

# **Yield and Quality of Popcorn (*Zea mays everta*) as Influenced by Planting Population and Fertility Levels in *Kharif* Season**

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## **ABSTRACT**

A field experiment was conducted during *Kharif* season of 2012 on vertisols of Post Graduate Research Farm, College of Agriculture, Kolhapur, to develop certain agro techniques for enhancing the productivity and quality of popcorn in Maharashtra. 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<sup>-1</sup>), 100% RDF (120:60:40 Kg NPK ha<sup>-1</sup>) and 125% RDF (150:75:50 Kg NPK ha<sup>-1</sup>) and four plant spacing levels viz., 60 x 15 cm<sup>2</sup>, 60 x 20 cm<sup>2</sup>, 75 x 15 cm<sup>2</sup> and 75 x 20 cm<sup>2</sup>. The results indicated that highest grain yield, popping percentage expansion volume, protein content, reducing sugars and total sugars obtained with the application 150:75:50 Kg NPK ha<sup>-1</sup> (125% RDF), while the lowest of all these parameters were recorded with 90:45:30 kg NPK ha<sup>-1</sup> (75% RDF). Among the different plant densities 75 x 20 cm<sup>2</sup> plant spacing recorded higher yield and quality characters over 60 x 15 cm<sup>2</sup>.

Key words: Fertilizer levels, Plant densities, Popcorn.