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Studies on crop geometries and fertility levels for Bt cotton hybrids

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ABSTRACT : An experiment was conducted at Agricultural Research Station, Borwat Farm, Banswara during *Kharif*-2010 and 2011 to find out optimum pant geometry and fertility levels for Bt cotton hybrid under three plant geometries (90 x 90, 90 x 60 and 90 x 45 cm) and three fertility levels (*i.e.* 75, 100 and 125 % RDF). Significantly higher seed cotton yield was recorded (2301 kg ha⁻¹) under closer geometry of 90 x 45 cm (2301 kg ha⁻¹) than wider plant geometry of 90 x 60 cm (1934 kg ha⁻¹) and 90 x 90 cm (1759 kg ha⁻¹), respectively. Though, yield attributing parameters such as bolls plant⁻¹ and boll weight were statically improved in wider as compared to closer spacing but it could not compensate yield due to significantly higher plant population in the later case. Among fertility levels, similar seed cotton yield was recorded with the application of 100% RDF (2204 kg ha⁻¹) and 125 % RDF (2295 kg ha⁻¹) but both were significantly better than that of 75 % RDF (1865 kg ha⁻¹) and plant geometry 90 x 45 cm seemed to be ideal for Bt cotton hybrid for realizing higher productivity under the specific agro climatic zone IV b of (Rajasthan).

KEY WORDS : Bt cotton, Plant geometry, Seed cotton yield, Fertility levels

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