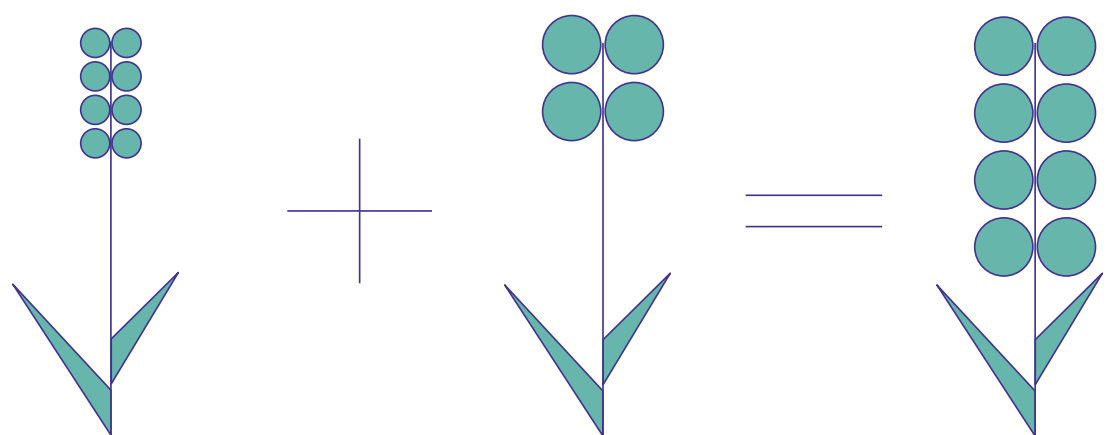


TYPES OF GENETIC MODIFICATION METHODS FOR CROPS

TRADITIONAL CROP MODIFICATION

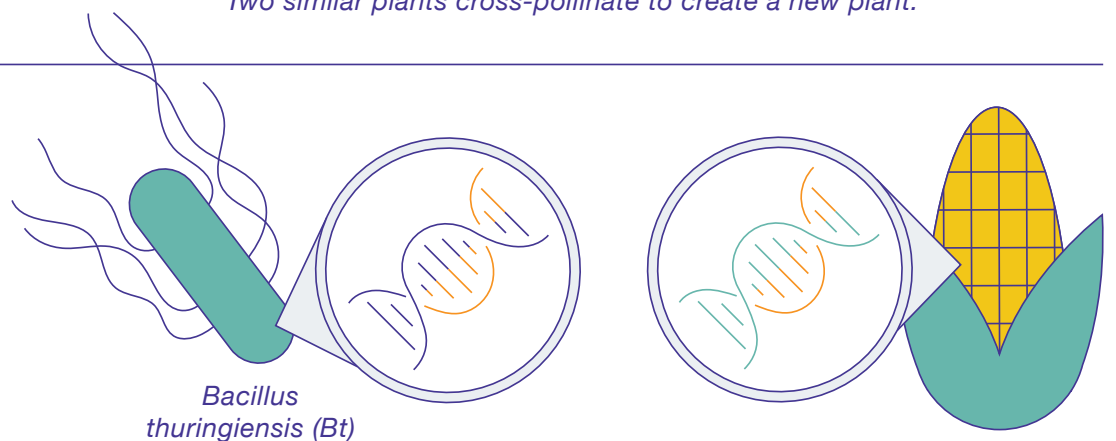
Traditional methods of modifying plants, like selective breeding and crossbreeding, have been around for nearly 10,000 years. Most of the foods we eat today were originally created using a combination of traditional methods.



Two similar plants cross-pollinate to create a new plant.

GENETIC ENGINEERING

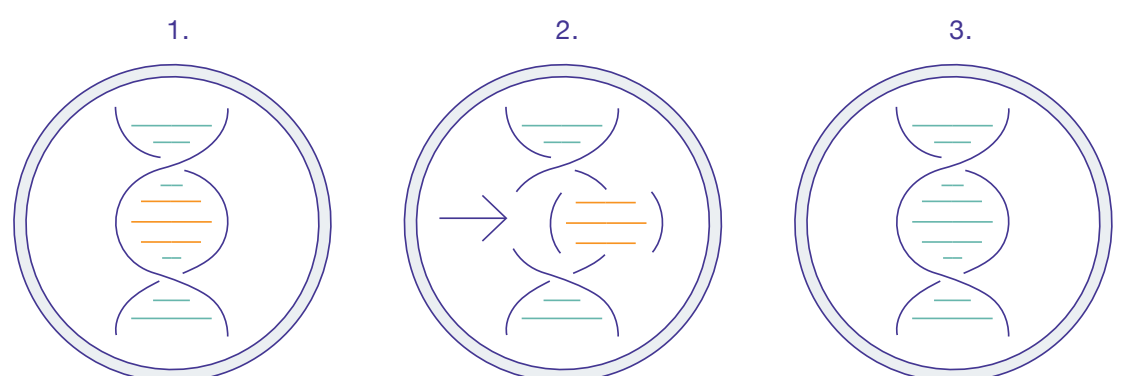
Genetic engineering is a method that, among other things, enables scientists to copy a gene with a desired trait in one organism and put it into another. Genetic engineering has been used since the 1970s and builds on the scientific advances we have made in the study of DNA.



A gene in a soil bacterium (Bt) is inserted into the DNA of the corn to create an insect-resistant corn.

GENOME EDITING

Genome editing is a new method that gives scientists more precise and targeted ways to develop new crop varieties. Genome editing tools can make it easier and quicker to make changes that were previously done through traditional breeding.



One example of genome editing is removing an unwanted gene.