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Influence of Biofertilizers on Growth, Yield, Quality and Nutrient Uptake in Onion (*Allium cepa* L.)

Dilpreet Talwar, Kulbir Singh, D.S. Khurana and Variendar Sardhana¹

Department of Vegetable Science and ¹Department of Plant Breeding and Genetics Punjab Agricultural University, Ludhiana-141 004, India E-mail: dsingh381@gmail.com

Abstract: The Azotobacter was beneficial for improving plant height, leaf area and bulb diameter when applied along with recommended dose of fertilizers (RDF). Likewise Azospirillum along with RDF the (234.4 q/ha) which was 11.2 % higher bulb yield than the RDF. The application of Azospirillum along with 75 % recommended dose of nitrogen or Azotobacter along with VAM and 75 % N and 75 % P of the recommended dose of nitrogen and phosphorus recorded yield which was statistically at par with RDF. The Azospirillum also improved TSS and ascorbic acid. The uptake of nitrogen and potassium also improved with the application of Azospirillum along with RDF. Azotobacter along with VAM and 75 % dose of N and P saves the nitrogenous and phosphorus fertilizers without any significant reduction in yield. Azospirillum either along with RDF or with 75 % dose of N suggested for sustainable production of onion.

Key Words: Azospirillum, Azotobacter, Biofertilizers, Nutrient uptake, PSB, VAM