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## Evidence That Light Stink Bug Damage Does Not Influence Open End Yarn Processing Performance

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Authors: Philip J. Bauer, David D. McAlister III, and Mitchell E. Roof  
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Stink bugs [*Acrosternum hilare* (Say), *Nezara viridula* (L.), and *Euschistus servus* (Say)] have become an important pest of cotton (*Gossypium hirsutum* L.) concurrent with the expansion of acres planted to transgenic cotton cultivars. The objective of this study was to determine the effect of stink bug damage on the textile mill performance of cotton cultivars that represented all combinations of transgenic technology (available in 2002). Six cotton cultivars (Stoneville 474 and its five transgenic siblings; ST 4793R, ST 4691B, ST 4892 BR, ST BXN 47, and ST BXN 49B) were grown with and without insecticide applications for stink bug control in 2002 and 2003. Stink bug damage was assessed in early August and in late August of each season. Cotton yield, fiber properties, and mill performance were measured. Transgenic traits did not substantially affect cotton mill performance. Stink bug damaged bolls were always greater for cotton not treated with insecticides than for cotton that was treated. Average damaged bolls ranged from 2 to 12% for the treated cotton and 9 to 21% for the untreated control. Although damage to bolls was greater for the untreated control, average seed cotton yield was not different between the cotton treated for stink bugs (1767 kg ha<sup>-1</sup> and 3765 kg ha<sup>-1</sup> in 2002 and 2003, respectively) and the untreated control (1981 kg ha<sup>-1</sup> and 3769 kg ha<sup>-1</sup> in 2002 and 2003, respectively). Fiber properties and yarn and fabric quality were not improved with insecticide applications to control stink bugs. The data indicate that light stink bug damage does not result in reduced textile mill performance of the harvested fiber.