



# **GRÜNER VELTLINER**

#### INTRODUCTION

The last 30 years of Austrian viticulture is quite a success story. There are several reasons for this; one of the most important is Grüner Veltliner. This is by no means a simple matter of course. Until the 1970s, the few high-quality wines could not disguise the fact that Grüner Veltliner was mainly used to produce high volumes of simple wines. A shift in thinking began in the 1980s. The founding of Vinea Wachau, Austrian Wine Marketing (AWM) and the long-term positive effects of the wine scandal all contributed in different ways to a new perception of Grüner Veltliner, which focused attention on its high-quality potential. Winegrowers began to question themselves and the variety and to consider its geological and climatic demands more attentively. They reduced yields and delved into the variety's stylistic diversity - and domestic consumers followed suit.

Although Austria is the home and with 14.450 hectars the largest cultivation area of Grüner Veltliner, the grape variety is traditionally also found in neighbouring countries Czech Republic, Slovakia and Hungary. There are smaller, but increasing numbers in Germany and New World countries like Oregon, Washington, Australia and New Zealand.

## **ORIGIN AND PEDIGREE**

Despite its misleading name, Grüner Veltliner does not belong to the Veltliner family, of which the Roter Veltliner is the most important representative. Following the ampelographer Ferdinand Regner into the realm of speculation, the fact that Grüner Veltliner bears this name today may have to do with the fact that is has morphological similarities to Brauner Veltliner, a mutation of Roter Veltliner. Grüner Veltliner was known as Grünmuskateller, Weissgipfler, and due to its prolific presence on the slopes of Manhartsberg (Weinviertel), also as Manhartsrebe.

Even if its exact origin is not clear, much suggests that Grüner Veltliner originated in Niederösterreich (Lower Austria). It is a natural cross between Traminer and St. Georgen and due to Traminer the Rotgipfler variety is a sibling. St. Georgen is a grape variety that has only recently been rediscovered in Burgenland and plays a formative role only as a parent to Grüner Veltliner.

#### **GRÜNER VELTLINER IN THE VINEYARD**

Grüner Veltliner is basically a flexible grape variety that is easy to handle. However, if extraordinary quality is the goal, it requires much experience and sensitivity. It thrives ideally on medium heavy nutrient-rich soils, which is why it is often planted in flat locations or at the foot of a slope in the Wachau. Loess is one of its preferred terrains, but it also delivers excellent qualities on meagre gneiss soils. Grüner Veltliner displays a unique style and particularly typical regional character when it grows on steep terraced vineyards in the Wachau and Kremstal. Drought and water stress are problematic for it.

Grüner Veltliner generally has somewhat thicker skins, a tendency that becomes even more pronounced in hot years and during dry periods. In particularly hot years and with insensitive processing in the cellar, this can lead to undesirable aromas in the wine. Excessively hot temperatures during the flowering period often lead to coulure, which as a natural thinning of an otherwise rather dense fruit set, can be considered positive to a certain extent. It is susceptible to peronospora but is resistant to botrytis due to its firm skins. In recent years, the absence of botrytis has sometimes led to prolonged ripening and hang times. When allowed to grow without intervention, it produces enormous quantities (up to 15,000 kilos per hectare), especially in deep and nutrient-rich soils. For top qualities, the quantities are significantly lower and depending on vintage and terroir around 5,000 to 7,000 kilos per hectare. For the lighter styles like Klassik or Steinfeder, a yield between 7,000 and 10,000 kg/ha is guite common. If yields are too low, Grüner Veltliner tends to ripen rapidly, store sugar too quickly and lose a decisive amount of acidity. This prevents grapes from developing sufficient extract, which leads to alcohol-rich wines without the corresponding firmness. These high-alcohol Grüner Veltliners appear broad, clumsy and often a bit fat. The right time for harvesting has therefore become extremely important in view of the warmer temperatures in recent years.

Grüner Veltliner ripens moderately late (after the Pinot varieties or Zweigelt, but before Riesling), whereby the harvest can continue over a long period. Because Grüner Veltliner is an all-rounder, depending on the style of wine desired, it is often the grape variety with which the harvest begins as well as the one with which it ends. If the harvest is very early, Grüner Veltliner is suitable as











a base wine for sparkling wine or as a base wine for high quality brandy. In an average year, the harvest begins in mid-September in (Niederösterreich/Lower Austria) and continues into November for the reserve and Smaragd categories. In contrast to the 1990s, grapes harvested very late are now meticulously selected and almost without exception free of botrytis. Meticulous manual harvest plays a significant role for high quality, especially when the vineyards are harvested in several passes, as is customary in the Wachau. For simpler qualities, harvesting is done by machine in many parts of Niederösterreich (Lower Austria) and Burgenland.

#### **GRÜNER VELTLINER IN THE CELLAR**

Grüner Veltliner has peculiarities in the cellar that must be taken into account. It reacts sensitively to small changes in fermentation temperature, length of skin contact and time spent on the yeast. If Grüner Veltliner is harvested very early, harshly clarified and fermented at very cool temperatures with specific types of yeast, aromas reminiscent of Sauvignon Blanc may appear – a style that fortunately is becoming increasingly rare.

Since the spicy aromas typical of Grüner Veltliner are found in the grape skin, a period of maceration before fermentation is common practice. Depending on the desired style and intensity, this can take several hours.

Today, Grüner Veltliner is normally fermented and matured in steel tanks, with wooden barrels also being a very suitable option. Particularly in the Kamptal and Kremstal, some wineries use lightly toasted wooden barrels with a volume of 1,500 to 3,000 litres, which leads to quite unique styles. Experimentations with barriques, carried out mainly in the early 2000s, have proven unsuccessful, as the excessively pronounced oak notes mask the typical varietal aromas of Grüner Veltliner. Wines from vinifications in granite vessels and amphorae are niche products and appear to emphasize very individual facets of the variety.

Brief maturation times on the yeast normally highlight varietal character. However, too long a period on the yeast or overly intensive bâtonnage often leads to a broader and richer style, in which taut structure and finesse may be lost. Grüner Veltliner has high thermolabile protein values, which makes experience and a

sensitive approach so essential. Too much protein alters wine character and robs it of depth and precision. No fining at all or too little fining can quickly lead to protein haze in the bottled wine.

#### STYLES AND AROMAS

Grüner Veltliner can reflect its terroir with transparent, straightforward precision. It can produce an outstanding light and slender style, but also serves as an elegant, medium-bodied food companion and delivers wines in the powerful, concentrated reserve category, which enjoy high worldwide recognition.

Grüner Veltliner is a familiar variety for Austrian wine consumers. Beyond the frequently mentioned peppery spice, many other aroma nuances can be attributed to it depending on the style of wine. Aromas of light, crisp, fruity Grüner Veltliner are reminiscent of citrus fruits such as lemon, lime, grapefruit, but also of apple and orange blossom or meadow herbs. Aromas of pomaceous fruit are usually somewhat fresher, such as green apple and pears. Even with light styles the spicy aromas are pronounced; one finds anise, nutmeg, white pepper, asparagus, stinging nettle or grass.

Medium-bodied versions often exhibit juicier aromas of stone and pomaceous fruit such as yellow apple, ripe pear, quince, crisp apricot and vineyard peach. Subtle tropical notes of honeydew melon, kiwi, pineapple and even floral nuances are also typical. Often most striking are various spicy fragrances of herbs or green vegetables reminiscent of green tea, celery or green beans and vineyard herbs. Nuances that are described as minerality or salinity, including roasted and salted almonds. But of course, classic peppery notes are also very typical for medium-bodied Grüner Veltliner.

A highly textured palate, full body and good concentration typically characterise Grüner Veltliner in the reserve or Smaragd range. The aromas are versatile and often convey an intense smoky minerality that can be associated with tobacco, graphite and wet stone. Ripe, tropical aromas of pomegranate, mango, pineapple, papaya, litchi, and passion fruit are also often present. The aromas are rounded off by subtly sweet, candied notes of hazelnut, orange, dried fig and apple, chamomile tea, honey, and beeswax.











Peppery spice, the most famous and distinctive Grüner Veltliner aroma, comes from the molecule rotundone, which was identified by the Australian Wine Research Institute in 2008. In scientific terms, rotundone is a bicyclic sesquiterpene ketone, which is mainly found in the grape skins of red varieties such as Syrah, but also in the skins of Grüner Veltliner. In the case of Grüner Veltliner, it is 17 times above the human perception threshold, although the concentration may vary depending on the Grüner Veltliner phenotype. Since rotundone is only slightly volatile, the accompanying volatile aromas are decisive for the olfactory impression. Due to the stability of rotundone, pepper spice is generally also perceived retronasally in Grüner Veltliner, which is why the olfactory impression of nose and mouth often differs less than in other grape varieties.

Lightweight Grüner Veltliner should be drunk young and is usually fruity and lively. Medium-bodied and fuller interpretations are appealing and aromatic in their youth, but often take several years to reach their true potential. In the reserve range, the best wines have a life span of up to several decades. Examples of such extraordinary rarities are the 1969 and 1973 vintages from the Achleiten vineyard.

### IN THE WACHAU AND AT DOMÂNE WACHAU

770 hectares (just over half of the area under vines) are currently planted with Grüner Veltliner in the Wachau. Grüner Veltliner grows on the steep terraces, on the slopes of great vineyards, and on the valley floor. Varying climatic conditions, contrasting expositions, small knolls, considerable differences in altitude, and the specific approaches of the winegrowers all influence the growth of the vines and the ripening period of the grapes, resulting in a broad spectrum of different wines.

The Domäne Wachau has played a decisive role in the evolvement of Grüner Veltliner into one of Austria's most renowned grape varieties from an early stage. The first single-vineyard wines in the 1930s paved the path that was followed and consistently developed over the next generations. Today, the Domäne Wachau produces about three dozen different Grüner Veltliner wines from approximately 300 hectares. This range reflects the astonishing versatility of the variety and the many different facets of the respective vineyards.

The spectrum includes regional, village and single-vineyard wines as well as lively Steinfeder, elegant Federspiel and rich Smaragd wines. Depending on from where they come, each expresses its very own aromas and style. Deep soils in the flat vineyards usually yield light, easy-drinking, fruity wines. Vineyard crus interspersed with loess, such as Pichlpoint or Kollmitz, generally accentuate the fruity and spicy attributes of Grüner Veltliner, while gneiss dominated vineyards such as Achleiten (extremely smoky) or Kellerberg (powerfully exotic) embed their aromas in a tightly woven, voluminous and vertical structure. The latter single-vineyard wines in particular also have the ability to evolve over decades, continuously revealing new sensory worlds.

In addition to the classic dry wines, the Domäne Wachau produces a fortified Grüner Veltliner V.D.N. (Veltliner Doux Naturel) that is produced according to the Southern French model. The brandy used for fortification is made from Grüner Veltliner in Domäne Wachau's on-premise distillery. These brandies often mature for decades in small oak barrels. A new addition to the programme since 2019 is the Grüner Veltliner Steinwerk, a dry white wine that is fermented and matured in stone, partly in marble and partly in granite.





