



FACTS South African Wine Industry

SOIL

South Africa is widely recognized as the cradle of mankind. Still older are the soils of the Cape wine regions. They are highly varied, mainly due to pronounced differences in topography and geology, greatly impacting on mesoclimate and vine performance.

Various weather cycles and several periods of inundation by the sea, together with the pronounced and varied geography of the Western Cape, gave rise to great soil diversity over short distances. In the coastal zone, the general pattern is sandstone mountains, often resting on granite intrusions, surrounded by shale at lower altitudes, whereas further inland shale parent material and river deposits usually predominate.

The highly regarded reddish and yellowish brown soils are usually associated with granitic hills, for example the Bottelary, Malmesbury and Darling hills, and the granitic foot slopes of the sandstone mountains, including Table Mountain, Stellenbosch Mountain, and the Hottentots Holland, Helderberg and Simonsberg mountains. These soils, at altitudes of 150-400 m, often on steep slopes, are relics of a past, high rainfall, tropical era. They are highly weathered and acid, very stable and well drained, with a good water-holding capacity.

Other soils that formed on granite occur on gently undulating hills between the mountains and the sea at 20-150 m altitude. This zone was invaded several times by the sea due to land recession and uplifting. The soils are generally duplex in character, consisting of coarse, bleached sand and often also yellow-brown gravel or ferricrete, on wet (gleyed) clay. Extremes in wetness and drought in these soils curtail vigor. The generally consistent performance of vines on these soils over seasons, especially when coupled with good exposure to prevailing cool sea breezes, ensures good quality wines.

The gently undulating Malmesbury shale landscapes usually surround granite plutons (domes) and are adjacent to the sandstone on granite mountain ranges. Here, soil types typically vary from stony, weathered rock residual soils on hill crests, to strongly structured soils on mid and foot slopes but with the weathered shale substrata usually still within reach to be exploited by vine roots.

THE THREE MOST IMPORTANT SOIL TYPES

Derived from Table Mountain Sandstone

Sandy with low nutrient and water-retention properties (Fernwood, Longlands, Westleigh, Dundee).

Derived from Granite

Usually red to yellow coloured, acidic, and found on mountain foothill slopes and on ranges of hills, with good physical and water-retention properties (Oakleaf, Tukulu, Hutton, Clovelly)

Derived from Shale

Usually brownish, strongly structured, on partly decomposed parent rock, with good nutrient reserves and water-retention properties (Glenrosa, Swartland, Klappmuts, Estcourt).