Character Association and Path Coefficient Analyses for Yield and Yield Component Traits in Upland Cotton (Gossypium hirsutum L.)

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ABSTRACT

Correlation and path coefficient analyses were carried out with 60 cotton genotypes, obtained from different cotton research centres across the country for yield and yield component traits. The character association studies revealed that seed cotton yield plant-1 had positive significant correlation with plant height, number of monopodia plant-1, number of sympodia plant-1, number of bolls plant-1, boll weight, seed index, micronaire, uniformity ratio and lint yield plant-1 suggesting that these are the major yield contributing traits. Path coefficient analysis revealed that lint yield plant-1 exerted strong direct positive effect on seed cotton yield plant-1 signifying the importance of this trait while selecting for improvement of seed cotton yield of cotton.

Key words: Character Association, Cotton and Path Analysis