



Engaging with Organic Standard Setting

Protecting organic integrity to grow a sustainable future

Introduction

by Jay Feldman

As a part of Beyond Pesticides' program to ensure continuous improvement in organic standards, the organization plays an active role in commenting on synthetic materials allowed in organic production. This is a process that goes directly to issues of organic integrity –USDA's compliance with the Organic Foods Production Act (OFPA) and the full functioning of the National Organic Standards Board (NOSB) to ensure fairness in the review of allowed materials in organic production with full consideration of the latest science, all stakeholder views, and practices that can eliminate synthetic materials, to the extent possible. We seek strict adherence to the three basic criteria for review of materials in organic by (i) not allowing synthetic substances, based on a cradle-to-grave analysis, that have adverse effects on health and the environment, (ii) ensuring compatibility with the legally defined organic system, and (iii) requiring proven essentiality in the organic system, meaning the system is not inherently reliant on outside inputs. To the extent that these materials review are conducted in the spirit of the law, compliance establishes limitations on the scale of production, so that we are not trading core values of environmental and health protection for industrial systems that eliminate the very standards on which organic is built. Additionally, if the process works as intended, with greater public involvement, the review and standard setting process creates economic incentives for more natural materials to become available for use in organic production and processing at the commercial scale. The integrity of this process ultimately determines public trust in the organic label. And, trust in the label drives growth in the market. As organic grows and we take pesticides out of agricultural production, and synthetics out of food processing, while supporting agricultural practices that protect and enhance soil fertility by building organic matter and naturally cycling nutrients, we protect our air, land, and water and sequester atmospheric carbon. If we are successful in transitioning all our land management to organic systems nationwide and globally (not an unreasonable goal, given the state of environmental health) we will ensure a sustainable future.

Materials Review

by Terry Shistar, Ph.D.

Petitioning to allow soy wax –Continuous improvement and prohibiting GMO ingredients

Beyond Pesticides' petition to add soy wax to the National List of Allowed and Prohibited Substances, a part of our continuous improvement effort, became a major issue at the Spring 2016 NOSB meeting. Beyond Pesticides petitioned the NOSB to list non-genetically engineered (GE or GMO) soy wax on the National List, as an alternative to currently allowed petroleum-based wax, for use in growing mushrooms on logs. Organic mushroom growers who grow shiitakes and other saprophytic mushrooms on logs may use a petroleum-based wax to seal the plugs and log ends. The wax helps to prevent other fungi from colonizing the exposed surfaces. The petroleum-based wax does not readily biodegrade, and at least one inspector reported seeing piles of wax fragments long after the logs had decomposed. It is our hope that approval of soy wax for this use, an opportunity for continuous improvement by incentivizing soy as an alternative to

petroleum, will allow at least some mushroom growers to replace the petroleum-based wax with a natural biodegradable material. If enough soy wax meeting the criteria of OFPA is available, we plan to petition for the removal of the petroleum-based wax.

Upon investigation, we found that there is some ambiguity about "non-GMO" soy wax. The product we found was demonstrated to be "non-GMO" based on certification that it does not contain GMO soy protein. However, soy wax is hydrogenated soy oil (which is also found in margarine), and does not contain any protein. The decision tree used by the Organic Materials Research Institute (OMRI) to determine whether a substance is prohibited as a product of excluded methods (GMO is an excluded method) does appear to permit the use of products made from soy oil of GMO soybeans. So the Crops Subcommittee of the NOSB, with our concurrence, proposed an annotation "made from non-GMO soybeans." We also suggested an expiration date for the listing, to allow for easier delisting or annotation in the event that wax from organically produced soy (another opportunity for incentivizing) becomes available.

The discussion of the soy wax petition highlights issues around the prohibition of GMO inputs (termed “excluded methods”) in organic production. The National Organic Program (NOP) told the NOSB that if it truly wants to exclude soy wax made from GMO soybeans, then it should include that in the recommendation. The NOSB was reluctant to do so, however, because some members thought that such an annotation might suggest that excluded methods are not truly excluded in other materials on the National List. The disagreement and/or confusion was so great that the NOSB chair called an “emergency break” to discuss it.

It turns out that NOP was right. The OMRI decision tree does permit a number of crop inputs that are made from GMO crops, including soybean meal, cotton gin trash, or other materials applied to the soil. This includes oils derived from nonorganic or non-segregated source crops; substrate for a non-GE microbe or enzyme that may contain nonorganic commodity crops. So, if the NOSB wants to limit the use of soy wax to that made from non-GE soybeans, then it needs to specify that requirement. And the concern that other materials allowed in organic production might also come from GE crops is also valid.

Excluded methods.

Prohibiting genetically engineered ingredients.

Other crop inputs that could be derived from GE crops include corn gluten meal, corn steep liquor, cottonseed meal, alfalfa meal and pellets, compost, compost tea, cotton gin trash, molasses, soybean meal, sugar, and oils from canola, corn, cottonseed, or

from animals that may have been fed GE crops (and may thus contain GE crop residues). Other materials review organizations or organic certifiers may have different criteria, but OMRI’s materials decisions are widely used by organic producers and certifiers.

In contrast to the OMRI decision tree, a proposal published by the NOSB Materials Subcommittee for consideration at the spring 2016 NOSB meeting takes a stronger stance. It says, “This term [genetically modified organism] will also apply to products and derivatives from genetically engineered sources.” The Materials Subcommittee cited the “NOSB Principles of Organic Production and Handling” in the Policy and Procedures Manual, which state,

Genetic engineering (recombinant and technology) is a synthetic process designed to control nature at the molecular level, with the potential for unforeseen consequences. As such, it is not compatible with the principles of organic agriculture (either production or handling). Genetically engineered/modified organisms (ge/gmo’s) and products produced by or through the use of genetic engineering are prohibited.

NOSB work on GE policy will be ongoing as long as the biotechnology industry continues to develop new technologies and products. However, the issue of soy wax has pointed out a need to clarify the application of the prohibition against genetically engineered organisms. The NOSB must complete work on (at least) the preliminary policy statements –those contained in the Excluded Methods Terminology Proposal– in order to clarify what is allowed and what is prohibited for organic farmers, certifiers, and input producers.

We support a statement such as the spring 2016 proposal, “This term [genetically modified organism] will also apply to products and derivatives from genetically engineered sources.” This is a process-based criterion and is thus more consistent with organic standards than the OMRI decision tree.

Eliminating chlorine-based materials.

Sanitizers need to be considered in context.

The NOSB voted to add another chlorine-based disinfectant –hypochlorous acid– for use in crops, handling, and livestock and postponed the vote on sodium dodecylbenzene sulfonate as an active ingredient in antimicrobial products containing lactic acid. The NOSB is also conducting a sunset review of ozone and peracetic acid as disinfectants used in crop production. Beyond Pesticides believes that the NOSB should review all the sanitizers and disinfectants together.

We proposed that the NOSB subcommittees should commission a technical review that (1) determines what disinfectant/sanitizer uses are required by law, and (2) comprehensively examines more organically-compatible methods and materials to determine whether chlorine-based materials are actually needed for any uses. In doing so, the



A great blue heron flies over a flooded soybean field in northwestern Ohio.

soy. In the case of some of these materials, OMRI applies decision trees to assess whether it is “considered a GMO or product of a GMO.” OMRI does not judge all materials made from GE crops to be “a GMO or product of a GMO.” Some other materials that are not considered by OMRI to be excluded as GE are manure

Beyond Pesticides is a plaintiff in a lawsuit along with other groups of consumers, farmers, certifiers, and environmentalists) that challenges USDA's reversal of the sunset process, which has historically required the NOSB to vote, by a 2/3's decisive margin, to re-list a material that has sunsetted after five years, based on a rigorous review in accordance with OFPA criteria. The court rejected a motion to dismiss filed by USDA, arguing that it had the authority to, without public notice and comment, reverse sunset to allow a material to stay, by default, on the National List unless the NOSB, with a decisive 2/3's vote, recommends to remove the material from the list. The case goes to trial within the year.

technical review authors should consult with EPA's Safer Choice Program and investigate materials on the Safer Chemical Ingredients List. If there are uses for which chlorine is necessary, then the NOSB should include them in the National List and limit the use to those particular uses with an annotation.

The sunset review of ozone and peracetic acid as disinfectants used in crop production.

The provisions allowing synthetic nutrient vitamins and minerals need to be corrected.

In 1995, the NOSB made a recommendation stating, "Upon implementation of the National Organic Program (NOP), the use of synthetic vitamins, minerals, and/or accessory nutrients in products labeled as organic must be limited to that which is required by regulation or recommended for enrichment and fortification by independent professional associations." The current listing does not comply with the NOSB recommendation, and the Handling Subcommittee produced a discussion document offering some options for changing it.

Beyond Pesticides supports a modification of the Handling Subcommittee's first option –although nonsynthetic vitamins and minerals required by law should be allowed in organic food, any other supplementation of food and all supplementation of infant formula should be allowed only in products labeled "made with organic." The reasoning for food is straightforward. Organic consumers expect that their food contains a full complement of vitamins and minerals based on organic agricultural production practices, not supplementation.

On the other hand, infant formula is known to be an imitation product. Making formulas for infant feeding has required attempts to make cow's milk more like breast milk and adding nutrients that are not optimal or sufficient. So it is a very complex problem and difficult to reconcile with organic principles. Thus, the top-of-the-line infant formula would be labeled "made with organic" rather than "organic."

Carrageenan review.

One very controversial material is carrageenan. Beyond Pesticides opposes the relisting of carrageenan because it may have adverse effects on the health of consumers, its production results in adverse ecological impacts, there are alternatives to its use, and its use is inconsistent with a system of organic and sustainable production. Independent scientists have presented evidence to the NOSB demonstrating inflammatory impacts of carrageenan. Due to consumer concerns about the use of carrageenan in organic products, it has been removed from many,

and every product containing carrageenan is available without it – demonstrating the lack of essentiality.

Policy and Procedures Manual and the Importance of the NOSB

When the organic law was passed and placed under the authority of USDA, hostile to organic as a viable commercial sector, it was the statutory power of the NOSB that garnered organic community support for the federal law. The first USDA organic rule, which set aside the recommendations of the NOSB, exemplified the organic divide. However, a public outpouring of support for the core values expressed in the law, along with the NOSB's specific and unique authorities representing the organic community –which includes growers, processors, and sellers of organic merchandise as well as consumers and environmentalists– resulted in a course correction. There are continuing disagreements with USDA on organic standards, decision making process, and co-existence with GMO contamination. However, the NOSB serves as the gatekeeper of the National List to ensure that USDA does not water down the organic label by allowing the use of substances that do not meet the rigorous criteria in OFPA.

The NOSB has struggled to distinguish itself from other boards established under Federal Advisory Committee Act by pointing to its statutorily defined mission and attempting to maintain control over its agenda. In doing so, it created a document that serves as bylaws for the NOSB, the Policy and Procedures Manual (PPM).

The Policy Development Subcommittee, with heavy involvement of NOP, produced extensive revisions to the PPM, which were approved at the spring meeting. Beyond Pesticides opposed many changes that weakened the authority of the NOSB. In addition, we objected to a process that created wholesale revisions without explanation or justification. With the successful litigation on reversing USDA's allowance of contaminated compost and the organic community's challenge to the reinterpreted sunset provision, organic is due for another course correction.

Conclusion

Members of the public can engage with the organic standard setting process on many levels. All organic consumers must get involved at some level to ensure that production practices and materials restrictions are strong. It must be clear that the expectations of organic consumers are met within the context of sound and responsible, organic, agricultural production practices, and that the organic label, as a result, is trusted. Watch the *Keeping Organic Strong* page on Beyond Pesticides' website and see how you can stay involved: <http://bit.ly/KeepingOrganicStrong>.