## **Tulbagh, South Africa**



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Vineyards of the World

ULBAGH is the smallest of the Cape's 11 wine districts, measuring 25 km by 12 km. In common with many of South Africa's wine districts, it has some of the most spectacular vineyard landscapes in the world.

The district was originally used for cattle grazing by indigenous Khoikhoi pastoralists. After land was granted to Dutch settlers in 1720, it was used for grazing, fruit-growing and vineyards. Subsequently the district established a reputation for its excellent sherry-style wines. Like the rest of South Africa's grapegrowers, producers in Tulbagh suffered from the introduction of phylloxera at the end of the 19th century. After a 20-year recovery period, production in Tulbagh once again expanded with large-scale plantings of inferior varieties, with an emphasis on quantity. This led to a massive oversupply of poor quality grapes. However, since the 1960s the district has developed a reputation for quality white winegrapes.

Tulbagh is 100 km north-east of Cape Town. The Tulbagh Valley is cradled in a vast mountainous amphitheatre, enclosed to the north by the Winterhoek range, to the east by the Witzenberg and to the west by the Obiqua Mountains. The Valley is the source of the Klein Berg River which flows west to its confluence with the Berg River. The Breede River flows south-easterly from Tulbagh towards Robertson and Swellendam.



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The floor of the Tulbagh basin is at 350 m with the surrounding mountains rising to 2,077 m. These different altitudes create very different mesoclimates within the district. The MJT<sup>1</sup> on the valley floor is 20°C while the winters are cold with frequent frosts and snow lying on the higher mountains for up to two months of the year. This ensures that vines do not suffer from the insufficient dormancy and erratic budburst prevalent in some other regions, e.g. Stellenbosch. As with most of South Africa's viticultural regions, the cold Benguela current makes the Cape cooler than its latitude might suggest. Average annual rainfall in the Tulbagh Valley is 351 mm. At some sites it can be much higher, for example 750 mm in the Winterhoek. The steep Obiqua mountains cast a shadow over many of the vineyards in the afternoon.

Tulbagh's vineyards are scattered among grazing camps and arable lands. Soils in the Valley vary considerably. Along the rivers there are deep sands and loose stones over clay subsoils. These have proved to be fertile but tend to lead to excessive vine vigour. The most common soils on the lower slopes are the low pH (around 4.5) huttonite forms of decomposing Table Mountain sandstone with a vertical Malmesbury shale base. These require substantial additions of lime, and occasionally gypsum, during site preparation. The soils on the higher slopes vary considerably with mountain clays varying in depth from 1 m to 2.5 m. A major drawback of most of Tulbagh's soils is the large number of stones, leading to high vineyard establishment costs. As is the case with most of South Africa's vineyards during establishment, soils are deep ripped to a depth of 1.5 m.

Tulbagh has 1,182 hectares of vineyards. White varieties make up 68% of the area (Chenin Blanc 21%, Crouchen 15%, Chardonnay 6% and Sauvignon Blanc 5%) with 32% red varieties (Cabernet Sauvignon 8%, Pinotage 6%, Merlot 6%,



Shiraz 5% and Cinsaut 3%)<sup>2</sup>. In recent times there has been a large increase in red varieties and better quality whites (e.g. Chardonnay, Sauvignon Blanc, Shiraz, Merlot and Cabernet Sauvignon) at the expense of Crouchen, Chenin Blanc and Cinsaut. As in the rest of South Africa, incidence of leaf roll, fan-leaf and corky bark viruses is high. Previous governments were slow to release clean, virus-tested clones. Growers are now taking full advantage of newly available clones.

Most vines are trained to the 'lengthened Perold trellis'. This is a VSP trellis type with a fruiting wire at 90 cm and two or three pairs of moveable fruiting wires. Some of the newer vineyards have double cordon VSP systems. Row spacing is normally 2.0 m which makes it difficult to retrofit new trellis systems. The older vineyards are usually planted with a vine spacing of 1.0 to 1.2 m. Pruning is done by hand: most vines are spur pruned to two-node spurs at six per metre spacing. There is also some manual shoot thinning and leaf removal from the bunch zone. Bunch thinning is a more recent and increasingly practised innovation. Many of the vineyards, including the larger estates, are irrigated, mainly with overhead sprinklers. Drip irrigation is being increasingly used in the newer vineyards. The water sources-melt water stored in dams and from the Klein Berg and Breede riversare of good quality. Some small estates do not irrigate at all.

Budburst is typically at the end of September and harvest normally starts in the last week of January. There is some machine harvesting in the larger vineyards, however most are reliant on hand picking. Some vineyards harvest at night by hand. Yields vary from approximately 12 t/ha for Pinotage down to 3.5 t/ha for high-value Semillon.

Land prices, compared to many other wine producing countries, are relatively cheap. Undeveloped land costs between A\$3,000/ha and A\$4,000/ha. However, with rising labour costs, increased competition on the world market and uncertainty over the government's land redistribution plans, vineyard development in Tulbagh may be considered to be a high-risk investment.

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 $^{\rm t}\rm MJT$  = mean July temperature (northern hemisphere) or mean January temperature (southern hemisphere).

<sup>&</sup>lt;sup>2</sup>Dorrington, C. (2001) Rijk's Private Reserve. *Harpers South African Special Supplement*. Sept. 2001; Hasselbroek, J. (2002) Tulbagh Wyne Goed vir 'n Koningin. *Wynboer*, March 2002.