Effect of different methods of fertilization on grape yield in Qazvin

M.Mostashari 1, M.shahabian 2 and M.J.Malakouli 3

- 1- Researcher in Qazvin Research Center.
- 2- Researcher in Soil and Water Research Institute.
- 3- Prof. of Soil Science, Tarbiat Moddares University, and Director general oil and Water Res. Ins.

Different methods of fertilizer application is one of the most important factors affecting absorbtion and efficiency of chemical fertilizers on qualitative and quantitative yield of grape. Therefor, in order to determine the best and the most suitable method of chemical fertilizers application for obtaining a high yield and increasing production in the region, a 5-years old seedless grape garden with 0.5 hectar area was selected in Eghbalieh area of Qazvin. Experimental design was a RCBD with 5 treatments and 3 replications. In each plot, 4 plant of grape was considered.

The treatments includes:

- 1) The farmers conventional practices which consists of urea and ammonium fertilizers, sometimes with additional animal manure;
- 2) Fruit set, or treatment one plus 0.5% solution of urea, zinc sulphate, and boric acid each applied in the fall after harvest, and
- 3) Foliar application of the macronutrients plus micronutrients and
- 4) Placement of all the materials from treatment one all soil applied materials from treatments two and three in ditches near the grape vines, in the early spring of 1998;
- 5) Acombination of treatments, 3 and 4.

After harvesting, quantitative and qualitative traits including cluster weight, plant yield, yield per hectar, cluster length, single grape weight, S. G.