

Cluster Thinning Effects on Grape Composition of Sangiovese in High Altitude Regions of Santa Catarina State - Brazil

Rufato, L.¹; Kretzschmar, A. A.²; Schlemper, C.¹; Brighenti, A. F.¹; Stähelin, V.¹; Rufato, A. D. R.²

¹UDESC, LUIZ DE CAMÕES 2090, 885 20000, LAGES, SANTA CATARINA, BRAZIL

²EMBRAPA CNPQV – VACARIA, RS, BRAZIL

Crop load adjustment is widely accepted as an important vineyard management tool for premium-quality wine production. However, little information is available on high altitude regions of Santa Catarina State – Brazil. The purpose of the present experiment was to study the effect of crop adjustment by cluster thinning on the rate of grape ripening and final fruit composition of Sangiovese grapevine. The experiment was conducted in Villa Francioni vineyards located at the city of São Joaquim (28°17' S, 49°56' W; altitude 1350 m), in Santa Catarina State, Brazil. The experimental design was randomized blocks, with four blocks and 10 plants per plot. The thinning was made at veraison, March 2nd at season 2008/09. The treatments were T1 - control (8.1 ton/ha¹); T2 - (7.1 ton/ha¹); T3 - (5.4 ton/ha¹) e T4 - (5 ton/ha¹). The variables analyzed were cluster weight (g), cluster length (cm), anthocyanins (mg·L⁻¹), total polyphenols, pH, total soluble solids and acidity (meq·L⁻¹), total soluble solids/acidity and number of berries. Data was submitted to analysis of polynomial regression. The treatment T1 presented the best results to chemical variables. To physical variables such as cluster weight and cluster length, the treatments T2 and T3 presented the best results.