Fruit tree gene could prevent GM cross-pollination with other plants

Genetically modified crops have long drawn fire from environmentalists, who worry that there could be contamination of organic food or creation of FrankenWeeds. Properly used, there is no chance of that, the only thing that can happen is trace material.

Still, they have worries and science may have an answer: modern plant genes damaging the claims of the $105 billion organic food industry might be mitigated by…plant genes.

Dr. Sherif Sherif, a post-doctoral researcher studying Dutch elm disease in University of Guelph's Gosling Research Institute for Plant Preservation, is lead author of a new paper in BMC Biology which they believe is the first-ever study to identify a gene involved in altering fruit trees that normally cross-pollinate – needing one plant to fertilize another – into self-pollinators.

Researchers might one day insert this gene into GM crops to prevent even their pollen from reaching other plants.

Plant agriculture professor Jay Subramanian, a co-author on the paper, said, "There are a lot of transgenic crops worldwide. There is concern about pollen from them being able to fertilize something in the wild population, thus creating 'super weeds.'"

The researchers found a gene making a protein that naturally allows a small handful of plants to self-pollinate and make fruit before the flower opens. Peaches, for example, have closed flowers, unlike their showy-flowered plum and cherry cousins that need pollen from another tree to fertilize and set fruit.

Read full original article: More Genetic Modification May Mitigate Environmentalist Worries About Genetic Modification