

August 25, 2017

Mr. Bruce Summers
Acting Administrator
Agricultural Marketing Service
United States Department of Agriculture
1400 Independence Avenue, SW
Room 3069 South Building
Washington, DC 20250

Submitted via GMOLabeling@ams.usda.gov

RE: Proposed Rule Questions Under Consideration (Posted June 26, 2017)

Dear Mr. Summers:

The American Seed Trade Association (ASTA) thanks the U.S. Department of Agriculture's (USDA) Agricultural Marketing Service (AMS) for the opportunity to provide feedback on questions being considered in connection with the development of a rule implementing the National Bioengineered Food Disclosure Law. Founded in 1883, the American Seed Trade Association (ASTA), located in Alexandria, Virginia, is one of the oldest trade organizations in the United States. Its membership consists of over 700 companies involved in seed production and distribution, plant breeding, and related industries in North America. ASTA members research, develop, produce and distribute all varieties of seeds – including grasses, forages, flowers, vegetables, row crops, and cereals. ASTA member seed products support agricultural producers of food products and farm commodities in the United States and around the world.

ASTA is providing information with respect to Questions 1 and 2 posed by AMS. ASTA also refers AMS to the feedback provided by the Coalition for Safe, Affordable Food, of which ASTA is a member.

Question 1. What terms should AMS consider interchangeable with 'bioengineering'? (Sec. 291(1))

No terms other than “bioengineering” should be considered interchangeable with “bioengineering” for the purposes of section 291(1). Use of a single term for purposes of the mandatory disclosure standard would be simplest for consumers.

The bipartisan Senate Report makes clear that the purpose of the legislation is to “establish a mandatory uniform national disclosure standard for human food that is or may be bioengineered.” S. Rep. No. 114-403 (2016). We therefore discourage use of any other words or terms within the context of this USDA-AMS mandatory marketing program.

Use of a single term for purposes of mandatory disclosure does not preclude the use of a different term in additional voluntary statements about foods. Additional descriptive terms used in voluntary statements, therefore, should not be considered interchangeable with the term “bioengineering” under section 291. For example, to the extent that AMS permits the term “genetically engineered” or “genetic engineering” to be used in additional voluntary statements that are truthful and not misleading, the agency should clarify that this term is not considered interchangeable with “bioengineering” under section 291 and that the ability to use this term in the voluntary disclosure text has no impact on the meaning of “genetic engineering” as that term is used in section 295 of the law.

Question 2. Which breeding techniques should AMS consider conventional breeding? (Sec. 291(1)(B))

“Conventional breeding” should include breeding methods that use the organism’s gene pool and other methods that enable efficient movement of native genes from unadapted to elite organisms. This approach is consistent with Congress’s direction that the USDA-AMS mandatory marketing program “be technology neutral and reflect technological changes over time.” (Senate Report).

More specifically, plant breeding encompasses an evolving set of scientific disciplines and enabling methods that produce more effective plant breeding outcomes. Any discussion of breeding techniques that would constitute “conventional breeding” should recognize this progression of breeding methods.

The induction of double haploids is a good example of a relatively new enabling method that has been incorporated into breeding programs in a wide range of crops. ASTA would consider this method in the category of “conventional plant breeding”.

Additionally, plant breeders have long utilized genetic variation created through mutations to develop plant varieties with improved characteristics. Spontaneous mutations are known to occur continuously at low frequency and these bring about genomic sequence changes that are the basis of evolution¹. Imperfections in the DNA replication and repair machinery can result in sequence changes, such as the deletion, rearrangement or insertion of nucleotides. Larger rearrangements of stretches of nucleotides may occur with the movement of transposable elements, which are widespread in living organisms.

Because spontaneous mutants yield beneficial results with such a low frequency, breeders have long employed methods, such as chemicals and irradiation, to increase the rate of mutations as part of their breeding programs. Since the 1950s, well over 3200 crop varieties have been directly developed by selection of induced mutations. A more recent development in mutation breeding involves TILLING (Targeting Induced Local Lesions IN Genomes) which is a technique that uses chemical mutagenesis methods to create libraries of mutagenized plants that are later subjected to high-throughput molecular screens for the discovery of mutations in specific genes.²

Therefore, a static listing of breeding methods that would constitute “conventional plant breeding” would not acknowledge the evolving set of enabling breeding methods that make the improvement to plant species more efficient to accomplish.

ASTA appreciates the opportunity to provide comments on the questions being considered by AMS in connection with the development of a rule implementing the National Bioengineered Food Disclosure Law. We stand ready to act as a resource throughout this process.

Sincerely,



Andrew W. LaVigne
President & CEO

¹ G. S. Ladics, , et al. 2015. Transgenic Research **24**(4): 587-603; J. Schnell, et al. 2015. Transgenic Research **24**(1): 1-17

² J. Bradshaw. 2017. Euphytica 213:60