

GERMANY

SPECIFICATIONS (What you have to know)	DISTRICTS, COMMUNES AND VINEYARDS Generic production: Rhine, Mosel, Liebfraumilch Ahr Mittelrhein Mosel: Brauneberg (Juffer-Sonnenuhr), Bernkastel (Doktor), Graach (Himmelreich), Urzig (Würzgarten), Piesport (Goldtröpfchen), Piesporter Michelsberg Nahe: Schlossböckelheim Rheingau: Assmannshausen, Rudesheim, Geisenheim, Johannisberg (Schloss Johannisberg), Winkel (Schloss Vollrads), Oestrich (Doosberg), Hochheim Rheinhessen: Nierstein (Pettental), Oppenheim Pfalz: Bad Dürkheim, Forst (Pechstein), Deidesheim (Hohenmorgen), Ruppertsberg Hessische Bergstrasse Franken Württemberg Baden: Kaiserstuhl-Tuniberg Saale-Unstrut Sachsen KEY LIGHT WINES Red Dornfelder Spätburgunder White Entry level or mid-market dry German Riesling Grosses Gewächs (or equivalent high quality) dry Riesling Riesling Kabinett Riesling Spätlese or Auslese Riesling Beerenauslese, Eiswein or Trockenbeerenauslese KEY FACTORS Geography: Latitude Soils: Slate Grape varieties: Riesling, Spätburgunder, Müller-Thurgau, Sylvaner, Kerner, Dornfelder Viticulture: German crosses, disease-resistant varieties, ripeness Vinification: Must weight, Oechsle, Süssreserve, residual sugar, sterile bottling Producers: Schloss Johannisberg, Kloster Eberbach, VDP (Verband Deutscher Prädikatsweingüter)
VIDEO PLAYLIST HISTORY	https://www.youtube.com/playlist?list=PLCx_IQt-zSFOWehZGButnoE2U2ZOxOB3s - 276-82AD: Emperor Probus believed to be the founder of viticulture in Germany. - 370: Ausonius, roman author, describes the steep vineyards of Mosel in the Mosella tract. - 4th-8th century: wine-growing concentrated west of the Rhine i.e. modern Pfalz & Rheinhessen - Late 8th-9th century (Charlemagne era): extension of wine-growing to the Nahe valley, Mosel & Ahr. - 11th-16th: rapid expansion of viticulture, via Church, aristocracy & merchants, helped by the recovery in population, the rise of towns. Cologne & Frankfurt dominated the trade. - 11th: foundation of the Johannisberg Benedictine abbey by Archbishop Ruthard that will become Schloss Johannisberg. - Late 13th: spread of wine-growing further from main towns into Rheingau, Baden, Württemberg & Franken. - 1500-1650: viticulture retreated from the cooler more remote valleys to focus on better sites & grape varieties before the 30 years war (early 17th) ravaged most viticultural regions - 1650-1800: slow and painful recovery in most regions with a focus on quality via new sites with better-quality grapes and prevention of low potential new sites. - 19th: left bank of the Rhine ceded to France -> administrative regions established & change of ownership - 1815: Congress of Vienna sees Mosel becoming a province of Prussia and the wine regions changing hands and thence competing against each other. - Devt of transport network (esp. railways) -> rapid development of the better wines. Württemberg & Franken massively down while other regions contributed to increase in quality and fruit ripeness. - 1830s: Oechsle designs a scale of measuring grape sugars (-> grape ripeness) based on the density of grape juice. - 1850s: creation of regional grower's associations + state authorities push for research in quality. - 1881: first appearance of Phylloxera in Ahr valley - 1900-45: area under vine halved (90,000ha to 50,000ha) with wars causing damage to the trade, the vines & the export - 1950-90: large increase in production due to mainly higher yields accompanied by a radical restructuring (Flurbereinigung) with improvements to access, drainage & workability of the high quality site vineyards. - 1971: German wine law introduces a quality system based on grape ripeness.
CLIMATE & WEATHER	- Cool & damp continental climate w moderate rainfall (500-800mm) + long autumns both allowed by the protection of mountains & rivers. - Important vintage variation - Most areas in zone A > Northern limit > Mesoclimates necessary to ripe the grapes

SOILS & TOPOGRAPHY	- Max altitude around 400m but mountain ranges (Black Forest in Baden, Haardt in Pfalz) & proximity to rivers (Rhine, Mosel & tributaries) contribute to elongate the growing season - Most of the key regions are situated alongside river valleys (excl. Pfalz). Varied soils (slate in Mosel)
GRAPE VARIETIES	<u>Reds</u> (36% of all plantings) 1. Spätburgunder (11%) ↑↑↑ 1/3 largest planting in the world w 11,000ha Area x3 folds since 80's Suited for Germany as it is early ripening & retains more flavours in cooler climates Mainly in Baden-Württemberg 2. Dornfelder (8%) ↑ Crossing Helfensteiner x Heroldrebe Good depth of colour, acidity & oak affinity Easier to grow vs. Spätburgunder & better resistance to rot vs. Portugieser Good examples in Rheinhessen & Pfalz with velvety texture, slightly floral & a hint of sweetness 3. Portugieser (4%) ↓ Extremely prolific (up to 120hl/ha) Low acidity for easy drinking wines Mainly found in Pfalz Others: Trollinger, Regent, Merlot, Cab Sauv <u>Whites</u> (64%) 1. Riesling (22% of all plantings) 2/3 of the world Riesling plantings are in GER Suitable in GER as hard wood > more resistant to frost Latest ripening German grape variety so needs good autumns & best exposed sites 2. Müller-Thurgau (13%) ↓↓↓ Was #1 in the 90's Floral simple grape w hi yields (150hl/ha) Crossing Madeleine Royale x Riesling by Dr Müller from Thurgau in 1882 Earlier ripening vs. Riesling (safer) Grows anywhere > high yields but softer wood vs. Riesling (winter damage) & susceptible to rot Low yields > elderflower aromas / High yields > damp cardboard aromas 1st German grape from early 70s to 90s Often blended into Liebfraumlich 3. Silvaner (5%) Early ripener Medium acidity and rather neutral wines 4. Grauburgunder (5%) 5. Weissburgunder (4%) Others: Kerner (early ripener hi sugar), Chardonnay, Sauv blc
VITICULTURE	- 102,000ha of vines (<Bordeaux) - Viticulture mainly depends on location of sites: > Steep slopes: high cost of cultivation w mechanisation limited due to the small avg holding (~2.1ha) & steepness of the slopes (esp. Mosel); lo yields for higher quality (best sites) > Valley bottoms & plains: wire trained, rows up to 3m apart to allow mechanisation; hi yields - Irrigation allowed since 2003 - Harvest date announced by local trade organisation. Viticulturists can choose to leave grapes longer on vine to achieve higher potential alcohol i.e. Prädikatswein. - Growers are paid based on weight, sugar level and grape variety.
WINEMAKING	- Fermentation in stainless steel or traditional large wood casks (Stuck in Rheingau, Fuder in Mosel) - Chaptalisation (Anreicherung) & must enrichment allowed for all wines up to (but not) Prädikatswein level. Max +4.5% in bad years - Süssreserve: unfermented grape juice added before bottling to sweeten/soften acidity. Allowed for all wines incl. Prädikatswein. Juice must be from the same site, variety and quality of wine. Less common as producers prefer to stop fermentation with addition of SO₂ to retain sugar level. - De-acidification by addition of calcium carbonate common too but permit required - Most wines fermented to dryness to make them stable.
WINE LAWS & CLASSIFICATION	Harmonization with EU system in 2009 Geographical indications (large to small) A. Anbaugebiet (13): designated quality region; 85% of wine must come from specified region if any region B. Bereich: group of several communes within an Anbaugebiet. C. Grosslage: group of vineyards; often named after top vineyard/village in the group. D. Einzellage: individual vineyard site (similar to 1er Cru / GC in France). Very high quality. NB: a town can give its name to a Bereich, Grosslage or Einzellage e.g. Piesporter Michelsberg. Must weight classification Classification criticized as based on sugar levels, no requirements for vinification and viticulture at any level (// US classification)

4 % of total German production

1. Deutscher Wein ("Tafelwein" before 2009) - 2% of production

- Lowest classification
- produced exclusively from German produce (in opposition to EU blends)
- must weight of 44° Oechsle in zone A and 50° Oechsle in zone B
- concentration (evaporation of grape must under vacuum) or enrichment (adding dry-cane or beet-sugar, or concentrated grape must, to the unfermented juice) authorized and common practice

2. Deutsche Weine mit geschützter geografischer Angabe (g.g.A.) (« Deutscher Landwein before 2009)

- Equivalent to French VdP
- 19 areas ("Landweingebiete") specified that must be displayed on the label
- Trocken or halbtrocken (res sugar < 18 g/l)
- Min 0.5% abv more // Deutscher Wein

3. Qualitätswein ("Quality Wine")

Qualitätswein (or Qualitätswein bestimmter Anbaugebiete (QbA)

- Minimum ripeness level
- Must come from a single Anbaugebiete
- Adorns an AP number on bottle (Amtliche Prüfungsnummer) following tasting test
- Region & style must be stated on the label
- Chaptalisation allowed, +3.5%abv max in zone A, +2.5%abv max in zone B
- Includes all Liebfraumlich
- Min must weights vary by region and grape variety. Usually Mosel & Riesling = lowest must weight requirements

Prädikatswein / Qualitätswein mit Prädikat (QmP)

- Same as above plus:
- Must come from a single Bereich
- Chaptalisation forbidden
- 6 Prädikats quality levels depending on ripeness levels (see below)

I. Kabinett

From grapes ripe enough for wines with no need for enrichment, potential alcohol minimum 9-11% abv, dry to medium sweet.

COURSE TASTING NOTES: Riesling Kabinett from Mosel - Pale gold colour. Pronounced notes of kerosene, petroleum, flint, preserved lemon, grapefruit. Off dry palate with high acidity, medium – alcohol (around 9% abv), medium body, medium + finish.

II. Spätlese

"Late Harvest". Picked min 1 week after main harvest > more concentration & flavours vs. Kabinett, potential alcohol minimum 10-12% abv, dry to medium sweet

COURSE TASTING NOTES: Riesling Spätlese from Mosel - Pale lemon colour. Pronounced notes of flint, wax, honeysuckle, dried apricot, honey. Medium sweet palate with high acidity, low alcohol (7% abv), medium bodied, long finish.

III. Auslese

"Select harvest" = hand selection of extra ripe bunches of grapes either at main or late harvest, potential alcohol minimum 11-14.5% abv, off dry to sweet

COURSE TASTING NOTES: Riesling Auslese from Pfalz - Medium gold colour. Pronounced notes of wax, pineapple tart, vanilla (oak), caramel, butterscotch, brioche, cooked peaches, honey. Medium sweet palate with high acidity, low alcohol, medium bodied, long finish.

IV. Beerenauslese

Made from individually selected grapes affected by noble rot. Potential alcohol minimum 14.5-17% abv. Addition of Süßreserve forbidden. Sweet wines. Rare & expensive

COURSE TASTING NOTES: Riesling Beerenauslese from Mosel - Pale amber colour. Pronounced notes of raisins, dry apricot, wax. Sweet palate with high acidity, low alcohol, long finish.

V. Trockenbeerenauslese

Made from grapes that have **dried** on the vines and with high proportion of **noble rot**. **>20% potential alcohol**. Rare & expensive: grey rot risk, sticky juice difficult to vinify, many passages in the vineyard

VI. Eiswein

-8°C for 8h minimum on the vine before picking. Grapes pressed while still frozen (higher sugar, acid & extract concentration). Same sugar level as Beerenauslese. Entirely healthy grapes.

All wines up to Auslese may be fermented to dryness (trocken), or made as halbtrocken (medium dry) or lieblich (medium sweet).

The Verband Deutscher Prädikatweingüter (VDP)

- 200 producers, 4000 ha
- Founded in 1910
- New self-regulated classification system created in 2012 > link between geographical origin and quality, based on Burgundy cru system
 - **Grosse Lage** (Grand Cru) max 50hl/ha, at least Spätlese must weight
 - **Erste Lage** (1er Cru) max 60hl/ha, at least Spätlese must weight
 - **Orstwein** (village wine) max 75 hl/ha
 - **Gutswein** (estate wine) max 75 hl/ha
 - Dry style: **Grosses Gewächs** (GG)
- Criteria for classification
 - vineyard site based on experience and historic documents // AOP
 - Grape varieties regionally defined (only Riesling, Silvaner, Pinots)
 - Max yields 50hl/ha
 - 100% hand picking
 - Minimum Spätlese ripeness
 - Only traditional methods
 - Monitoring & sampling
 - Dry wines as **Grosses Gewächs** (GG)
 - Sweet wines with Prädikat classification
 - Use of Erste Lage logo, vineyard & estate on front label
 - White wines released on Sept 1st a year after harvest
 - Red wines released 2 years after harvest

Other labelling terms

	Res sugar	Comments
Trocken	Max 9g/l	"dry"
Selection	Max 12 g/l if Riesling, otherwise 9 g/l	- Hand harvest - From single vineyard (Einzellage) - <60hl/ha - Min 12.2% potential alcohol (Auslese level ripeness)
Halbtrocken = Feinherb	9 to 18 g/l	"off dry"
Classic	Max 15 g/l	- Traditional grape varieties - From single Anbaugebiet or Bereich - At least 12% potential alcohol (11.5 in Mosel) - Max 15g/l res sugar
Liebfraumlich	Min 18 g/l	- Can only be made in Rheinhessen, Pfalz, Rheingau, Nahe; cross-regions blending not permitted - QbA quality level - Min 70% from Riesling, Müller-Thurgau, Silvaner & Kerner - Only region of production required on the label - Represented 60% of German exports in the 80s. - Example: Blue Nun
Moselalter		Mosel's liebfraumlich « copy »
Lieblich	18 to 45g/l	"medium sweet"
Süss	More than 45 g/l	"sweet"
Riesling Hochgewächs		- Riesling with higher must weight - QbA level

KEY REGIONS & CHARACTERISTICS

Wine regions concentrated in the **Southwest of the country**. Exceptions: Sachsen, Saale Unstrut, Ahr.

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3. Rheingau – 3,200ha - 85% ● / 15% ●

- North bank of the Rhine facing south; west of Frankfurt
- Protected by the Taunus mountains > dry & sunny climate
- Slate, loess and loam soils on steep slopes and sandy loam in the valley
- Lower yields // other regions
- Gentle sloping land except Rüdesheim
- Riesling & Spätburgunder
- Some of Germany's finest & best know vineyards
- One Bereich only: Johannisberg
- Lower acidity, dryer style // Mosel
- 0% Deutsche Wein / Landwein, **39% Prädikatswein** > very high quality region

- Key sites:

- > **Assmanshausen**: most northerly village, in the west, 75ha, mostly Spätburgunder-based reds which are Germany's most famous reds.
- > **Rüdesheim**: steepest area, quartzite & clay (mineral wines)
- > **Geisenheim**: where the German Wine Institute is based
- > **Johannisberg**: famous for **Schloss Johannisberg**, 900yr old 35ha wine estate, only Riesling; claims discovery of botrytised wines by mistake in 18th Mumm property.
- > **Winkel**: **Schloss Vollrads**: 800yr old wine estate; 35ha dedicated to Riesling
- > **Oestrich**: Doosberg Einzellage, good water retention, healthy grapes for late harvest
- > **Hochheim**: detached, warm mesoclimate near Mainz > "Hock" full bodied wines

COURSE TASTING NOTES: Spätburgunder from Rheingau - Pale ruby colour. Medium + intense nose of 1ary fruit (raspberry, sour cherry), black forest cake, 2ndary & 3ary aromas of smoke, vanilla (>oak), cedar, black pepper. Dry palate with high acidity, medium drying tannins, medium alcohol, medium – body, medium + finish.

4. Rheinhessen – 26,600ha (#1 Anbaugebiet in size) - 70% ● / 30% ●

- Protected from winds & rain by up to 600m hills on West
- Birthplace and largest producer of Liebfraumilch
- 2 zones:
 - Plateau, fertile soils, cold and prone to frost > sweet Grosslage wines
 - Terraces along the Rhine, reddish shale ("Roter Hang"), warmer > top quality wines with "smoked meat" notes
- Most varieties represented but Riesling, Müller-Thurgau, Silvaner & Dornfelder more common
- Cooperative wines with **75% of wine sold in bulk**

Key locations:

- **Niersteiner Pettenhal**: 32ha Einzellage, 100% Riesling, roter Hang soils, east-facing slopes along the Rhine for world famous opulent Rieslings with smoked meat notes.
- **Niersteiner Gutes Domtal**: confusing Grosslage located on fertile soils, with coops producing sweet low quality wine from Müller Thurgau
- **Oppenheim** & Nackenheim along the river for top quality Rieslings

5. Pfalz – 23,000ha - 63% ● / 37% ●

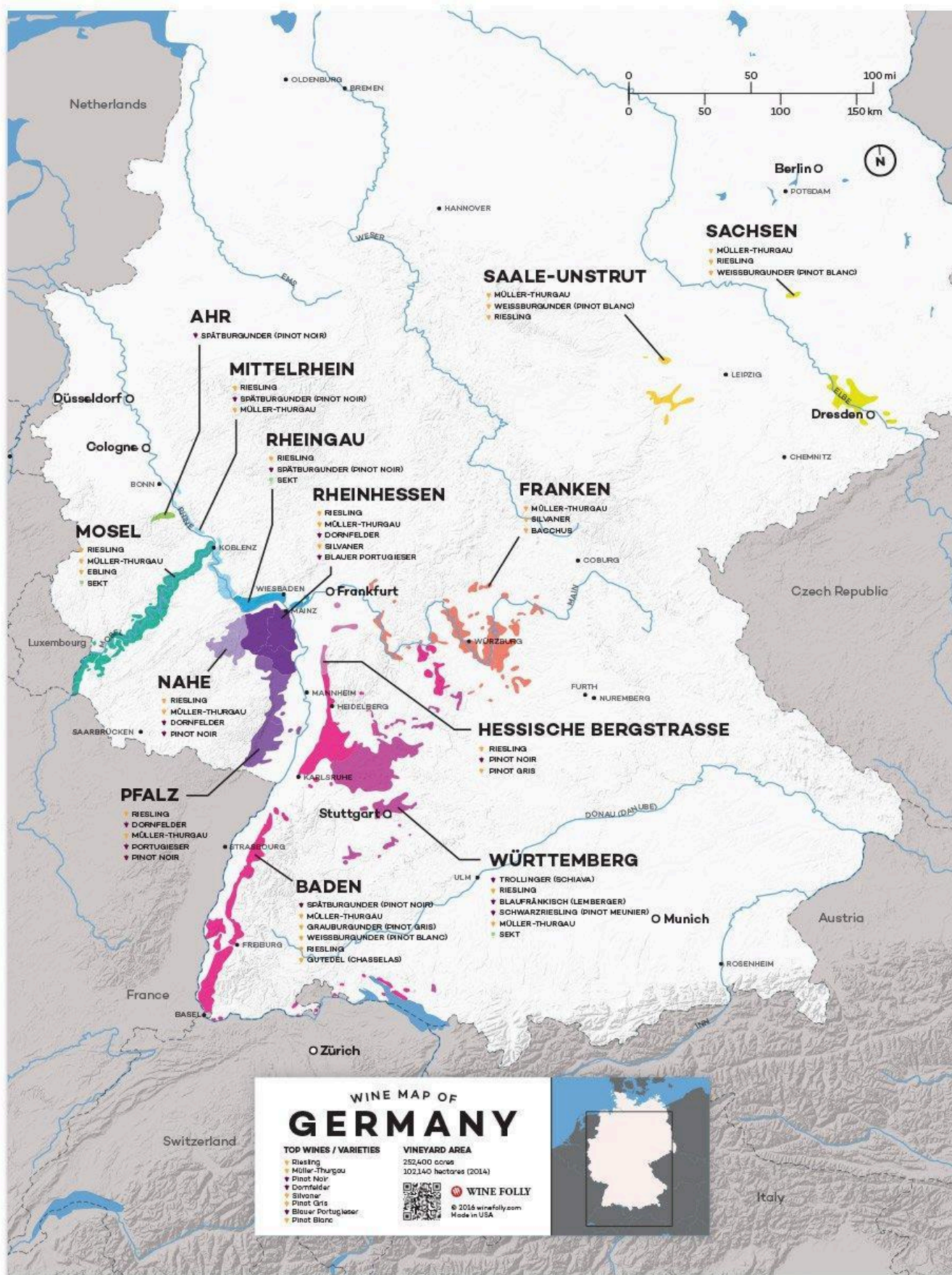
- Haardt mountains = similar shelter to Vosges > dry (one of the driest areas in Germany), warm summers, mild winters
- Whites: **Fuller bodied** wines, dryer Rieslings with lower acidity, 2nd largest Liebfraumilch producer after Rheinhessen
- Reds (in the south): Spätburgunder Burgundian style with oak maturation and up to 13%abv, but lower tannins. Dornfelder Beaujolais style
- Various soils but predominantly sandstone
- Exciting region with lots of experimentation
- Riesling, Dornfelder, Müller-Thurgau, Spätburgunder, & Portugieser dominate.
- Coops = 30% of harvest, with some good value for money

- Key locations located in the **Mittlehaardt Deutsche Weinstrasse Bereich**, protected by the Haardt mountains and where Riesling is important:

- **Bad Dürkheim**: largest wine producing commune in Germany, 800 ha (roughly size of St Julien). Limestone soils, known for reds from Dornfelder
- **Forst**: Soils rich in potassium and basalt > full bodied wines, known for dry spätlese

	Includes Forster Pechsteiner Einzellage, 17ha, flinty wines. - Deidesheim: Sandstone, chalk, volcanic soils. Includes Desdenheimer Hohenmorgen Einzellage, 2ha. - Ruppertsberg: Most southerly, shallow sandstone and loam soils - Key producers include: - Von Buhl, the largest winery in Deidesheim; founded 1848; member of the VDP; international reputation - Basserman-Jordan - Dr Bürklin-Wolf - JL Wolf (Loosen from the Mosel) 6. Baden – 15,500ha 59% ● / 41% ● - Longest wine region (400km) along the eastern side of the Rhine; facing Alsace - Only German viticultural Zone B region > highest Oechsle levels requirements - Lacks protection from the Vosges > rainier (up to 1200m) & cloudier - 3rd producing region in Germany - Spätburgunder dominates more than 1/3 of plantings, followed by Müller-Thurgau, Pinot Gris & Pinot Blanc - Wine styles: fuller bodies, lower acidity, no need for Süsreserve. Famous for oak-matured Grauburgunder (high local demand, high prices). - High quality: 26% Prädikatswein and only 1% low quality - Key quality producing zones: Kaiserstuhl (highly distributed in the UK) and Tuniberg - Coops produce 70% of production with Badische Winzer, largest western European coop, produces almost all wine from the Tuniberg Bereich. 7. Ahr - 550ha 15% ● / 85% ● - Northern part of the country - Dark volcanic soils - 2/3 Spätburgunder - Mostly coops and part time producers. Average holding = 0.5ha - Wine styles: oak-aged powerful reds, late-picked medium sweet reds 8. Mittelrhein - 468ha 86% ● / 14% ● - Neighbouring region to Mosel and Rheingau - Top quality Rieslings (67%) can rival top Rheingau - Dark slate & quartzite soils, very steep slopes 9. Hessische Bergstrasse - 450ha 79% ● / 21% ● - Smallest region, only sold on local market - 46% plantings Riesling, then, Spätburgunder, Grauburgunder - 3 coops dominate production 10. Franken - 6000ha 81% ● / 19% ● - Located in Bavaria (near Munchen) - Continental climate, calcareous clay soils - Hi quality full bodied Silvaner, Müller Thurgau, dry or halb trocken, some late harvest - 50% production by coops - Distinctive bottle shape (green Bocksbeutel) - Würzburger stein = top quality old vineyard > expensive Rieslings, fine Silvaners - 47% production Prädikatswein 11. Württemberg - 1100ha 550ha 30% ● / 70% ● - Neighbouring region to Baden. Produces large quantities of light fruity reds - 75% production by Cooperatives. - Mostly Trollinger (schiava), Riesling, Schwarzriesling (pinot meunier), Lemberger (Austrian Blaufränkisch) - Light pale reds adapted to local taste 12. & 13. Sachsen and Saale-Unstrut (ex-DDR) – 1200ha >75% ● - Continental climate with spring frost risk - Light wines, low in alcohol, high in extract - High prices - Saale-Unstrut = Calcareous soils, Sachsen = granite & gneiss (//Wachau) - Müller-Thurgau main grape, Riesling, Weissburgunder
PRODUCTION & BUSINESS	• Average: 9-10m hl (Europe's #4 biggest producers) / 100 000 ha • 75% of wine produced by co-operative cellars. • Key producers: - Weingut Dr Loosen – Mosel One of the largest Mosel producer w 70,000btl/yr; famous for the quality of his Rieslings

	Run by Ernst Loosen; committed from the start to boost quality in all his top sites & sustainable and organic viticulture; Wehlener Sonnenuhr Auslese Erste Lage Riesling one of the flagship wines; also owns Villa Wolf. - Markus Molitor - Mosel Outside VDP system Produces a Trockenberreenauslese without botrytis Only German producer to have had a 100 rating from Parker - Schloss Schönborn – Rheingau 50ha estate owned by the noble Schonborn for centuries; vineyards dispersed. Known for top sweet wines. - Weingut Gunderloch - Rheinhessen Owns vineyards in top Nierstein sites; traditional winemaking (low yields, no cultivated yeasts) & unusually long aging in cask for complex Rieslings, from dry to lusciously sweet. Jean Baptiste is the export wine. - Weingut Dr Burklin-Wolf - Pfalz Large private estate w vineyards in most top sites of Mittelhaardt; rebuilt reputation on dry Rieslings (≠sweet wines) after quality dropped in the 80s; biodynamic since 05 • <u>Vintages:</u> 2010: poor crop due to bad weather conditions 2009/11/12: more typical years NB: hi crops does not mean lower quality (e.g. 1982 – largest ever and good quality) • <u>Mature local market:</u> Dominated by supermarkets (Aldi – 25%) w hi price sensitivity & limited growth opportunity Per capita consumption: 25l/yr; mainly red (63%)
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Germany

MOSEL

NAHE

PFALZ

BADDEN

WÜRTTEMBERG

VERITY
WINE PARTNERS

