

April 1, 2022

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

Docket # AMS-NOP-21-0087

Federal Register Number: 2022-04441

Re: Meeting of the National Organic Standards Board

The Cornucopia Institute seeks to defend and improve integrity in the certified organic marketplace. Through research and investigations into agriculture and food issues, The Cornucopia Institute provides needed information to family farmers, consumers, and other stakeholders in the organic agriculture community.

Crops Subcommittee

Proposal: Highly Soluble Nitrogen Fertilizers

The Crops Subcommittee (CS) proposal on Highly Soluble Nitrogen Fertilizers (HSNF) is an excellent step in addressing Program and community concerns about these fertilizers. The Cornucopia Institute supports the prohibition of ammonia extracts in the Organic Program. We urge the NOSB to pass the Crop Subcommittee's proposal.

We strongly support restrictions on the use of nitrogen fertilizers with a C:N ratio of 3:1 or less, including those individual components of a blended fertilizer formulation, to an upper limit of 20% of crop needs. This restriction protects the intent and goals of organic agriculture and provides clarity for fertilizer manufacturers, producers, and consumers. Organic producers must employ management practices to protect and build soil biological activity in order to ensure a sustainable food system for future generations.

Cornucopia urges the Program to prohibit the use of sodium nitrate entirely, given the environmentally harmful extraction process necessary for its manufacture and its deleterious action on soil biological activity.

Cornucopia agrees with Beyond Pesticides' comment that there are serious concerns that some certifiers do not apply §205.203 to all operations. It must be made clear that the suggested restriction on HSNF applies to *all certified operations* (including hydroponic and container systems). We recommend that clear language be added to the practice standards (§205.203 and/or §205.105) to address this concern. The NOSB's recommendation should, at a minimum, make clear that the HSNF restriction applies to all operations, and that any use of HSNF must be part of an organic systems plan in which fertilizer use is minimized in favor of holistic management practices.

Materials Subcommittee

Distilled Tall Oil Petitioned Material Discussion Document

The National Organic program should *not* add any materials to the inerts list until the issues with that list's role in the Organic Program are entirely resolved. The Environmental Protection Agency (EPA) has stopped updating the inerts lists the organic regulations refer to, meaning individual "inert" ingredients allowed in the Program are not being reviewed or kept up to date with the latest science from the EPA. Given that so-called "inert" ingredients can be particularly noxious and anything but inert, an updated policy and strict review of individual substances is badly overdue.

The distinction between "active" and "inert" is problematic because so-called inert ingredients have important actions within formulae. "Inert" ingredients are not disclosed in formulations and thus lack the transparency that is fundamental to the Organic Program. All substances applied in an organic system should be evaluated.

The Cornucopia Institute opposes the allowance of distilled tall oil as an inert ingredient in organic crop and livestock production. The petition fails to justify the need for tall oil, and the substance fails every requirement of the Organic Program. As detailed in the Technical Review (TR), distilled tall oil poses serious threats to the environment and non-target organisms; the substance functions as an active pesticide, not as an inert or adjuvant.

The petition for distilled tall oil should be rejected.

Handling Subcommittee

Cetylpyridinium Chloride (CPC) Petitioned Material Proposal

Cetylpyridinium chloride (CPC) is a quaternary ammonium compound, all of which are toxic chemicals that must never be allowed in organic processing. Cornucopia recommends rejecting the CPC petition due to the substance's incompatibility with organic requirements; it poses clear risks to human and environmental health, and is not necessary.

Additionally, the TR for CPC notes that polypropylene glycol must be combined with CPC for it to be functional. However, the petitioner failed to petition for the use of polypropylene glycol in organic handling (propylene glycol is only listed on §205.603 for treatment of ketosis in ruminants).

Sunsets

Squid byproducts

§205.601(j) As plant or soil amendments. (10) Squid byproducts—from food waste processing only. Can be pH adjusted with sulfuric, citric, or phosphoric acid. The amount of acid used shall not exceed the minimum needed to lower the pH to 3.5

The Cornucopia Institute concurs with Beyond Pesticides' comments on Squid byproducts: synthetic extracts of squid and squid byproducts are not essential due to the existence of alternatives in the marketplace, and are not compatible with organic production due to environmental harm.

According to the TR, illegal, unreported, and unregulated fishing may be a significant source of squid byproduct. It is impossible to measure the effect on the ecosystem if this is the case. Squid byproducts should be removed from §205.601(j).

Biodegradable biobased mulch film (BBMF)

§205.601(b)(2) *Mulches. (iii) Biodegradable biobased mulch film as defined in §205.2. Must be produced without organisms or feedstock derived from excluded methods.*

Natural organic mulches and compost should be the norm in organic production. Further, natural alternatives and production methods already exist and are widely accessible to producers (as already discussed by the NOSB and technical reviews). For weed control, for example, producers are encouraged to use cover crops as living mulches or green compost.

Both plastic and bioplastic mulches are inconsistent with organic production. Due to the known risk to human health from microplastics (including recent research that found microplastics in human blood where there is risk of lodging in organs¹) and the environmental impact of plastic manufacture, it's important for the organic marketplace to move away from plastic use. Adding more plastics in the form of BBMF will only compound this problem.

Keep the requirement for 100% biobased and biodegradable: the ingenuity of human industry will respond.

Policy and Procedures Manual (PPM) Revision (Policy Development Subcommittee Proposal)

The suggested process changes update the PPM to clarify how public comments have changed in recent years. However, the following language addition is extremely problematic:

Commenters shall refrain from including personal attacks or remarks that might impugn the character of any individual.

Criticism and intense scrutiny of institutions and individuals – especially public figures – is a natural and necessary part of any federal government process. The suggested addition may raise Constitutional [First Amendment](#) concerns by attempting to restrict free expression without bounds.

NOSB members may be uncomfortable due to someone's expression; however, restricting public speech in this manner is a much greater concern.

The term "personal attacks" is not defined. The phrase alone does not make it clear that the restriction would fall under one of the existing exceptions to the right to free expression (such as Fighting Words, Hostile Audiences, True Threats, Defamation and False Statements, or Obscenity). The NOSB members

¹ Gruber, E.S., Stadlbauer, V., Pichler, V. et al. March 22, 2022. "To Waste or Not to Waste: Questioning Potential Health Risks of Micro- and Nanoplastics with a Focus on Their Ingestion and Potential Carcinogenicity." *Expo Health*. <https://doi.org/10.1007/s12403-022-00470-8>. <https://link.springer.com/article/10.1007/s12403-022-00470-8>

and most federal officials (for example, the Secretary of Agriculture) are also arguably [public figures](#), meaning the bar for defamation is much higher.

Without a clear definition, the term “personal attacks” is completely subjective. Because the NOSB is a FACA committee, it should “not be inappropriately influenced by the appointing authority or by any special interest.”² If NOSB members are allowed to make subjective decisions on whether one public speaker is launching a personal attack, it calls this FACA requirement into question.

The phrase “might impugn the character” is problematic. Because false words may be and have been spoken during NOSB proceedings, Cornucopia believes it is critical to publicly oppose those words as false. We concur with Beyond Pesticides’ suggestion that a more appropriate word may be “malign.”

FACA requires that the advice provided by these committees be objective and accessible to the public. All committee meetings that are bound by FACA are presumptively open to the public, with certain specified exceptions.

Public speakers *should never be cut off* during their allotted oral speaking time (which is currently three minutes) unless they are inciting violence, making threats, false statements, or other speech that is not protected expression.

Organic Research Priorities

The Cornucopia Institute is pleased to see relevant and important topics put forward as spring 2022 organic research priorities.

The NOSB’s request that “...integrated research be undertaken with consideration of the whole farm system, recognizing the interplay of agroecology, the surrounding environment, and both native and farmed species of plants and animals” is particularly important.

Research should be premised on moving away from input-dependent farming, monocultures, and fragile non-localized food infrastructure. The organic marketplace and organic research are already valuable resources for the entire food system – but we can still improve. Long-term research projects should lead the way, since soil building is a multi-year effort.

Most studies on the effects of fertility additions are conducted on conventionally farmed soils and not soils that have been under continuous organic management. Short-term and conventionally-managed soil research will give a very different picture of soil fertility than the soil in a healthy organic system. Long-term research into continuously-managed organic soil fertility using various management practices is needed in *different regions*.

NOSB Suggested Research Priorities

Cornucopia is especially interested in these research priorities being followed through, with additional comments included in italics:

A. *Livestock*

- Evaluate natural alternatives to DL-Methionine in a systems-based approach for organic poultry feed program.

² 5 U.S.C. Appendix § 5(2).

- Determine the efficiency of natural parasiticides and methodologies. *The goal of this research should be to move away from synthetic parasiticides altogether.*

B. Crops

- Develop cover cropping practices that come closer to meeting the annual fertility demands of commonly grown organic crops. *Cornucopia suggests combining this research with other system-based management practices to look for alternatives to off-farm inputs.*
- Development of systems-based plant disease management strategies (including specific considerations related to copper use in organic rice production) are needed to address existing and emerging plant disease threats.
- Elucidate practices that reduce greenhouse gas emissions and that contribute to farming systems resilience in the face of climate change. *The benefits and threats to farmland-adjacent Native Ecosystems (in line with the NOSB's 2018 recommendation to eliminate the incentive to convert native ecosystems) should be included in this research.*

C. Food Handling and Processing

- Sanitizers: Effective alternatives to sanitizers, effects of sanitizers on occupational human health and environment, effectiveness of rotational use strategies with the sanitizers currently on the National List. *Research should emphasize moving away from synthetic sanitizers that are known to have significant human and environmental health effects, or at least decreasing their use.*

D. Coexistence with GE and Organic Crops

- Outcome of genetically engineered (GMO/GE) material in organic compost.
- Techniques for preventing adventitious presence of GE material in organic crops, and evaluation of the effectiveness of current prevention strategies. *Research into policy alternatives that shift the risk of GE contamination from organic farmers.*

E. General

- Examination of the factors influencing access to organically produced foods. *As the organic community has more conversations and develops a better understanding of the needs of Black, Brown, and Indigenous communities, those findings must actively inform the changes made to existing programs and guide the creation of new standards and support.*
- Examination of production and yield barriers to transitioning to organic production.

Cornucopia's Recommended Research Topics

In addition to the NOSB suggested research priorities, Cornucopia recommends investigating the following research topics:

- *Research into long-term benefits of stacked practices.* We know from current research that practices such as crop rotation, no-till, and cover cropping all provide significant benefits to soil health, ecosystem services, and climate resilience. Prioritize more funding toward support research into ecological farming methods, with an eye toward how to best support the needs of local ecosystems on-farm. A growing body of scientific research shows that farming systems

designed and managed according to agroecological principles can meet the food needs of society while addressing our serious environmental and social issues.³

- *Soil health research.* Research that focuses on holistic support of healthy soil should be prioritized, including developing the biological knowledge and mechanisms to reduce dependence on added fertilizers, and especially to reduce inputs from unsustainable sources (fish emulsion, for example).
- *Research into adapting indigenous food ways.* Indigenous tribes cultivated the Americas for thousands of years before European colonization. Indigenous knowledge about farming systems should be respected, and Tribes should be given funding and resources to educate the USDA and agribusiness in low impact cultivation methods that are ecologically sustainable.
- *Research the environmental and human health effects of plastic use.* Plastic use is common in some organic production. Due to the known risk from microplastics (including recent research that found microplastics in human blood where there is risk of lodging in organs⁴) and the environmental impact of plastic manufacture, it's important for the organic marketplace to move away from plastic use. Research into viable plastic alternatives and the impacts of plastic use in farming is vital.
- *Outcome of non-approved substances organic compost derived from conventional agricultural products.* Research into the possible contamination of non-approved substances when conventional agricultural material is used for organic compost or fertility amendments. For example, the situation with PFAS unfolding in the Northeast highlights the danger in applying substances year after year without knowing the true impact of the accumulated material.

³ See Marcia S. DeLonge; Albie Miles; and Liz Carlisle. January, 2016. "Investing in the transition to sustainable agriculture." *Environmental Science & Policy*, 55(1): 266-273. <https://doi.org/10.1016/j.envsci.2015.09.013>. <https://www.sciencedirect.com/science/article/pii/S1462901115300812>

⁴ Gruber, E.S., Stadlbauer, V., Pichler, V. et al. March 22, 2022. "To Waste or Not to Waste: Questioning Potential Health Risks of Micro- and Nanoplastics with a Focus on Their Ingestion and Potential Carcinogenicity." *Expo Health*. <https://doi.org/10.1007/s12403-022-00470-8>. <https://link.springer.com/article/10.1007/s12403-022-00470-8>