

Growth and Yield of Fingermillet [*Eleusine coracana* (L.)] as Influenced by Phosphorus Management Practices

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ABSTRACT

A field experiment conducted during *kharif*, 2015 on sandy soil of Agricultural College Farm, Bapatla. Experiment was laid out in randomized block design with nine treatments (T1: RDP @ 30 kg ha⁻¹; T2: 75% Recommended dose of inorganic phosphorus + FYM @ 3.75 t ha⁻¹; T3: 75% Recommended dose of inorganic phosphorus + Vermicompost @ 0.75 t ha⁻¹; T4: 50% recommended dose of inorganic phosphorus + FYM @ 7.5 t ha⁻¹; T5: 50% Recommended dose of inorganic phosphorus + Vermicompost @ 1.5 t ha⁻¹; T6: T1 + PSB @ 5.0 kg ha⁻¹; T7: T4 + PSB @ 5.0 kg ha⁻¹; T8: T5 + PSB @ 5.0 kg ha⁻¹; T9: No phosphorus.) and replicated thrice. The results indicated that the highest plant height at harvest (100.9 cm), drymatter production (566.0, 3068.0 and 6845.0 kg ha⁻¹ at 30,60 DAS and harvest stages), total tillers m⁻² (67.0, 72.7 and 74.3 at 30,60 DAS and harvest stages), grain yield (2200 kg ha⁻¹), straw yield (4550 kg ha⁻¹) and highest benefit cost ratio (1.73) was recorded with 50 % recommended dose of phosphorus + FYM @ 7.5 t ha⁻¹ + PSB @ 5.0 kg ha⁻¹ followed by 50 % recommended dose of phosphorus + Vermicompost @1.5 t ha⁻¹ + PSB @ 5.0 kg ha⁻¹ and significantly superior to the rest of the treatments.

Key words: *Fingermillet*, *FYM*, *Phosphorus management*, *PSB*, *Vermicompost*.