

Response of Popcorn (*Zea mays everta*) to Different Fertilizer Levels and Plant Densities in *Kharif* Season”

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ABSTRACT

An experiment entitled “Response of popcorn (*Zea mays everta*) to different fertilizer levels and plant densities in *kharif* season” was conducted during 2012 at Post Graduate Research Farm, College of Agriculture, Kolhapur, to study the effect of fertilizer and plant spacing levels on growth and yield of popcorn. The experiment was laid out in Factorial randomized block design with twelve treatments combinations comprising 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 x15 cm² and 75 x 20 cm². The study has revealed that all the growth characters viz., plant height, number of functional leaves, leaf area and dry matter accumulation per plant were found significantly higher with application of 125% RDF (150:75:50 Kg NPK ha⁻¹) over 75% RDF (90:45:30 Kg NPK ha⁻¹) and it was on par with 100% RDF (120:60:40 Kg NPK ha⁻¹) at all the crop growth stages. The number of functional leaves, leaf area and dry matter accumulation per plant were significantly higher with plant spacing of 75 x 20 cm² over 60 x 15 cm², expect 75 x 15 and 60 x 20 cm² spacing levels.

Key words : Fertilizer levels, Plant densities, Popcorn.