



National Organic Coalition

3540 Route 52, Pine Bush, NY 12566

845-744-2304; email: Liana@NationalOrganicCoalition.org

www.NationalOrganicCoalition.org

April 10, 2011

Ms. Patricia Atkins,
National Organic Standards Board,
USDA–AMS–NOP,
1400 Independence Ave., SW., Room 2646–So., Ag Stop 0268,
Washington, DC 20250–0268.

National Organic Standards Board:

The National Organic Coalition, (NOC) is a national alliance of organizations representing farmers, environmentalists, other organic industry members, and consumers concerned about the integrity of national organic standards. The goal of the coalition is to assure that organic integrity is maintained, that consumers’ confidence is preserved and that policies are fair, equitable and encourage diversity of participation and access.

Following are the comments of the National Organic Coalition to the National Organic Standards Board

POLICY COMMITTEE	2
Conflict of Interest	2
CROPS COMMITTEE	2
Chlorine	2
Copper Materials.....	2
Corn Steep Liquor.....	3
Lignin Sulfonate	4
Magnesium Sulfate	5
Pheromones.....	5
Sodium Nitrate	5
Streptomycin and Tetracycline	5
Classification of Materials	9
LIVESTOCK COMMITTEE.....	9
Animal Welfare.....	9
POLICY COMMITTEE	11
Procedures for Committee Recommendations.....	11
HANDLING COMMITTEE.....	11
Chlorine	11
Nutrient Supplementation	12

POLICY COMMITTEE

CONFLICT OF INTEREST

As required by the NOSB Policy and Procedures Manual, Conflict of Interest Policy, Board members must declare their interests..

We propose a more deliberate approach to a COI policy:

1. Annually, each member completes a Declaration of Interest Form, declaring all interests (businesses, investments, and agricultural endeavors) of their own, those of immediate family members, and those of the companies and/or organizations they represent. All conflicts regarding substances and practices being considered by the NOSB, at that time, are declared, as they are during the member's term on the NOSB.
2. This information will be compiled annually and given to the Board Chair or Secretary and NOSB Coordinator so it can be easily referenced during the Board's voting sessions.
3. Members are responsible for declaring their COI prior to any specific discussion.
4. Members are responsible for timely revision of their annual COI declaration should they change jobs or add clients.
5. Prior to each vote, the chair will publicly ask all members if anyone has a conflict of interest in that particular decision, and references above-noted compilation.
6. Upon such declaration, the member can either voluntarily refrain from voting, or can request that the Board decide if the conflict warrants the member abstaining from voting.
7. Additionally, these procedures for declaration of COI need to be added to the Board Policy Manual.

CROPS COMMITTEE

CHLORINE

We support the Crops Committee recommendation on re-listing chlorine compounds, with an added annotation, but suggest the following edits:

"Residual chlorine levels in the water in direct crop contact or as water from cleaning irrigation systems applied to soil or for disinfecting and sanitizing equipment or tools ~~should~~ must not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act. ~~Chlorine products may be used up to maximum labeled rates.~~"

COPPER MATERIALS

NOC agrees with the Crops Committee recommendation to continue the listing of coppers (fixed) and copper sulfate with the addition of language that requires periodic testing of the soil for copper levels. We provide the following edits to the recommendation for clarity. Additions are noted as underlined text, and deletions are noted in strike-out text.

The motion was to amend the current listing of coppers (fixed) and copper sulfate to read:

- (i) As plant disease control.
- (2) ~~Coppers, fixed-copper hydroxide, copper oxide, copper oxychloride, includes products exempted from EPA tolerance, Provided, That, copper-based materials must be used in a manner that minimizes accumulation in the soil and documented through periodic testing and shall not be used as herbicides"~~ Provided that copper-based materials are used in a manner that minimizes accumulation of Cu in the soil, as documented through periodic soil testing. Copper products shall not be used as herbicides.
- (3) ~~Copper sulfate Substance must be used in a manner that minimizes accumulation of copper in the soil and documented through periodic testing."~~ May only be used in a manner that minimizes accumulation of copper in the soil, as documented through periodic soil testing. Copper products shall not be used as herbicides.

CORN STEEP LIQUOR

The NOC agrees entirely with the Minority Opinion regarding Corn Steep Liquor: CSL is a synthetic. As such, it needs to be petitioned to remain on the National List.

We believe that the determination of whether CSL or any material is synthetic is foundational for several reasons, and it is now time to stop redefining science and OFPA for the spurious result of making a synthetic declared non-synthetic.

Agreement on basic definitions has been deferred by this Board for way too long, at the peril of no less than the entire integrity of the label. Using a clear, OFPA-based, widely understood, simple definition of synthetic is necessary for the ultimate transparency of what this label is about for both the regulators and others implementing the OFPA, as well as the consumers who believe that the issue of synthetics goes to the heart of organic.

With regards to CSL, the minority opinion in total is the clearest discussion and argument we have seen on this matter, and specifically refer to the following to, in our minds, close the book on whether or not it is a synthetic:

"...the process of making CSL --the wet milling countercurrent process-- is different than the natural practices that are defined in our standards, expressly because the process requires adding a synthetic chemical to an otherwise natural steeping/lactic acid fermentation process to effect a chemical change, necessary for the end product to be created."

We also wholly support comments from Beyond Pesticides which discuss in great detail and clarity all the issues surrounding synthetics and materials decision-making, as well as comments from Consumers Union and others.

But if CSL is a synthetic, then other materials on the NL will have to be Reconsidered!

Clearly the confusion developed around this decision should not be repeated. In addition, the inordinate amount of time spent during, before and after Board meetings cannot continue for each material. Unclear definitions and decision-making cause great difficulty for the entire industry: certifiers and materials-reviewers reviewing products, farmers understanding what is allowed, and manufacturers knowing what is allowed and what needs to be petitioned. Certainty will aid in industry development.

Unfortunately, if mistakes regarding the characterization of some other materials were made in the past, then they need to get fixed now, so that future Boards do not have to engage in this wrestling match. If reformulations need to happen, then so be it. Fortunately, you have some tools to assist in these re-assessments. You can change an annotation to acknowledge a phase-out, you can grandfather a material, and you can keep a material on the list due to essentiality.

The National Organic Program is a fairly young program. Given that prior to this administration, organic was poorly understood at best, it is now time to redouble our efforts to create a program and a process that is transparent, clear, and coherent. If that means that previous mistakes were made, then now is the time to fix them.

LIGNIN SULFONATE

We agree with the Crops Committee recommendation to re-list Lignin Sulfonate with amended annotations. However, we have the following comments and edits to the recommendation for clarity.

Comment: The Committee Summary notes that § 205.601(j)(4) is a duplicate listing; they are actually two different use listings: § 205.601 (l) for post-harvest handling, and § 205.601(j)(4) for application to soil.

Suggested text edits [Additions are noted as underlined text, and deletions are noted in strike-out text.]:

1. Relist lignin sulfonate on § 205.601 (l) with the amended annotation: ~~As floating agents in postharvest handling, subject to wastewater disposal documentation in the Organic Systems Plan to prevent adverse impact to aquatic life.~~ As postharvest floating agent, subject to documentation in the Organic System Plan of wastewater disposal systems sufficient to prevent adverse impact to aquatic life.
2. Relist lignin sulfonate on § 205.601(j) (4) with the amended annotation: chelating agent, dust suppressant.

MAGNESIUM SULFATE

This recommendation seemed to be made with a lack of an adequate TAP or TR for the committee. Absent adequate technical information, the NOSB should not be making a decision.

PHEROMONES

NOC supports the Crops Committee recommendation for the continued use of Pheromones, with the additional language proposed by Beyond Pesticides as below:

List pheromones for insect management on § 205.601, provided that they ***are identical to or substantially similar to natural pheromones as defined in 40 CFR 152.25(b)***, in passive dispensers, without added toxicants, and with only approved inert ingredients.

Pheromones are an important tool for pest control for organic farmers. As tools for organic become more widespread for all agriculture, and as pest management technology develops, it is important to re-evaluate previously-approved technologies to re-affirm their safety and appropriate-ness for use in organic. This is exactly what the Sunset provision envisioned.

Unfortunately, The Crops Committee recommendation was made without the information from a TAP or TR review. Pheromone technology has blossomed, and there are an increasing number of delivery options, as well as other materials used in their formulations. Fortunately, EPA has done some work in the safety area which is useful to inform the discussion, and we feel that this information should be referenced to clarify exactly which pheromones are allowed in organic.

For complete detail on our position, we refer to the Beyond Pesticides comments in this area. Pesticide use and safety has been an area of expertise for Beyond Pesticides for decades, and this information is vital as the NOP begins its work with EPA on pesticides and inerts.

SODIUM NITRATE

NOC supports the Committee recommendation for the continued listing of Sodium Nitrate as a prohibited natural, and the removal of the annotation for its limited use.

We agree with the analysis presented regarding environmental concerns of it being a mined, non-renewable resource. In addition it contributes high sodium levels in the soil, and does not support the building of soil fertility through system practices such as additions of compost or the use of cover crops.

STREPTOMYCIN AND TETRACYCLINE

NOC PROPOSAL FOR LIMITED ANTIBIOTIC USE FOR FIRE BLIGHT

The National Organic Coalition is fundamentally opposed to the ongoing use of antibiotics in organic agriculture. We are specifically concerned with the extension of use of Streptomycin and Tetracycline for control of Fire Blight in apple and pear trees.

Yet this is not so much a problem created by farmers as it is a substantial failure on many levels to support and advance organic agriculture systems. When full responsibility is not laid on all the elements of our food and agriculture system, it is all too easy to simply blame farmers for needing materials incompatible with organic. This is not the case.

We see this predicament as a failure of:

- USDA (Research in not supporting and funding research into rootstock and varietal alternatives or anti-bacterial research; NOP in previously allowing extensions; NOSB in previously proposing extensions);
- Certifiers to uphold the Regulations, specifically the hierarchy of pest management 205.206;
- Industry to support the high standards rather than attempting to find a way through [e.g., in apples, while the market forces pushed for highly susceptible varieties, they should have been finding other marketable organic varieties, and should have been financially supporting the development of alternatives to antibiotics];
- Producers following regulations, specifically the hierarchy of pest management 205.206;
- Advocates in making it crystal clear prior to the 11th hour that use of synthetics is only acceptable as a last resort.

The effect of antibiotic resistance on human health is well documented, and we refer the Board to extensive comments from Center for Food Safety, Food and Water Watch, Beyond Pesticides, Union of Concerned Scientists, and Consumers Union for detail. The role of spraying antibiotics on crops with regard to human antibiotic resistance has not been well understood. Contrary to anecdotal wisdom that says that application of antibiotic to fruit trees doesn't really contribute to resistance because 1) the amount of spray is minimal, 2) antibiotics don't get in the food we eat (apples and pears), and 3) minimal amounts reach the soil, there is significant scientific evidence that supports the idea that the mechanism of resistance transfer to human pathogens can indeed occur in cases in which the antibiotics are applied to control diseases in other species.

For a succinct discussion of this, we refer to the testimony of Beyond Pesticides:

It has not been so well appreciated by this board that use of antibiotics on fruit trees can contribute to resistance to the antibiotic in human pathogens. The human pathogenic organisms themselves do not need to be sprayed by the antibiotic because movement of genes in bacteria is not solely "vertical"—that is from parent to progeny—but can be "horizontal"—from one bacterial species to another. So, a pool of resistant soil bacteria can provide the genetic material for resistance in human pathogens."

At this time, Streptomycin is under NOSB sunset review, and the listing of Tetracycline is subject to an annotation that allows use of this material only until October 21, 2012.

Proposals to request continued use of these antibiotics further support the appearance that once materials get listed, they tend to stay on the National List, resulting in concerns about organic agriculture moving away from a systems approach based on continuous innovation, towards one based on input substitution.

Yet, requirements under 205.206 very specifically mandate a hierarchy of “crop pest, weed, and disease management.” This hierarchy requires that growers implement many organic methods and preventative strategies before resorting to use of a synthetic material such as these antibiotics. Examples include use of “cultural practices that enhance crop health, including selection of plant species and varieties with regard to suitability to site-specific conditions and resistance to prevalent pests, weeds, and diseases.” [205.206(a)(3)]. Compliance with this “pest control hierarchy” must be documented through the organic system plan. Unfortunately, based on the recent, significant shift toward production and marketing of susceptible varieties such as Fuji and Gala, we suggest that the organic industry (from producers through to the retail marketplace) has not paid enough attention to the provisions of the NOP regulations that require a systems approach to pest control. Instead the reliance on antibiotic use increased and this has not only contributed to the resistance of fire blight to streptomycin in the Northwest, it has reduced the incentive to develop other strategies for combating the disease. [Since both conventional and organic producers use streptomycin, we in no way place sole blame on the organic industry for this development.]

There are at least two strategies that are developing to combat Fire Blight without antibiotics. One is further research and development of root stock and varieties that are resistant. There are many apple varieties (unknown about pears) that are significantly less susceptible than the two varieties currently making up most of the organic apple market coming from the Northwest (Fuji and Gala). The Northwest supplies over 50% of organic apples in the U.S.

At least one alternative product for controlling fire blight (a natural yeast anti-bacterial) is in the last stages of efficacy testing. NOC was distressed to learn that the developer of this alternative treatment for fire blight was recently turned down for a grant from USDA OREI to fund further work on its development. This is not the first time that USDA has failed to support research into alternative strategies for organic production, and as a result, we must once again point to a significant failure of USDA to support the needs of organic farmers.¹

NOC contacted multiple producer groups and researchers but unfortunately, found that streptomycin and tetracycline are, at present, the only known alternatives for control of Fire Blight. Because of the lack of alternatives for control of this disease, these materials are also widely used by conventional orchardists.

While some significant work is being done on alternatives, experience shows that a complete cessation of use of antibiotics would result in the death of trees that contract fire blight—it is not unusual to see entire orchard blocks succumb to the disease even when growers are working actively to prevent or control fire blight infections. Given the fact that fruit trees are perennials that require a multi-year (in fact decades) investment, and take several years from initial planting to fruit production, the likely outcome of an immediate prohibition of these antibiotics would not result in the discontinuation of antibiotic use in organic systems, but rather a withdrawal of orchard land from organic certification. The result of this could be not only the loss of organic apples and pears in the marketplace, but the use of other conventional materials and practices on

¹ We note that this has also happened with other organic alternatives research proposed to USDA; for instance, the slow development of High-Methionine corn (as a replacement for synthetic Methionine) due to inadequate funding, which has led to the need for ongoing extensions of the use of synthetic methionine for poultry production.

land that had previously also provided the environmental and health benefits related to organic production.

Therefore, while we applaud the recommendation of the Committee for a complete prohibition of these antibiotics, NOC proposes the following plan which supports policies that require immediate steps toward the goal of prohibiting antibiotics in organic crop production. This includes proposals for limited continued use of both Streptomycin and Tetracycline. We reference the excellent work of organic fruit tree producers around the country, and specifically information that we obtained from the Organic Tree Fruit Association (OTFA) and Washington State researchers.

1. STREPTOMYCIN

- a. There is currently no replacement for Streptomycin. There are several products that will help protect fruit trees from fire blight but there are none that can cure the disease once a tree has become infected.
- b. Streptomycin has a stronger mode of action against bacteria than tetracycline. It is this feature of the material that has resulted in the fire blight bacterium becoming resistant to Streptomycin in the Northwest.
- c. **PROPOSAL FOR LIMITED CONTINUED USE:**
 - i. Allowance of Streptomycin for 3 years until January 2014 “while growers learn to use the new protectant products and begin planting immune rootstocks” and varieties (OTFA)
 - ii. Annotation to Limit the use only when agricultural models that monitor the interaction of the conditions that foster fire blight strikes (moisture, temperature, blossom timing) predict a high probability of infection.
 - iii. Guidance from the NOP which requires the OSP to detail that all provisions of 205.206 (a) through (d) have been met, as delineated in 205.206 (e), and verified by the certifier, followed up with auditing certifiers for implementation of §206 with regard to fire blight as part of NOP’s accreditation system.

2. TETRACYCLINE

- a. The bacterium that causes fire blight has become resistant to streptomycin in some areas of the Northwest, rendering the material ineffective in this important fruit production region.
- b. In comparison to Streptomycin, Tetracycline is a milder antibiotic whose mode of action is to retard the bacterial growth rate instead of killing bacteria outright
- c. Tetracycline spray needs to be applied during the period of infection risk, since once an infection occurs, tetracycline is not effective in controlling it. The goal is to use precisely timed application to prevent infections, based on an agricultural model that monitors conditions that can help predict the risk of an infection.
- d. **PROPOSAL FOR LIMITED CONTINUED USE:**
 - i. Allowance of Tetracycline for 3 years until January 2014 “while growers learn to use the new protectant products and begin planting immune rootstocks” and varieties (OTFA)
 - ii. Annotation to limit use to conditions outlined in models that predicts risk of fire blight infection. (e.g., *CougarBlight* Model)

- iii. Guidance from the NOP which requires the OSP to detail that all provisions of 205.206 (a) through (d) have been met, as delineated in 205.206 (e), and verified by the certifier, followed up with auditing certifiers for implementation of §206 with regard to fire blight as part of NOP's accreditation system.

3. FIRE BLIGHT TASK FORCE

- a. During this additional allowance period, the NOSB will convene a Fire Blight Task Force
- b. Task Force will report annually, in person, to the NOSB:
 - i. the progress of development of all possible alternatives
 - ii. the progress of development of the yeast alternative
 - 1. efficacy studies,
 - 2. commercial development, and
 - 3. regulatory approval (EPA and NOSB)
 - iii. Status on the development of Fire Blight resistant rootstock of apples and pears for all parts of the country.
 - 1. Types under development
 - 2. Commercial availability
 - iv. Status on the development of varieties of apples and pears that are resistant to Fire Blight for all parts of the country.
 - 1. Types under development
 - 2. Commercial availability
- c. Task Force will be composed of at least:
 - i. Farmers from each of the major fruit production regions
 - ii. The developer(s) of the yeast alternative
 - iii. Organic Apple and Pear industry representative(s)
 - iv. Plant breeders who are working on varieties that are resistant to fire blight
 - v. Plant pathologist
 - vi. Others?

- 4. USDA SUPPORT FOR ALTERNATIVES: NOSB, NOP and others will write letters to [USDA Research] Catherine Wotecki [others?]
 - a. Acknowledgement of the issue and importance of research on production methods and non-synthetic materials as alternatives to the allowed synthetics currently on the National List, including those on 205.606
 - b. Addition of specific selection criteria for allocation of funding from USDA research programs which gives priority and high scoring to research on alternative to fire blight control and prevention. [Note that this research would be of great benefit to conventional growers too because they are stuck with using antibiotics to which the fire blight bacterium is bound to develop resistance over time.]
 - c. Support of a new research program in the Farm Bill that is specifically focused on organic needs outlined by the NOP.

In conclusion, the responsibility for identifying and developing solutions for combating fire blight should not just be on the fruit producers, as it would be with a complete prohibition on antibiotic use for fruit production at this time. NOC urges NOSB to take a multi-faceted

approach that includes market research, development of new varieties, research, technical assistance, and changes to USDA policies.

CLASSIFICATION OF MATERIALS

We support the recommendation to change the definition of chemical change back to the language adopted in November 2009; deleting the sentence added in April 2010.

We support the minority position and the definition it proposes for “significant”: Significant is defined as *“any known level of a synthetic substance in the final material or in the environment, as a result of the substance’s manufacture, use and disposal.”*

For this fundamental discussion of Classification of Materials, we fully support the comments of Beyond Pesticides.

LIVESTOCK COMMITTEE

ANIMAL WELFARE

We applaud the Livestock Committee for continuing to work on a comprehensive Animal Welfare standard. It is clear that consumers want to see specific standards that show organic reaches a high bar for animal welfare. Given the large number of species alone, much less the wide variation in the industry of “animal welfare standards,” this is no small task.

Unfortunately, the proposal presented by the Livestock Committee is still very far from comprehensive, and does not reach anywhere near the ‘gold standard’ for animal husbandry – which is where organic should be.

We note that the space requirements for poultry and hogs is as “low-bar” as to approach a factory farm level, yet those for dairy cows (in barns) may be oddly excessive. There is considerable controversy from all sides with this proposal.

We further note that this proposed standard is significantly different than the EU organic standard in several areas, for instance, this outdoor space requirement for poultry is 2 square feet while the EU organic standard is over 40 square feet. It would be useful for the Livestock Committee to provide these comparisons in the commentary of the recommendations for increased transparency, to allow easier analysis, and would show that the committee had considered equivalency issues.

We request that this proposal be pulled back and reworked, potentially with the convening of a short-term task force. We also request that any subsequent proposal have a significant time-frame for comment (e.g., several months), so that the community – especially farmers – have enough time to digest the proposal and offer not just criticism, but specific suggestions for acceptable changes.

POLICY COMMITTEE

POLICY & PROCEDURES MANUAL SECTION V: PROCEDURES FOR COMPLETING COMMITTEE RECOMMENDATIONS

We greatly appreciate the Board clarifying its policies regarding Committee Recommendations. We offer some comments and edits for further clarity.

- The terminology "vote", "takes action" and "presented" are confusing. We recommend that the document address procedures for "presenting" first and then address voting.
- What is meant by "taking action"? Does that mean discussing the proposal or does it just include taking a vote?
- Also, the recommendation does not address how the Committee will decide whether to withdraw the proposal.

We suggest the following language changes:

4. ~~Prior to an official vote at the Board meeting, the committee may withdraw its recommendation.~~ During the Board meeting, the Committee presents its recommendation for discussion by the full Board.

5. ~~Once presented, the Board takes action on the committee recommendation. Note: all language following #4 on p.20 remains unchanged and should be included.~~ At any point in the process prior to the Board's vote on the status of the recommendation, the presenting Committee may withdraw its recommendation, based on approval of this action by the majority of the members of the Committee.

6. The Board votes on the status of the recommendation: Approve, Reject, or Send the recommendation back to Committee for further work.

HANDLING COMMITTEE

CHLORINE

We support the Handling committee's recommended annotation on chlorine materials, with the following edits:

"Chlorine materials (calcium hypochlorite; chlorine dioxide; and sodium hypochlorite) may be used up to maximum labeled rates for disinfecting and sanitizing food contact surfaces. Chlorine materials in water used in direct contact with ~~crop or~~ food ~~contact~~ is permitted at levels approved by FDA or EPA for such purpose, provided the use is followed by rinse with potable

water ~~that~~ which has a chlorine content that does not exceed the maximum residual disinfectant limit ~~for the chlorine material~~ under the Safe Drinking Water Act.”

THE USE OF NUTRIENT SUPPLEMENTATION IN ORGANIC FOODS

The National Organic Coalition opposes the recommendation by the Handling Committee to add an annotation to the Nutrient Vitamins and Minerals Sunset recommendation which would allow “Materials required or allowed by law for the purpose of enrichment, supplementation or fortification of foods, including infant formula, and materials the use of which is supported by the FDA or the Institute of Medicine of the National Academies.”

Simply, this would permit synthetic materials which have not been reviewed by NOSB, broadly characterized as “accessory nutrients,” to be added to organic foods. This blanket allowance is not only a violation of OFPA, but a violation of the trust to the organic consumer, who expect that when synthetics are allowed in organic, they have been thoroughly and individually reviewed by NOSB.

Further, this recommendation refers to materials “supported” by FDA or the Institute of Medicine of the National Academies. Neither FDA or this Institute have any list of supported nutrients, so it is extraordinarily unclear what is specifically permitted here.

A perfect example of the absurdity of this would be the blanket allowance of the nutrient DHA. With such a proposed blanket allowance, DHA would be permitted to be used in organic foods, including baby food and milk labeled organic, even if it was extracted with hexane, which has known toxicological issues. DHA should be permitted for use in organic only through the petition process.

We specifically object to the analysis provided by the Committee:

- This does not comport with OFPA, which requires all synthetic materials to be reviewed by NOSB
- This does not honor the authorization of the 1995 recommendation – which was to allow those nutrient vitamins and minerals required by law
- It is not the job of the NOSB to “embrace developments in the organic marketplace” without materials review. The marketplace is a fickle place, and today’s “needed” nutrient could be abandoned in the marketplace (or proven ‘un-needed’ by science) tomorrow.
- OFPA in no way pre-supposes that organic food products should harmonize with ‘rules’ on fortification, supplementation and enrichment of other foods; instead the law requires independent review by the NOSB through the petition process. The 1995 regulation ‘refers to actual legally-required fortification.

We encourage the Board to reject this proposal.

We thank the Board for its work, and appreciate the opportunity to make this public comment.

Sincerely,

A handwritten signature in black ink that reads "Liana Hoodes". The signature is written in a cursive, flowing style.

Liana Hoodes, Director