

ABSTRACT

LEPIDOPTERAN-ACTIVE CRY1DA1 AMINO ACID SEQUENCE VARIANT PROTEINS

Engineered Cry1Da amino acid sequences are provided that exhibit improved Lepidopteran insecticidal activity and an enhanced Lepidopteran spectrum compared to the naturally occurring Cry1Da protein toxin. Polynucleotide sequences intended for use in expression of the improved proteins in plants are also provided. Particular embodiments provide compositions containing insect inhibitory amounts of the engineered proteins, as well as recombinant plants, plant parts, and seeds containing polynucleotide constructs encoding one or more of the improved engineered proteins.

Figure 1