Effect of varieties and nutrient levels on growth and yield of rice fallow finger millet

B Sanjitha, E Aruna, S Prathibha Sree, P Venkata Subbaiah

Department of Agronomy, Acharya N G Ranga Agricultural University, Agricultural College, Bapatla-522101, Andhra Pradesh, India

ABSTRACT

A field experiment was carried out on clay loam soils during *rabi*, 2024-2025 at Agricultural College Farm, Bapatla to assess the Response of finger millet (*Eleusine coracana* L.) varieties to nutrient levels in rice-fallows. The experiment was laid out in randomised block design with factorial concept with 4 varieties *viz.*, Vakula, Tirumala, Indravathi and Gosthani as factor I and nutrient levels – 75%, 100% and 125% RDF as factor II, replicated thrice. The results of the investigation revealed that among the varieties, Indravathi recorded highest drymatter accumulation at harvest (9986 kg ha⁻¹), number of productive tillers m⁻² (129), number of fingers earhead⁻¹ (7.9), grain yield (3148 kg ha⁻¹) and straw yield (5622 kg ha⁻¹). Highest plant height at harvest (87.6 cm), drymatter accumulation at harvest (9692 kg ha⁻¹), number of productive tillers m⁻² (128), number of fingers earhead⁻¹ (7.5), grain yield (3042 kg ha⁻¹) and straw yield (5450 kg ha⁻¹) was recorded with application of 125 % RDF (75-50-37.5 N, P₂O₅, K₂O kg ha⁻¹) over 100% (60-40-30 N, P₂O₅, K₂O kg ha⁻¹) and 75% RDF (45-30-22.5 N, P₂O₅, K₂O kg ha⁻¹).

Keywords: Finger millet, Nutrient levels, Rice fallows and Varieties