choapa Valley | |  | Borders the Atacama Desert, dry, lack of water. Brilliant sunshine, cooling influences from sea breezes or mountain air. | Elqui SB, Limari Chardonnay | Elqui Syrah. |
| Aconcagua Region | Aconcagua Valley | |  | Less ocean influence, warm with fertile soil. | 没说 | CS, Syrah, **Carmenere**, rich ripe fruit flavours with high alcohol and tannins. |
| Casablanca Valley, San Antonio Valley, Leyda Valley, | |  | Influenced by cool sea breeze and fog, very cool region but dry. | SB, Chardonnay | Syrah, Pinot Noir |
| Central Valley Region | Maipo Valley | |  | Surrounded by mountains, blocking ocean influence. Premium sites at foothills, cooled by descending air from mountains. | 没说 | Intense and structural CS |
| Rapel Valley  Cachapoal, Colchagua | |  | Very large region with great diversity. Almost no influence in Cachapoal, cool west and warm east in Colchagua. | 没说 | Carmenere, Syrah, CS |
| Curicó Valley, Maule Valley | |  | Warm with fertile soil. Traditionally bulk wine region. Dry farming is common. | SB, Chardonnay | Merlot, CS, **Old vine Carignan** |
| Southern Region | Itata Valley,  Bio Bio Valley,  Malleco Valley | |  | Cooler and wetter due to the southern location | **Muscat of Alexandria** in Itata and Bio Bio.  Chardonnay in Bio Bio, Malleco. | Pinot Noir in Malleco.  **Pais** in itata and bio bio. |
| Argentina |  |  | |  | Andes mountains, Altitude of vineyards, low rainfall, excessive heat, summer hail. |  |  |
| Salta Province |  | |  | Very high altitude, very large diurnal range. Cafayate is most well-known. | **Torrontes** | **Malbec**, CS |
| La Rioja Province |  | |  | Hot due to lower altitude. Famatina Valley is the main vineyard area. | Torrontes | CS, Syrah, **Bonarda** |
| San Juan Province |  | |  | Similar altitude to Mendoza | Chardonnay, Torrontes | Syrah, Malbec, CS, Bonarda |
| Mendoza Province | North and East Mendoza | |  | Flat terrain with lower altitude, hot climate. Irrigation from Mendoza River. Bulk wine. | 没说 | 没说 |
| Central Mendoza | |  |  | 没说 | **Lujan de Cuyo** department very fine Malbec.  **Maipu** lower altitutde, CS and Syrah. Also bulk wine, also old vine Bonarda and Tempranillo. |
| Uco Valley | |  | Highest altitude in Mendoza, dry and cool. Diversity in meso-climate, altitude, soli. | Chardonnay, Torrontes, SB | Malbec, CS, Merlot, Tempranillo, Pinot Noir |
| Southern Mendoza | |  | San Rafael department, lower altitude, but southerly location makes it cool. | 没说 | 没说 |
| Patagonia Region | Rio Negro Province, Neuquen province. | |  | lower altitude, but southerly location makes it cool. Strong desert winds, low rainfall, low disease pressure, large diurnal range. | SB, Chardonnay | Malbec, CS, Merlot, Pinot Noir |
| South Africa |  |  | | Overall Mediterranean | Benguela Current, Cape Doctor wind.  Mountains provides aspects, high altitude and breezes. |  |  |
| Coastal Region | Stellenbosch district | | Moderate to warm Mediterranean | Sufficient rainfall in the winter and summers not too hot, cool winds from False Bay. Diversity of altitude, aspect and soil types. | Sauvignon Blanc, Chardonnay | Cabernet Sauvignon, Merlot (Bordeaux blend), Syrah, and **Cape blends**. |
| Paarl District | |  | Less sea influence, warmer inland.  Diversity of altitude, aspect and soil types. | **Chenin Blanc**, Chardonnay | CS, Syrah, **Pinotage** |
| Cape Town district | Constantia ward |  | Constantly cooled by Cape Doctor. | Sauvignon Blanc, Semillon | Shiraz, Cabernet Sauvignon |
| Durbanville ward |  | Hillside, sea breezes. | Sauvignon Blanc | 没说 |
| Swartland district | |  | Cool near coast, hot inland | Old vine Chenin Blanc | Dry-farmed Syrah |
| Breede River Valley | Worcester district,  Robertson district | |  | Worcester hot and dry, irrigation is needed.  Robertson some ocean influence. | Mainly bulk red and white.  Brandy from Chenin blanc and **Colombard**. | Robertson has good Syrah and Chardonnay. |
| Cape South Coast | Elgin district, Walker Bay district -> Hemel en Aarde ward, Agulhas district -> Elim ward | |  | Cooling see breeze for Walker Bay district  Higher altitude for Elgin district. | Chardonnay + Pinot Noir are the stars. Syrah, Sauvignon Blanc also popular. |  |
| Australia | South Eastern Australia Zone | Murry Darling, Riverina, Riverland | |  | Dry and hot, fertile irrigated vineyards. | Bulk wine  Riverina produces premium botrytis Semillon. | Bulk wine |
| South Australia | BCE, ML, CA  Barossa Valley | |  | Hot and dry, lots of old bush vines. | Semillon | Very ripe black fruits Syrah with American oak flavours, GSM blend |
| Eden Valley | | Cool to moderate climate | Higher altitude, large diurnal range suits whites | Riesling is key variety, dry, lime, steely, great ageing potential. | Shiraz |
| Clare Valley | |  | Some altitude influence, large diurnal range. | Riesling is key variety. | Shiraz, CS. |
| McLaren Vale | | Warm climate | Sea temper the climate | 没说 | Old vine Grenache and Shiraz famous. CS, Merlot. |
| Adelaide Hills | | Moderate climate | Higher altitude creates a cooler sub-climate | Refreshing SB, oaky Chardonnay. | Pinot Noir for still wine and blends for sparkling. |
| Coonawarra | | Moderate maritime climate | Cold currents from the Antarctic, cloud cover moderate temperature. Terra Rossa soil over limestone subsoil. | Chardonnay | Eucalyptus CS. Shiraz, Merlot |
| Victoria | YH, MP, GG  Yarra Valley | | Cool to moderate maritime | Wide range of altitudes and aspects. | Chardonnay, as well as sparkling. | Rich Pinot Noir. Shiraz, CS. |
| Mornington Peninsula | | Costal cool to moderate maritime | Vintage variation due to cool, windy weather at flowering and harvest. Lots of small boutique wineries. | Chardonnay | Pinot Noir |
| Geelong | | Similar to MP |  | Chardonnay, as well as sparkling. | Pinot Noir, Shiraz. |
| Goulburn Valley | | Moderate climate | Moderated by creeks, lakes and rivers. | Marsanne | Shiraz |
| Heathcote | | Moderate climate | Cooling effects from higher altitude. | Chardonnay | Elegantly structured Shiraz. CS, Tempranillo, Sangiovese. |
| New South Wales | Hunter valley | |  | Hot and humid, unsettled rain weather in harvest. canopy management to prevent fungal diseases. | Semillon, Chardonnay | Shiraz |
| Western Australia | MR, GS  Margaret River | | Warm Mediterranean | Rainfall high, mainly in winter. | Chardonnay, Semillon, SB. SSB+SBS. | CS, Merlot (Bordeaux blend) |
| Great Southern | | 没写 | Includes subregions of Mount Baker and Frankland River. | Riesling | CS, Shiraz. |
| Tasmania |  | | Cool maritime |  | Chardonnay, SB, Pinot Gris | Pinot Noir |
| New Zealand | Auckland |  | |  | Warm and wet, fungal disease. Waiheke Island is famous for quality red. | Chardonnay | Merlot, Syrah |
| Gisborne |  | | Warm climate | Higher temperature, long sunshine hours and high rainfall in growing season. | Chardonnay, Gewurztraminer, Pinot Gris |  |
| Hawke’s Bay |  | |  | Warmest, and longest sunshine hours. Drier due to mountains to the west. | 没说 | Gimblett Gravels particularly good for CS, Syrah, and Merlot. |
| Wairarapa |  | |  | Cool and windy with large diurnal range. | 没说 | Pinot Noir. Martinborough is the most well known. |
| Marlborough |  | |  | Diversity of sub-regions. Wairau (similar to Martinborough, large area, warmer), Awatere (south, drier, cooler, windier). | SB is majority. Chardonnay | Pinot Noir, also for sparkling. |
| Nelson |  | |  | Cooler and wetter than Marlborough. | SB, Chardonnay, Pinot Gris | Pinot Noir |
| Canterbury |  | |  | Cooling influence from the Pacific. | SB, Riesling | Pinot Noir |
| Central Otago |  | | Cool Continental. | Large diurnal range, spring and autumn frost damage. Very high UV. | Pinot Gris, Riesling, Chardonnay. | Deep coloured, rich and fruity Pinot Noir. |
| USA | California - North Coast (Mendocino County) |  | | Mediterranean | Coastal regions cooled by cold ocean currents and fog, coastal mountains and central valley much less cooling effect. Great diversity. |  |  |
| Mendocino AVA | |  | Behind coastal hills, much warmer, drier. | 没说 | CS, Zinfandel, Syrah |
| Anderson Valley AVA | |  | Close to coast, very cool | Riesling, Gewurztraminer, still and sparkling | 没说 |
| California - Sonoma County |  | |  | Cooling effects and fog from south and west, eastern inland much warmer. |  |  |
| Alexander Valley AVA | |  | warmer |  | CS |
| Dry Creek Valley AVA | |  | Warmer than Russian River Valley, hillside vineyard above fog layer warmer for red, valley floor vineyards cooler for white | SB | Zinfandel |
| Russian River Valley AVA | |  | Break in coastal ranges (Petaluma Gap) leads to cool, foggy conditions. | Chardonnay, still as well as sparkling. | Pinot Noir |
| Sonoma Coast AVA | |  | Greatly influenced by cold Pacific Ocean, vineyards on south-facing slopes to maximize ripening. | Chardonnay | Pinot Noir |
| California - Napa County |  | |  | Morning fog and cool afternoon breezes from San Pablo Bay |  |  |
| Howell Mountain, Mount Veeder | |  | Lie above the fog layer, cooled by altitude. West facing aspect (Howell Mountain AVA) with hot afternoon, warmer than east facing vineyards (Mount Veeder AVA). | Chardonnay | CS, Merlot, CF, **Zinfandel** |
| St. Helena, Calistoga AVA | |  | Macayamas mountain 在 Calistoga的正北面  Warmest daytime temperatures, Cool air from Macayamas relieves afternoon and night temperatures. | 没说 | CS, Zinfandel, Syrah |
| Stags Leap District, Yountville, Oakville, Rutherford | |  | Moving north along the valley, less sea breeze influence, warmer. Rutherford warmest. | SB, Chardonnay with ripe tropical fruit flavours. | CS, Merlot |
| Los Carneros AVA | |  | Most southerly, valley floor, cool from sea breezes | Chardonnay, still and sparkling | Pinot Noir |
| California - Central Coast |  | |  |  |  |  |
| Santa Cruz Mountains, Monterey AVA | |  | Influenced by cooling wind from the sea. Inland much warmer. Santa Cruz Mountains has hillside locations with infertile soils. | Chardonnay | Pinot Noir, elegant CS, Merlot, Syrah |
| San Luis Obispo County - Paso Robles AVA | |  | east hot sunny weather, deep fertile soil for bulk wine, west cooled by marine air, high quality Zinfandel and Rhone varieties. |  | Zinfandel, CS, Merlot, Syrah |
| Santa Barbara County – Santa Maria Valley AVA | |  | Significantly cooler, influenced by the cooling wind due to the east-west lying mountains. | Chardonnay | Pinot Noir |
| California - Central Valley | Sacramento Valley  San Joaquin Valley | |  | Hot, dry, irrigation widely practiced. Bulk wine.  No AVA, simply labelled California | Chardonnay, Chenin Blanc, Colombard | CS, Merlot, Barbera |
| Lodi AVA | |  | East of Sacramento Delta, Cooling breezes from San Francisco Bay. |  | Oldest and best **Zinfandel**. |
| Washington State | Columbia Valle,  Yakima Valley, Walla Walla AVA | | Continental climate | East of Cascade mountains, large diurnal range, winter freeze, very dry, irrigation, low disease pressure. | Chardonnay, Riesling | Merlot, CS, Syrah |
| Oregon State | Northern Oregon- Willamette Valley AVA | | Warmer climate | Cooling breezes from the Pacific Ocean. Dry, long sunny days and cool nights. | Pinot Gris | Pinot Noir |
| Southern Oregon AVA | |  | Warmer than the north, more diversity in varieties. | Pinot Gris | PN, CS, Syrah |
| New York State | Finger Lakes AVA | |  | Too cold for vitis vinifera. Many American and hybrids grown here. Finger lakes store heat, raise air temperature, extend growing season. | Riesling, Chardonnay | Pinot Noir |
| Canada |  |  | | Continental climate | Warm summers and cold winters. Large lakes can moderate extreme temperatures in winter. Cold winters with heavy snowfall ideal for icewine. |  |  |
| Ontario | Niagara Peninsula VQA | |  | Lake Ontario moderate temperatures, extends growing season, delay budburst minimizing frost damage. Airflow reduces fungal diseases. | Riesling, Vidal for Icewine. Chardonnay. | Merlot, CabFranc, CS, Pinot noir. |
| British Columbia | Okanagan Valley VQA | |  | Rain shadow from coastal mountains, low rainfall, semi-desert environment. Large lakes moderate temperature, extends growing season. | Pinot Gris, Chardonnay,  Icewine from Riesling and vidal. | Merlot, Pinot Noir |
| France | The Loire Valley |  | | coastal maritime, inland continental | Fungal disease linked with high levels of rainfall. Best vineyards on mid-slope, southerly aspect, facing the river. |  |  |
| Val de Loire IGP | |  |  |  |  |
| The Loire Valley - Nantais | Muscadet, Muscadet Sevre-et-Maine AOP | |  |  | **Melon Blanc**, dry, **Sur lie** is specialty |  |
| The Loire Valley – Anjou-Saumur | Coteaux du Layon AOP | |  | Ideal condition for botrytis | **Sweet Chenin Blanc ONLY**  Quarts de Chaume, Bonnezeuax | 没有 |
| Anjou AOP, Saumur AOP | |  |  | Chenin blanc, Anjou dry, Saumur sparkling | Anjou没有说  Saumur Lighter body CF |
| Savennieres AOP | |  | South facing slope with schist | Dry chenin blanc, wet woot and stony/flint notes. | 没说 |
| Saumur-Champigny AOP | |  |  |  | At least 85% CF, most fruity, light body |
| Rose de Loire AOP,  Rose d’Anjou AOP,  Cabernet d’Anjou AOP | |  |  |  | Rose de Loire: dry, CF&CS  Rose d’Anjou:semi-dry, **Grolleau**  Cabernet d’Anjou: semi-sweet, CF & CS |
| The Loire Valley – Tourain | Bourgueil AOP, Chinon AOP | |  |  | 没说 | CF, Chinon fuller body, Bourgueil lighter. |
| Vouvray | |  | Vineyards on tuffeau cliff | Chenin | 没有 |
| Touraine AOP | |  |  | High volume white, most SB. | High volume red from Gamay, CF or Malbec, often like Beaujolais |
| The Loire Valley – Central Vineyard | Menetou-Salon AOP,  Pouilly-Fume AOP | |  | Limestone and flinty, smoky and gunflint flavour | SB, Pouilly-Fume 贵些 | 没有 |
| Sancerre AOP | | Cool Continental | Clay, gravel, limestone and flint soil. | SB | Red和rose可以，但没有说品种 |
| Bordeaux |  | | Moderate maritime | Three rivers, close to Atlantic, Landes forest, Gulf stream. Prolonged growing season, rainfall throughout the year, fungal diseases, flowering and fruit set, dilute fruit. Lots of spraying. Organics difficult. |  |  |
| Entre-Deux-Mers AOP  Bordeaux Blanc AOP | |  |  | **Only WHITE**, mainly from SB | 没有 |
| Pessac-Leognan AOP,  Graves AOP | |  | Gravel soils suited to Cabernet Sauvignon. | SB+Semillon | CS, Merlot. |
| Medoc, Haut-Medoc, St. Estephe, Pauillac, St. Julien, Margaux AOPs | |  | Medoc clay soil for Merlot,  Haut-Medoc onwards gravel soil, CS more than Merlot. | 没说 | CS, Merlot. |
| St. Emilion, Pomerol AOP | |  | Plateau on the north and west warm well-drained gravel and limestone, CF and CS.  South and east escarpment sandy, clay limestone soil | 没说 | Merlot, CS, CF, Petit Verdo |
| Cotes de Bordeaux | |  |  | 没说 | Merlot based for early drinking. |
| Barsac AOP, Sauternes AOP | |  | Rivers of Garonne and Ciron create ideal misty autumn conditions for noble rot. | Semillon is predominant, passerillage is allowed. | 没有 |
| Dordogne |  | | Continental | Right to the east of Bordeaux. Similar to Bordeaux. Less ocean influence. |  |  |
| Bergerac AOP | |  |  | SB, Semillon | Merlot, CS, CF, Petit Verdo |
| Monbazillac AOP | |  |  | SB, Semillon, like Sauternes | 没说 |
| France | South West France |  | | Continental | Much stable, riper fruit and more concentration, less diseases. |  |  |
| Cotes de Gascogne IGP | |  |  | Ugni Blanc + international, Armagnac | 没说 |
| Cahors AOP | |  |  | 没有 | At least 70% Malbec, vin noir, concentrated and powerful. |
| Madiran AOP | |  |  | 没说 | **Tannat**, full-bodied sometimes rustic red, very tannic |
| Jurancon AOP | |  |  | **Petit Manseng**, late harvest dry and sweet white, Passerillage, NOT Botrytis | 没说 |
| Alace |  | | Cool to moderate continental | Vosges mountain shelters from westerly rain bearing winds, lack of clouds, sunny summers and dry autumns. Drought can be an issue. Great varieties of soils. Slopes vines trained low to gain radiated heat, plains vines trained high to avoid spring frost. Organic and biodynamic widely practiced. |  |  |
| Alsace AOP | |  |  | **Sylvaner**, Pinot Blanc, Riesling, Muscat, Pinot Gris, Gewurztraminer, Chardonnay, Edelzwicker/gentil for blends | Pinot Noir |
|  | Alsace Grand Cru AOP,  Vendanges Tardives,  Selections de Grains Nobles | |  |  | Riesling, Muscat, Pinot Gris, Gewurztraminer | 没有 |
| Burgundy |  | | Continental | Spring frosts, summer hail, rain or rot at harvest |  |  |
| Chablis region | | Cool continental | Slope and aspect important, limestone soil. | **ONLY permit Chardonnay** | 没有 |
| Cote de Nuits region | | Moderate continental | Marl soil suitable for Pinot Noir. | 没有 | **Pinot Noir** |
| Cote de Beaune region | | Moderate continental | East, southeast slopes, mainly limestone, some villages marl soid | **Chardonnay:Beaun, Mersault, P-Montrachet, C-Montrachet** | **Pinot Noir: Aloxe-Corton, Pommard, Volnay** |
| Cote de Beaune-Villages AOP | |  |  | **没有** | 有 |
| Cote de Nuits-Villages,  Bourgogne Cote d’Or,  Bourgogne Hautes Cotes de Beaune,  Bourgogne Hautes Cotes de Nuits | |  |  | 有 | 有 |
| Cote Chalonnaise | |  |  | **Montagny AOP only allow white.** Rully白比红好 | Mercury和 Givry的红比白有名 |
| Maconnais | |  | Limestone soil, majority is white | **Pouilly-Fuisse, Saint-Veran AOP only allow white.** | Pinot Noir, Gamay, only a small amount. |
| Beaujolais |  | | Moderate continental | Granite hillsides in the north, flat sandy soils in the south. Gamay traditionally goblet trained and spur pruned. | 没有说 | Gamay |
| France | Northern Rhône |  | | warm continental | Cold north winds mistral - Vines are supported stake or bunch of stakes. Rhone river. Lateral valleys – protect from mistral. South facing slopes. Granite soil. | Viognier, Marsanne, Roussanne | Syrah |
| Cote Rotie AOP | |  | Excellent aspect, roasted slopes. | 没有 | **Only Red from Syrah**, up to 20% Viognier co-ferment allowed.  Deeply coloured, full-bodied, spicy. |
| Condrieu AOP | |  | Steep, well-exposed, terraced vineyards. | **Only white from Viognier** | 没有 |
| Saint-Joseph AOP | |  |  | Marsanne, Roussanne | Syrah, mostly light body, fruity. |
| Hermitage AOP | |  | South facing slopes, lieux-dits vary in steepness and aspect. | 有 | <15% Marsanne, Roussanne co-ferment with Syrah allowed. |
| Crozes-Hermitage AOP | |  | Slopes in the north, plain in the south | 有 | <15% Marsanne, Roussanne co-ferment with Syrah allowed |
| Cornas AOP | |  | Warmest in Northern Rhone. South facing slopes. | 没有 | **100% Syrah** |
| Southern Rhône |  | | **Warm Mediterranean** | Flatter terrain, Galet/pudding stone, Mistral strong, need wind break, Bush trained traditional. | Viognier, Marsanne, Roussanne, Grenache Blanc | Syrah, Grenache Noir, Mourvedre, Cinsault |
| Cote du Rhone AOP  Cote du Rhone Villages AOP | |  |  | 有 | 有，CdRV has better sites and richer style. |
| Chateauneuf-du-Papa AOP | |  |  | 有 | 有 |
| Tavel AOP | |  |  | 没有 | **ONLY Rose from Cinsault and Grenache** |
| Lirac AOP | |  |  | 有 | **Rose and Red** |
| Gigondas AOP,  Vacqueyras AOP | |  |  | 有 | 传统上是红，也能做白 |
| Beaums de Venise | |  |  | **Fortified Muscat** | 没有 |
| Southern France |  | | Warm Mediterranean | Mistral and tramontane winds, far less fungal diseases, drought can be an issue. | **Picpoul**, Grenache Blanc, Viognier, Muscat,  international | Grenache, Mourvedre, Syrah, Cinsault, **Carignan**, international |
| Pays d’Oc IGP | |  |  | Largest IGP, simple, popular inexpensive |  |
| Languedoc AOP | |  |  | Local varieties | Local varieties |
| Cotes du Roussillon (Villages) AOP | |  |  | 没说 | Mainly Carignan, carbonic maceration often used. |
| Corbieres, Minervois, Fitou AOP | |  |  | 没说 | Mostly red, blends from all local varieties allowed. NO international varieties. |
| Picpoul de Pinet AOP | |  | Near coast with sea breezes. | **White from Picpoul.** High acid, fresh zesty unoaked. | 没有 |
| Cotes de Provence AOP | |  | Hilly terrain blocks mistral. | 有 | 有红，maily Rose, pale light delicate dry, high priced. |
| Bandol AOP | |  | South facing slopes. | 没说 | Red and rose based on Mourvedre. Big tannic and full bodied red. Expensive. |
| Germany |  |  | | Cool continental | Gulf current warms Germany’s climate and brings sufficient rainfall, autumn drier, long cool ripening period. | Riesling, Muller-Thurgau/Rivaner, Silvaner | Spatburgunder, Dornfelder |
|  | Mosel | Piesport,  Bernkastel,  Wehlen | |  | River Rhine and two tributaries. | **GG only permits Riesling**, lighter in body, lower in alcohol, higher acidity compared with other parts.  Other whites 也有 | 没说 |
|  | Nahe | Schlossbockelheim | |  | River Nahe. Steep south-facing slopes. | **GG only permits Riesling.** |  |
|  | Rheingau | Johannisberg  Rudersheim | |  | Slopes of north bank of river Rhine and river Main. Taunus hills in the north. Birthplace of Spatlese style. | GG permits Riesling. Ripe, rich style. | GG permits Spatburgunder. |
|  | Rheinhessen | Nierstein | |  | Largest region in Germany, most flat. | Muller-Thurgau, Riesling.  GG permits Riesling. | **Dornfelder**, Spatburgunder, Portugieser  GG permits Spatburgunder. |
|  | Franken |  | |  |  | **Silvaner** most important.  GG permits Silvaner, Riesling, weissburgunder. | GG permits Spatburgunder. |
|  | Pfalz | Forst,  Deidesheim | |  | Second largest region, dry and long autumns due to Haardt mountain (Vosges) | Muller-Thurgau, Riesling. Grauburgunder, weissburgunder.  GG permits Riesling, weissburgunder. | Dornfelder, Spatburgunder, Portugieser  GG permits Spatburgunder. |
|  | Baden |  | |  | Warmest and most southern region. South facing slopes of Kaiserstuhl, an extinct volcano. | Muller-Thurgau, Grauburgunder, weissburgunder, Riesling.  GG permits a lot. | Spatburgunder most planted.  GG permits a lot. |
| Austria |  |  | | Cool to moderate continental | Similar to Germany but warmer. Cooler in the north, warmer in the south. |  |  |
| NiederOsterreich | Weinviertel DAC  Wachau DAC | |  | Downstream of Danube. Influenced by Alps and Danube. | **Gruner Veltliner**, Riesling.  **Weinviertel only allows Gruner Veltliner.** | 没有说 |
| Burgenland | Neusiedlersee DAC  Mittelburgenland DAC | |  | Warm climate, vast shallow lake NeusiedlerSee provides stable conditions for noble rot. Red from higher ground away from the lake. | Sweet white from **Welschriesling**. | **Zweigelt** in Neusiedlersee, **Blaufrankisch** in Mittelburgenland, St Laurent, international varieties. |

起泡

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 国家/地区 | 产区 | 子产区 | 气候 | 洋流山脉河湖天灾 | 白品种及风格 | 红品种及风格 |
| France | Champagne | Montagne de Reims  Vallée de la Marne Côte de Sézanne Côte des Blancs  Côte des Bar  一山一谷三个丘 | Cool continental | Winter freeze, spring frosts, rainy cloudy weather.  Slopes minimize frost, chalk soil good drainage after rain, retain sufficient water in dry periods.  Sugar level low, acid high, ideal for sparkling wine. | **Chardonnay** in Blancs and Sezanne. | **Pinot Noir** in Reims and Bar,  **Meunier (Schwarzriesling)** in Marne due to its late bud, frost very often in Marne. |
| Cremant d’Alsace |  |  |  | Chardonnay. Aromatic varieties Mustcat and Gewurz NOT allowed.  Traditional method, 9 months on lees minimum. | 没说 |
| Cremant de Bourgogne |  |  |  | 书上没说，推测是Chardonnay和 Pinot Noir |  |
| Cremant de Loire | Saumur, Vouvray |  |  | Chenin Blanc. Traditional method, 9 months on lees minimum. Chardonnay | Cabernet Franc for sparkling rose |
| Spain | Cava DO | Sant Sadurní d'Anoia,  Rioja, Navarra, Valencia. |  |  | Macabeo(Viura), Xarel.lo, Parellada.  Traditional method, 9 months on lees minimum.  Chardonnay and PN recently permitted. | Garnacha, Monastrell for rose. |
| Italy | Piemonte | Asti DOCG |  |  | Muscat Blanc a Petits Grains, Asti method. All are sweet, low alcohol, no autolytic, notes of peach and grape. |  |
| Veneto and Friuli | Prosecco DOC,  Conegliano-Valdobbiadene DOCG |  |  | **Glera**. Tank method, medium acidity and fresh, green apple, melon. | Rose permitted in 2020, blends Glera with Pinot Noir |
| Germany | Deutscher Sekt bA |  |  |  | Base wine from France, Italy, Spain, mostly tank method. Germany ones uses Riesling. |  |
| Australia |  | Yarra Valley, Adelaide Hills, Tasmania Traditional method.  Riverrina has bulk ones by tank method or carbonation. | Cool to moderate climate regions. |  | Chardonnay | Pinot Noir  Sparkling red from Syrah, CS, Merlot. |
| New Zealand |  | 所有产区都, Marlborough 量最大 |  |  | Chardonnay and PN with traditional method.  SB using tank method or carbonation for varietal aromas. |  |
| South Africa | Fruit sourced from all over Western Cape. |  |  |  | Cap Classique, 12 months on the lees.  Chardonnay and PN. |  |
| USA |  | California largest volume tank method or carbonation.  **Los Carneros AVA, Anderson Valley AVA** traditional method using Chardonnay and Pn. |  |  |  |  |

加强

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 国家/地区 | 产区 | 子产区 | 气候 | 洋流山脉河湖天灾 | 白品种及风格 | 红品种及风格 |
| Spain | Jerez | Jerez de la Frontera  Sanlucar de Barrameda,  El Puerto de Santa Maria for maturation. | Hot sunny Mediterranean | Coast cooler and wet. Humid west wind Poniente, dry hot east wind Levante. (Levante 在Jerez东边) . Albariza soil has high chalk content. Good drainage during rain, excellent water holding capacity in dry conditions. Rectangular pits also dug to trap water, 秋天挖，冬天蓄水，春天整平 | Palomino for dry  Pedro Ximenez(PX), Muscat of Alexandria for sweet. |  |
| Portugal |  | Porto and Vila Nova de Gaia for storage  Vineyard at Baixo Corgo, Cima Corgo, Douro Superior | Warm continental | Shield by Serra do Marao from cooling rain bearing Atlantic winds. Baixo Corgo coolest, further east hotter and drier. Spring frosts, heavy rain at flowering and harvest. Hot and dry summers. Schist bedrock allows root to go deep. Vineyards at Socalcos, Patamares and Vinha ao alt. | 书上没说 | Touriga Franca, Tinta Roritz, Tinta Barroca, Touriga Nacional, Tinto Cao. |
| France | Southern Rhone | Muscat de Beaumes-de-Venise |  |  | Muscat, picked when ripe and healthy, no raisining. Some skin contact to increase aromatic intensity. Fortification by 96% grape spirit. Stored in inert vessels. Sweet with primary fruit aromas. |  |
| Australia | Rutherglen |  |  |  | Muscat, picked when ripe and healthy, some raisining to add complexity and luscious style, not too much.  Fermentation on skin till 1~2% with high residual sugar. Oxidative aging for decades in large old wood. Brown with oxidative aromas. |  |

Natural factors to produce premium wine?

各种气候

|  |  |  |  |
| --- | --- | --- | --- |
| Climate | Advantages | disadvantages | Typical regions |
| Mediterranean climate | Dry, warm summer, less fungal disease pressure.  Sunny, long growing season leads to well-developed grapes. | Drought: irrigation, low density planting  Excessive heat and sunshine reduces acidity, increase sugar level hence alcohol level, cause sunburn: canopy management. Sorting, acidification in wine making process. | Costal California, Chile, South Africa, Australia |
| Maritime climate | Spring frost rarely occur and long growing season, resulting healthy and concentrated grapes. | High levels of rainfall and humidity can disrupt floweing and fruitset, cause fungal diseases, dilute fruit flavours at harvest: Trelising like VSP. |  |
| Continental climate |  | Spring frost: heaters, sprinklers, wind machine  Rainstorms:  drought |  |

Mountains block rain-bearing winds, resulting in sunny and dry growing seasons, reduces fungal diseases, improve the ripeness, flavours more concentrated.

做late harvest的前提是dry autumn, growing season is prolonged.

Style: This wine is pale lemon (Appearance), It is dry, with x acitidy, x alcohol, x tannin, x body (Structure), flavours of x.

**High quality white**

种植

slopes facing the sun, sufficient sunlight to ripen the grapes.

Old vine, dry farming, green harvesting for yield control, produces more concentrated fruits.

酿造

Sorting,

extended skin contact especially for aromatic varieties

Fermentation in inert vessel for aromatic varieties, in oak barrels for neutral varieties, low fermentation temperatures for refreshing style, ambient yeast for complexity

MLC to soften the acid, buttery aromas.

Lees contact or stirring, for body and savoury flavours.

Maturation in new oak barrels. Or Maturation in large oak vats, for long period of time.

Blending for complexity, balance and consistency of style.

**Bulk white**

Sorting not necessary

Short time skin contact

Fermentation in inert vessel with cultivated yeast

No lees contact

Stabilization and filtration.

No maturation in oak

**Bulk red**

Climate: warm, fertile soil, irrigation water available. Grape can reach ripeness with high yields.

Characteristics: fruity and simple.

Varieties:

Winemaking: May use carbonic maceration. No post-fermentation maceration. No new oak maturation.

**High quality red:**

Cold soak, extract colour and flavours, but not tannin.

Cap management during fermentation to extract tannin and flavours.

Post-fermentation maceration for more extraction and soften tannins.

Oak maturation, maturation time long

Blending for complexity, balance and consistency of style.

贵的原因

use of new oak

low production

growing and picking labour intensive.

Comes from premier cru or DOCa

风格多样的原因

Vineyards vary in altitude, steepness and aspect, different flavor concentration.

Wines can go through oak maturation or not

Blending

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Tannin/ Acidity | Low | Low to Medium | Medium | Medium to High | High |
| Low |  |  |  |  |  |
| Low to Medium | Grenache |  |  |  | Pinot Noir, Gamay, Barbera, Corvina |
| Medium |  |  | Tempranillo, Merlot, Cabernet Franc |  | Pinotage, Mencia |
| Medium to High |  |  | Dolcetto | Zinfandel, Syrah |  |
| High |  |  | Malbec, Montepulciano, Negroamaro | Carmenere, Petit Verdot | Cabernet Sauvignon, Nebbiolo, Sangiovese, Aglianico, Mourvede, Nero D'Avola, Touriga Nacional, Carignan |

Colour Red

|  |  |  |
| --- | --- | --- |
| light | Medium | deep |
|  | Barbera | |
| Nebbiolo | Corvina |  |

budding and ripening

|  |  |  |
| --- | --- | --- |
| ripening/ budding | early | late |
| early |  |  |
| late | Barbera | |
| late |  |  |

White Acidity

|  |  |  |
| --- | --- | --- |
| Low | Medium | High |
| Viognier, Gewurtztraminer | |  |
|  | Semillon, Chardonnay, Pinot Gris, Garganega | |
|  | Fiano | Furmint, Albarino, Sauvignon Blanc, Chenin Blanc, Riesling, Cortese , Verdicchio, Petit Manseng, Aligote, Melon Blanc, |

**Characteristics of Grapes:**

味道比较像的葡萄

chenin blanc 和 chardonnay，但是chennin blanc高酸

Cabernet Franc

Cabernet Sauvignon: grass, green bell pepper.

Carignan = Carinena

Chardonnay: neutral

Chenin Blanc: neutral

Cinsault

Gamay: red fruit, light bodied

Gewurztraminer: rose, lychee

Grenache = Garnacha

Grolleau

Malbec:

Marsanne

Melon Blanc

Merlot

Mourvèdre

Muscadelle: grapey, floral characteristics, no relationship with muscat. Not to be confused with Muscadet, which is not a grape but an AOP in the Loire Valley.

Muscat

Petit Manseng: apricot, grapefruit,   用来做甜酒的

Petit Verdot: ripens later than CS, resistant to rot,

Pinot Blanc

Pinot Gris: 木有啥味道

Pinot Noir: red fruit flabours, earthy, game and mushroom as wine matures.

Piquepoul

Riesling: lime, green apple, petroleum

Roussanne

Sauvignon Blanc: passionfruit, grass, cat's pee, gooseberry

Syrah:

Sémillon

Tannat

Ugni Blanc

Viognier

Blaufränkisch: medium tannin, high acidity and peppery, sour cherry flavor.

Dornfelder: deep colour.

Grüner Veltliner: full bodied, concentrated wines with naturally high acidity.

Müller-Thurgau: ripens early than Riesling, but less acidity and flavor intensity.

Riesling: expresses itself differently from region to region.

Saint Laurent: similar to Pinot Noir.

Silvaner: less acidic and less overtly fruity than Riesling and sometimes have earthy quality.

Spätburgunder: Pinot Noir

Welschriesling: fresh but simple, citrus and green apple flavours, high acidity.

Zweigelt: very deep colour, soft tannin and bramble fruit.

Aglianico: deep colour with high acidity and tannin, with flavours of black fruit.

Barbera: late ripening with medium to deep colour, low to medium tannins and high acidity, displaying aromas of red cherries and plums and sometimes black pepper.

Cortese: high acidity and floral character. Flavours of citrus, green apples and pears.

Corvina: moderate colour, low to medium tannin and high acicity.

Dolcetto: earlier ripening than Nebbiolo and Barbera, deep purple colour with medium to hith tannins and medium acidity. They display aromas of black plums, red cherries and dried herbs.

Fiano: medium acidity, medium to full body and aromas of stone fruit, melons and mango.

Garganega: medium to high acidity, medium body and display aromas of pears, red apple, stone fruit and sometimes white pepper.

Grechetto:

Greco: more acidity than Fiano, leaner in body, producing wines with green apple, stone fruit and passion fruit flavours.

Malvasia:

Montepulciano: high levels of colour and tannin, medium acidity and flavours of black plums and cherries.

Nebbiolo: a black grape with high levels of acidity and tannins but little colour. perfumed aromas of sour cherries, herbs and sometimes dried flowers

Negroamaro: medium tannins and acidity, backed red and black fruit.

Nero d’Avola: medium levels of acidity and tannins, with aromas of plums and black cherries.

Pinot Grigio: light to medium body, high acidity and citrus and green fruit flavours.

Primitivo: medium tannins and acidity, and pronounced flavours of very ripe berry fruit.

Sangiovese: high levels of acidity and tannin. late to ripen, and have aromas of red cherries, plums and dried herbs.

Trebbiano: ugni blanc.

Verdicchio: high in acidity with flavours of green apples, lemons and sometimes display notes of fennel and almonds.

Furmint: hith acid, flavours of apple when young.

Hárslevelű: contributes perfume to a blend.

Sárga Muskotály: contribute aromas.

Xinomavro: high tannin, high acidity, medium colour, 跟Nebbiolo很像

Agiorgitiko: hotter lower slopes overtly jammy, higher slopes higher acidity and less fine tannins.

Assyrtiko: white, perfumed aromas and concentrated flavours of ripe citrus and stone fruit, natural high acidity.

Airén: heat and drought tolerant, nothing special.

Albariño: lemon, grapefruit, thick-skinned, resist fungal disease, high acidity, citrus and stone fruit flavours

Cariñena: Carignan.

Garnacha: Grenache.

Graciano: concentrated black fruit aromas, acidity and tannins.

Mazuelo: Carignan.

Mencía: fresh fruit, medium to high acidity, a hint of herbaceousness.

Monastrell: Mourvedre. Drought tolerant, need hot sunny conditions to ripen. Very deep colour, full body, high tannin, low to medium acidity and flavours of ripe blackberry.

Tempranillo: medium acidity, medium to high tannin.

Verdejo: white grape, susceptible to oxidation.

Viura:

Alfrocheiro: deep in colour, intense aromas of blackberry and strawberry.

Alicante Bouschet: deep colour, high tannin.

Alvarinho: Albarino

Aragonês: tempranillo.

Arinto:

Baga: late-ripening, small, thick-skinned berries, deep colour, high tannin, black fruit flavours.

Jaen: Mencia

Loureiro:

Tinta Roriz: tempranillo

Touriga Nacional: intense colour and flavours, high tannin.

Trincadeira: drought tolerant, spicy red berry flavours, medium tannin.

Vidal: hardy, little character when make into dry wine.

Torrontés: intense fruity, floral perfume, medium body, medium acidity, stone fruits and melon.

Bonarda: late ripening, deep colour, high acidity, high tannin.

The grape variety "Tannat" is named after its high tannin content, which gives the wine made from this grape a strong and robust character. Therefore, the literal meaning of "Tannat" could be interpreted as "tannic" or "rich in tannins."

Santa Barbara County 横的山

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 山的影响 | Altitude | Rainshadow | Cool air from mountain |  |
|  | Washington state | Okanagan Valley |  |  |
|  |  | |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 海的影响 | Cool sea breezes, morning fog |  |  |  |
|  | Oregan State, California North Coast, Napa County, |  |  |  |
|  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 河湖的影响 | Moderate temperature | Air flow | Botrytis |  |
|  | New York State, Niagara Peninsula |  | Coteaux du Layon, |  |
|  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| 有特点的土 | 土 | 产区 |
|  | Tuffeau | Vouvray |
|  |  |  |

|  |  |
| --- | --- |
| 气候 | 产区 |
| 地中海气候 | Vouvray |
|  |  |