Research Paper- Genetic Engineering

Genetic engineering is the science of modification of genes in cells. Genes are the DNA molecules that make up the code that determines the various functions of a cell, such as reproduction. It includes the insertion of artificial or foreign genes into the specified organism. It means genetic tinkering of the cells to find new ways to help and increase the scientific knowledge of humankind.

When people think genetically engineered, or enhanced, they think super humans or plants that could feed a thousand people. Well, that's sort of what they are. In the process genes from another organism is put into the plant the scientists want to engineer, mainly crops that are on high demand. Drugs and items that would normally take ages to produce can be produced and shipped off in no time.

Space was known as the "final frontier", but we have only gone through the surface layer. There are thousands of frontiers we must discover, and then conquer. Genetic engineering is one of them.

We have many different uses for genetic engineering. We use them for better agriculture, for new advances in medical science, new wonders. We could even genetically engineer blue horses, red bananas, and so much more in this branch of science. For us, this is the pinnacle of science. Many good developments could come out of this and help everyone.

But not all bright shiny things come from this. Sometimes it gets loose and does something wrong, rarely of course, but sometimes. When things like this happen, they need companies like Bug-E to help with the finding and the capturing of the animals or plants. Animals are also being engineered to have more meat, or flesh, or food produced. That's just one example of the things that genetic engineering can do.

Plants like soybeans and corn are some of the many things being introduced with genetically engineering. They cost less, sell more, and produce more. Also, there are bugs that have been engineered like this, mosquitoes as an example. Britain has been making them for wiping out other mosquitoes that carry harmful diseases, more specifically Dengue Fever, a dangerous disease.

The first genetic organism sold was the “Glofish” brand, where standard zebra fish were engineered to have bright, pretty colors. Although entertaining, they actually had a more practical purpose. This purpose was to determine whether waterways were contaminated or not. When the company of Glofish realized that these colorful fish could be sold, they mass marketed these fish, earning huge profits.

Another way genetics has helped our life is through the genetically modified mosquitoes that have saved countless lives from dengue fever, a virus based disease that is spread by mosquitoes. The difference from these mosquitoes from the genetically modified mosquitoes are that the GM (genetically modified) mosquitoes successfully sabotaged the original mosquitoes from effectively spreading the dangerous disease.

Sources:
http://environmentalcommons.org/gmo.html
http://www.nature.com/scitable/topicpage/genetically-modified-organisms-gmos-transgenic-crops-and-732
http://www.npr.org/2011/07/05/137631009/can-genetically-modified-bugs-reduce-dengue-threat
www.psrast.org/whatge.htm
www.uscusa,org/food_and_agriculture/science_and_impacts/science/what-is-genetic-engineering.htm
www.bionewsonline.com/what_is_genetic_engineering.htm

The Glo Fish:

The GM Mosquitoes: