

Effects of micro and macro nutrients on grape's qualitative and quantitative characteristics in Qazvin.

M.Mostashari¹, M.Shahabian².

1-Researcher in Qazvin Research Center.

2- Researcher in Soil and Water Research Institute.

Qazvin and Takestan regions are the most important areas for grape production, where 27500(ha) are under grape cultivation.

Therefor, in order to determine the best and most suitable fertilization composition for obtaining the maximum crop yield and quality and also getting a proper nutritional balance, this experiment was carried out during 97-98, on Thompson seedless cultivar at the Vineyard Research Experiment Station in Qazvin.

The different fertilization treatments included:

1-NP 2-NPK 3-NPKS 4-NPKS Mn 5-NPKSMn Zn 6-NPKSMnZnFe
7-NPKSMnZnFeCu 8-NPKSMnZnFeCuB

The treatments were replicated three times. The grapes were harvested and analysed for sugar content. The yield and other growth characteristics such as size and weight of berries were also measured. All micronutrient plots increased the yield of grape significantly. The highest yield, 17t/ha was obtained with N, P, K, S, Mn, Zn, Fe, Cu, B, treatment in comparison with the check plots(7.5t/ha). The highest concentration of sugar was observed with (N, P, K, S, Mn, Zn, Fe).

Finally, it was suggested that application of macro and micro elements in *grape gardens increases the crop quantity and quality.*