

Abstract

To assess the effects of drought stress and biological fertilizer on quantitative and qualitative traits mung bean, experiment was run as split plot in a randomized complete block design with three replications were performed at Zabol University. Treatments included three levels of drought stress, a1) irrigation after 90% depletion of available water (control), a2) after 75% depletion of available water for irrigation, a3) after 60% depletion of available water for irrigation as main factor and five levels of biological fertilizer, b1) Biological phosphate barvar 2, b2) Biological phosphate barvar 3, b3) Biological micoriza (*Glomus mosseae*), b4) Biological micoriza (*Glomus intraradices*), b5) control .

Result of this study indicated that deficit irrigation treatments had significant influence on date of bud , Number of days from planting to 50% flowering, Number of days from planting until the first pod, Number of days from planting to maturity, plant height, Thousand Grain weight, Biological yield and grain, harvest index, Protein percent, Proline content, RWC, Percent yield of sodium. increasing drought stress Cause to Increased the Protein percentage, Proline content and sodium percentage. Biological fertilizer influence on Number of days from planting until the first pod, Thousand seed weight, grain yield, harvest index ,RWC and Potassium percentage was significant. highest Increased yield grain obtained from Biological phosphate barvar 3 The interacts stress and biologic fertilizer was significant on Thousand seed weight . and the highest Thousand seed weight was from irrigation after 90% depletion of available water and Biological phosphate barvar 3.

Keywords: mungbean, prolin content , 50% flowering, seed sodium, planting to maturity



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title

**Effect of biologic fertilizer on qualitative and
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condition**

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