

FROM PLAN TO PLANT

HOW A GENETICALLY ENGINEERED PLANT IS MADE

1

DECISION MAKING

First you need to decide what to improve. Plants could survive in higher temperatures or with less water, resisting insects trying to eat them, or more. The nutrition of the plant could also be changed to make them better for the people that use them.

RESEARCH

2



Next you need to learn more about what you want to change. What controls it? Would any allergens be made? How does the plant work normally? University research labs might help with this.

METHOD CHOICE

3



Now that you know what to change, you need to pick how to do it. Assess the time, cost, crop, and resources to decide. Traditional crossing, editing, or genetic engineering or could be used.

4

MAKING A CHANGE



With each method, the DNA is changed. Breeding, editing, or engineering provides new DNA instructions to the plant cells.

STUDIES

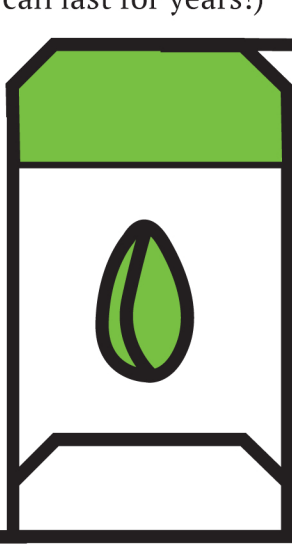
5



After making changes you need to check the plants. Make sure you only changed what you wanted to, that the plants work in the field, and they meet all safety regulations. (This could take a while- these studies can last for years!)

LAUNCH

6



Finally, plants are ready to go to the farmer customers. Samples might be pre-launched so that farmers can do side-by-side comparisons and make better choices.

FEEDBACK

7



Now that people are using the plants, keep talking to the farmers. Evaluate the released product and listen to their needs and ideas to plan for the next product.

made by

Alyssa Pease