PERFORMANCE OF WIDESTRIKE® 3 INSECT PROTECTION IN 2014

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Abstract

WideStrike® is the registered trademark of Dow AgroSciences dual gene insect protected cotton. It expresses Cry1F and Cry1Ac proteins from *Bacillus thuringiensis* (Bt) and provides broad spectrum Lepidopteran management. WideStrike was first introduced in the U.S. in 2004 and has been commercially available since 2005. This technology was deregulated in Brazil and Australia and extensively tested in Argentina, India, and Mexico where it has consistently performed against a wide range of Lepidopteran pests. WideStrike has been steadily increasing market share since introduction and performance is extremely dependable. With all Bt technologies, growers are encouraged to continue to scout and treat if needed, and supplemental sprays may be required for extremely high populations or secondary pests. To increase trait durability, improve resistance management, consistency, and broaden the spectrum, Dow AgroSciences acquired a license for Syngenta's Vip3A vegetative insecticidal protein which is stacked with WideStrike to produce WideStrike® 3.

WideStrike 3 is the in-plant, three-gene insect protection trait featuring Cry1F, Cry1Ac and Vip3A. From 2011-2014, WideStrike 3 cotton varieties were tested for efficacy by Dow AgroSciences field scientists and select university cooperators in 46 regulated field trials. When insect pressure was average, no difference in performance was detected. However, in 18 high pressure sites, WideStrike 3 was numerically more consistent and provided greater insect protection from increased levels of *Helicoverpa zea* (cotton bollworm). Yield values were also greater in WideStrike 3 varieties than comparable WideStrike varieties. WideStrike 3 received U.S. registration in 2013 and launched in elite PhytoGen cotton varieties in 2014. Details on the efficacy and yield results are provided in the oral presentation.