Agronomic Management In Rabi Groundnut For Higher And Quality Yield

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ABSTRACT

Field experiments were conducted during two consecutive *rabi* seasons of 2008 and 2009 on sandy clay loam soils of S.V. Agricultural College, Tirupati campus of ANGRAU, to develop certain agro- techniques for enhancing the productivity and quality of export oriented groundnut. The experiment was laid out in a split - spit plot design and replicated thrice. It consisted of three planting patterns viz., 22.5 x 10 cm (P_1), 30.0 cm x 10 cm (P_2) and 37.5 x 10 cm (P_3) as main plots, four nitrogen management practices viz., 100% N through urea (N_1), 100% N through poultry manure (N_2), 50% N through fertilizer + 50% N through poultry manure (N_3) and 25% N through urea + 75% N through poultry manure (N_4) as sub plots and four weed management practices viz., Two hand weedings at 20 and 40 DAS (W_1), Pre-emergence application of pendimathalin @1.0 kg a.i ha^{-1} + one hand weeding at 40 DAS (W_2), Post emergence application of quzilofop –p-ethyl @ 54 g a.i ha^{-1} at 20 DAS + hand weeding at 40 DAS (W_3) and Pre-emergence application of pendimathalin @ 1.0 kg a.i ha^{-1}+ post emergence application of quzilofop –p-ethyl @54 g a.i ha^{-1} at 40 DAS (W_4) as sub-sub plots. The results revealed that sowing groundnut with planting pattern of 22.5 x10 cm and application of 30kg N ha^{-1} @ 50 per cent each through urea and poultry manure along with hand weeding twice at 20 and 40 DAS is essential for obtaining higher yield with better quality and remunerative monetary returns.

Key words: Groundnut, Hand weeding, Nitrogen, Planting pattern.