18 ICAC RECORDER

Short Notes

WideStrike Cotton from Dow AgroSciences

Dow AgroSciences has developed a transgenic cotton called WildStrike that is resistant to insects. The company announced at the 2004 Beltwide Cotton Conferences of the National Cotton Council of America held in San Antonio, TX from January 5-9, 2004 that they had applied to the US Environmental Protection Agency for necessary approval and that WideStrike could be available for commercial planting beginning in 2004/05. WideStrike will be introduced in elite varieties of the Phytogen Seed Company in 2004 and it is also expected to be available in varieties from other cottonseed companies by 2005.

WideStrike is a stacked-gene variety. The insect protection trait, a combination of the Cry1F and Cry1Ac *Bacillus thuringiensis* (Bt) proteins, has been in development and field-testing for several years. According to Dow AgroSciences, the WideStrike insect protection trait has been extensively tested for its agronomic, efficacy and resistance management performance at many locations across the U.S. cotton belt between 2001/02 and 2003/04. The WideStrike provided season-long control of a broad spectrum of lepidopterans, such as cotton bollworm, tobacco budworm, pink bollworm, beet armyworm, fall armyworm, yellow striped armyworm, cabbage looper and soybean looper.

Economic Impact of Bt Cotton

Dr. George Frisvold of the University of Arizona, USA presented a paper analyzing the impact of growing Bt cotton at the 2004 Beltwide Cotton Conferences. His paper, "Impact of Bt cotton adoption in the United States and China (Mainland)" showed how Bt cotton adoption in the two countries has affected world cotton production, consumption, prices and imports/exports in China (Mainland), USA and rest of the world. Using data for 2001/02, when China (Mainland) and USA together shared over 95% of Bt cotton area in the world, Dr. Frisvold ran three scenarios: global impact of Bt cotton adoption in China (Mainland), adoption in the USA only and combined effect of adoption in both countries.

Dr. Frisvold and his colleagues concluded that adoption of Bt cotton in the USA alone lowered world cotton prices by 1.6 cents per kilogram of lint. Adoption of Bt cotton production in China (Mainland) resulted in a similar reduction in world cotton prices. The combined effect of adoption of Bt cotton in both countries lowered the world average price by 3.1 cents per kilogram of cotton in 2001/02. The US Loan Deficiency Payment rate increased by the same margin in each case. The impact on farm prices in the USA was a decrease of 2.7 cents per kilogram due to adoption of Bt cotton in China (Mainland) and the USA. Adoption in each country had a similar depressing effect on farm prices received in the USA. Consumption in China (Mainland) and the USA increased due to adoption of Bt cotton in either country. Adoption of Bt cotton in China (Mainland) increased consumption by 0.4% in the rest of the world. However, higher production in China (Mainland) and the USA due to Bt cotton negatively affected production in other countries, thereby increasing imports into these countries. The full paper will be published in the Proceedings of the 2004 Beltwide Cotton Conferences.