

Studies on Yield and Nutrient Uptake of *kharif* Popcorn (*Zea mays everta*) as Influenced by Different Levels of Fertilizer and Plant Density

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ABSTRACT

A field experiment was conducted during *Kharif* 2012 to study the different levels of fertilizer and planting pattern on yield and nutrient uptake of popcorn. The experiment was laid out in factorial randomized and replicated thrice. It consisted of three fertilizer levels viz., 75% RDF (90:45:30 Kg NPK ha⁻¹), 100% RDF (120:60:40 Kg NPK ha⁻¹) and 125% RDF (150:75:50 Kg NPK ha⁻¹) and four plant spacing levels viz., 60 x 15 cm², 60 x 20 cm², 75 x 15 cm² and 75 x 20 cm². The results indicated that highest LAI, LAD, drymatter accumulation per plant, chlorophyll SPAD readings, 1000 grain weight, grain yield and nutrient uptake with application 150:75:50 Kg NPK ha⁻¹ (125% RDF), while the lowest of all these parameters were recorded with 90:45:30 kg NPK ha⁻¹ (75% RDF). Among the different plat densities 75 x 20 cm² shows significantly higher LAI, LAD, drymatter accumulation per plant, chlorophyll SPAD readings, 1000 grain weight, grain yield and nutrient uptake over 60 x 15 cm².

Key words: *Fertilizer levels, Plant densities, Popcorn.*