Effect of Azotobacter spp. inoculum on growth of wheat variety trimbak

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Biofertilizer has been acknowledged as a substitute to chemical fertilizer to increase soil fertility and crop production in sustainable farming. Most of the farmers assume that chemical fertilizer gives more yield than the biofertilizer, ignoring environmental and long term losses. This study is done to test the efficiency and efficacy of the biofertilizer in opposition to the chemical fertilizer and in additions to this comparison also done among the four species of *Azotobacter* for their aid in increase in yield and biomass of wheat crop. The field experiment was conducted during *Rabi* 2006-07 season using randomized Block Design and Trimbak variety were used for sowing in 21 plots. About nine parameters of wheat crop were selected and intermittently readings were taken at 30, 60, 90 days of interval to observe alteration, due to use of biofertilizer, chemical fertilizer and some plots were kept as a control for comparison. ANOVA were used to test the significance in treatments.

Key words : Biofertilizer, Azotobacter, Wheat, Chlorophyll

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