



Deregulation of Monsanto's genetically engineered canola

Thursday, December 12, 2002

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The animal and plant health inspection service (APHIS) recently decided to deregulate Monsanto's genetically engineered canola GT200.

After analysing scientific data and listening to public responses, APHIS recently decided to deregulate the canola variety GT200. This determination followed Monsanto's request for a non-regulation status for its new canola product.

Moreover, the recent decision by APHIS may have been facilitated due to the fact that Monsanto's canola GT200 was produced using the same method as for its non-regulated Roundup Ready canola RT73.

Similar to canola RT73, canola GT200 expresses the 5-enolpyruvylshikimate-3-phosphate synthase (EPSPS) enzyme from *Agrobacterium* sp. (strain CP4), and the glyphosate oxidoreductase (GOX) protein from *Ochrobactrum anthropi* (strain LBAA). Working symbiotically, EPSPS and GOX make the plant resistant to the herbicide glyphosate.

Glyphosate is one of the most used herbicides worldwide. When sprayed on plants glyphosate (N-phosphonomethyl glycine) inhibits the production of aromatic amino acids that are essential for plant growth.

Prior to the recent decision to deregulate Monsanto's GT200, the product could only be used in field trials as a regulated article. APHIS defines a regulated article as an organism or product that is a plant pest, or that is under suspicion of being a plant pest, as a result of having been altered, or produced, through genetic engineering.

GT200 and RT73 canola varieties were produced through transformation of the parental canola variety Westar using the *Agrobacterium tumefaciens* method. Both products make use of the plant pathogen figwort mosaic virus to control gene expression of the added genes. In this case, the virus' pathogenic components were taken out, thus eliminating any possible risk from using the virus in the plant. Despite these precautionary steps, the use of the figwort mosaic virus was one of the driving factors to regulate GT200 before its release for commercial use.

After analysing all available data during the regulation period, APHIS concluded that canola GT200 is safe because it expresses no plant pest characteristics, is no more likely to become a weed than traditional varieties, is unlikely to increase the weed-potential of other species with which it can interbreed, and it will not harm other organisms that are beneficial to agriculture.

The recent ruling by APHIS will be effective as of January 2, 2003.

Source: Department of Agriculture