



## Technical Information: Broad-Spectrum Insect Control MIR162 + Bt11 stack technology

### About MIR162 + Bt11 stack technology

MIR162 + Bt11 stack technology is a new proprietary technology from Syngenta that features an event (MIR162) containing a novel insecticidal protein called Vegetative Insecticidal Protein (VIP3A) in a stack with the proven Agrisure<sup>®</sup> CB/LL trait (the Bt11 event). Corn hybrids with this proprietary technology are anticipated to be available for the 2010 growing season\*.

### Characteristics of MIR162 technology

- Employs a new, proprietary vegetative insecticidal protein, VIP3A, which is functionally and structurally different from insecticidal proteins in currently available products.
- Controls a broad spectrum of lepidopteran insects in corn, including Western bean cutworm, corn earworm, black cutworm, and fall armyworm.
- Will be stacked with the Bt11 event (the Agrisure CB/LL trait) for proven control of European corn borer, Southwestern corn borer, common stalk borer and sugarcane borer as well as better protection for stalks and ears.
- The MIR162 + Bt11 stack will combine two unique modes of action for broad-spectrum control and potential insect resistance management benefits.
- Commercial release of hybrids containing this trait stack is anticipated for 2010\*. Stacks with the Agrisure GT trait and the Agrisure RW trait also are planned following regulatory approval of such stacks.

### MIR162 + Bt11 stack technical background

- The MIR162 + Bt11 stack is a novel technology that will unite two unique proteins, VIP3A and Cry1Ab, the first new approach to complete insect control in corn since transgenic technology was first introduced in 1996.
- In university and Syngenta studies, MIR162 + Bt11 stack technology has been demonstrated to be highly effective on target pests.
- MIR162 + Bt11 stack technology begins working as soon as larvae start to feed on plant parts. As the larvae feed, they consume the VIP3A and Cry1Ab proteins, which work by disrupting the gut of susceptible larvae, causing them to quickly stop feeding.
- Although VIP3A targets pests in a manner similar to Cry proteins, the two proteins attack different sites on the pest's gut and have distinct modes of action.
- MIR162 + Bt11 stack technology is expected to be combined with leading genetics from Syngenta to provide high-performing hybrids with complete insect protection.

\*MIR162+Bt11 stack technology is not currently registered for sale or use in the United States and is therefore not being offered for sale. This communication does not constitute an offer for sale. This product will not be offered for sale until the EPA has approved registration and all necessary authorizations have been granted.

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