

THE WINE PRODUCING TERROIRS OF SOUTH AFRICA

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The South African wine industry is concentrated in the south western and southern parts of the tip of Africa, which is flanked by ocean on three sides. The cold water on the western coast contributes to lower rainfall and eventually the desert conditions of the Namib Desert, while along the south and eastern coasts the summer drought of the Mediterranean climate becomes less until it eventually reaches sub-tropical conditions in Mozambique. This strong ocean influence results in summers in the South African winelands being cooler than similar latitudes in the northern hemisphere. The broken relief resulting from the narrow coastal plain, the fold mountains that follow the coast line and the deep narrow valleys result in very varied rainfall. Temperatures also range from moderately cool (Winkler region II) near the coast and at higher altitudes to very hot (Winkler region IV) in the inland river valleys. Soil types vary between regions but also change rapidly over a very small distance. Many soils in the South Western Cape are characterized by *heuweltjies* or Mima-like mounds, which are attributed to the ancient action of termites. They influence the biological, physical and nutrient status of the soil, resulting in a “patchy” or “measle-like” soil distribution, which in turn affects plant growth.

The diverse natural environment is reflected in the diversity of the natural vegetation. The winelands are associated with the renowned Cape Floral kingdom. It contains more than 8 700 plant species, making it the richest plant kingdom, despite being the smallest in surface. Many of these species are very site specific and are only found within a single square kilometer. Because this rich diversity of plant life is a heritage of the diverse climates and soils in the wine growing area, we can expect that these same climates and soils will provide many diverse and distinctive wine styles.

The Wine of Origin scheme was legislated in 1973 with the objectives to serve as a basis for the development of distinctiveness and quality of wines; to confirm the correctness of certain indications in connection with the origin of wine and to create confidence in these indications. The importance of origin was seen as residing in the characteristics of soil and climate. Current Wine of Origin control legislation stipulates that no indication of origin, cultivar or vintage may be given unless the area has been demarcated and the wines have been produced strictly in terms of the control legislation. Areas are demarcated within the Wine of Origin Scheme into five categories, namely geographic units, regions, districts, wards and estates, with wards being the demarcated areas most stringently based on environmental attributes. The demarcation of wards is essentially based on the land-type concept. All soil and climatic factors possibly having an effect on wine character and/or quality, existing cultural practices, existing experience and evidence that prove an area to be unique, geographical and other factors that contribute to the development of the traditional wine area and the traditional name of the area are taken into account in their delimitation. On application by the producers within a community, denominations of origin are demarcated by a multidisciplinary demarcation committee within the structure of the Wine and Spirit Board. For an area to be demarcated, a strong emphasis is placed on the local knowledge of experts and dominant environmental feature(s) are identified to form the basis for the demarcation of the area. There is, therefore, a degree of flexibility that depends on the area to be demarcated and the available information. Strong emphasis is placed on the origin of the grapes, as well as on the area of wine production, especially at the ward level. According to statutory regulations, when the term “Wine of Origin” appears together with the name of a production area, it confirms that 100% of the grapes used for the production of the wine

come from that area. All wines are evaluated by a central, or in some cases decentralised, tasting panel of experts in order to ensure a minimum quality standard and expression of wine style (according to label, not origin).

For example, the ward of Durbanville is situated close to the Atlantic Ocean and the cold Benguela current. Its situation, together with altitudes in the order of 300 m results in cooler ripening conditions. The deep red- and yellow-brown soils consist of decomposed phyllite and greywacke and are not acidic. They are well-drained but have a good soil water-holding capacity. The Sauvignon blanc wines have recognisable fruity and green fig aromas.

The delimitation of terroirs, from regional level to the level of private concerns, is increasingly important within the South African context to characterise the many diverse environments for viticulture and in so doing to optimise practices, both within the vineyard and the cellar, in order to produce outstanding and unique wines that meet the consumer demand and at the same time improve the sustainability of the said practices. The system of geographical indications in South Africa, the Wine of Origin Scheme, is dynamic and is based on the best available environmental information and newest research results pertaining to the environment x wine interaction. As such, the increasing awareness of the diversity of the South African wine growing environments is resulting in increasingly stringent criteria for delimitation and a movement towards wines produced from single vineyards. The delimitation and characterisation of viticultural terroirs has therefore become a focal point of South African viticultural and oenological research.