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
Effects of Boron on Growth of Various Wheat Varieties and Distribution of  
Boron in Aerial Part

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**Abstract:** The aim of this project was to determine the effects of boron on growth and boron distribution in the aerial part of wheat cultivars. For this purpose, soil samples collected from Kenan Evren training and research farm at the Faculty of Agriculture was used. The soil was clay loam in texture, containing 12% lime, with a pH of 7.91 and 1.52 mg kg<sup>-1</sup> plant available boron. In greenhouse conditions, four Triticum aestivum cultivars (Bolal-2973, Bezostaya, Kirac, Gerek-79) and two Triticum durumcultivars (Cakmak-79, Kiziltan-91) were grown with boron at levels of 0,1 and 10 mg kg<sup>-1</sup> levels as boric acid (H<sub>3</sub>BO<sub>3</sub>) to the experimental soils. Wheat cultivars responded to the application of boron in a different manner. Triticum durum cultivars were affected to a much greater extent than Triticum aestivum cultivars. Boron applications caused increases in the dry weight of Bolal-2973 and Gerek-79 cultivars while decreasing the dry weight of Cakmak-79 and Kiziltan-91 cultivars. In soils both with and without added boron, the highest boron concentrations were determined at the leaf-tips of all cultivars, followed by old leaves. When boron was not added to the soils, boron concentrations determined at the aerial part, whole plant, whole leaves and leaves without tips were found not to be significant differences. When boron added to the soils, boron concentrations determined at the aerial part-whole plant, whole leaves and leaves without tips were found to be different from each other.

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