

**GENOTYPIC VARIATION OF NEPS AND SEED COAT FRAGMENTS IN AN EXOTIC COTTON
GERMPLASM POPULATION**

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Abstract

Neps and seed coat fragments are impurities in ginned fibers affecting textile processing during spinning and dyeing. The objectives of this study were to investigate genotypic variation of neps and seed coat fragments remaining in ginned fibers in an introgressed population. Two hundred lines of a population, i.e., John Cotton (JC) germplasm, derived from multiple crosses between *Gossypium hirsutum* L. and *G. barbadense* L. and five cultivars were planted at two locations during 2006 and 2007. The neps and seed coat fragments were measured using Advanced Fiber Information System. Genotypic variations of neps and seed coat fragments in the JC germplasm were highly significant. The interrelationships of these two properties with lint yield and other fiber traits were also analyzed.