Variations in Physical Terroir Within the Walla Walla Valley American Viticultural Area

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Abstract:

The original defining characteristics of the Walla Walla Valley American Viticultural Area (AVA), include low-relief valley floor topography, a predominance of loessderived soils with irrigated capability of class I or II, a relatively long growing season of 190 to 220 days, and average yearly rainfall of 31.75 cm (12.5 in). When the AVA was established in 1984, it hosted only 24.3 hectares (60 acres) of vineyards. These vineyards were planted in the central part of the Walla Walla Valley, in areas with a physical terroir that corresponds closely with the geographic characteristics used to define the AVA. Since 1984, over 550 additional hectares (1360 acres) have been planted throughout the AVA, at sites that collectively display substantial variability in climate, soils, topography and other aspects of physical terroir. Vineyards are now located on moderate to steep slopes, on the floors of narrow canyons, and at elevations ranging from 160 to 530 m (525 to 1740 ft.) which leads to large variations in growing degree-days, rainfall, and other climatic parameters. The soils presently utilized in the AVA can be divided into 4 categories: deep loess, loess over glacial outburst flood sediments, cobblestone alluvium, and thin loess over basalt bedrock. The chemistry, texture, and water-holding capacity of the soils vary greatly between the categories. Vineyards are now planted in soils with irrigated capability ranging from class I to class VII. With the expansion of viticulture throughout the AVA, it is now impossible to define a single characteristic terroir.