

1648 Expression profiles of Cry1Ac and Cry2Ab2 insecticidal proteins in tissues of Bollgard^(r) and Bollgard II^(r) in multiple Indian hybrid backgrounds

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Monsanto cotton events MON531 (modified *Cry1Ac* gene) and MON15985 (*Cry1Ac* and *Cry2Ab2* genes) have been introgressed into *Gossypium hirsutum* parental germplasm of 23 technology partners of Monsanto in India.

Since tissue contents of insecticidal proteins and bollworm tolerance are correlated, during the 2005 season, *Cry1Ac* concentrations in three tissues of 129 Bollgard™ hybrids were profiled (using quantitative ELISA) between 30 and 150 days after sowing. The tissue concentrations of *Cry1Ac* were adequate for the management of the three bollworms *Viz.*, *Helicoverpa armigera*, *Earias vittella* and *Pectinophora gossypiella*. Likewise, the season-long tissue-concentrations of *Cry1Ac* and *Cry2Ab2* proteins were independently profiled in tissues of **87** Bollgard II™ hybrids. The tissue contents of *Cry1Ac* in Bollgard and Bollgard II were essentially equivalent and the presence of *Cry2Ab2* in Bollgard II hybrids increases bollworm control efficacy with IRM benefits.

The poster provides a glimpse of the season-long expression profiles of the two insecticidal proteins of the events MON531 and MON15985 in several Bollgard and Bollgard II hybrids across two growing seasons of 2005 and 2006.