GM Terminology

G-Genetically
M-Modified
O-Organism

When the DNA is modified to...
enhance a characteristic (e.g., pest resistance) or
reduce a characteristic (e.g., thorns) of a crop.

GM Techniques Include:

Conventional Breeding and/or Genetic Engineering (GE)

Example:
Pollinating a crop with the pollen of a closely related crop.

Example:
Using biotechnology to insert DNA from a plant or organism into a crop.

GOAL: Create a better crop — SAME GOAL — **GOAL: Create a better crop**

You might hear:
-Hybridization
-Sexual Propagation
-Cross-Pollination

You might hear:
-Biotechnology
-Gene Insertion
-Genome Editing

So easy a bee can (and does) do it!

Typically faster to create new varieties!

Most all crops on the market are the result of years (sometimes 1,000's of years) of conventional breeding!!

Only 9 GE Crops on the Market

Alfalfa	Cotton	Sugar Beets
Canola	Rainbow Papaya	Yellow Squash
Corn	Soybeans	Zucchini

BOTTOM LINE

Conventional breeding and GE are both used to genetically modify crops.

Both types must pass the same safety standards before they are released into the market.

Public Issues Education
HAWAI'I

References: http://goo.gl/QrqwjT ; http://goo.gl/c2q9q2 ; http://goo.gl/JpyCM6 ; http://goo.gl/NppXIo