



**Statement from the American Seed Trade Association  
to the  
National Organic Standards Board  
GMO Ad hoc Subcommittee  
Discussion Document  
Excluded Methods Terminology  
March 19, 2013**

On behalf of the American Seed Trade Association (ASTA) and its more than 700 members, we are pleased to resubmit comment to the National Organic Standards Board (NOSB) GMO Ad hoc Subcommittee on Discussion Document: Excluded Methods Terminology.

**Who We Are**

Founded in 1883 and located in Alexandria, VA., ASTA is one of the most established trade organizations in the United States. Our membership is involved in seed production and distribution, plant breeding and related industries around the globe. As an authority on plant germplasm, ASTA advocates science and policy issues important to the industry.

ASTA's mission is to be an effective voice of action in all matters concerning the development, marketing and movement of seed, associated products and services throughout the world. ASTA promotes the development of better seed to produce better crops for a better quality of life. Our members represent all areas of the seed industry –and range in size from small and medium regional seed companies, to large international corporations.

**Overall Objectives of the ASTA Comments on the Discussion Document Excluded Methods Terminology**

The ASTA encourages clear and rigorous guidelines to encourage the use of organic seed. We are pleased to have the opportunity to provide input to the NOSB on “excluded methods” as they are defined by the USDA organic regulations as they apply to the seed industry.

**There should be a clear rationale and philosophy guiding any revision to the definition of ‘excluded methods’.**

The discussion document does not clearly articulate a particular reason why the definition of excluded methods needs to be changed, other than the fact the definition uses vague terms and is thus subject to interpretation. The discussion document (p. 3) appropriately notes that clarity is first needed on the “basis for objection” before a meaningful discussion about specific terms and techniques can be held. The existing excluded method definition includes the subjective phrase “AND is not considered compatible with organic production.” So long as this “compatibility” phrase is a component of the

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excluded method definition, the NOP, certifying agents and producers will continue to struggle to determine what techniques are or are not compatible.

**Any modifications to the definition must be consistent with congressional authority and intent.**

Any revised definition of excluded methods should be consistent with the intent of the Organic Foods Production Act (OFPA). It is important to note that the Managers report accompanying the 1990 Bill stated the following, with regard to the role of the NOSB:

*“As time goes on, various scientific breakthroughs, including biotechnology techniques, will require scrutiny for their application to organic production. The [Senate Ag] Committee is concerned that the production materials and practices keep pace with our evolving knowledge of production systems.”* [pg. 297, Report of the Senate Committee on Ag., Nutrition, and Forestry to accompany S.2830; July 6, 1990]

The OFPA does not use the term excluded method, but uses terms like “synthetic” to describe substances that are prohibited and “wholly natural” as a characteristic of products that are allowable. Concepts of genomic integrity are not captured in the Act. In addition the term synthetic is defined in OFPA to specifically NOT include “substances created by naturally occurring biological processes”. Many of the methods already included in the excluded method definition clearly use “naturally occurring biological processes” to modify an organisms genotype.

**The concept of “Traditional methods” should not be dictated by whether it has been used for many years.**

Regardless of the method(s) used to introduce or generate genetic variability or diversity, it is uniformly true that successful development of new cultivars/hybrids is a result of rigorous breeding and selection programs. This is true whether the cultivar/hybrid is being developed for use in conventional or organic agricultural production systems. While traditional breeding methods as well as those considered more novel may initially display unintended phenotypic off-types, these are removed during the selection process to assure that final cultivar/hybrids deliver consistent and stable material to producers. The breeding and selection process itself is a “traditional” element that has been used for centuries. This process now uses tools (e.g., marker assisted selection, isozyme analysis) other than visual and phenotypic selection to facilitate the process, but it would be difficult to argue that because these tools are “new”, they are not compatible with the statutory definition of “organically produced”. Likewise, the newness of a process used to generate genetic variability, and the timeframe of its use relative to the “emergence of transgenic technologies” (p. 6), should not be a criterion for exclusion.

**Seek expertise from plant and animal breeders and geneticists.**

The discussion document could benefit from input from experts that are able to provide greater context to the discussion on “genetic integrity” and how the techniques in the current excluded methods definition fit within the broader context of organic production systems.

Given the dynamic nature of genomes, it would be very difficult to track, and even more difficult to detect a genomic change that is induced by human intervention versus changes that are spontaneous. In addition, given the international nature of organic agricultural production, the potential number of lines, varieties, hybrids and processes that would need to be evaluated for their genetic lineage, would make such a task nearly impossible both logistically and from a resource standpoint.

## **Response to the NOSB Discussion Document: GMOs and Seed Purity**

Upon reviewing the questions, we have surveyed our members and compiled the following responses:

***1. Does the definition of "excluded methods" in the Organic Rule need to be revised? Please provide reasoning for either a "yes" or a "no" answer.***

Without clearly outlining the rationale for redefining the term for ‘excluded methods’, the ASTA finds it difficult to provide guidance on revision of the definition.

***2. On what general principle(s) should practical and consistent distinctions be made between “excluded” and permitted methods of breeding that could apply to plants, animals and micro-organisms? Under such general principles should we further define or replace terms such as "natural conditions" and "traditional breeding"?***

A general principle to consider is one in which the use of methods to generate genetic variability in organisms for use in organic production systems, be evaluated as to their potential long term effect on the environment. As indicated in the discussion document, even acceptable breeding methods may not be possible under natural conditions. Terms such as "natural conditions" and "traditional breeding" should be considered dynamic and not specific entities. These phrases project ideals which are part of the spectrum of developments that started with "natural" and have evolved over time; part of evolution that will continue into the future.

***3. Are there other terms beyond those discussed here that should be addressed in the context of excluded methods?***

Organic certification is a process-based guarantee, which should not be limited to “novel, accelerated, complementary, advanced techniques /methods”. There are many techniques under development now, and to be developed in the future, that will be used to produce products that may be deemed to be compatible with organic production. Any static list of techniques or processes that are considered to be excluded will suffer from constantly being out of date and open to inconsistent interpretation.

***4. Of the terms and practices discussed here, which ones should be in the definition of excluded methods and which not excluded? Why? Page 11 of 20***

Given the current definition of the ‘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.”*

ASTA does not have any terms or practices to suggest for addition or removal from the definition.

However, a clear rationale and philosophy for why any form of genetic modification is objectionable,

especially for those methods that are possible under national conditions or processes, would be useful to consider as a part of future discussions centered around revisions of key term and phrase definitions.

***5. How far back into the development or manufacture of a substance, or in the development of vaccines, or in the lineage of a breeding line, should the excluded methods prohibition apply? How far back is practical and verifiable?***

Identifying and verifying a point in breeding history to apply an excluded methods prohibition is not practical and would be difficult to impossible to enforce. Ultimately, establishing this point in time would not provide guidance to whether or not a method is acceptable or objectionable for use in organic production systems. Such an approach would also be inconsistent with the statutory intent of the OFPA, which recognizes that new scientific methods will continually need to be evaluated for their applicability to organic systems from a lineage standpoint the number of generations that have passed since the modification was created or stabilized is not meaningful or reasonable basis for exclusion.

**Conclusion**

On behalf of the ASTA, we appreciate your consideration of our comments regarding this Discussion Document. The goal of ASTA seed companies is to bring the most suitable, high quality organic seed varieties to the marketplace while encouraging varietal diversity.

Sincerely,

Andrew W. LaVigne  
President and CEO, American Seed Trade Association