GENOTYPE x ENVIRONMENT INTERACTION AND STABILITY ANALYSIS OF SEED-COTTON YIELD IN UPLAND COTTON (*Gossypium hirsutum* L.)

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ABSTRACT

Stable performances in crop yield over a wide range of growing conditions are desirable from a standpoint of management and marketing. Fourteen cotton genotypes were tested for seed cotton yield at eight sites differing in rainfall and in temperature, over a period of two growing seasons of 1997 and 1998, to classify them for yield stability and to determine their genotype x environment interactions. In the study; the estimates of variance components for seed cotton yield combined over two years and eight locations were highly significant. Deltapine 5690, Sure Grow 404 and Deltapine 5409 had regression coefficients of 1.073, 1.084, 1.008, respectively, indicating their best adaptations to all environments tested.