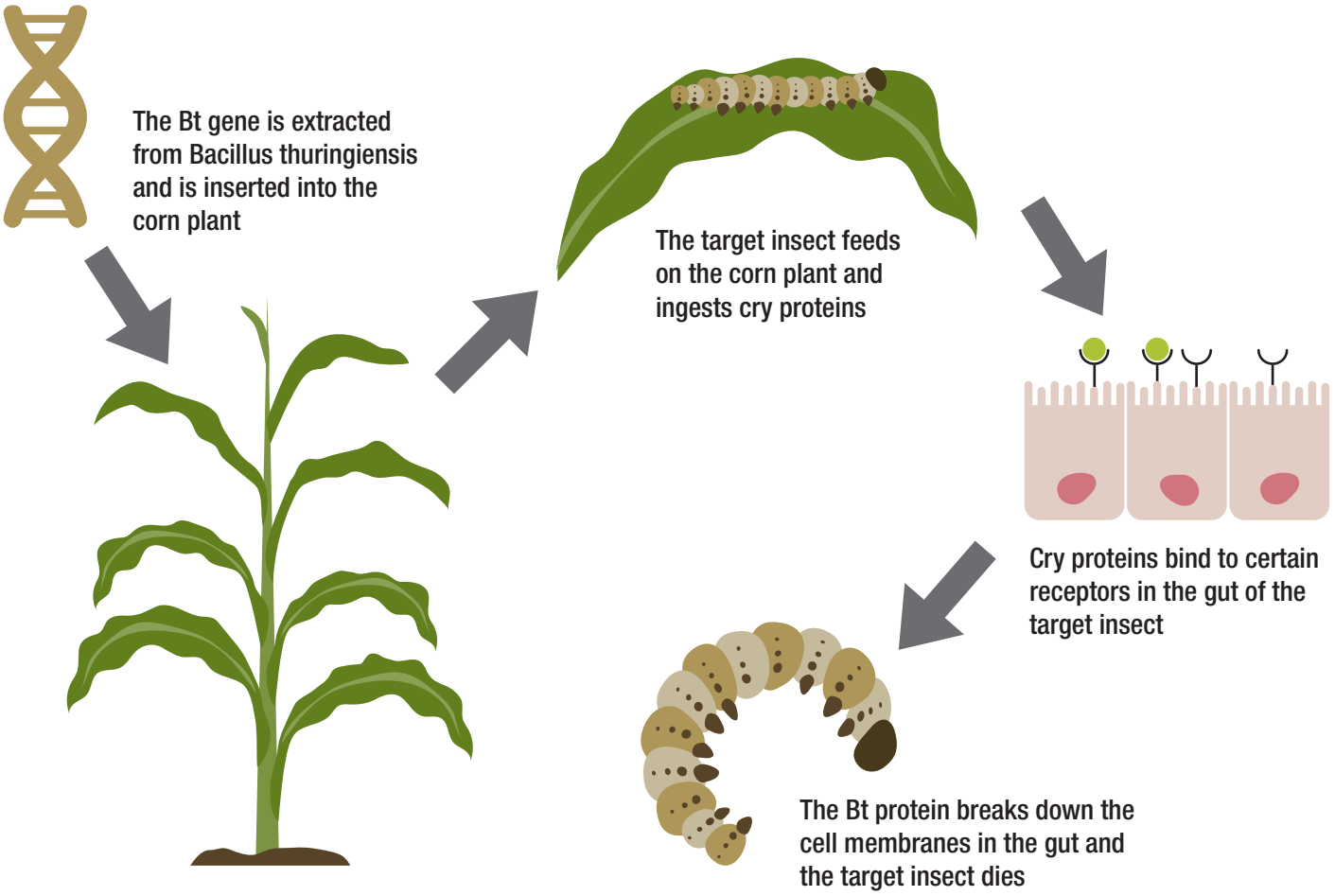
Bt insect control technology

Bacillus thuringiensis (Bt) is a spore-forming bacteria that produces crystal proteins. Certain crystal (cry) proteins bind to specific receptors in the gut of target insects and cause the gut wall to break down, killing the insect to subsequently end feeding and help growers protect yield.



The cry protein is selective toward targeted insects and leaves non-targeted insects unharmed. Considered safe for humans, fish, birds and the environment, cry proteins are an important and practical tool in the ongoing effort to combat damaging pests.

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Bt insect control technology: A look through history

1902
When studying silkworms, Japanese biologist Shigetane Ishiwatari discovers bacteria that would later be known as Bt.

1911
In the province of Thuringia, Germany, Ernst Berliner isolates bacteria that kills Mediterranean flour moth and later names his discovery Bacillus thuringiensis (Bt) after the province.

1920
Farmers in France begin using Bt for flour moth control.

1938
Sporeine, the first commercial Bt product, is produced in France.

1958
The first products containing Bt technology are registered for use in the United States.

1996
Dr. Mary-Dell Chilton, a researcher at Syngenta legacy company Ciba-Geigy, and her team become the first to commercialize a transgenic Bt maize product. Known as Bt176, it is the first of several plant-incorporated Bt traits that protect corn plants from insect feeding.

Present day
Growers continue to use various insect-control products containing Bt technology to safely and effectively combat key insects. Labeled products continue to be used for many applications, including organic production.

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