

2268 Symposium wrap-up: An agronomist's perspective on compensation in the cotton plant

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Cry1Ac/Cry1F (as commercial event DAS-21Ø23-5 x DAS-24236-5) is a new, combined insect-protection trait in genetically modified cotton that was developed by Dow AgroSciences , and which contains the *cry1Ac* and *cry1F* genes. Both genes express insecticidal proteins (called Cry1Ac and Cry1F) derived from *B. thuringiensis* (*Bt*), and together these proteins offer a high level of protection from several economically significant lepidopteran insect pests including tobacco budworm, bollworm, pink bollworm, fall armyworm, loopers and several other caterpillar species.

Cry1Ac/Cry1F cotton provides season-long, whole-plant protection from lepidopteran insect-feeding damage, allowing plants to remain healthier and less susceptible to environmental stresses throughout the growing season. Full-season protection against lepidopteran insect damage and other stress factors allows cotton varieties to reach their full genetic yield potential. Cry1Ac/Cry1F cotton can also increase farmer's productivity by reducing various inputs (e.g., labor, fuel, equipment, pesticides) typically required for conventional insect control programs. Recent performance data from several global locations will be provided

Cry1Ac/Cry1F cotton (as commercial event DAS-21Ø23-5 x DAS-24236-5) is currently approved for sale and cultivation in the United States, and goes by the tradename WideStrike™ *Insect Protection*. The development of WideStrike in other geographies is under evaluation.

Dow AgroSciences has a strong commitment to continue to bring new technologies to the world cotton producers including further improvements in insect control. To accomplish this goal we have continued to build upon the largest Bt patent estate as well as to seek other insect genes from novel sources. Insect control coupled with herbicide tolerant traits is of even greater value to growers and the recent announcement of a new herbicide tolerant trait by Dow AgroSciences should build on the overall utility. In addition to having access to genes the ability to improve their effectiveness with targeted placement will be more important in the future and Dow AgroSciences is investing in zinc finger proteins to address this need. A brief overview of these developments will be provided.