



RESEARCH PAPER

Morphological characterization of phosphorus stress common bean plant under different media

Asmat Farooq, Vikas Sharma* and Sajad Majeed Zargar¹

Division of Biochemistry, Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu, Main Campus, Chatha, Jammu (J&K) India (Email: vikas.skuast@gmail.com)

Abstract : Common Bean (*Phaseolus vulgaris* L.) is a legume of significant importance with major domestic and diversifying history. The Common Bean is usually appreciated for their affordability and extensive storage life in developing countries where different environmental stresses exist or develop. Among various abiotic stresses, mineral stress (especially Phosphorus stress) is a critical limiting factor for common bean production mostly growing in developing countries. The study was conducted to investigate the impact of phosphorus stress on morphological characteristics of root and shoot common bean plant (Shalimar French Bean-1), grown under *in vitro* conditions in solid Agar and liquid media. Shoot Length, shoot weight number of nodes of shoot, root length and root weight were significantly decreased as compared to control in both media. Thus, the study reflected the significant impact on phosphorus utilization efficiency (PUE) of common bean plant by changing the morphological characteristics under phosphorus stress conditions.

Key Words : Common bean, Abiotic stress, Phosphorus stress, Morphology, Solid Agar, Liquid media

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*Author for correspondence :

¹Division of Plant Biotechnology, Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Shalimar, Srinagar, (J& K) India