



Effects of Potabarvar Biofertilizer on some Physiological and Growth Characteristics of Fenugreek (*Trigonella foenum-graecum*).

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Nowadays, the use of soil-born microorganisms as biological fertilizers is considered to be a natural and most desirable solution to maintain sustainability of agricultural soil system. Fenugreek (*Trigonella foenum-graecum* L.) an annual legume, is extensively cultivated in most regions of the world for its medicinal value. The present investigation was undertaken to evaluate the effect of potabarvar biofertilizer on growth characteristics of fenugreek under field conditions. The experiment was conducted as randomized complete block design with three replications at the Agricultural Research Station, University of Birjand during growing season of 2016. Treatments were 2 levels of bio-fertilizers Potabarvar 2, (0 and 5Kg.ha⁻¹). Results showed that the highest fresh weight (0.13g.m⁻²) and dry leaf (0.028g.m⁻²) were obtained in plants treated with 5kg.ha⁻¹ of biopotass, while the lowest values was recorded in the control. Also the highest biological yield (88 kg.m⁻²) observed in plants treat with 5kg.h⁻¹. As a result potash bio-fertilizer had considerable effect on quantity and quality of fenugreek plant.

Keywords: Fertilizer, Vegetative growth, Fenugreek

References

- [1] Menbari, S., AlizadehSalteh, S., Bolandnazar, S., Sarikhani, M., *Journal of Agricultural Knowledge and Sustainable Production*. **2017**: 27,.4.
- [2] Petropoulos, GA. Fenugreek: The genus *Trigonella*. *Taylor and Francis*, London and New York. **2002**, 255.