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STUDY ON THE SELECTION RESPONSE IN DIFFERENT GENERATIONS OF SUGAR BEET FOR SALINE AND DROUGHT STRESS CONDITIONS

Abstract

Stress conditions are the most important factors in yield reduction of crops in the world. Breeding of cultivars with high tolerance and satisfactory yielding is considerable. The aim of this study was the comparison of means of selected generations in saline and drought stress in order to estimate response to selection. In this study two populations, 8001 and 7233 and their successive generations, which were selected for tolerance to salinity, as well as two breeding materials BP-Karaj and BP-Mashad and their generations, which were selected for tolerance to drought stress were evaluated under stress conditions. The results showed that response to selection in 8001 sequential generation was higher than 7233 in saline conditions and the selection has increased the root and sugar yield. Also, selection for drought tolerance in BP-karaj and BP-Mashad had been successfully done. It seems that, this method of selection is useful for breeding of these populations in stress conditions.

Other languages: not available