Fear of 'foreign' genes in GMOs? Turns out Nature produces transgenic sweet potatoes

One of the most frequently mentioned issues with GMO foods is a vague concern about bringing genes from distantly related organisms into plants. But an international team of biologists has now found that this has occurred naturally in a major crop plant: the sweet potato. The strains of this crop that we currently cultivate had a set of genes inserted into their genomes by bacteria—the same bacteria used to create many genetically modified plants.

The bacteria in question are part of the *Agrobacterium*genus, a group of plant pathogens. Upon infection, the bacteria insert a small piece of DNA (termed T-DNA) into the plant's genome. The DNA carries a number of genes that interfere with a few normal plant hormones. These changes cause plant cells to start proliferating, forming tumor-like growths.

Researchers have found it in the sweet potato, a food crop. While studying the RNA made in sweet potato cells, researchers found a collection of bacterial genes. Tracing them back to the DNA, they found the *Agrobacterium* T-DNA, along with a handful of genes from the bacteria. Further examination revealed a second cluster of genes, indicating that this natural transgenic process has happened at least twice in this lineage.

Every sweet potato plant contains foreign genes obtained through a process similar to that used to create GMO foods.

The GLP aggregated and excerpted this blog/article to reflect the variety of news, opinion and analysis. Read full, original post: Genetically modified crops? Nature got there first