



Climate and Grape Growing

3 climatic zones:

- 1. N/NW coast of Spain = **moderate maritime** (Atlantic = high rainfall)
- 2. E coast Catalunya → N of Levante = **warm Mediterranean climate** (sea/altitude cooling influences)
- 3. Meseta Central (central Spain) = **hot continental** (summer = very hot/low rainfall → winter = freezing night time temp)

Challenges

• Heat/lack of water = stress on wine. Vines bush-trained low density - maximising water/shading fruit. Some wire training being introduced for mechanisation.

Grape Varieties and Wine Styles

Black grapes

Tempranillo

- Thick skin, medium acid, strawberry
- Needs diurnal swing to moderate acidity (or areas with moderating influences)
- "Joven" = fermented as single varietal semi-CB, early-drinking strawberry wines
- Blends = age-worthy (Garnacha, Graciano, Cariñena, Mazuelo, Cab Sauv)

Garnacha Tinta (Garnacha)

- High alcohol usually matures early
- Used in 'Rosados'
- Priorat = low yielding, old vines complex reds

Monastrell (Mouvedre)

- Thick-skinned
- Hot conditions to ripen fully = Jumilla/Yecla
- Deep colour/full body/high tannin + alcohol/low-med acid/ripe blackberry

Graciano

Difficult to grow

• Used in Rioja blend - adds black fruit/acid/tannin

Cariñena/Mazuelo (Carignan/Mazuelo = Rioja name)

- High in acid/tannin/colour
- Blended with Tempranillo in Rioja (or) with Garnacha in Priorat

Mencia

- Enjoys moderate climates
- Fresh fruit/med-high acid/herbaceous

White grapes

Verdejo

- Very susceptible to oxidation (was used to make Sherry-like wines)
- Light body/high acid/melon/peach (sim to/blended with SB)
- Fuller/richer with skin contact + barrel fermentation

Albariño

- NW Spain (fashionable)
- Thick-skinned = can resist fungal disease
- High acid/citrus/stone fruit → can be fuller-bodied/richer

Airen

- Vast plantings La Mancha (Central Spain), can tolerate heat/drought
- Brandy de Jerez main use

Jerez/Parella/Xerel-lo/Macabeo

• Catalunya - Cava production

Viura (Macabeo)

- Viura = Rioja name
- Can be unoaked, subtle herb, spice
- Used in white Rioja → heavily oaked

International varieties; Cabernet Sauvignon/Merlot/Sauvignon Blanc/Chardonnay

Regions and Wines

6 main regions: Upper Ebro/Catalunya/Duero Valley/North West/Levante/Castilla-La Mancha

Vino de la Tierra production - extensive Castilla Y Leon region

The Upper Ebro

Rioja

3 main subregions around Logroño:

- 1. **Rioja Alavesa** (W of Logroño/foothills of Cantabrian mountains) lightest Rioja/most finesse
- 2. **Rioja Alto** (W of Logroño/S of Ebro River) 500-800m altitude/moderating Atlantic
- 3. Rioja Baja (E of Logroño/S of Ebro River) less maritime/hotter summers/drought
- Tempranillo adds red fruit/medium tannins
- Garnacha (grows best in Rioja Baja) adds body + alcohol
- Winemaking:
 - Early drinking reds = Semi CB maceration vibrant fruit/low tannin
 - Long term = destemmed/crushed traditional fermentation vigorous cap management + extended maceration = deep colour/full of fruit
 - Oak maturation is common. Formerly American → move towards subtler French oak (spicey/subtle)
- White Rioja
 - Viura/8 varieties
 - Formerly deliberately oxidised/aged in oak (golden/nutty) → now white Rioja jas min oak contact to preserve fruit flavours. Some barrel fermentation (less oxidative).

Navarra

- Climate: Similar to Rioja (cooler/wetter)
- Tempranillo blended with Rioja varieties or international varieties; Joven → Gran Reserva
- Garnacha picked early (high acid/low sugar) fruity rosé (med levels of alcohol)
- Little white wine production (Viura/Chard/SB)

Cariñena and Calatuyud

- Neighbouring DOs (S of Ebro)
- Climate: warm continental (low rainfall)
- Garnacha (main variety)
 - Fruity, early-drinking (or) expensive wines with old vine Garnacha and Cariñena more flavour/structure

Catalunya

NE Spain - vineyards on the coastal plain

"Catalunya" = generic DO (still wines) entire region

Nearly all Cava produced here

Penedés

- 3 climatic zones
 - o Mediterranean coastal plain

- Cooler inland
- o Moderate hills (vineyards up to 800m)
- Cava white grapes = most planted
- Reds; Tempranillo (Ull de Llebre)/PN/Merlot/Cab Sauv
- Whites; Chard/SB/Gewurztraminer

Priorat

- Inland from Tarragona
- Long, hot, dry summer = low rainfall
- Old Garnacha/Cariñena vines = late ripening
- Llicorella (best soil) = layers of red slate with small particulates of mica (sparkly) = reflect and retain heat, retain water (some cool temp night)
- Bush vines/steep slopes = no mechanisation so expensive. Low yields too.
- Red Priorat = deep colour/high tannin/med-high alcohol/black fruit/toast (french oak)
- Some international Cab Sauv

The Duero Valley

Ribera Del Duero

- No maritime influence (hills). Short, hot, dry summers + cold winters. The highest part of Meseta Central (+850m) cold nights/acidity + fruit retained.
- DO for red (some rosé)
 - o Tempranillo dominant dark colour
 - o Cab Sauv/Merlot/Malbec permitted not used
 - o Garnacha dry rosé
- Winemaking
 - Concentrating fruit/tannin = long maceration + short new oak aging (French)

Toro

- Climate: sim to Ribera del Duoro
 - High day temp, sunny
- Low yielding bush vines = Tempranillo is full-body/high alcohol/concentrated fruit
 - Joven = portion of Garnacha
 - o Reserva/Gran Reserva = deep colour/tannic (young) can age
- Rosé/white in small quantities

Rueda

- Climate: **continental** (cool summer nights)
- White wine production
 - Verdejo cooled at night
 - Sauvignon Blanc
 - Single or blended (if blended 50% Verdejo)
 - o Simply fruity → rich/barrel ferm

The North West

Rias Baixas

- Climate: moderate/damp (Atlantic coast)
- Humidity can cause rot/mildew
- Albariño = high acid/stone fruit
 - Richer styles: lees/oak

Bierzo

- Climate: maritime (cooling)
- Between Galicia + Meseta Central = red wine DO
- Mencia elegant reds/high acid/red fruit
 - Best = old vines, steep, stony slopes
 - Can be unoaked (fruity) or oaked (toasty)

The Levante

Valencia

- Large DO high vol/inexpensive
- Main red grape = Monastrell
- Main white grape Merseguera
 - o Also Muscat of Alexandra (for local fortified sweet wine = Moscatel de Valencia)

Jumilla and Yecla

- Climate: hot and dry
- Main grape: Monastrell
 - Youthful/fruity style

Castilla-La Macha

½ of Spain's total wine prod. Meseta Central - S of Madrid

La Mancha

- Largest DO in Spain
- Airen = neutral/fruity wines. Declining authorities encouraging other varieties
 - o Tempranillo (Cencibal)/ Merlot/Cab Sauv/Syrah/Chard/SB
- Good tech investment = La Mancha makes good reds/whites for export
- Pagos wine trend (high quality) = estates awarded 'Vinos de Pagos' status

Valdepeñas

- DO south of La Mancha (same climate)
- Airen = most planted
- Tempranillo (Cencibel) = main red single or blended (international varieties)
- Fruity → oaked/concentrated

Spanish Wine Laws

PDO Wines (Denominacion de Origen Protegida - PDO)

- DO Denominacion de Origen (min specs/grapes)
- **DOCa Denominacion de Origen Calificada** (DOs of 10 years can apply only Rioja/Priorat. Priorat uses **DOQ Denominacion d'Origen Qualificada**.

Vinos de Pago (VP) = Small no of single estates with high rep. Only own grapes.

PGI wines - Vino de la Tierra (VdIT)

Aging:

	Red wines		White/Rosé wines	
Designation	Min total ageing	Min time spent in barrel	Min total ageing	Min time spent in barrel
Joven	0	0	0	0
Crianza	24	6	18	6
Reserva	36	12	24	6
Gran Reserva*	60	18	48	6

*only made in exceptional vintages

Multiple Choice Practice Questions

- 1) Which grape variety is commonly associated with the production of Rioja wines?
- a) Tempranillo
- b) Garnacha
- c) Monastrell
- d) Verdejo
- 2) Which Spanish wine region is known for producing high-quality Albariño wines?

a) Rioja b) Ribera del Duero c) Rías Baixas d) Priorat 3) What aging designation indicates the longest period of aging for Rioja wines? a) Crianza b) Reserva c) Joven d) Gran Reserva 4) How much time must a red Crianza wine spend aging in total? a) 0 months b) 24 months c) 36 months d) 60 months 5) Which Spanish wine region is known for producing rich, full-bodied red wines primarily from the Monastrell grape variety? a) Priorat b) Jerez c) Bierzo d) Jumilla **Answers** 1. a) Tempranillo 2. c) Rías Baixas 3. d) Gran Reserva

4. b) 24 months

5. d) Jumilla