



BEYOND PESTICIDES

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September 30, 2025

Ms. Michelle Arsenault
National Organic Standards Board
USDA-AMS-NOP
1400 Independence Ave. SW.,
Room 2648-S, Mail Stop 0268
Washington, DC 20250-0268

Docket ID # AMS-NOP-25-0034

Re. MS: Induced Mutagenesis (IM)

These comments to the National Organic Standards Board (NOSB) on its Fall 2025 agenda are submitted on behalf of Beyond Pesticides. Founded in 1981 as a national, grassroots, membership organization that represents community-based organizations and a range of people seeking to bridge the interests of consumers, farmers, and farmworkers, Beyond Pesticides advances improved protections from pesticides and alternative pest management strategies that eliminate a reliance on pesticides. Our membership and network span the 50 states and the world.

Beyond Pesticides thanks the MS for taking up this complicated discussion. It is helpful that the MS highlights that the definition of excluded method refers to **means, not results** that are “not possible under natural conditions or processes and are not considered compatible with organic production.” This is particularly pertinent in considering induced mutations, since mutations may be produced under natural conditions, using natural processes. Critically, excluded methods are contrasted with classical or traditional plant breeding, which “does not exclude the use of genetic or genomic information to more accurately assess phenotypes, however the emphasis must be on whole plant selection.”

In Fall 2024, the MS looked at the criteria that define excluded methods in NOP regulations:

They must:

1. be methods used to genetically modify organisms or influence their growth and development,
2. use means that are not possible under natural conditions or processes, and
3. use means that are not considered compatible with organic production.

These criteria are called “Prongs” in the current discussion document. Regarding “Prong 1,” We agree with the Vaccines Made With Excluded Methods (MWEM) Working Group, which

indicated that targeted genetic modifications are prohibited as an excluded method, while a method that causes random genetic modification followed by screening for a desired phenotype may be permitted if it fails to satisfy the other two prongs of the excluded methods definition. We believe that IM satisfies Prong 1 of the definition.

Since according to the 2024 technical report, IM uses synthetic chemicals or high levels of radiation to achieve mutation rates hundreds of times higher than those found in nature, we believe Prong 2 is satisfied.

We believe that Prong 3 is difficult because IM is a process that is incompatible with organic production, but in the historical context, the factors that make it incompatible may not apply today to using varieties developed long before organic standards existed, on which organic growers depend. We agree with the MS:

Regardless of whether IM is or is not an excluded method, there remains significant concern among NOSB members and the organic community around the use of toxic chemicals and radiation as a plant breeding technique used in organic production. These harmful substances are clearly not allowed for use on organic farms or in contact with organic products, and it is warranted to consider how the organic regulations could restrict the use of these techniques if they are not determined to be excluded methods.

We also accept that it would be very difficult to identify past varieties that were developed with induced mutagenesis (IM). The heritage of some varieties is clear; for others it is much cloudier. We also recognize that to disallow some of those varieties would create a significant disruption in the organic seed and breeding stock supply chain. While this may be true, it is not clear to us whether, or to what extent, organic production is **reliant** on cultivars developed using IM. This missing information may be critical to deciding whether certain varieties might be “grandfathered in.” Beyond Pesticides supports grandfathering in varieties that are essential to the organic seed and breeding stock supply chain. However, there may be varieties that are not essential that should not be grandfathered.

Beyond Pesticides does not support the continued use of synthetic chemicals or irradiation for IM. The use of high doses of radiation or cancer-causing chemicals is contrary to organic principles.

Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry Shistar".

Terry Shistar, Ph.D.
Board of Directors