

Nutrient Uptake and Economics of Rabi Sunflower (*Helianthus annuus. L*) as influenced by tillage practices and nitrogen management

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A field experiment was conducted during Rabi 2011 at Research farm, RARS, Bijapur on a deep black soil under rainfed condition with an objective to study the effect of different tillage practices imposed during kharif and nitrogen sources on nitrogen uptake and economics of rabi sunflower. Significantly higher N uptake (57.35 kg ha^{-1}) was seen with conventional tillage over minimum tillage but was on par with reduced tillage. Neither P nor K uptake was significantly influenced due to tillage practices in sunflower during rabi season. Sunflower fertilized with 100% recommended dose of fertilizer (N3) recorded significantly higher N, P and K uptake at harvest. Maximum gross returns (38061 Rs ha^{-1}) and net returns (28729 Rs ha^{-1}) was realized for the treatment combination T3N3 (Minimum tillage with 100% recommended dose of fertilizer). Reducing the tillage intensity does not significantly influence economics and substituting 50% nitrogen through organic sources produces comparable yields that of inorganic source of nitrogen application.

Biography

Sridhar has completed his M.Sc(Ag) Agronomy at the age of 24 years from ANGRAU and currently pursuing his PhD in Dept. of Agronomy, College of Agriculture, Rajendranagar, ANGRAU, Hyderabad, Andhra Pradesh.

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