

Potassium nitrate sprays increased yields of Colombard and Carignane wine grapes.

A scientific study in Turkey revealed that two foliar  $\text{KNO}_3$  sprays at 1% or 2% statistically significantly increased yield and hundred berry weight compared to the control. The trial was designed in randomized blocks with 4 replications in a 10 year old vineyard with two varieties; Colombard and Carignane. Soil analysis results showed a sandy-loam texture, high pH, low organic matter content and 130 mg/kg available K in the soil. Best result was observed with two sprays of 2%  $\text{KNO}_3$ , which increased the yield of Colombard grapes by 24% and Carignane by 43%, as compared to the control (Figure 1). Furthermore, foliar potassium nitrate sprays, both at 1% and 2%, increased total soluble solids (TSS) and improved leaf N and K contents, although not statistically significant. It was concluded that the doses of 1% and 2% can be suggested for agricultural practice.

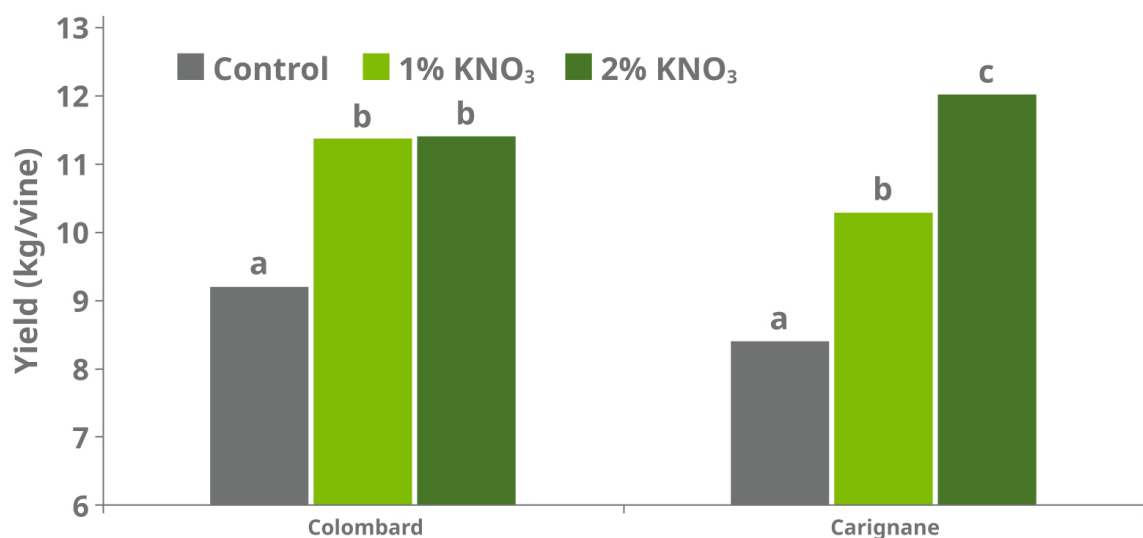


Figure 1. The effect of  $\text{KNO}_3$  sprays on the yield of Colombard and Carignane grape varieties.