BRINGING A BIOTECH CROP TO MARKET

10+YEARS and $150M

WHY BIOTECHNOLOGY?

Since the beginning of agriculture, farmers and then crop breeders, have been modifying crop plants to increase beneficial traits or reduce negative characteristics. Biotechnology is the most effective and precise way to identify and introduce traits in crop plants.

PROBLEM:

- Poor yield due to pest or disease stress
- Crop failure due to drought
- Diets with nutritional deficiencies
- Food waste

SOLUTION:

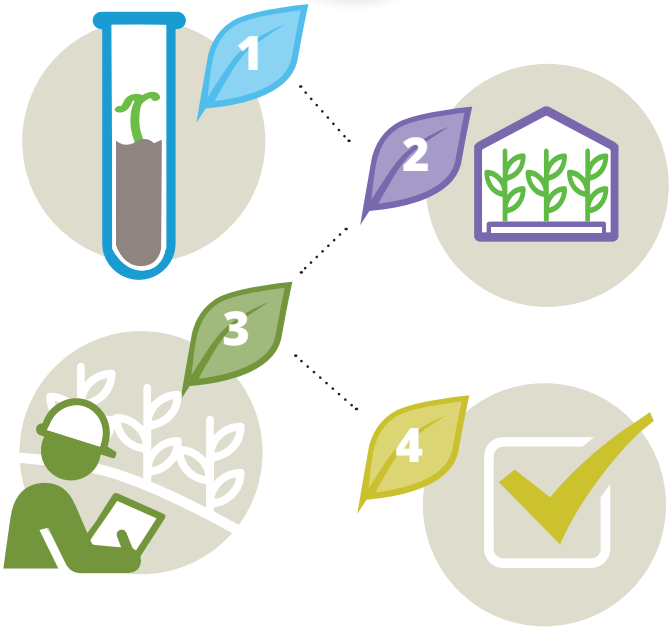
- Disease or pest resistant traits
- Drought resistant trait
- Added micronutrients
- Non-browning trait

STEP 1: IN THE LAB (5 TO 7 YEARS)

In a lab, thousands of tiny plants are modified with the desired trait.

STEP 2: GREENHOUSE TESTING

The most promising plants are chosen and grown in a greenhouse under simulated 'real' conditions.



STEP 3: CONFINED FIELD TRIALS (2 TO 3 YEARS)

Only a few plants make it to this stage.

They are grown on small plots in outdoor conditions and closely monitored.

STEP 4: REGULATORY APPROVAL (1 TO 3 YEARS)

When a crop is considered new, the CFIA and Health Canada evaluate the data for the safety, the way it will grow, and the food that will be harvested.

The comprehensive data analysis follows international standards recommended by the World Health Organization, Food and Agriculture Organization of the United Nations and the Organisation for Economic Co-operation and Development.

GLOBAL BIOTECH WEEK

Ag-West Bio

ROLES OF HEALTH CANADA AND THE CANADIAN FOOD INSPECTION AGENCY (CFIA)

- ☑ - Evaluate all data to ensure the new crop is safe.
- ☑ - Decide whether to authorize the crop, which means farmers can grow and sell it.
- ☑ - Monitor and conduct ongoing inspections.
- ☑ - Re-evaluate, if new information emerges.

The information in this document was provided by CropLife Canada