



October 1, 2020

National Organic Standards Board  
USDA – AMS  
1400 Independence Ave, SW  
Washington, DC 20250  
RE: AMS-NOP-20-0041

National Organic Standards Board members:

The Ohio Ecological Food and Farm Association (OEFFA) is a grassroots coalition of more than 4,200 farmers, gardeners, retailers, educators, and others who since 1979 have worked to build a healthy food system that brings prosperity to family farmers, safeguards the environment, and provides safe, local food. Certified organic farmers make up the bulk of our membership, as well as the bulk of our policy advisory council. OEFFA's Certification program has been in operation since 1981. OEFFA certifies more than 1,300 organic producers and food processors, in a twelve-state region, ensuring that these operations meet the standards established for organic products, and collaborates with partners such as the Accredited Certifiers Association and International Organic Inspectors Association to foster consistency and clarity both in the way we conduct ourselves, and in what we expect from producers and handlers we certify, as well as from our colleagues at the NOP and NOSB.

OEFFA employs education, advocacy, and grassroots organizing to promote local and organic foods, helping farmers and eaters connect to build a sustainable food system. We work collaboratively with groups such as the Organic Farmers Association, the National Organic Coalition, and the National Sustainable Agriculture Coalition to effect positive food systems change. We want to support our farmers in their efforts to protect organic integrity and educate their communities about its benefits, its rigor, its strong values of transparency and continuous improvement.

We thank you for your service to the organic community, and we respectfully offer the following comments:

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## COVID-19: THANK YOU AND BEST WISHES

We are wishing NOSB members, your families, and USDA NOP staff and their families all the best during this ongoing global pandemic. We are thankful for NOP’s continued work to continue the meeting in a digital format, and for the NOSB members’ focus and attention during a challenging time. Situations like this offer a clear reminder of the importance of a vibrant and robust local and regional food system that offers healthy food to communities and fair prices to farmers. Thank you for all you do to support and strengthen the organic movement.

## BIG PICTURE

### THE NOSB WORK AGENDA AND UNHEEDED RECOMMENDATIONS

There was a time when the National Organic Standards Board (NOSB) studied issues that were brought forward by the organic community. Issues that people, literally in the field, found important or concerning were raised and added to the NOSB work agenda. The board spent countless hours working to better understand these issues and concerns, bring in subject matter experts to provide testimony, respond to questions and engage in dialogue. They asked for technical reviews and inquired to the National Organic Program (NOP) to ground any recommendations in the law and science. They put out discussion documents to garner feedback and ensure solutions and recommendations put forward could be implemented effectively without unintended consequences.

Over the past 10 years, the ever-changing makeup of the NOSB made 20 recommendations based on that work which have not advanced to rulemaking.

The board worked to bring clarification and greater consistency for the organic industry with regard to many issues including: aquaculture production, the use of vaccines that may contain genetically altered material, a multitude of issues dealing with animal welfare, a prohibition on aeroponics, container production standards, certification for pet food and personal care products, apiculture, ensuring that organic standards do not unintentionally incentivize the conversion of native ecosystems, and promoting increased use of organic seed- to name a few.

Unfortunately, the USDA has restricted and controlled the NOSB work agenda. In a February 27, 2014, memo, the NOP states that for an item to be added to the NOSB work plan it “must be a priority for the USDA/NOP.”<sup>1</sup> However, OFPA gives the NOSB the duty “**to assist in the development of standards for substances to be used in organic production and to advise the Secretary on any other aspects of the implementation of this chapter.**” This duty to advise transcends NOP priorities. Indeed, as stated in U.S.C. § 6518(a), NOSB should help to establish NOP priorities.<sup>2</sup> Clearly, OFPA intends that the NOSB play a large role in setting priorities of the National Organic Program.

The rationale for greater NOP control of the NOSB work agenda is to ensure the workload is manageable for board members and that greater focus will enable greater efficacy. We appreciate these goals while also acknowledging what is lost in a more restrictive process. The establishment of the NOP was more than the addition of a new program to the purview of the USDA. Organic food production went counter to the industrial model of food production dependent upon external inputs and largely negating the role of natural ecosystems, that was, and to a great extent still is, the predominant paradigm at the agency.

The NOSB was envisioned to be more than a traditional Federal Advisory Committee Act (FACA) board. OFPA directs the Secretary to consult with the NOSB and gives the NOSB the responsibility for advising the Secretary in all aspects of the implementation of the Act, as well as spelling out several specific areas of responsibility. Designed to not only fulfill the traditional role of FACA boards, the NOSB was also to consult with organic practitioners and proponents to guide the USDA development and administration of the program.

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<sup>1</sup> <https://www.ams.usda.gov/sites/default/files/media/NOSB%20Memo%20Training%20Summary.pdf>, p 3.

<sup>2</sup> 7 U.S.C. § 6518(a).

USDA/NOP restricts the scope of NOSB action to those within the authority of the NOP/AMS, contrary to the broader scope required by OFPA. Again, OFPA requires the NOSB “to assist in the development of standards for substances to be used in organic production and to advise the Secretary on any other aspects of the implementation of this chapter.”<sup>3</sup>

The USDA is, contrary to the requirements of FACA, exerting undue influence on the recommendations of the NOSB. Previous memos from the program itself detail that “Once a work plan is assigned to a subcommittee, NOP must ensure that the subcommittee is not inappropriately influenced by the appointing authority (e.g., the NOP itself) or by any special interest.”

The duty to avoid inappropriate influence by the appointing authority does not begin upon assignment of a work plan to a subcommittee. It begins much earlier—with the appointment of the FACA committee members— and continues through all aspects of the committee’s work. These actions by USDA will result in the NOSB’s recommendations becoming totally dominated by the USDA, which is contrary to the purpose of FACA and to the previously highlighted subsections of OFPA law that were intended to prevent that domination.

OFPA gives the NOSB the duty “to assist in the development of standards for substances to be used in organic production and to advise the Secretary on any other aspects of the implementation of this chapter.”<sup>4</sup> This duty to advise transcends NOP priorities. Indeed, the NOSB should help to establish NOP priorities. This is further reflected in the responsibility, 47 U.S.C. § 6518(a), a responsibility never undertaken by the NOSB, to “hire a staff director.” Clearly, OFPA intends that the NOSB play a large role in setting priorities of the National Organic Program.

USDA/NOP actions change organic policy-making- from one driven by the public process to one controlled by USDA- which can choose to dismiss critical issues. For example, NOP continues to remove agenda items and has required that USDA/NOP priorities drive the public process. The NOSB was designed to maximize public input from a community with strong and diverse views about the meaning of “organic.” That input and the 2/3 “decisive vote” requirement ensure that NOSB proposals can only pass when they garner broad and diverse support from different stakeholder groups.

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<sup>3</sup> 7 U.S.C. § 6518(a).

<sup>1</sup> <https://www.ams.usda.gov/sites/default/files/media/NOSB%20Memo%20Training%20Summary.pdf>, p 3.

USDA has exerted undue and inappropriate influence on the recommendations of the NOSB, by prohibiting the board from advancing recommendations that were inconvenient in some way for the agency. Again, we urge the Board to reject the undue and inappropriate influence of the USDA that denies the NOSB and the public their due roles in setting organic policy.

Over the past 10 years this group of board members worked diligently to address concerns that, to this day, are problematic and lessen the value of the organic label to many consumers. Clarity and consistency are not just important for enforcement of the organic standards, a clear and transparent process for bringing issues forward and for ensuring that those issues are acted upon sets the tone for the program.

**We urge the NOSB to not abdicate its responsibilities under OFPA. We ask that you:**

- Request that the NOP provide an update on all previous recommendations made but not advanced including a rationale for lack of NOP action.
- Request results from peer review audits conducted annually by the American National Standards Institute. The Board should pay careful attention to peer review findings as one way to assess the health of the NOP's accreditation program and to identify areas of future work so they can make recommendations to the NOP about ways to address systemic shortcomings in the NOP's accreditation program.
- We also request that notes from NOSB executive committee and subcommittee calls be made available to public stakeholders in a timely way.

The credibility of the NOP depends on the fact that an independent board of stakeholders is the gatekeeper for the program and can fully advise the USDA on implementation of the law and in accordance with the law.

#### FIELD AND GREENHOUSE CONTAINER PRODUCTION

We continue to note that the updated Work Agenda lists "field and greenhouse container production" as being "on hold" since 2017. ***Pleas refer to our comments on NOSB Work Agenda and Unheeded Recommendations, which relate to this topic. This is an issue of tremendous importance to the organic community and should be restored to current status on the NOSB work agenda.***

It is our understanding that a current focus of the NOSB and NOP is clarity and consistency of enforcement. The integrity of the organic seal and the market for organic products is harmed in the absence of clear and consistent standards, and when the NOP allows multiple and conflicting interpretations of the organic regulations across certifiers.

OEFFA agrees that clear and consistent standards are paramount. There are existing and evolving systems of production that need additional oversight to eliminate inconsistencies among certifiers and operations. **In light of the progress being made with regard to organic fraud issues, we urge the NOSB and NOP to advance work on Field and Greenhouse Container Production, a work agenda item that has been previously approved by the NOP, by putting this topic on the agenda for the Spring 2021 NOSB meeting.** Further action is essential to ensure clarity and consistency in the organic standards and to prevent multiple conflicting requirements across certifiers.

#### TIMING AND FORMAT OF MEETINGS

OEFFA's Grain Growers' Chapter has continually requested an alternative to the current meeting schedule. They have heard the constraints of the board with regard to scheduling and continue to brainstorm. Recently, the chapter suggested moving the schedule back two weeks each meeting. This would mean the meeting would rotate throughout the year, equally benefitting and inconveniencing various stakeholders over time.

Further, we would like to again thank the Program for its nimble work in making the NOSB meeting virtual during the pandemic. We appreciate the ability to access both the public comment and the formal meeting virtually. The virtual format increases access to participants, both individual partners and organizational stakeholders, who may not have the funds, time, or farm and family circumstances to enable several days away from home to attend the meeting. Please consider this input as you plan for future meetings.

#### ORGANIC AGRICULTURE AS A SOLUTION TO CLIMATE CHANGE

Discussions around climate and agriculture are progressing, and in those discussions the issue of soil health is predominant. The management practices associated with organic agriculture focus on soil building techniques and reducing the need for off-farm inputs which are a persistent emitter of nitrous oxide, a long-lived greenhouse gas (GHG). N<sub>2</sub>O emissions from soils comprise 50.4% of all domestic agricultural emissions and is a long-lived GHG and ozone depleter, with 310 times the global warming

potential of carbon dioxide.<sup>1,2</sup> Synthetic pesticides disrupt nitrogen fixation and inhibit soil life. The absence of these pesticides in the soil allows diverse organisms and beneficial insects to decompose plant residues and help sequester carbon.

- Organic regulations (§205.105) prohibit the use of synthetic substances in crop production.

According to Rattan Lal, Director of Ohio State University's Carbon Management and Sequestration Center, the world's cultivated soils have lost between 50 and 70 percent of their original carbon stock, much of which has oxidized upon exposure to air to become CO<sub>2</sub>. Carbon is the main component of soil organic matter and helps give soil its water-retention capacity, its structure, and its fertility. Many of the practices delineated in the Organic standards are consistent with practices being advanced to sequester carbon and to mitigate the effects of climate change.

- Organic regulations (§205.203) require the implementation of soil fertility and crop nutrient management practices to maintain or improve soil such as crop rotations, cover cropping, and the application of plant and animal manures.
- Cover crops, routinely planted by organic farmers after harvesting cash crops, rebuild soil nitrogen and improve carbon sequestration by adding soil organic matter. Planting deep-rooted cover crops like forage radish or cereal rye further aid in the long-term sequestration of carbon.
- Compost is an important organic farming soil amendment and, when used judiciously and in combination with cover crops, accrues more soil organic carbon than when used alone.

Healthy soils are a cornerstone for organic farmers and an important factor in reducing GHG emissions. As biologically active soils break down crop residues, they release carbon dioxide and nutrients. Stabilized soil organic carbon that adheres to clay and silt particles or resists decomposition is sequestered and can remain in soils for decades or longer.

The long-term studies conducted at the Rodale Institute demonstrate both the increased water holding capacity and the better water infiltration of organically managed soils which is also key to the kinds of

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<sup>1</sup> Environmental Protection Agency (EPA). (2018) *Sources of Greenhouse Gas Emissions*. <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

<sup>2</sup> Schonbeck, M. et al. (2018) *Soil Health and Organic Farming, Organic Practices for Climate Mitigation, Adaptation, and Carbon Sequestration*, Organic Farming Research Foundation, p. 2. <https://ofrf.org/soil-health-and-organic-farming-ecological-approach>



adaptations necessary for farmers to survive and thrive in the years ahead.<sup>3</sup> Organic farming practices also help mitigate climate change by keeping roots in the soil, preventing soil erosion, and sequestering soil carbon. USDA has an opportunity to both recognize and promote the multifunctional benefits of organic agriculture.

Research has also shown that if the standard practices used by organic farmers to maintain and improve soils were implemented globally, it would increase soil organic carbon pools by an estimated 2 billion tons per year – the equivalent of 12% of the total annual GHG emissions, worldwide.<sup>4</sup> While individual practices such as cover cropping or no-till can accrue measurable amounts of SOC, integrated systems of practices based on sound agro-ecological principles have the greatest potential to mitigate agricultural GHG emissions, sequester and stabilize SOC, and attain the full measure of a productive and resilient agriculture.<sup>5</sup>

### **No- till is no Panacea for Climate Change**

One of the most emphasized practices USDA and land grant university extension services is no-till agriculture and the benefits of not disturbing the soil. They have stressed that soil disturbance is more harmful to SOC and soil life than the herbicides and other agricultural chemicals used in continuous corn and soy rotations. However, much of SOC accrues in aggregates near the soil surface, where it is vulnerable to rapid oxidation after even a single tillage pass; most no-till farmers till once every several years to deal with perennial weeds and/or soil compaction leading to the loss of any accrued carbon stores. Crucially, most stabilized soil organic matter appears to derive from microbial processing of root exudates and other organic residues and are not of direct plant origin.<sup>6,7,8</sup> Thus, the detrimental effect of

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<sup>3</sup> USDA Agricultural Research Service (ARS). Web accessed 3/2020

<https://www.ars.usda.gov/research/publications/publication/?seqNo115=207137>

<sup>4</sup> Schonbeck, M. et al. (2018), p. 42.

<sup>5</sup> Lal, R., J.M. Kimble, R.F. Follett & C.V. Cole. 1998. *The Potential of U.S. Cropland to Sequester Carbon and Mitigate the Greenhouse Effect*. Ann Arbor Press, Chelsea MI.

<sup>6</sup> Paustian, K., Lehmann, J., Ogle, S., Reay, D., Robertson, G. P., & Smith, P. (2016). Climate-smart soils. *Nature*, 532(7597), 49-57. DOI:10.1038/nature17174.

<sup>7</sup> Kallenbach, Cynthia M., Frey, Serita D., & Grandy, A. Stuart. 2016. Direct evidence for microbial-derived soil organic matter formation and its ecophysiological controls. *Nature Communications*, 7, Article number: 3630. <https://www.osti.gov/pages/servlets/purl/1363941>.

<sup>8</sup> Schmidt et al., 2011. Persistence of soil organic matter as an ecosystem process. *Nature*, 478:49-56.

chemicals used in no-till systems on soil microbes undermines formation of stable soil organic matter.<sup>9,10</sup> It is becoming clear that previous studies may have over-estimated the carbon accrual potential of chemical no-till agriculture and illustrates the need for additional research and closer examination of systems-based approaches such as organic management.

The following excerpt from the report from the National Sustainable Agriculture Coalition, “Agriculture and Climate Change” Policy Imperatives and Opportunities Help Producers Meet the Challenge” further illustrates the role that organic farming has to play in the climate crisis.

*In a meta-analysis of 20 organic/conventional comparison trials from around the world, organic systems accrued an average of 400 lb C/ac-year more than conventional systems, of which about 60 percent was sequestered in situ and 40 percent was imported in the form of compost, manure, and other organic amendments (Gattinger et al., 2012). Another meta-analysis of 59 studies found total SOC averaging 19 percent higher in organic than conventional systems (Lori et al., 2017). In the U.S., a nationwide sampling of 659 organic fields and 728 conventional fields across the U.S. showed 13 percent higher total Soil Organic Matter (SOM) and 53 percent higher stable SOM in the organic soils (Ghabbour et al., 2017).*

*Most recently a meta-analysis examined 528 studies which each compared at least one organic farm to at least one conventional farm (Sanders and Hess, 2019). On average, organically managed soils had a 10 percent higher organic C content and a higher annual C sequestration rate of 256 kg C /ha. Nitrous oxide emissions averaged 24 percent lower for organic farming, which results in a cumulative climate protection performance of 1,082 kg CO equivalents per hectare per year. Aggregate stability in soil was on average 15 percent higher (median) in organic farming; infiltration differed by 137 percent. Higher infiltration reduces soil erosion and soil loss, which means that organic farming reduces these occurrences by -22 percent and -26 percent, respectively (Sanders and Hess, 2019).<sup>11</sup>*

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<sup>9</sup> Druille M, Cabello MN, Omacini M, Golluscio RA. 2013. Glyphosate reduces spore viability and root colonization of arbuscularmycorrhizal fungi. *Applied Soil Ecology*, 64:99–103; <https://doi.org/10.1016/j.apsoil.2012.10.007>

<sup>10</sup> Nicolas V, Oestreicher N, Vélot C. 2016. Multiple effects of a commercial Roundup® formulation on the soil filamentous fungus *Aspergillus nidulans* at low doses: evidence of an unexpected impact on energetic metabolism. *Environmental Science and Pollution Research* 23, 14393–14404; doi: <https://doi.org/10.1007/s11356-016-6596-2>.

<sup>11</sup> National Sustainable Agriculture Coalition, November 2019. Agriculture and Climate Change: Policy Imperatives and Opportunities to Help Producers Meet the Challenge. Washington D.C.

The research and field data are conclusive enough to warrant the USDA making significant investments and educational outreach to promote the value of organic management systems as a way forward in dealing with this impending crisis.

## **COMPLIANCE, ACCREDITATION, & CERTIFICATION SUBCOMMITTEE**

### **DISCUSSION DOCUMENT: HUMAN CAPITAL “STEWARDSHIP OF EXPERTISE”**

We appreciate this agenda topic and the NOP memo as a first attempt at a discussion document. That said, we take issue with the process by which this agenda item found its way on to the agenda, when other agenda items must be petitioned and approved. In short, the NOSB, as an independent advisory board, must also have autonomy in the development of its own work agenda. When a topic of this magnitude is added to the work agenda, but other topics of large scope are denied on account of their large scope or the amount of work it would take to tackle them, a problematic and unequal power dynamic is at play.

Those observations aside, this topic, which we have chosen to rename “Stewardship of Expertise,” as we prefer not to consider humans as “capital,” presents important ideas, and asks good questions. We will address each of the following sections.

#### **Strategic Workforce Planning**

##### **What is going well and reflects strengths with respect to human capital in the organic community?**

We see this focus on the training and education of certification staff and inspectors as a hallmark and considerable strength of Dr. Jenny Tucker’s leadership. Resources such as the Organic Integrity Learning Center have the potential to provide valuable training for multiple sectors, clarify inconsistencies among certifiers, and serve organic producers. Further, the collaboration between ACA and IOIA, and IOIA as a stand-alone trainer of organic inspectors represent strengths. Finally, with COVID, several organizations including organic certifiers and educational organizations have offered free, online trainings on myriad topics, a positive externality of the pandemic which we hope persists into the future.

##### **What challenges do many certifiers share in identifying, attracting, developing, and retaining talent?**

The ideal skillset for, say, a farm-focused certification review staff is a particularly odd combination of skills. One must be able to read and interpret regulatory texts, write clearly and succinctly, speak “farmer” and “certifier,” and provide excellent customer service. This person must have sustainable agricultural knowledge and experience such that s/he understands what is written on an OSP, can identify areas of risk or compliance with the law and the Rule, and see room for improvement. The

reviewer must also possess significant “soft” skills such as those that put a nervous person at ease or keep a person talking to gain greater clarification. This person must be comfortable working with people of diverse cultural backgrounds, languages, and levels of English literacy. This is an odd combination of skills and a difficult one to find. Therefore, we spend significant time and resources training our staff.

### **Talent Management: Pipeline Development**

In addition to those fields noted in the memo, other expertise such as those in chemistry, ecology, biological sciences, plant pathology, and biological engineering would be particularly helpful, especially when considering many of the topics discussed and debated by the NOSB. We have long wondered what it would look like if each NOSB member had a research assistant (a co-op position for a graduate student, for example) to help conduct and provide literature reviews, write drafts, and otherwise support the work of NOSB members. What better way to expose young people to the organic community than through service to its leadership board!?

**How can these candidate pipelines be developed in a way that maximizes diversity and inclusion, so that those working in the organic community represent the diversity of the public we serve?**

One way in which OEFFA has supported diversity and inclusion in pipeline development is in participation in the Federal Work Study Program. As a community site for Federal Work Study, OEFFA has exposed several interns who were not in a position to take an unpaid internship, to work in sustainable agriculture and organic certification. Also, through a federally funded Begin Farming program at OEFFA, several young people have explored farming as a potential career through paid, on-farm internships and training programs. Some of these Federal Work Study interns and beginning farmers have then later served as staff.

### **Talent Management: Recruitment and Matching**

**What are possible needs and opportunities for a shared job board to advertise either employment or contract opportunities across the organic certification community?**

ACA posts jobs internally, and varied certifiers and educational organizations often post on list-servs. IOIA hosts a job board, as well. That said, we support the idea of an NOP-hosted job board to increase access.

### **Performance Management and Evaluation**

**Some certifiers have asked for a systematic mechanism to share information about both high-performing and poor-performing inspectors with the NOP and with other certifiers.**

Shared tools for inspector evaluations such as IOIA-conducted inspector evaluations that are then shared with certifiers are one example of a systematic mechanism by which to share information. Further, timely staff and inspector feedback from supervisors and evaluators would give all actors the opportunity to correct mistakes and improve in real time.

### **Professional Support and Educational Infrastructure**

We think this is a worthy sub-topic and we look forward to the input of contract workers to help frame it.

This is a massive topic, and there is so much more to be discussed. We look forward to continuing this conversation both internally and with the Board, and we will seek further input from our staff and inspectors to help inform it.

## **CROPS SUBCOMMITTEE**

PROPOSAL: PAPER (PLANT POTS AND OTHER CROP PRODUCTION AIDS)- PETITIONED

**petitioned in August 2018 for the addition of paper planting pots to the National List: §205.601(o) production aids- Plant pot or growing container-hemp or other paper, without glossy or colored inks**

OEFFA continues to view Paper Pots as a necessary part of an innovative and labor-saving transplanting system. As the NOSB noted, this system has the potential to diminish the amount of plastic used on mixed vegetable operations that utilize it, as plastic cell trays and plastic mulch are not compatible with the paper pot transplanter. We are grateful for the July 2019 Technical Report on Paper Pots and Containers, and the NOSB's careful consideration of this topic.

We are curious whether the manufacturer or the materials review organization (MRO) will be responsible for testing the biobased carbon percentages. If the MRO will be responsible for this testing, we think it likely that MROs paid by manufacturers or with access to state labs will be those well positioned to review these materials.

A second question we have is related to the ASTM test methods, which have a 3-5% margin of error. It would be helpful if certifiers were provided with guidance regarding how to interpret, for example, a test with 85% +/- 5% as the result. Further, we are aware that ASTM standards are based on lab tests, not field tests, providing little information on how these products will behave in on-farm conditions. The lab protocols utilize optimal conditions that would not likely be found in agricultural fields between growing seasons and do not account for variations in environmental and climatic conditions. The scope of the ASTM "test methods do not address environmental impact, product performance and

functionality, determination of geographical origin, or assignment of required amounts of biobased carbon necessary for compliance with federal laws.”<sup>12</sup>

We share additional concerns about the need for continued research on the impact of the portion of the material that does not decompose, including the portions that partially decompose. Additionally, there must be further definition regarding who would be considered a “qualified reviewer” of the biodegradability and percentage of biobased content, the relevancy of which is highlighted in our previous points. Greater clarity on these topics in guidance will lead to greater certifier consistency.

Despite these practical concerns, we support the NOSB’s motion to add Paper Pots to the National List at 205.2 and 205.601(o).

#### PROPOSAL: WILD, NATIVE FISH FOR LIQUID FISH PRODUCTS

**205.601 Synthetic substances allowed for use in organic crop production**In accordance with restrictions specified in this section, the following synthetic substances maybe used in organic crop production: Provided that, use of such substances does not contribute to contamination of crops, soil, or water...(j)As plant or soil amendments.(8)Liquid fish products—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

OEFFA thanks the NOSB for addressing this work agenda item. We agree that harvesting wild-caught fish for the exclusive use of fertilizer would be a misuse of a resource from the ocean, which is already under extreme environmental stressors, and should not be supported by organic production. That said, liquid fish products are effective, quick sources of nitrogen, and are widely used by OEFFA producers. Finally, we have reason to believe that some producers were under the impression that fish fertilizers were already produced exclusively from fish waste.

We support the Crops Subcommittee’s motions to amend both the definitions section at 205.2 and 205.601(j)(8) to indicate that liquid fish products can only be sourced from fish waste, bycatch, or invasive species, and can be pH adjusted with sulfuric, citric, or phosphoric acid, with the amount of acid used not exceeding the minimum needed to lower the pH to 3.5.

Please also refer to the detailed comments of the National Organic Coalition on this topic, as they address the ecological impacts quite thoroughly.

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<sup>12</sup> ASTM International, 1. Scope, <https://www.astm.org/DATABASE.CART/HISTORICAL/D6866-12.htm>.

## AMMONIA EXTRACT - PETITIONED

We urge you to approve this petition to prohibit the use of ammonia extracts in organic production by listing it at §205.602 - Nonsynthetic substances prohibited for use in Organic Crop Production or the “prohibited naturals” section of the National List. It belongs in this listing due to its lack of compatibility with systems of organic agriculture, its lack of necessity in a system of organic production, and its toxicity to humans and other organisms. Please refer to NOC’s more detailed comments on this material.

## DISCUSSION DOCUMENT: BIODEGRADABLE BIOBASED MULCH ANNOTATION CHANGE

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

OEFFA supports the Crops Subcommittee’s continued work on this topic. Biodegradable biobased mulch films are regularly sought by OEFFA certified producers. Our comments will focus on the questions put forth by the subcommittee:

#### **1. Is the biodegradability of the mulch film the main issue, or should a future annotation include other issues?**

The biodegradability is the main issue for two primary reasons. First, it removes the labor currently required to remove plastic mulch film. Secondly, it has the potential to mitigate the wasteful practice of landfilling loads of plastic which are generally not recycled. Please see our comments under Research Priorities calling for a study of the decomposition rates and effects of biodegradable biobased mulch film residues on soil biology and noting the importance of a safe, biodegradable biobased mulch film.

Determining how mulch film will biodegrade on organic farms is our primary concern, as it affects both the utility of the tool and has potential consequences for contamination of organic crops or land. Other concerns that could be addressed in an annotation include whether certain processing to create the mulch film has toxic byproducts, whether any ingredients come from genetically modified plants, or whether any post-consumer waste is included. Some additional considerations may prove to be beyond the capacity of some MROs (or even some manufacturers) to verify, and we are comfortable with the annotation addressing biodegradability and non-GE content. We urge, at minimum, an affidavit indicating that there are no GE or GE-derived inputs in the production of the mulch film. Provision of nutrients or delivery of allowed pesticides could also be addressed by annotation.

**3. What is your opinion on mulch films that could be engineered to include macro or micro- nutrients or pesticides that would then make the mulch film provide more benefits than just a mulch?**

Other allowed mulch materials (straw, newspaper, leaves, etc.) break down into nutrients that may be used directly or indirectly by crops via soil biology, and anything that biodegrades will, by definition, be used somehow. Provision of nutrients does not inherently seem reason to deny a product, but perhaps there could be a restriction (similar to the defunct restriction on sodium nitrate) regarding how much of a crop's nutrient needs can be supplied by mulch film. We are less supportive of the concept of including pesticides directly in the mulch film, but if the active ingredients were allowed otherwise, the delivery method could be less significant.

**4. Is the risk/benefit of keeping plastic mulches out of landfills part of the Organic Food Production Act criteria the NOSB should consider when reviewing this material?**

Yes, we should consider keeping other plastics out of landfills as a motivation to allow biodegradable mulches. For certain production systems that will use plastic mulches as long as any are allowed, it is appropriate to consider effects of each type of mulch in comparison to other tools.

The following two sections of OFPA provide the board authority for evaluating benefits of keeping plastic mulches out of landfills.

OFPA Section 2103 [7 U.S.C. 6502] 13. Organic Plan, which is the basis governing organic production, refers to "...all aspects of agricultural production or handling..." (emphasis added). Requirements regarding makeup or sourcing of inputs is an aspect of agricultural production.

Additionally, OFPA Section 2118 [7 U.S.C.] 6517 (c) (1) (A) (i), dealing with National List prohibitions and exemptions states that certain substances can be prohibited only if "...the Secretary determines...such substances...would not be harmful to human health or the environment" (emphasis added).

**6. Should a future annotation try to include consideration that different soils and climates might not be able to meet the biodegradability standard set in the annotation, and how would certifiers be able to verify the use of the material met the biodegradability standard?**

Absolutely. Either a mulch film must be allowed everywhere based on tests in a standard set of circumstances or guidance must be provided so that ACAs/MROs can evaluate for specific requirements. Standardizing testing circumstances would be most efficient and feasible, and should be conducted centrally, rather than by each individual certifier. That said, biodegradable biobased mulch film should only be allowed in conditions in which it will biodegrade, which could effectively disallow it in some regions or conditions.



Regarding the options you presented for regulating Biodegradable Mulch Film that are not biobased, listed here, we have the following feedback:

**1. Continue with the current annotation with no change**

The annotation as it stands now effectively disallows the use of the material, but also offers a clear standard for those manufacturers interested in working towards it. We harbor concerns about implementing a BDM film without truly understanding the impacts it will have on the soil over time.

**2. Allow BDM film use followed by ploughing into soil (with some consideration for off-site transport), with monitoring and assessment to determine whether there are adverse impacts, or**

This option is problematic due to the potential timing issues of tillage with regard to the crop in question and the potential inability to get a cover crop seeded, for instance, if it's a late fall crop. It may also not make sense to require tillage if a bed could serve as a no-till bed in the following year, for example, if as part of a crop rotation the bed went from kale with a BDM mulch into garlic, which might be mulched with bedpack or straw.

**3. Allow BDM film use but require that it be gathered up at the end of the season followed by on-farm or off-farm composting, if feasible, or**

This option is impractical for multiple reasons. Not only does it defeat the labor-saving reason for using the film in the first place, but it also could prove almost impossible to do if the film had begun to biodegrade.

**4. Allow BDM film use but restrict its use in certain environments where biodegradation may not occur in a reasonable time.**

This option would simplify the materials review process for ACAs/MROs and make it clear to most farmers what is and is not allowed. Use in those environments in which biodegradation may not occur in a reasonable time could be restricted to require monitoring and assessment to determine whether there are adverse impacts. This option would be reflective of the diversity of on-farm conditions while providing clear instruction to certifiers and farmers.

In short, we don't have a clear "yes or no" position on this material because we don't have the longitudinal data to help support one. We see the potential benefit to producers, and the producers certainly desire the labor and waste-saving potential of this material, but not at the cost of the soil food web. We look forward to more data so that the board can make a fully informed decision.

## 2022 CROP SUNSET REVIEWS

### SOAPS, INSECTICIDAL

**205.601(e)(8) - As insecticides (including acaricides or mite control).**

OEFFA supports the continued listing of insecticidal soap.

## VITAMIN D3

### **205.601(g) - as rodenticides.**

Several OEFFA producers utilize Vitamin D3 products. Though many of our certified operations report that they are largely ineffective, we support the continued listing of these products in the absence of alternatives.

## LIGNIN SULFONATE

### **205.601(j) As plant or soil amendments. (4) Lignin sulfonate - chelating agent, dust suppressant.**

OEFFA supports the relisting of lignin sulfonate.

## EPA LIST 4- INERTS OF MINIMAL CONCERN

### **205.601(m) As synthetic inert ingredients as classified by the Environmental Protection Agency (EPA), for use with nonsynthetic substances or synthetic substances listed in this section and used as an active pesticide ingredient in accordance with any limitations on the use of such substances. (1) EPA List 4 – Inerts of Minimal Concern.**

This group listing functions differently than much of the National List, which allows or disallows specific materials. The group listing and long defunct reference leads to regulatory inconsistency among certifiers. We appreciate the long history of work the Board has already put in on this topic, which was well articulated by Terry Shistar of Beyond Pesticides, including the more recent October 2015 recommendation proposing an annotation to remove the reference to EPA List 4 and to find a path forward with a formal, transparent, public relationship with the EPA Safer Choice Program. A transparent, public MOU between the EPA and NOP would be necessary so OEFFA materials reviewers would understand how and why materials decisions are being made and could apply that same logic to lingering grey areas. We support the clear and detailed list of steps submitted by the National Organic Coalition which could serve as a checklist to address this issue moving forward. **Finally, we support the Crops Subcommittee motion to remove EPA List 4- inerts of minimal concern from 205.601 of the National List.**

## LIVESTOCK

### PROPOSAL: FENBENDAZOLE FOR USE IN POULTRY

**petition requesting a revision to the annotation at 7 CFR §205.603 (23)(i) to include the use of Fenbendazole for laying hens and replacement chickens intended to become laying hens**

OEFFA does **not** support the addition of Fenbendazole for use with poultry as proposed – to expand the use of fenbendazole to poultry by adding an annotation to 7 CFR §205.603(a)(23)(i) to include laying hens and replacement chickens intended to become laying hens with no withholding period and no defined parameters for use..

Materials related to poultry and egg laying have been important to OEFFA over time. We lack adequate standards to regulate the systems of poultry or egg laying that fit with organic principles, and therefore we spend time debating about the materials that ought to be allowed or disallowed in an organic poultry or layer system. Fenbendazole is an example of such a material. Per OEFFA producers, many of which produce in large poultry barns modeled after conventional production systems, this material is not needed. Producers report that, with appropriate management of litter and outdoor access, parasites do not present a problem. As is noted in the poultry-focused Technical Review (TR), the environmental impact assessment did not assess organic systems, but rather confinement operations. Further, the TR noted several other tools available for poultry parasite management that do not leave residues in eggs. Finally, truly pastured organic poultry producers utilizing moveable coops on pasture have not identified a need for parasiticides.

What we do need, instead of materials to enable poor management in systems modeled after conventional production, is actual poultry standards, similar to what were provided in OLPP. We need to focus on SYSTEMS of organic production, not input substitution, which is what is being requested here. This material is not compatible with a system of organic agriculture and is not needed in organic production systems.

## 2022 LIVESTOCK SUNSET REVIEWS

### BUTORPHANOL

**205.603(a) As disinfectants, sanitizer, and medical treatments as applicable**

**(5) Butorphanol (CAS #-42408-82-2) - federal law restricts this drug to use by or on the lawful written or oral order of a licensed veterinarian, in full compliance with the AMDUCA and 21 CFR part 530 of the Food and Drug Administration regulations. Also, for use under 7 CFR part 205, the NOP requires:**  
**(i) Use by or on the lawful written order of a licensed veterinarian; and**

**(ii) A meat withdrawal period of at least 42 days after administering to livestock intended for slaughter; and a milk discard period of at least 8 days after administering to dairy animals.**

While we understand Butorphanol to be an extra-label use, OEFFA still supports the continued listing of Butorphanol for animal health and welfare purposes.

#### FLUNIXIN

**205.603(a) As disinfectants, sanitizer, and medical treatments as applicable (12) Flunixin (CAS #-38677-85-9)—in accordance with approved labeling; except that for use under 7 CFR part 205, the NOP requires a withdrawal period of at least two-times that required by the FDA**

OEFFA supports the continued listing of Flunixin for animal health and welfare purposes. While not commonly used by OEFFA producers, many have it on-hand in the event it is needed for pain, fevers, or swelling.

#### MAGNESIUM HYDROXIDE

**205.603(a) As disinfectants, sanitizer, and medical treatments as applicable (18) Magnesium hydroxide (CAS #-1309-42-8)—federal law restricts this drug to use by or on the lawful written or oral order of a licensed veterinarian, in full compliance with the AMDUCA and 21 CFR part 530 of the Food and Drug Administration regulations. Also, for use under 7 CFR part 205, the NOP requires use by or on the lawful written order of a licensed veterinarian.**

OEFFA supports the continued listing of Magnesium Hydroxide for use as an antacid. While we only have one product in use by OEFFA producers, several other products are denied for this use. It is important to maintain the continued listing of this material, should an antacid be needed.

#### POLOXALENE

**205.603(a) As disinfectants, sanitizer, and medical treatments as applicable (21) Poloxalene (CAS #-9003-11-6)—for use under 7 CFR part 205, the NOP requires that poloxalene only be used for the emergency treatment of bloat.**

While not widely used, this material is an important one in the event of frothy bloat when natural oils do not work. It is quick, effective, and potentially life-saving. OEFFA urges the continued listing of this material.

#### FORMIC ACID EXCIPIENTS

**§205.603(b) As topical treatment, external parasiticide or local anesthetic as applicable (2) Formic acid (CAS # 64-18-6) - for use as a pesticide solely within honeybee hives.**

OEFFA does not support the re-listing of this material for which there are no organic standards. The NOSB has formerly recommended apiculture rules. Standards would provide a framework for making decisions about materials used in organic beekeeping. In the absence of organic standards, materials for use in those production systems ought not persist on the National List.

## EXCIPIENTS

**205.603(f) Excipients, only for use in the manufacture of drugs used to treat organic livestock when the excipient is: Identified by the FDA as Generally Recognized As Safe; Approved by the FDA as a food additive; or Included in the FDA review and approval of a New Animal Drug Application or New Drug Application.**

**As defined in:**

**§205.2 Excipients. Any ingredients that are intentionally added to livestock medications but do not exert therapeutic or diagnostic effects at the intended dosage, although they may act to improve product delivery (e.g., enhancing absorption or controlling release of the drug substance). Examples of such ingredients include fillers, extenders, diluents, wetting agents, solvents, emulsifiers, preservatives, flavors, absorption enhancers, sustained-release matrices, and coloring agents.**

Just as “inert” ingredients function in pesticide products, so do excipients function in animal medications. We use the term “function,” because excipients and “inerts” are not necessarily biologically or chemically inactive, and are not always listed on the label. In order for the Board to review excipients in accordance with OFPA, it must have adequate information about the identity and function of excipients. Therefore, it must seek information from materials review organizations and animal drug manufacturers to identify the excipients that are present in products used in organic livestock production so that they can be individually evaluated by the Board.

## EPA LIST 4-INERTS OF MINIMAL CONCERN

**205.603(e) As synthetic inert ingredients as classified by the Environmental Protection Agency (EPA), for use with nonsynthetic substances or synthetic substances listed in this section and used as an active pesticide ingredient in accordance with any limitations on the use of such substances.**

### **(1) EPA List 4 -Inerts of Minimal Concern**

Please refer to OEFFA’s comments on EPA List 4 – Inerts of Minimal Concern under our Crops Subcommittee comments.

## **HANDLING SUBCOMMITTEE**

### **CARNAUBA WAX**

#### **205.606 Waxes – nonsynthetic (Carnauba wax; and Wood resin)**

Under OEFFA's current method of material review this material would not be further reviewed based on its presence on the National List. That having been said, we are wondering if the appropriate place for this material is on 205.606, or if it ought not rather be listed as an organic ingredient. It is, after all, consumed right along with the apple. At a minimum, carnauba wax ought to be labeled as having been added to the fruit so that organic consumers are aware.

### **COLORS (18)**

#### **205.606(d) Colors derived from agricultural products - Must not be produced using synthetic solvents and carrier systems or any artificial preservative**

We are wondering if the industry has now reached a point of maturity within which many of these colors can now be obtained from organic agricultural ingredients. Further, group listings such as these are inherently problematic in sunset review.

### **TURKISH BAY LEAVES**

#### **205.606(u) Turkish bay leaves**

We are wondering if the industry has now reached a point of maturity within which it can now produce a sufficient quantity of Turkish bay leaves. 12 producers are listed in the Integrity database, but it's difficult to assess the quantity produced relative to demand.

## MATERIALS SUBCOMMITTEE

### MARINE MACROALGAE IN ORGANIC CROP FERTILITY INPUTS

#### **§205.601 Synthetic substances allowed for use in organic crop production**

This proposal suggests an annotation to §205.601 (j)(1) requiring (proposed annotation changes are in blue):

- 1) In accordance with restrictions specified in this section, the following synthetic substances may be used in organic crop production: Provided that, use of such substances does not contribute to contamination of crops, soil, or water...

(j) As plant or soil amendments.

Aquatic plant extracts (other than hydrolyzed) –Extraction process is limited to the use of potassium hydroxide or sodium hydroxide; solvent amount use is limited to that amount necessary for extraction. [Harvest Parameters - “Prohibited harvest areas: established conservation areas under federal, state, or local ownership, public or private, including parks, preserves, sanctuaries, refuges, or areas identified as important or high value habitats at the state or federal level. Prohibited harvest methods: bottom trawling and harvest practices that prevent reproduction and diminish the regeneration of natural populations. Harvest practices should ensure that sufficient propagules, holdfasts, and reproductive structures are available to maintain the abundance and size structure of the population and its ecosystem functions. Harvest timing: repeat harvest is prohibited until biomass and architecture \(density and height\) of the targeted species approaches the biomass and architecture of undisturbed natural stands of the targeted species in that area. Bycatch: must be monitored and prevented, or eliminated in the case of special status species protected by U.S. Fish and Wildlife Service or National Marine Fisheries Service.”](#)

- 2) An additional listing is proposed at §205.602 prohibiting marine macroalgae unless produced in accordance with the following annotation (identical to that proposed for §205.601 (j)(1)) in order to address marine macroalgae used in non-synthetic products and therefore not covered by the annotation under Aquatic Plant Extracts. This prohibition, unless harvested in accordance with the annotation, would help safeguard that marine macroalgae harvested for and used in organic crop production do not harm the environment (proposed changes are in blue):

#### **§205.602 Nonsynthetic substances prohibited for use in organic crop production.**

The following nonsynthetic substances may not be used in organic crop production:

[\(j\) Marine macroalgae \(seaweed\)--unless harvested in accordance to the following parameters: Non-commercial harvests for whole and unprocessed seaweed are exempt from these parameters.](#)

[Harvest Parameters - “Prohibited harvest areas: established conservation areas under federal, state, or local ownership, public or private, including parks, preserves, sanctuaries,](#)

refuges, or areas identified as important or high value habitats at the state or federal level. Prohibited harvest methods: bottom trawling and harvest practices that prevent reproduction and diminish the regeneration of natural populations. Harvest practices should ensure that sufficient propagules, holdfasts, and reproductive structures are available to maintain the abundance and size structure of the population and its ecosystem functions. Harvest timing: repeat harvest is prohibited until biomass and architecture (density and height) of the targeted species approaches the biomass and architecture of undisturbed natural stands of the targeted species in that area. Bycatch: must be monitored and prevented, or eliminated in the case of special status species protected by U.S. Fish and Wildlife Service or National Marine Fisheries Service."

We agree with NOC's framing of this issue as it relates to the definition of Organic Production:

**§205.2 – *Organic Production*. A production system that is managed in accordance with the Act and regulations in this part to respond to the site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.**

The requirement in organic agriculture does not just apply to the farm, but requires us to think holistically about the impacts of our processes, practices, and as is noted here, the materials we use. We appreciate the years of work the board has put into this agenda item, and the attempt at a compromise posed here. We support the annotation changes, and urge that they be accompanied by robust guidance in order to flesh out requirements to be authored in collaboration with experts. We refer you to NOC's list of reference items as a starting point for guidance creation. We also agree with NOC that further research is needed. All of that said, we support the forward movement of this proposal. We need to begin, and this proposal employs the precautionary principle to get us moving in a positive direction.

## ASSESSING CLEANING AND SANITATION MATERIALS USED IN ORGANIC CROPS, LIVESTOCK, AND HANDLING

Thank you for organizing and scheduling the upcoming panel discussion on sanitizers on November 12, 2020. The organic community would benefit from a comprehensive review of sanitizers, disinfectants, and cleaners. It is very difficult to evaluate the essentiality of proposed materials, whether a petitioned new material or a review at sunset, in the absence of such a comparative analysis.

OEFFA has noticed three varying levels of scrutiny when reviewing cleaning materials, especially sanitizers:



- Certifier looks only at the active ingredients on the label of a product and does not consider other ingredients; actives must be non-synthetic or on the National List.
- Certifier looks at a full list of ingredients. Active ingredients on the label must be non-synthetic or on the National List. Other ingredients must be present on the Technical Evaluation Report for the active ingredient(s).
- Certifier looks at a full list of ingredients; all ingredients must be non-synthetic or on the National List.

OEFFA Certification currently follows the second option because we believe that the intent of the Board and organic community is best embodied in that approach. However, this limits the availability of approved sanitizers to producers.

We support the request for a Technical Review for each active sanitizer ingredient to provide a foundation for this broader review and the pragmatic idea to have a reference document that could be passed to future NOSB members. The Technical Review should include a “standard of identity” for the active ingredient which includes common inert ingredients that accompany it. It is our understanding that the NOP has not put this Technical Review topic out for bid because the topic is viewed as being too unwieldy or broad. That is precisely why we need to get started with such a technical review, so we urge the NOSB and NOP to support a Technical Review, even if it is not all-encompassing at this time.

We also support the development of a tool, as NOC suggests, that identifies the needs in organic production for cleansers, sanitizers, and disinfectants, and that would help inform the NOSB when evaluating petitions for sanitizers to assess whether other materials currently on the NL meet the same needs, or if there is a special characteristic to the material under review that justifies its placement or renewal to the NL. This assessment may help identify areas where there are gaps in necessary sanitizers or disinfectants which aid organic crops, livestock, and/or handling operations in the promotion of food safety.

In the course of reviewing each sanitizer, NOSB would first note if there is an identified need, then evaluate the full list of ingredients (including common inerts) against the criteria in OFPA. This process would happen every three years and could include revisions of the Technical Review to include new ancillary/inert ingredients as necessary. If new ancillaries are not in keeping with OFPA, the listing could be annotated to exclude those specific formulations. For example, “Chlorine materials, *except* chlorine materials containing quaternary ammonium compounds.” Materials review organizations would then review only the listed active ingredient in a sanitizer product unless the National List entry for that active included an annotation (and then would review inerts/ancillaries as well).

We think the previously proposed evaluation criteria and list of materials classified by their active ingredients are a good start and appreciate NOSB's acknowledgement of previous comments and desire to move this topic forward. As NOC notes, the goal of this work would be to result in a comparative reference tool for the NOSB to help them understand the various categories, classes, or families of sanitation materials, where they are most needed, and what would have the least and most environmental and human health impacts. Both the NOSB and the broader community need reference tools that will help them decide if petitioned materials are filling a need, as well as if a material that is less desirable could be taken off the list and replaced with a new material.

We thank you for your continued interest in this topic, look forward to the November 12<sup>th</sup> conversation, and we urge the NOP to support NOSB by issuing initial Technical Review(s) to begin this important work.

## DISCUSSION DOCUMENT: NOSB RESEARCH PRIORITIES 2020

OEFFA appreciates the board's overall recommendation that integrated research consider whole farm systems. This is especially pertinent as we head into a long-term climate crisis. We further request that the board and USDA advance research into the role of holistic systems, such as organic agriculture and the role that organic can play as we advance into this crisis. Please refer to OEFFA's comments on the role of "Organic Agriculture as a Solution to Climate Change".

While we support the range of research priorities identified by the NOSB we continue to reiterate the top-line research priorities that we have advanced for the past several years. Given the increases in NIFA funding, please amplify the importance of these sustainable alternatives to the USDA.

### ***The Role of On-Farm Research***

The way research is conducted is as important as the research itself. To the extent possible, organic research should be done in partnership with organic producers on working farms. This will help ground the research in realities faced by organic producers in the field. Further, researchers should take care to disseminate the interim and end-of-study findings of research with organic producers, in brief, accessible technical publications, and in paper and digital formats, to maximize farmers' access to this information. In order to be beneficial to the farming community, research must be pertinent to its needs, answer critical on-farm questions, and results must reach the farmers in a timely fashion.

### ***Livestock***

1. Evaluation of methionine for use in organic poultry production

We reiterated for years the increased use of metal methionine hydroxy analogue chelates, or, in common language, synthetic methionine stuck to copper, manganese, or zinc. This has been allowed under §205.603(d)(2), “Trace minerals, used for enrichment or fortification when FDA approved,” because these substances are AAFCO approved as sources of these minerals. Typically, however, synthetic methionine use would be regulated under §205.603(d)(1), which specifically addresses DL-Methionine. This continued work-around underscores the urgent need for natural methionine sources within a holistic, systems-based approach to poultry production.

Substantial research has already been conducted investigating isolated strategies for raising chickens organically and humanely without synthetic amino acid supplementation. Systems based research on eliminating DL-Methionine in organic poultry feeds should investigate the impacts of natural methionine feed sources, breed, and high-welfare management strategies simultaneously. Holistic management research should take into consideration the methods used for parasite management and mitigation in organic poultry systems. Investigation of natural methionine sources and parasite management in a systems-based approach is urgently needed to prevent the use of synthetic methionine in poultry diets, and the proliferation of requests for synthetics to be included on the national list.

## **Crops**

### 2. Organic no-till

It is by now common knowledge that organic no-till preserves and builds soil organic matter, conserves soil moisture, reduces soil erosion, and requires less fuel and labor than standard organic row crop farming and yet we are still waiting for substantive research demonstrating the benefits of organic no-till practices. The need for research to address ongoing challenges to implementation remains. Issues of weed, disease, and insect management previously identified by the NOSB are critical issues to be resolved so that organic practices can continue to be the gold standard in sustainable agriculture.

### 3. Study the decomposition rates and effects of biodegradable biobased mulch film residues on soil biology

A biodegradable biobased mulch film would be a great asset to organic producers, and we have, for years, received requests for its use. We echo the plethora of concerns expressed through public comment over the past several years about the amount of plastic currently in use by organic producers, much of which ends up in the landfill at the end of each season. Just as we have no desire for a product to be in use which would cause environmental and health effects as it breaks down in the soil and whose production contributes to global climate destabilization, an alternative to plastic mulch is long overdue. Research and *development of a safe, biodegradable biobased mulch film for organic production is imperative.*

## **Coexistence**

1. Integrity of breeding lines and ways to mitigate small amounts of genetic presence

There are many questions about the viability of public germplasm collections. Understanding inadvertent presence of GMOs in those collections is critical. Maintaining pure breeding lines is a foundation for a strong organic agriculture system and should be prioritized. OEFFA was disappointed in the weak recommendation of the NOSB last year regarding the Genetic Integrity Transparency of Organic Seed and its inability to get baseline data on the integrity of the organic corn seed supply. Measures to gather that data are needed if we are to preserve the integrity of an organic system of agriculture and organic markets.

2. Prevention of GMO contamination: Evaluation of effectiveness

OEFFA reiterates previous requests for a better understanding of how prevention strategies are working to maintain the integrity of organic crop production systems. As part of OEFFA's annual residue testing procedure, and by way of example, eighteen samples were tested for GMO contamination in 2019. Of these eighteen samples, eight were negative, and ten tested positive for GMO contamination. All of the ten positive tests fell below 5% contamination, the Non-GMO Project Action Threshold. Nine of the samples positive for GMO contamination were corn, and one was a soybean sample.

Avoiding contamination requires organic farmers to take preventative measures and conventional farmers to adopt practices as good neighbors to help organic farmers avoid contamination, but organic farmers cannot always count on this cooperation. For these instances we need policy research to provide conventional growers with an incentive to take prevention measures, which will also focus on mandatory compensation mechanisms paid to farmers that experience contamination as well as research that identifies techniques for preventing adventitious presence of GE material in organic crops, and evaluation of the effectiveness of current prevention strategies.

## **Food Handling and Processing**

1. Alternatives to Bishpenol-A in organic product packaging

BPA poses serious hazards and OEFFA supports its elimination from organic food packaging. At the same time, since known alternatives to BPA may also present similar problems, the NOSB should approach the issue of food packaging in a comprehensive way. Research on alternatives would help inform NOSB discussion on organic packaging moving forward.

## **Water quality**

1. In Ohio, Iowa and many other areas around the country there are growing concerns about agriculture impacts on water quality. Whether the concerns relate to nitrogen or phosphorous,

states and farmers are being looked to urgently for solutions. This is another opportunity to highlight the positive role that organic farmers play in stewarding water resources, and yet there is a distinct lack of water quality research that includes organic farmers. We urge the NOSB and the NOP to share this message widely with research audiences. The funding for organic research has never been higher. We should embrace this growth opportunity.

On behalf of the Ohio Ecological Food and Farm Association and OEFFA Certification,

*Amalie Lipstreu*

Amalie Lipstreu, Policy Director