NORTHWEST HORTICULTURAL COUNCIL
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April 5, 2023

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

RE: Docket Number AMS-NOP-22-0071; Notice of Meeting of the National Organic Standards Board

Dear Ms. Arsenault,

The Northwest Horticultural Council (NHC) appreciates the opportunity to comment on the National Organic Standards Board (NOSB) proposals and discussion documents pertaining to organic materials listed in the most recent NOSB meeting materials posted in the *Federal Register* on February 13, 2023. Many of the NOSB proposals, petitions, and discussion documents referenced in this letter are especially pertinent to the growers, packers, and shippers of organic apples, pears, and sweet cherries in Idaho, Oregon, and Washington that the NHC represents.

The Pacific Northwest region is the epicenter for organic pome fruit and cherry production in the United States, leading the nation in the production of organic apples, pears, and cherries. Over 15.5 million boxes of organic apples are now harvested from nearly 29,000 acres in Washington state, amounting to over 90 percent of the value of sales of the fresh organic apple crop grown in the United States. There is also a significant volume of organic pears and cherries grown in our region, with more than 7,200 acres planted across the Pacific Northwest.

Organic tree fruit production in the region is increasing, with additional acreage transitioning to organic each year. The total value of the organic tree fruit crop for the region topped $693 million in 2020, of which organic apples alone accounted for approximately $606 million. In fact, tree fruit accounted for 50 percent of farm gate sales for all Washington state organics that year.

Organic tree fruit production, handling, and shipping is very complex. Our farmers must routinely manage dozens of pests that have the potential to make fruit unfit for consumption, or that suppress tree growth and overall production. The Food and Agriculture Organization estimates that 20 to 40 percent of global crop production is lost each year due to pests, with plant diseases contributing significantly to food waste and costing the global economy $220 billion.

In the Pacific Northwest, growers must protect fruit from injury by 33 direct insect pests (those that feed directly on the fruit), 47 indirect insect pests (those that feed on the tree), two common bacterial pathogens, eight fungal pathogens, ten viral pathogens, and five phytoplasmas and viroids. Another seven postharvest diseases can cause fruit decay, costing the fruit industry millions of dollars in losses each year after farmers have already invested in growing and harvesting the crop (Washington State University 2023). Invasive or emerging pests are also a continual threat.

In addition to pests and diseases that affect the fruit or the tree, our growers and packers must also combat foodborne pathogens, such as *Listeria monocytogenes*, pathogenic *E. coli*, and *Salmonella*, that are naturally occurring in the environment. Growers and packers must have access to the sanitizers necessary to prevent cross-contamination on food contact surfaces through the harvest and packing process. Access to different types of sanitizers with different modes of action is critical to sanitizing the various types of food contact surfaces and attacking the multitude of microorganisms that can be found in the growing and packing environments.

The Organic Foods Production Act (OFPA) states that synthetic substances may be permitted if, among other things, the substance is deemed "necessary to the production or handling of the agricultural product because of the unavailability of wholly natural substitute products." We ask NOSB members to be cognizant of the impacts to the practical abilities of organic growers and packers to produce organic food in a matter that allows for effective management of threats from plant pests and diseases and human pathogens when considering whether a listed material truly has a wholly natural alternative. In particular, the evolution of insect, weed, and microbe resistance means that producers and packers need access to multiple tools to deploy season-long pest management programs that allow for the rotation of products with differing modes of action to manage the evolution of pest resistance and therefore to be able to continue growing and handling organic food. One product often cannot and should not be considered as a full substitute for another.

Not all alternatives provide equal efficacy in controlling the target pest organism; nor is it a given that an alternative product is compatible with all pest management or food safety programs in all regions of the country in vying to manage varying pest and pathogen complexes under a myriad of different weather and soil conditions. Impacts to material supply chains are another important consideration when deliberating whether to delist existing materials. Manufacturers and input distributors may not have the capacity to easily step up production and distribution of alternative products to fill a void created by delisting, leaving end users without the materials they need to produce and pack organic produce.

The NHC appreciates the NOSB's good work in its preparation of the Proposals, Discussion Documents, and Sunset Reviews for the NOSB meetings. We have compiled a list of materials from those listed by the NOSB for review that are of particular importance to organic tree fruit growers and packers. Below, you will find this list, complete with NOSB citation, a brief description of the item's standard usage, and a statement as to why the product is needed.

Crops Subcommittee (CS)

Proposal: Potassium sorbate - petitioned

The NHC supports the motion to add potassium sorbate to the National List at §205.601(i) for use as a plant disease control.

According to the potassium sorbate petition, the end-use products would be valuable in managing crop disease pathogens (*e.g.,* powdery mildew and downy mildew) and insects (*e.g.*, whiteflies) on a number of crops, including stone and pome fruit. Research has demonstrated potassium sorbate's effectiveness in postharvest technology. The material shows antimicrobial, antifungal, and insecticidal properties (Gregori, *et. al*, 2008). It has also shown potential to control postharvest diseases in stone fruits, such as sweet cherries, apricots, peaches, and nectarines, alone or in combination with biocontrol agents (Mari, *et. al,* 2004).

Potassium sorbate is already allowed in organic production at §205.601(m) as a synthetic inert ingredient, as classified by the EPA. EPA considers the product a minimum risk, does not require an EPA registration number, and it is exempt from EPA regulations on efficacy and toxicity. Potassium sorbate is also generally recognized as safe (GRAS) by FDA.

2025 Crops Sunset Reviews

§205.601 Sunsets: Synthetic substances allowed for use in organic crop production

Alcohols
§205.601(a)(1)(i) Ethanol and (1)(ii) Isopropanol; As algicide, disinfectants, and sanitizer, including irrigation system cleaning.

Ethanol and isopropanol alcohols should continue to be listed as algicides, disinfectants, and sanitizers, including for irrigation system cleaning. These two alcohol products are critical tools for the tree fruit industry to decontaminate the lines of irrigation systems and to disinfect a variety of on-farm implements.

Algae and bacteria grow in surface water used for irrigation. These biofilms and other suspended solids then travel inside the irrigation lines, clogging the emitters and micro sprinklers. Biofilm can be a nesting place for pathogenic microorganisms, which diminishes the effect of central irrigation water disinfection (Van Ruijven, *et. al,* 2021). If not prevented, emitter clogging can cause damage to irrigation systems, as well as unequal supply of nutrient solution to the crop, negatively impacting plant growth.

Alcohols are used to clean pruning shears while removing infected shoots or branches, as shears can become contaminated with fire blight (*Erwinia amylovora*). Apple and pear trees are among the many plant species susceptible to fire blight, which kills flowers and young shoots. The pathogen, which is present in internal tissues or on the bark surface, infects the shears as the blades pass through the branch or shoot. When the next cut is made with contaminated blades, the bacteria may be transmitted and a new infection established (Teviotdale, *et. al*, 1991). Alcohols play a critical role in disinfecting orchard tools and work surfaces, and so they are used by nearly all organic tree fruit growers. When label use directions are followed, neither material poses a risk to human health nor presents an environmental concern. Neither ethanol nor isopropanol are applied to edible organic fruits.

Plastic Mulch and Covers

§205.601(b)(2)(ii) Plastic mulch and covers; **As herbicides, weed barriers, as applicable.**
Plastic mulches and covers offer numerous crop production benefits, including as a weed suppresser and barrier, and can conserve water by decreasing evaporation. These products are used extensively in both organic and nonorganic production systems, and have received strong support for continued listing from the organic community during sunset review consideration.

The organic tree fruit industry of the Pacific Northwest also uses plastic mulches and covers for bird nets, wind screens, shade cloths, and weed mats. Ground covers reflect light up into the tree canopy to help promote advancing the bloom or late in the crop cycle to help the fruit gain additional color and maturity.

Ground covers have also proven useful in cherry orchard blocks as a deterrent for various leafhoppers known to transmit the Western-X phytoplasma, the causative pathogen of Little Cherry Disease (LCD), which is epidemic in the Pacific Northwest and has caused significant damage to cherry orchards. LCD has no treatment and infected trees produce shrunken, leathery-skinned, pale fruit. Management efforts focus on reducing transmission through removal of infected trees, resulting in significant loss of cherry acreage over the past three years. Using ground covers deters leafhoppers from feeding on trees at the block level in both high-pressure and low-pressure blocks (Northfield & Nottingham 2021). Northfield's research found ground covers reduced leafhopper numbers by 80 to 90 percent compared to the control, and reduced vector access to important X-disease hosts in the orchard such as dandelions and mallows.

If used and maintained properly, these cover materials can last for multiple seasons, and therefore are less impactful to the environment compared to plastic products that must be replaced every year. The ground reflective materials can be used more than once during the growing season. Following postharvest control, they are removed for the winter and stored until spring.

Elemental Sulfur

§205.601(e)(5) Elemental sulfur; As insecticides (including acaricides or mite control).
§205.601(i)(10) Elemental sulfur; As plant disease control.
§205.601(j)(2) Elemental sulfur; As plant or soil amendments.
Elemental sulfur is not only a valuable tool but an essential one for the organic tree fruit industry in all three of its currently allowed uses – as an insecticide, as plant disease control, and as plant or soil amendments. There are no alternatives to elemental sulfur in organic production. Sulfur is also one of the six macronutrients plants need to survive, along with nitrogen, phosphorus, potassium, calcium, and magnesium.

For its insecticide listing, elemental sulfur is used to control orchard pests that damage leaf tissue (Rocha 2012). Rust mite feeds on plant foliage, which can cause bronzing of leaves and premature suspension of shoot growth when in high numbers. Applications of elemental sulfur to control rust mite in organic pear and apple orchards take place early in the growing stage, normally pre-bloom. There are currently no alternatives for controlling this pest. Spider mite feeds on leaves, which removes the cell contents and results in bronzing of foliage and premature defoliation. Fruit on trees heavily infested with spider mites fail to color and size properly, and fruit production for the following year may be lowered (Wunderlich, *et. al*). White apple leafhopper feeds by sucking on leaf tissue, leading to a white stippling on leaves and possible weakening of buds and reduction in fruit size.

As a plant disease control, elemental sulfur helps control powdery mildew, scab, and brown rot in apples, pears, and cherries. Fungal infections in fruit trees spread quickly and easily, resulting in crop loss due to reduced fruit set, stunted fruit growth, or severe surface blemishing of the fruit. Elemental sulfur is one of the few options organic growers have for treating powdery mildew. Fire blight caused by *Erwinia amylovora* is the most serious bacterial disease in organic apple trees and is difficult to control. It causes blossom clusters to wilt and collapse in late spring, which leads to a brown, sticky secretion from diseased tissue (Wunderlich, *et. al*).

For plant or soil amendments, elemental sulfur is used to adjust soil pH. Ninety-nine percent pure elemental sulfur is the material used in orchard sulfur burners to generate the on-site form of sulfurous acid (also up for sunset review, see comments below), which is needed to treat irrigation water. A balanced pH through the use of elemental sulfur ensures better nutrient uptake (particularly phosphorus, iron and zinc), better water penetration, and enhanced overall plant health, which in turn provides a healthy soil environment for beneficial insects and microbial activity (Hemmaty, *et. al,* 2012).

Sulfur treatments do not cause phytotoxicity, increase fruit russet, or lead to undesirable soil and fruit residues at harvest (Jamar, *et. al,* 2010). It is important to have several materials to rotate between to avoid resistance evolution, and the alternatives to elemental sulfur do not provide the same level of control and are not compatible with other materials used during the growing season. We strongly support the continued listings of elemental sulfur.

Lime Sulfur
§205.601I(6) Lime sulfur; **As insecticides (including acaricides or mite control).**
§205.601(i)(6) Lime sulfur; **As plant disease control.**
Lime sulfur has been a staple of disease management in both organic and conventional tree fruit production for more than a century. It is a well-known source of calcium and sulfur, controls diseases such as blight, mildew, and scab, helps control various orchard pests, and is not harmful to humans or the environment (Chagas, *et. al,* 2001). Label restrictions have recently been added to ensure proper application, which minimizes the potential for spray drift and impacts to the environment and human health. A majority of organic tree fruit growers use lime sulfur.

Lime sulfur is used during the dormant season prior to the trees leafing out. This use helps control insects – such as phloem feeding aphids, scales, and mites – that have overwintered in apple and peach trees. These pests can cause serious damage to the fruit trees, resulting in reduced tree vigor, cracked branches, irregular shoot growth, and thin or bronzed foliage. Left unchecked, aphids may enter the fruit through the calyx end and can cover fruit and foliage with honeydew, which causes a black, sooty mold to develop, ultimately hindering leaf function and lowering fruit grade (Wunderlich, *et. al*).

Applications also help to control overwintering pathogens such as mildew, scab, and several forms of blight (Johnson & Temple 2013). Fire blight caused by *Erwinia amylovora* is the most serious bacterial disease in organic apple trees and is difficult to control. It causes blossom clusters to wilt and collapse in late spring, which leads to a brown, sticky secretion from diseased tissue. Research by Johnson and Temple was critical to determine alternative controls of fire blight in organic apple and pear orchards following the loss of antibiotics as an approved substance on the National List.

Lime sulfur is also applied at bloom time, which is crucial to limit the growth of bacteria within the blossoms of the fruit tree, therefore decreasing the potential for infection (Kunz 2006). Bloom is also an important time of the season for the control of powdery mildew on apples and of bacterial canker and gummosis on cherries. Depending on the level of infection or infestation, some growers may use lime sulfur as a clean-up spray post-harvest as the plants enter dormancy. With no viable alternative for these uses, we strongly support the continued listing of lime sulfur.

Hydrated Lime

§205.601(i)(4) Hydrated lime; As plant disease control.

Hydrated lime is an organic fungicide used as a foliar application by tree fruit growers. There are few viable alternatives available to organic tree fruit growers to control various types of mildew, therefore, a majority of organic tree fruit growers use this material. Hydrated lime is typically used in combination with copper sulfate, as it acts as a precipitating agent making the copper available to prevent infestations of mildews and other pathogenic fungi in fruit production systems (Grimm-Wetzel & Schönherr 2006). Applications showed no signs of phytotoxicity on either leaves or fruits. Hydrated lime should continue to be listed as a plant disease control.

Liquid Fish Products

§205.601(j)(8) Liquid fish products; As plant or soil amendments.

Liquid fish products play a vital role in aiding organic farmers' tree nutrition programs and should continue to be approved on the National List. These products are used by nearly all organic tree fruit growers in the Pacific Northwest. Liquid fish products are important fertilizers for providing nitrogen and phosphorus, and contain many trace minerals critical for tree health. Liquid fish foliar applications have also been shown to help improve crop yields and reduce insect and disease pressures (Madende & Hayes 2020).

In addition to benefiting organic crop production, there are environmental benefits as well. Liquid fish products are otherwise considered an industrial waste product, so processing them into plant and soil amendments can recycle about 30 to 70 percent of fish waste (Ahuja *et. al.*, 2020). Fish waste products in agriculture recycle nutrients that would otherwise be wasted.

Sulfurous Acid

§205.601(j)(11) Sulfurous acid; As plant or soil amendments, for on-farm generation of substance utilizing 99% purity elemental sulfur per paragraph (j)(2) of this section.

A majority of organic tree fruit growers use sulfurous acid to reduce high pH in irrigation water, which is not conducive to plant or soil health. The process involves running irrigation water through sulfur burners, which acidifies the water to adjust the soil pH. Ninety-nine percent pure elemental sulfur is the material used in the orchard sulfur burners to generate the on-site form of sulfurous acid.

Irrigation water with a high pH, if left untreated, causes calcium carbonate build-up on the leaf and fruit surface. A balanced pH ensures better nutrient uptake (particularly iron, zinc, and phosphorus), better water penetration, and enhanced overall plant health, which in turn provides a healthy soil environment for beneficial insects and microbial activity (Hemmaty, *et. al*, 2012). Apple research by Hemmaty, *et. al*, found that on average, applying sulfur decreased pH of soil by 17.1 percent, increased the chlorophyll content of leaves by 4.8 percent, and increased the concentration of iron, zinc, and phosphorus by 30.2 percent, 11.6 percent, and 18.8 percent, respectively, as compared to the control.

The benefits of sulfurous acid over alternative soil and plant amendments are clear. By reducing calcium carbonate on the fruit surface, the overall condition and appearance of the fruit is improved and the potential for russeting of the fruit surface is reduced. By balancing the pH of the soil, the soil health is improved, creating an environment for beneficial insects and fungi to survive and thrive. By improving the soil health, its ability to absorb water is enhanced, thereby reducing both the water needed to sustain the crop and the potential for water runoff.

Ethylene Gas
§205.601(k)(1) Ethylene gas; As plant growth regulators – for regulation of pineapple flowering.
The NHC supports the continued listing of ethylene gas as a plant growth regulator. The Crops Subcommittee asked the question of whether there is a need to expand the use of ethylene beyond pineapple flowering, based on international acceptances. Yes, the use of ethylene should be expanded to include organically produced pear fruit.

Organic pear growers and packers should be able to ripen their pears with the use of ethylene. Proper ripening governs the post-harvest quality of pears, and ethylene plays a crucial role in both the initiation and maintenance of regulating the softening process during ripening (Hiwasa, *et. al*, 2003). Research has shown uniform and dramatic improvement in the color of the pears when exposed to ethylene gas treatments over the control (Dhillon & Mahajan 2011). Ethylene is not harmful or toxic to humans and is generally recognized as safe (GRAS) by FDA. An expanded allowance of ethylene gas would benefit organic pear producers.

§205.602 Sunsets: Nonsynthetic substances prohibited for use in organic crop production

Potassium Chloride
§205.602(e) Potassium chloride – unless derived from a mined source and applied in a manner that minimizes chloride accumulation in the soil.
The NHC agrees with the subcommittee in the continued listing of potassium chloride as a prohibited material. The subcommittee meeting packet states that a Technical Review (TR) is pending. This TR will be helpful in ascertaining potential uses and/or impacts of potassium chloride.

Handling Subcommittee (HS)

2025 Handling Sunset Reviews

§205.605 Sunsets: Nonagricultural (Nonorganic) substances allowed as ingredients in or on processed products labeled as "organic" or "made with organic (specified ingredients or food group(s)).":

Phosphoric Acid

§205.605(b)(23) Phosphoric acid; for cleaning of food-contact surfaces and equipment only.
Phosphoric acid is a tool for the cleaning and sanitizing of food processing equipment. Cleaning food-contact surfaces and equipment removes calcium and mineral deposit build-up and reduces the potential for cross-contamination. Organic tree fruit packers use phosphoric acid only on an as-needed basis.

Protecting public health is the top priority of organic tree fruit growers and packers. Food handlers must have access to multiple sanitizing and disinfecting products to combat the full plethora of pathogens of human health concern. Different products with different modes of action are regularly used in postharvest handling in order to manage these many pathogens. Each sanitizer and disinfectant listed as an approved substance on the National List has specific benefits that make it the most effective and appropriate choice for a particular circumstance.

Certification, Accreditation, and Compliance Subcommittee (CACS)

Proposal: Organic Is Climate-Smart Agriculture

With the USDA earmarking billions of dollars in climate-related market investments, organic producers should have access to funding through the USDA's Partnership for Climate-Smart Commodities program, but there is more for NOP to consider. As defined by USDA, a climate-smart agricultural commodity is produced using farming, ranching, or forestry practices that reduce greenhouse gas emissions and sequester carbon. This broad definition may describe many certified organic farms in the U.S., but likely not all, depending on the type of crop grown and its region of production. We agree with the subcommittee's statement that "not all 'climate-smart' production is certified organic." Perennial crops, such as tree fruit, whether grown organically or conventionally, should also be automatically recognized as climate smart commodities.

We question the proposal's claim that there is a "baseline understanding [that] certified organic farmers lead the way with the implementation of climate-smart practices and should automatically qualify for any climate-smart label when the USDA codifies the term's use." Not all organic operations are the same. Not all organic producers grow cover crops or implement other climate-smart practices. Organic pest management in many crops requires more applications of crop protection inputs due to less effective availability of tools (*e.g.*, disease management in tree fruit), resulting in more fuel use and soil compaction. It is problematic to state all organic annual crop production is "automatically" more climate-smart than perennial tree fruit production, whether organic or conventional. We caution against the NOP opening itself up to accusations of greenwashing on this emerging technical issue. "Automatic" certification of organic production as climate smart could negatively affect the adoption of impactful climate-smart practices across all production systems.

If organic farming is to be "automatically considered climate smart," tree fruit and other perennial crops should be as well. Perennial crop production practices are very different from those that involve annual crops. In recognizing certified organic operations as climate smart, USDA's efforts should be expanded to be more inclusive of the inherent climate-smart nature of tree fruit and other perennial crops.

The production of tree fruit in the Pacific Northwest – organic and conventional – is likely a net sink for carbon, principally by sequestering carbon through the growth of trees (wood). Vegetation (cover crops) are already used in orchards to protect against soil erosion and nutrient runoff, and provide other benefits. Fruit growers constantly work to make the most efficient use of resources and raw material farm inputs, including by implementing Integrated Pest Management (IPM), reusing plastic mulches throughout the growing season, and decreasing water use via targeted irrigation systems.

When considering climate-smart certification, the NOP should focus on the physical environmental aspects of sustainability – practices that maintain and enhance the natural resource base upon which food production depends (soil health, water and air quality, energy availability), and that make the most efficient use of on-farm resources. This will assist organic producers and processors in assessing their individual operations' carbon footprint and, in turn, applying for USDA climate-smart commodity funding. By being better equipped to participate in voluntary incentive programs, including climate-smart funding, USDA procurement, and other programmatic opportunities, growers will be better prepared to meet climate-related government mandates and retailer directives, to answer questions posed by the marketplace, and to inform future research priorities.

The NOP and NOSB should also explore methods to support claims of climate-smart agriculture with credible, scientific research. We recommend such claims be based on life cycle assessments, quantifying the environmental impacts of each organically grown crop in the various growing regions of the U.S. This will enable the organic industry to demonstrate all the ways it is meeting climate-smart metrics. Research projects regarding reduced tillage, cover cropping, crop rotations, and plastic usage are important steps in identifying practices that may contribute to environmental impacts. No matter the production system, there is always room for improvement, and life cycle assessments will show the organic industry where its opportunities for improvement rest.

The NHC supports efforts to help organic growers utilize USDA conservation and assistance programs, such as through the Farm Service Agency, Risk Management Agency, and Natural Resources Conservation Service (NRCS). Incentives to increase organic grower participation in NRCS programs – Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Conservation Innovation Grant (CIG) – should be established. We also support funding from the Partnership for Climate-Smart Commodities being used to increase technical assistance for all aspects of climate-smart production, from record keeping and soil testing to risk management and transitioning to organic certification.

We agree that USDA researchers, potentially with assistance from an interdisciplinary team of university researchers, should assess the state of the literature on climate change and organic farming, but they should go further. Researchers at the Agricultural Research Service and the

Economic Research Service should study commodity-specific life cycle assessments, climate impacts of fertilizer use, economic resiliency of organic production and supply chains, and how healthy soils and perennial crops sequester carbon and other greenhouse gases.

Through its history, the organic industry has made significant efforts to understand the impacts of its production and to make adjustments that promote good stewardship of natural resources. Many on-farm practices in organic and perennial tree fruit production are already environmentally friendly, such as cover crops, reduced or no-till, buffer zones, and nutrient management. We can use this to our advantage both in the field and in the climate-smart marketplace.

Materials Subcommittee (MS)

2023 Research Priorities

The NHC generally supports the NOSB's 2023 research priorities. The NOSB's annual list of organic food and agriculture research priorities is a good example of how the organic industry has shown itself to be forward-thinking on difficult issues.

Half of the listed priorities for Crops (1-4, 7, 9, 12, 15), tie directly into questions related to "climate-smart" production practices. Claims of "climate-smart agriculture" from a scientific standpoint depend on research into the greenhouse gas emissions and carbon footprints of each organic commodity in production and its growing region, with a principal focus on life cycle assessments. The tree fruit industry in Washington state is in the process of conducting a life cycle assessment that will evaluate climate impacts in organic apple production. Proposed NOSB research priorities regarding reduced tillage practices, cover cropping, plastic use, and greenhouse gas emissions are important steps in identifying practices that may contribute to environmental impacts. Organic pest management in many crops requires more applications of crop protection inputs due to less effective availability of tools (*e.g.*, disease management in tree fruit), resulting in more fuel use and soil compaction. The industry should focus on the physical environmental aspects of sustainability, such as practices that maintain and enhance the natural resource base upon which food production depends (*e.g.*, soil health, water and air quality, energy availability), and that make the most efficient use of on-farm resources.

For the research priorities under Food Handling and Processing, the importance of sanitizers in tree fruit production cannot be overstated. Using different sanitizers with different modes of action based on unique circumstances make them effective against viral, protozoa, and bacterial targets, enabling producers to reduce threats to human health. Growers and packers need access to more than one type of sanitizer to make the most appropriate choice for a particular circumstance, and be able to achieve the critical objective of delivering a safe and healthy product to consumers year-round.

Both of the General research priorities are important areas of research for the continued and increased success of organic farming and sales. There are many barriers to consumers accessing organically produced foods and we support studying methods for alleviating those barriers. We also support research into effective methods for providing increased assistance to growers to successfully transition to organic production.

Conclusion

The NHC's comments are focused on products and proposals important – and in some cases critical – to organic tree fruit production. The loss of these products would negatively impact the abilities of organic tree fruit growers and packers to protect against and manage injury from insect, disease, and microbial pests, and could have the unintended impact of forcing our local tree fruit growers and packers out of organic production.

We ask that members of the NOSB consider their decisions carefully while recognizing the importance of these materials for the role each plays in organic tree fruit production and in preserving management options necessary to respond to food safety concerns and operational needs in organic production and packing. Thank you for your thorough consideration of these comments.

Sincerely,

NORTHWEST HORTICULTURAL COUNCIL

Dan Langager
Technical Communications Manager

CC: NHC Science Advisory Committee's Organic Subcommittee

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