

# EFFECT OF BORON and MOLYBDENUM FOLIAR SPRAYS ON GROWTH, YIELD AND FRUIT QUALITY OF "SUPERIOR" GRAPEVINE

(*Vitis vinifera* L).

Morsi, M. E., Iman, A. Abd El-Khalek. and Zeinab A. Ibrahim.  
Dept. of Horticulture, Fac. of Agric., Fayoum Univ., Egypt.

## ABSTRACT

This investigation was carried out during two successive seasons of 2007 and 2008 to study the effect of boron and molybdenum foliar sprays on growth, yield, berry quality and some chemical constituents of "Superior" grapevine cultivar. The vines were grown in loamy sand soil. The treatments were (control, B 100 ppm, B 200 ppm, Mo 50 ppm, Mo 100 ppm, B 100 ppm + Mo 50 ppm, B 100 ppm + Mo 100ppm, B 200 ppm + Mo 50 ppm and B 200 ppm + Mo 100 ppm. Generally, it was found that all treatments increased leaf area, shoot length, cane thickness, cluster weight(g), fresh and dry weight(g) of 100 berries compared with control. Yield per vine also increased by all treatments except Mo 50ppm. On the other hand, Mo treatments reduced total sugars (%) and TSS in berries. Acidity percentage in fruit juice decreased by foliar spray of boron and molybdenum. Total Carbohydrates, total chlorophyll, carotenoids, N, P, K, Fe, Zn and Mn in leaves increased by boron and molybdenum foliar spray.

**Key Words:** Grapevine (*Vitis vinifera* L), Boron, Molybdenum, growth, yield, chemical constituents.