

Heterosis study for yield and yield attributing characters in inter-specific asiatic cotton hybrids

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ABSTRACT

Thirty two intrer-specific hybrids of Asiatic Cotton (*Gossypium herbaceum* and *Gossypium arboreum*) along with their sixteen parents were evaluated at Anand Agricultural University. The data on heterosis calculated over better parent and standard checks DH-7 and DH-9 revealed outstanding superiority of some cross combinations. The analysis of variance revealed significant differences among genotypes for all the traits. Three hybrids viz., 832 x CINA – 316, 592 x CINA – 343 and 832 x CINA – 344 showed higher economic heterosis for seed cotton yield per plant, however, study of other yield attributing characters for these crosses revealed that the crosses were either at par or poor than standard checks. The desirable heterosis was also observed in the cross combinations viz., G.cot – 13 x CINA – 344 for days to 50% flowering, 832 x CINA – 343 for boll weight and 832 x CINA – 344 for number of bolls per plant.

Key words : Asiatic cotton, Heterosis, *Gossypium herbaceum*, *Gossypium arboreum*

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