

IMPACT OF ELEVATED TEMPERATURE ON GROWTH, YIELD, GRAIN QUALITY IN SUMMER MUNG BEAN AND ITS MITIGATION THROUGH USE OF BIOFERTILISERS

Anusmita Goswamy* and J.D.S. Panwar

Department of Botany, M.G. University, Meghalaya

Abstract: Two varieties of mung bean viz. Pusa 9531 and Pusa Vishal were raised under pot culture conditions during summer season. These plants were grown under natural and elevated temperature (normal $\pm 5^{\circ}\text{C}$) conditions. The result revealed that the elevated temperature had the adverse effect on nodulation, leaf area, total dry matter and grain yield as compared to natural conditions. The use of *Rhizobium* and AM fungi either alone or in combination had mitigated the adverse effect of elevated temperature in both the varieties. The dual inoculation was found better than individual application in terms of dry matter production, pod number, seed number, seed size, grain yield and quality. Variety Pusa 9531 proved better than Pusa Vishal.

Keywords: Elevated temperature, Summer mungbean, AM Fungi, *Rhizobium*, nodulation, grain yield, quality

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