Growth, Yield and Economics of Groundnut (Arachis hypogaea L.) Cultivars as Affected by Levels of Nitrogen

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ABSTRACT

A field experiment was carried out during *rabi*, 2020-2021 on sandy loam soil at Agricultural College Farm, Bapatla, Guntur, Andhra Pradesh to study the growth, yield and economics of groundnut (*Arachis hypogaea* L.) cultivars as affected by levels of nitrogen. The experiment was laidout in Randomized Block Design with factorial concept in three replications. The treatments consisted of three varieties *viz* V₁: Dharani, V₂: Kadiri lepakshi and V₃: TAG-24 and four nitrogen levels *viz*, 0 kg, 25 kg, 50 kg, and 75 kg N ha⁻¹. The results of the investigation revealed that Kadiri lepakshi (V₂) recorded the highest drymatter accumulation (kg ha⁻¹), more number of branches plant⁻¹, higher pod yield, kernel yield and haulm yield while dharani (V₁) recorded the highest plant height. Gross returns, Net returns and B:C ratio were recorded maximum with the cultivar kadiri lepakshi (V₂). Among the levels of nitrogen application, application of 75 kg N ha⁻¹ (N₄) recorded the highest growth parameters, yield parameters and economic parameters.

Keywords: Drymatter accumulation, Economics, Groundnut cultivars, Haulm yield, Nitrogen levels, Plant height and Pod yield,