Performance of inter specific cotton hybrids under various plant geometries and nutrient levels

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ABSTRACT: Field experiment was conducted at Agricultural Research Station, Borwat Farm, Banswara during Kharif-2010 to find out the optimum plant geometry and fertility levels for inter specific cotton hybrids with three cotton hybrids (JKCHB-214, RAHB-170 and DCH-32), two plant geometries (90 x 60 and 90 x 45 cm) and three fertility levels (75, 100 and 125 % RDF). Sowing of JKCHB-214 cotton hybrid gave significantly higher seed cotton yield (1558 kg ha⁻¹) over DCH-32 cotton hybrid. The maximum seed cotton yield (1754 kg ha⁻¹) was observed under wider plant geometry of 90 x 60 cm than closer plant geometry of 90 x 45 cm. Though, yield attributing parameters such as bolls plant⁻¹ and boll weight were statically improved in wider as compared to closer spacing it could be increase the seed cotton yield. Among fertility levels, similar seed cotton yield was recorded with the application of 100 per cent RDF (1555 kg ha⁻¹) and 125 per cent RDF (1602 kg ha⁻¹) but both were significantly better than that of 75 per cent RDF and plant geometry 90 x 60 cm seemed to be ideal for inter specific hybrid cotton for realizing higher productivity under the specific agro climatic zone IV b of Rajasthan.

KEY WORDS: JKCHB-214, Inter specific cotton, Plant geometry, Fertility levels


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