

# BIO-FERTILIZERS INOCULATION EFFECT ON GROWTH, YIELD AND QUALITY OF BER (*Ziziphus mauritiana* Lam.)

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## Abstract

An experiment was conducted at experiment field of Agricultural Research Station, Mandor, Jodhpur (Raj.) to study the effect of bio- fertilizers on growth, yield and quality of ber using Factorial Randomized Block Design with 5 replication during October 2021 to March 2022. Result showed that the maximum increase plant growth 4.25 per cent, number of primary branches (14.05), secondary branches (21.86), chlorophyll contents (53.83 SPAD value), fruit volume (20.51cm<sup>3</sup>), specific gravity (0.95), fruit length at harvest (3.30 cm), fruit diameter at harvest (3.19 cm), pulp thickness (12.36 mm), pulp weight (14.86 g), pulp: stone ratio (18.20), fruit setting (6.57 %), average fruit weight (16.93 g), yield/ tree (65.49 kg), ascorbic acid (Vit-C) (64.79 mg/100g pulp), total soluble solid (15.61°Brix), total sugar (8.51%), reducing sugar (4.54%), non-reducing sugar (4.04%), fruit pH (5.44), number of micro-organism (22.52×10<sup>8</sup> bacteria per g of soil) in rhizosphere whereas minimum stone weight (0.82 g) and fruit drop (50.75%) were recorded with the application of Consortium of bio-fertilizers *Pseudomonas fluorescens* 50 ml + *Azotobacter* 50 ml + Vesicular Arbuscular Mycorrhizae 100 g per plant over the control.

**KEYWORDS-** Arid climate, Bio-fertilizers, Ber, Fertility, Soil microbes.

## CONCLUSION

The present experiment concluded that the treatment consortium of biofertilizer (M<sub>1</sub>) was found better in respect of growth, yield, fruit physical and quality attributes of ber.

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