



United States Dept. of Agriculture | Agricultural Marketing Service



National Organic Program

Genetically Modified Organism (GMO)

Miles McEvoy, Deputy Administrator





GMO OVERVIEW

The Organic Food Production Act (OFPA) of 1990 does not mention biotechnology, genetic engineering or genetically modified organisms. OFPA prohibits synthetics unless they are allowed, allows natural substances unless they are prohibited.

The first National Organic Program proposed rule (1997) did not prohibit GE substances or GMOs. There was a huge public outcry against GMOs being considered in organic production and handling. Proposed rule withdrawn.

The second National Organic Program proposed rule (2000) excluded the use of GMOs in organic production and handling.



GMOs are prohibited as excluded methods:

7 CFR § 205.105

Allowed and prohibited substances, methods, and ingredients in organic production and handling.

To be sold or labeled as “100 percent organic,” “organic,” or “made with organic (specified ingredients or food group(s)),” the product must be produced and handled **without the use of:**

- (e) Excluded methods, except for vaccines: Provided, That, the vaccines are approved in accordance with §205.600(a);



Excluded Methods

A variety of methods used to genetically modify organisms or influence their growth and development by means that are not possible under natural conditions or processes and are not considered compatible with organic production. Such methods include cell fusion, microencapsulation and macroencapsulation, and recombinant DNA technology (including gene deletion, gene doubling, introducing a foreign gene, and changing the positions of genes when achieved by recombinant DNA technology).

Such methods do not include the use of traditional breeding, conjugation, fermentation, hybridization, in vitro fertilization, or tissue culture.



NOP Policy

- In 2004 the NOP responded to a letter from the National Association of State Departments of Agriculture (NASDA) regarding the use of GMOs in organic production and handling.
- In September 2010 the NOP published the Program Handbook: Guidance and Instructions for Accredited Certifying Agents and Certified Operations.
- In April 2011 the NOP issued NOP Policy Memo 11-13 to address GMOs in organic production and handling. The policy reiterates the policy outlined in the 2004 letter to NASDA and clarifies questions concerning GMOs and organic production and handling.



NOP Policy Memo 11-3

Issue:

If a producer adheres to all aspects of the NOP regulations, including never utilizing genetically modified seeds, but a Certifying agent tests and detects the presence of genetically modified material in the crop, is that crop's status determined to be no longer certified organic?

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NOP Policy Memo 11-3

Reply:

Organic certification is process based. That is, certifying agents attest to the ability of organic operations to follow a set of production standards and practices which meet the requirements of the Organic Foods Production Act of 1990 and the NOP regulations. The NOP regulations prohibit the use of excluded methods (i.e., “GMOs”) in organic operations. If all aspects of the organic production or handling process were followed correctly, then the presence of a detectable residue from a genetically modified organism alone does not constitute a violation of this regulation. This policy was established at the promulgation of the NOP Regulation in the Preamble to the Final Rule (FR Vol. 65, No. 246, p. 80556), December 21, 2000. The Preamble stated that:

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NOP Policy Memo 11-3

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Reply-

As long as an organic operation has not used excluded methods and takes reasonable steps to avoid contact with the products of excluded methods as detailed in their approved organic system plan, the unintentional presence of the products of excluded methods should not affect the status of the organic operation or its organic products



NOP Policy

Issue:

Is the inadvertent presence of GMOs in organic seeds a violation of the NOP regulations? Can organic producers use seeds that contain the inadvertent presence of GMOs?

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NOP Policy

Reply:

7 CFR § 205.105 of the NOP regulations prohibits the use of GMOs as excluded methods in organic production and handling. The use of excluded methods, such as planting genetically modified seeds, would require a specific intent, and would render any product ineligible for organic certification. However, the inadvertent presence of GMOs in organic seeds does not constitute a use because there was no intent on the part of the certified operation to use excluded methods. The presence of detectable GMO residues alone in an organic seed does not constitute a violation of the NOP regulations



NOP Policy

Issue: How do organic producers avoid contact with GMOs?

Reply:

Organic producers utilize a variety of methods to avoid contact or the unintentional presence of GMOs including testing seed sources for GMO presence, delayed or early planting to get different flowering times for organic and GMO crops, cooperative agreements with neighbors to avoid planting GMO crops adjacent to organic crops, cutting or mowing alfalfa prior to flowering, posting signs to notify neighboring farmers of the location of organic fields, and thorough cleaning of farm equipment that has been used in non-organic crop production.



NOP Policy

Issue:

What are organic producers required to do in order to avoid the presence of GMOs in their products?

Reply:

In order to become a certified organic operation, a producer must submit an organic system plan to a NOP accredited certifying agent for approval. The producer's organic system plan must include a description of management practices and physical barriers established to prevent contact of organic crops with prohibited substances. Certifying agents evaluate the preventative practices and buffer zones to determine if the producer has taken reasonable steps to avoid contact with GMOs.



NOP Policy

Issue:

Could a farm's organic certification status be threatened if sufficient buffers and barriers are not established and inadvertent contact with GMO material occurs?

Reply:

Organic producers that implement preventive measures to avoid contact with GMOs will not have their certification threatened from the inadvertent presence of the products of excluded methods (GMOs). Crops grown on certified organic operation may be sold, labeled and represented as organic, even with the inadvertent presence of GMOs, provided that all organic requirements under 7 CFR Part 205 have been followed.



NOP Policy

Issue:

Is there a working definition of the word "contamination" within the NOP?

Reply:

There is no definition in the NOP regulations for the word "contamination," even though it is mentioned frequently in the standards. The use of excluded methods in organic production is prohibited, as cited in 7 CFR § 205.105.



NOP Policy

Issue:

What actions are authorized or required when organic crops or products are found to contain unintended or inadvertent genetically modified substances?

Reply:

The inadvertent presence of genetically modified material does not affect the status of the certified operation and does not result in loss of organic status for the organic product, provided it was produced in accordance with all of the organic requirements under 7 CFR Part 205. Certifying agents are responsible for working with organic producers to identify the source of the inadvertent GMOs and to implement reasonable steps to avoid contact with GMOs in the future.



NOP Policy

Issue:

Are organic products tested for genetically modified substances?

Reply:

Under 7 CFR § 205.670(b) certifying agents may test organic products when there is reason to believe that excluded methods were used in the production or handling of an organic agricultural product. Certifying agents may also collect and test organic products from organic handlers to ensure that practices are in place to prevent commingling or contamination during handling and processing.



NOP Policy

Issue:

Are organic products free of GMO contaminants?

Reply:

Organic standards are process based. The NOP regulations prohibit the use of genetically modified organisms, prohibit commingling or contamination during processing and handling, and require preventative practices to avoid contact with GMOs. Organic agricultural products should have minimal if any GMO contaminants; however, organic food products do not have a zero tolerance for the presence of GMO material.



NOP Policy

Issue:

Has a tolerance level (e.g. 5%) been established for the presence of GMOs in organic agricultural products?

Reply:

The NOP regulations do not establish GMO tolerance levels. The NOP regulations establish a tolerance for the presence of pesticides registered by the U.S. Environmental Protection Agency (EPA) that is set at 5% of the EPA tolerance level for the specific residue detected. No federal agency, including EPA or USDA has established tolerance levels for the inadvertent presence of the products of excluded methods (GMOs).



NOP Policy

Issue:

Processed foods sold as “organic” must contain at least 95% organic ingredients. Are GMOs allowed in the remaining 5% of ingredients? Likewise, processed foods sold as “made with organic (specified ingredients or food group(s))” must contain at least 70% organic ingredients. Are GMOs allowed in the remaining 30% of ingredients for these products?

Reply:

The use of GMOs is prohibited in all ingredients in “organic” and “made with organic (specified ingredients or food groups(s)).” There is no provision within the NOP regulations that allows the use of excluded methods (GMOs) in ingredients or processing aids under the “organic” or “made with organic (specified ingredients or food group(s))” label categories.



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