

BOLLGARD®II COTTON EFFICACY SUMMARY-MIDSOUTH

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Abstract

Bollgard®II cotton was tested across the mid-South to determine efficacy against lepidopteran caterpillar pest in 2000. Three types of studies were conducted across the region with consultants and academics: System trials, Sprayed/Unsprayed trials, and Unsprayed trials. Varieties included in each study were DP50BII (15985, Bollgard II), DP50B (Bollgard®) and DP50 (conventional cotton). Boll damage ratings were taken at each site to determine efficacy of Bollgard II compared to DP50B and conventional DP50 against cotton bollworm, *Helicoverpa zea*. Data available from six sites across the mid-South showed less boll damage to Bollgard II than DP50 and five of the six sites showed less boll damage to Bollgard II than DP50B. Two sites evaluated boll damage caused by fall armyworm, *Spodoptera frugiperda*. In both sites there were fewer damaged bolls in Bollgard II than DP50B or DP50 caused by fall armyworm. Beet armyworm, *Spodoptera exigua*, and soybean looper, *Pseudoplusia includens* were sampled at two locations. Beet armyworm and soybean loopers were found less frequently in Bollgard II than DP50B or DP50. Yields analyzed across all available sites showed Bollgard II numerically higher than DP50B and significantly higher than DP50. The data suggest that Bollgard II is performing well across multiple environments. Bollgard II appears to be more efficacious on cotton bollworm, fall armyworm, beet armyworm, and soybean loopers than Bollgard.