

Vocabulary: GMOs and the Environment



Vocabulary

- <u>Genetically modified organism (GMO)</u> an organism whose genetic material has been altered using genetic engineering techniques.
 - Types of genetically modified crops include corn, soybeans, and cotton genetically modified to be resistant to insects and tolerant to herbicide.
- Herbicide a pesticide used to kill unwanted weeds.
 - Pesticides are substances that kill organisms that are harmful to crops.
- <u>Insecticide</u> a pesticide used to kill unwanted insects.
- <u>Pesticide</u> any substance used to destroy or repel pests.
 - Insecticide and herbicide are types of pesticides.
- Refuge field a field where normal corn (sensitive to insects) is grown to help prevent resistance development.
 - Insects are able to grow and reproduce in the refuge field without being under the selective pressure that the main field, growing insect-resistant corn, is under.
 - Sensitive insects from the refuge field mate with resistant insects from the main field, creating sensitive offspring and limiting the size of the resistant population.
- Resistance the ability of an organism to remain unaffected by a harmful agent in the environment.
 - The GM corn in this Gizmo were modified to become resistant to insects and tolerant of herbicide.
 - A population of resistant insects develops through natural selection.
 - In a population of insects exposed to a lethal toxin, the majority of the insects will die. A small number of insects may be naturally immune to the toxin. Under continued selective pressure, all the sensitive insects will die and the resistant insects will multiply, creating a population or resistant insects.

