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ABSTRACT BOOK



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Effect of Different Doses of Boron Fertilizer Application on Yield and Nutrient Contents of Sunflower (*Helianthus annuus* L.) Plants

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Abstract

Boron is essential elements for plant growths. The lack of nutrients and toxicity are among the most common nutrient elements because there is very little difference between the levels of soil boron which causes deficiency or toxicity in plants, with very large differences between plants in terms of borate reactions. So, this study was conducted in low efficiency soil boron availability soil which has high lime content. To determine effects of boron application on sunflower plant (*Helianthus annuus* L.) growth and nutrient content according to trial design of completely randomized design with four replications. In the experiment, boric acid at the doses of 0, 200, 400, 800 and 1200 gr da⁻¹ was used. in doses of 0, 200, 400, 800, 1200 gr da⁻¹ was used as boric acid. Plant growth care such as irrigation, weed control and other controls are made routinely. After developing period, the plants are harvested from the soil surface. The total nutrients contents and intake nutrient element amounts are determined in plant samples. According to result of research; the boron applications are positive side effected on dry matter productivity and nutrient mechanism of sunflower plants and the highest yield was obtained from 750 gr B da⁻¹ applications.

Key Words: Boron fertilizer, sunflower, available soil boron