

Genetic Analysis of Quantitative Traits in Upland Cotton (*Gossypium hirsutum* L.)

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ABSTRACT

The present study was carried out with fifty seven genotypes comprising of ten parents and forty five hybrids obtained from crossing of ten parents in diallel manner without reciprocals and two checks at Regional Agricultural Research Station, Lam Farm, Guntur, Andhra Pradesh during *khariif* 2013-14. The experiment was conducted in randomized block design with three replications. The data was recorded on plant height (cm), days to 50% flowering, number of monopodia per plant, number of sympodia per plant, number of bolls per plant, boll weight (g), ginning out-turn (%) and seed cotton yield per plant (g). The data was subjected to combining ability analysis. Both general combining ability and specific combining ability indicated significant mean sum of squares in analysis of variance. Most of the traits showed the predominance of non additive gene action.

Key words: *Cotton, diallel, combining ability, Gene action.*