10. Jura

This small region, which has around 1,850 hectares of vineyard or 0.5 per cent of all land under vine in France, lies to the east of Burgundy and borders Switzerland. It was once 10 times its size today. In the century following 1850 a series of major setbacks (mildews, phylloxera, arrival of the railway enabling transport of wines from the south of France to Paris, world wars) led to a radical reduction in land under vine.

However, since the turn of the millennium Jura has attracted attention from sommeliers and wine enthusiasts for its distinctive wines, especially those made from local varieties: the white Savagnin and the black varieties Poulsard and Trousseau. In addition, Chardonnay and Pinot Noir are widely grown in the region. The styles covered in this study guide are the white and red wines, the highly distinctive Vin Jaune (only around five per cent of production) and the tiny production of Vin de Paille.

10.1. The Growing Environment and Grape Growing CLIMATE

Jura has a cool continental climate. Spring frosts can be a risk. The region has rainfall above 1,100mm per year, including significant rain during the growing season. In late spring/early summer rain can pose a threat to flowering and fruit set. Excessive rain in the vineyards can make any vineyard work



Vineyard on slope

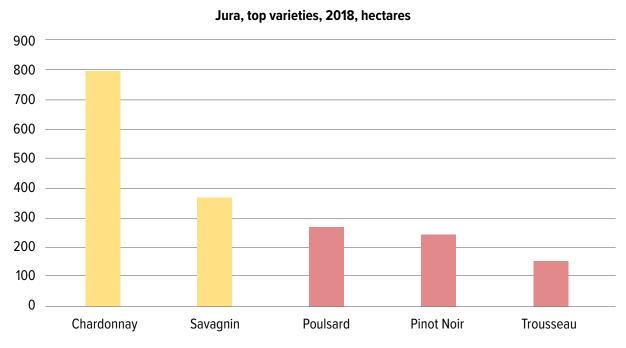
very difficult. Long periods of wet weather during the season, exacerbated by the heavy clay soils, means additional work to control weeds and combat fungal diseases, both of which increases costs. Hail has also been a problem in the last decade, and this is another factor that can increase costs of production. Climate change has brought significant extra warmth and the Jura enjoys good sunshine levels.

The vineyards are located on west-facing slopes of the Jura Mountains at altitudes of between 250 m and 400 m with soils that are mainly clay and marl, with limestone in some places. Grass cover crop is common between rows to reduce erosion on the sloping hillside vineyards. This enables less herbicide to be used: herbicide is needed only on the ground immediately below the vines. The vines are mostly replacement-cane pruned at some height above the ground to mitigate the frost risk. Vertical shoot positioning is used to encourage the flow of air to reduce the threat of fungal disease. Machine harvest has become more popular, except where slopes are too steep. This reduces costs and enabling growers to harvest rapidly and efficiently.

Yields average well below the maximum yield figures allowed (see <u>Wine Law and Regulations</u>) due to various weather hazards (frost, hail, heavy rain early in the season causing mildew outbursts and excessive heat/drought later in the season), and caused increased costs.

Sales are divided between white wines (42 per cent), Crémant (25 per cent), red (21 per cent) and the other specialist categories.¹

GRAPE VARIETIES



Source: Vins du Jura.²

Chardonnay – This is the most planted variety but much of it goes into Crémant du Jura, which is not dealt with here. As an early budding variety, it is prone to spring frosts. For information about Chardonnay as a variety, see Burgundy: Chardonnay.

Savagnin – This white variety makes both conventional white wine and and oxidative wine styles, including Jura's most distinctive wine, <u>Vin Jaune</u> (see below). Savagnin buds early and thus is prone to spring frosts. It is a thick-skinned variety with good resistance to fungal diseases and thrives on the steep marlstone slopes. The conventional wines have high acidity and medium (–) lemon and apple fruit, a medium body and medium alcohol.

Poulsard – also known as Ploussard. This is the most planted black variety. As a variety that buds very early, it is vulnerable to spring frost. It is also prone to coulure (leading to reduction in yield) and to all the fungal diseases as it is thin-skinned (and thus requires constant attention in the vineyard, adding to cost). However, it ripens early, enabling growers to harvest it if there is a threat of autumn rain. The wines are very pale ruby, almost translucent in colour and have low intensity red fruit (redcurrant, cranberry), low tannins, high acidity, low end of medium alcohol and a light body. The wines are typically good to very good in quality and mid- to premium priced.

Pinot Noir – This is the second most planted black variety and is used in multi-variety red blends, in Crémant du Jura and increasingly as a varietal wine. For information about Pinot Noir as a variety, see Burgundy: Pinot Noir.

Trousseau – This is a black variety with thick skins, which gives it resistance to fungal diseases, although it can suffer from botrytis bunch rot. It is prone to poor flowering and coulure, which reduce yield. As a vigorous variety, it requires careful canopy management. To ripen fully it needs a warm site. These could include planting on a site with warm gravels, on the warm, lower part of the slope or on a well-exposed, higher, steeper slope. The wines are pale ruby in colour and have low intensity red fruit (red cherry), low to medium tannins, medium to high acidity, low end of medium alcohol and a light to medium (–) body. The wines are typically good to very good in quality and mid- to premium priced.

10.2. Winemaking and Appellations

Savagnin and Chardonnay for conventional white wines are typically fermented in stainless steel tanks or old barrels at mid-range fermentation temperatures because fruity esters are not desired. Malolactic conversion is commonly used.

Red winemaking is highly variable, but, in general, many red wines are macerated on the skins for a short time (5–10 days) with temperatures limited to 30°C (86°F) or below. Poulsard may be made with carbonic or semi-carbonic maceration, contributing to a fruity style of wine. Some are aged in large old oak barrels and casks for a few months before bottling and release. Trousseau and Pinot Noir may be kept on the skins for longer for a more structured wine (more flavour concentration and more tannins) with the capacity to age in bottle. Ageing in barrel for red wines is usually less than one year.

Much winemaking for both white and red wines is in old barrels of various sizes, with very little new oak being used. Both white and red wines are matured either in tank or in old wood barrels, preserving primary fruit and reducing cost. Some estates make Chardonnay in what is known as a Burgundian style; that is, barrel fermented with possible lees stirring for added richness.

OXIDATIVE WINES STYLES AND VIN DE PAILLE

While many white wines in Jura are conventional white wines, it also produces the distinctive Vin Jaune, other dry oxidative styles, and Vin de Paille.

Vin Jaune – This wine is made by fermenting Savagnin grapes to dryness and then ageing the wine in barrels with a headspace. A thin layer of a flor-type yeast develops, here called le voile or the veil (for further details on flor, see the chapter on Sherry in D5: Fortified Wines). Vin Jaune has to remain under flor for a minimum of five years within a total ageing requirement of six years in barrel.

Producers may choose to inoculate the wine with selected yeasts to create flor, or allow the process to happen naturally by making sure the barrels are placed in a well-ventilated cellar with seasonal temperature changes.



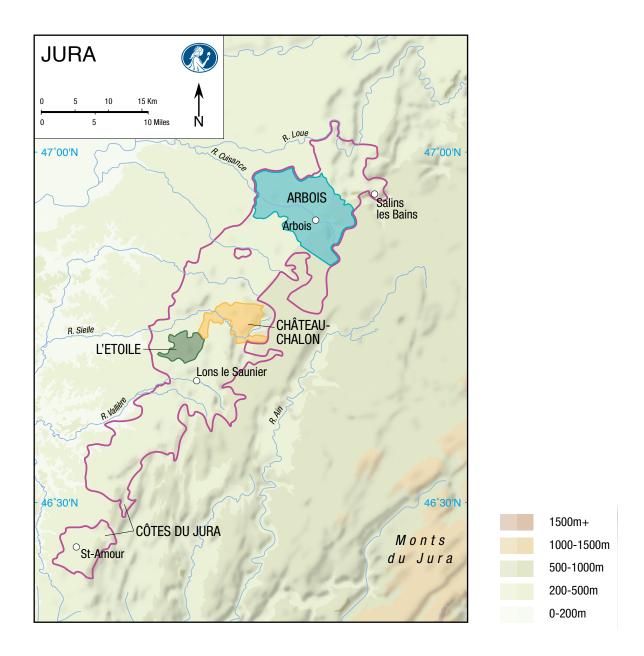
Winery with old barrels

Barrel ageing cellar location and conditions are considered crucial to how the veil forms, and how these wines develop in barrel. As the level of flor is thin and no fresh wine is added (in contrast to the soldera system of Fino Sherry production), the wines develop the aromas of both biological and oxidative ageing. The alcohol level rises by about 1 degree up to 13.5%—15% abv due to transpiration of water through the barrels.

Vin Jaune is typically medium lemon to medium gold in colour with pronounced aromas of bread dough, almond, ginger and green apple. Acidity is high. The wines are dry, often with high alcohol and medium body. They are very good to outstanding in quality and premium to super-premium in price. They are renowned for being able to age for several decades owing to their flavour concentration, complexity and oxidative winemaking.

Other oxidative white wines – Many Savagnin barrels are withdrawn earlier than wines destined to be Vin Jaune. These are used to make Savagnin with lighter, less concentrated aromas from biological and oxidative ageing, because they have had only 2–3 years under the veil. Some of these wines may be blended with Chardonnay. The Chardonnay portion may have been made conventionally, or itself be aged under flor and each will bring stylistic elements to the blend.

Vin de Paille – Very small quantities of Vin de Paille are also made in Jura. This is a sweet wine made using grapes dried off the vine. All Jura varieties except Pinot Noir are permitted. The wines must be above 14% abv, and residual sugar levels are typically 70–120 g/L. They must be aged in oak for a minimum of 18 months and released no sooner than three years after vintage. Vin de Paille can be made in both oxidative (no topping up of barrels) and fresher styles. Aside from Crémant du Jura AOC, there are two larger appellations and two very small ones.



APPELLATIONS

Côtes du Jura AOC – This is the regional appellation for the whole of the Jura wine region, including the more specific village appellations below, around 560 ha planted. All five wine styles may be made (red, rosé, white, Vin Jaune and Vin de Paille). Most of the wine produced under this AOC is white.

Arbois AOC – A compact, densely planted AOC around the town of the same name in the north of the Jura wine region, with around 780 ha planted. All five wine styles may be made. The majority of Jura's red wines are made here.

Château-Chalon AOC – Solely Vin Jaune from 54 ha of plantings.

L'Etoile AOC – Solely white wines, including Vin Jaune and Vin de Paille, with 73 ha planted.

10.3. Wine Law and Regulations

The appellations share the same production rules:

- White wines: must comprise a minimum of 80 per cent Savagnin and/or Chardonnay. The maximum yield is 60hL/ha. Vin Jaune and Vin de Paille are excluded from this rule.
- Red and rosé wines: Pinot Noir, Poulsard and Trousseau must make up a minimum of 80 per cent of the blend. The maximum yield 55 hL/ha.
- Vin Jaune: Only Savagnin can be used and the maximum yield is 60 hL/ha, except in Château-Chalon, where the maximum yield is 30 hL/ha. The wine must be under flor for a minimum of 60 months, during which time it must not be racked or topped up. It can only be sold to the consumer from January, seven years after harvest. This wine must be



Clavelin bottle

- bottled in 62 cL distinctively-shaped clavelin bottles. This is an exception to EU legislation that stipulates standard bottle sizes.
- Vin de Paille: maximum yield is 20 hL/ha.

10.4. Wine Business

Estates control 50 per cent of wine volumes produced in Jura. Négociants are the next biggest business section, with nearly 30 per cent. Four co-operatives account for the rest.

Three companies account for nearly 50 per cent of the wine sold: the co-operative Fruitière Vinicole d'Arbois, the *négociant* La Maison de Vigneron (owned by Grands Chais de France) and Henri Maire (owned by Boisset; Maire is a very small negociant business but retains large vineyard holdings). Alongside these three, there are many small estates.

Both organic grape growing (about 20 per cent of vineyard area, around twice the French average) and natural winemaking are important in the region, contributing to Jura's reputation for artisan wines.



Bottle-ageing Jura wine

Significant vintage variation in Jura strongly affects production volumes. For example, the yield in 2019 was around half of the yield of 2018. Approaching 20 per cent of the wine is exported. Exports have increased rapidly over the 15 years to 2018.³ The *Percée du Vin Jaune* is a large annual wine fair held in the region that has done much to raise the profile of Vin Jaune and of Jura as a wine producing region.

References

- 1 Hors serie statistiques 2020-21, Vins du Jura, p. 6 (retrieved 4 November 2022)
- 2 Wines of the Jura, Vins du Jura (retrieved 30 November 2022)
- 3 Private communication, Vins du Jura, email, December 2020