

Productivity, Nutrient Uptake and Economics of Pearl Millet [*Pennisetum Glaucum* (L.)] as Influenced by Nitrogen, Phosphorus and Biofertilizer Management

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ABSTRACT

A field experiment was conducted at the Agricultural College Farm, Bapatla, to study the effect of N, P and biofertilizer management practices on yield, nutrient uptake and economics of pearl millet. The treatments consisted of T₁ : Control, T₂ : Biofertilizer alone (Azospirillum and PSB), T₃ : 20 kg N + 15 kg P₂O₅ ha⁻¹, T₄ : 40 kg N + 30 kg P₂O₅ ha⁻¹, T₅ : 60 kg N + 45 kg P₂O₅ ha⁻¹, T₆ : T₂ + T₃, T₇ : T₂ + T₄ and T₈ : T₂ + T₅. Application of 60 kg N + 45 kg P₂O₅ ha⁻¹ + biofertilizer recorded the highest grain yield (29.7 q ha⁻¹), stover yield (67.5 q ha⁻¹) and protein content (10.41%) but it was at par with T₇ and T₅ treatments. Significantly highest N (98.3 kg ha⁻¹) and P (25.8 kg ha⁻¹) uptake recorded with T₈ treatment. T₈ treatment recorded the highest net returns (27357 ha⁻¹) but T₇ was more economical with the highest B: C ratio (2.57).

Key words : Biofertilizer, Economics, Nitrogen, Nutrient uptake, Pearl millet, Phosphorus, Protein, Yield.