

**O 137. RESPONSE OF BORON GENOTYPES TO BORON DEFICIENCY AND TOXICITY**

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**ABSTRACT:** Boron element can cause toxicity in plants while It's deficient in some region for the benefit of plants in our contry. Boron uptake capacity of plants shows differ for each plant variety, and also differs between the same plant species. Boron is one of the important elements that plants need as a micro-nutrient element. Significant deformities occur in cell walls of plants that do not contain enough boron. Deficiency of boron can cause growth irregularities in STEM and body meristem cells. In our study, it is aimed to investigate the changes that occur in the development of radish plant by boron application at inadequate or toxic levels in the growing environments of radish plant which has an important place in agriculture of our country. Four different radish genotypes that White, Hazelnut, Black ve Çukurova (Rolex F1) were used in the study in water culture environment. 0mM B,0,5mM B,1mM B, 2mM B,4mM B ve 8mM B doses were applied to radish seedlings when plants come to the first three-leaf phase. They have been identified as Sensitive and durable genotypes, hazelnut, Rolex F1 genotypes. There has been a decrease in plant growth in hazelnut radish genotypes against increasing boron applications, Which according to its own group. The resulting differences have been seen becosue of the character of varieties against applications. And It has been determined that the Rolex F1 Genotype has shown a more healthy development than the other genotypes against high boron doses.

*Keywords: Boron, Radish, Genotypes, Deficiency, Toxicity*