

EFFECT OF BORON FERTILIZATION ON BORON CONCENTRATIONS AND YIELD OF APPLE CULTIVARS GROWN ON DIFFERENT BORON CONTAINING SOILS

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Abstract

Study was carried to investigate the effect of soil, leaf and soil + leaf boron applications on leaf B concentration and fruit yield in three different boron containing soils. For this, 4 levels of soil application as 0, 100, 300 and 500 g B da⁻¹ and 2 levels of leaf application as 0 and 100 mg B l⁻¹ were alone and as their combination. Leaf B concentrations and fruit yields in all individual districts increased with the soil and soil x leaf combination. Foliar application had an effect only in one district on leaf boron concentrations but in other districts foliar boron application did affect neither leaf boron concentration nor fruit yield. Depending on the means of soil applications, 12-23 % increase in leaf B concentrations and 11-57% increase in fruit yield were determined. The highest B and yield increases were determined from the lowest soil B containing district with the S3xL1.

Key words: Boron application, leaf B, fruit yield