



# BEYOND PESTICIDES

701 E Street, SE ■ Washington DC 20003  
202-543-5450 phone ■ 202-543-4791 fax  
info@beyondpesticides.org ■ www.beyondpesticides.org

March 28, 2022

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

**Docket # AMS-NOP-21-0087**

**Re. HS: 2024 Sunsets §205.606**

These comments to the National Organic Standards Board (NOSB) on its Spring 2022 agenda are submitted on behalf of Beyond Pesticides. Founded in 1981 as a national, grassroots, membership organization that represents community-based organizations and a range of people seeking to bridge the interests of consumers, farmers, and farmworkers, Beyond Pesticides advances improved protections from pesticides and alternative pest management strategies that reduce or eliminate a reliance on pesticides. Our membership and network span the 50 states and the world.

Materials listed on §205.606 are nonorganic agricultural ingredients that are allowed to be used as ingredients as part of the 5% of organic processed foods that is not required to be organic. OFPA allows such substances to be used in organic food under limited conditions, including this from §6517(c)(1):

The National List may provide for the use of substances in an organic farming or handling operation that are otherwise prohibited under this chapter only if—

(A) the Secretary determines, in consultation with the Secretary of Health and Human Services and the Administrator of the Environmental Protection Agency, that the use of such substances—

- (i) would not be harmful to human health or the environment;
- (ii) is necessary to the production or handling of the agricultural product because of the unavailability of wholly natural substitute products; and
- (iii) is consistent with organic farming and handling.

## **Organic agriculture can now supply these materials.**

Materials should not remain on §205.606 if they can be supplied organically. A lesson from the experience with hops is that the organic production may not sufficient until the

demand is present. The Handling Subcommittee needs to ask the question of potential suppliers, “Could you supply the need if the organic form is required?”

The following comments contain information about pesticide use on particular nonorganic crops. This information is derived from the Beyond Pesticides web-based database *Eating with a Conscience*.<sup>1</sup>

## **Pectin (non-amidated forms only)**

**Reference: 205.606(s) Pectin (non-amidated forms only)**

The Technical Review for non-amidated low methoxyl pectin (LMP) states repeatedly that LMP is the result of a chemical process that demethylates high methoxyl pectin. Therefore, a listing on §205.606 should be limited to high methoxyl pectin (HMP), which is extracted from citrus peel and apple pomace. In reviewing the impact of the manufacture of HMP, the HS must consider the impacts of raising the non-organic crops used to produce it. The NOSB must identify barriers to producing pectin from organic sources.

## **Oranges**

**California Farmworker Poisonings, 1992–2010:** 508 reported (CA acreage: 180,000). These poisoning incidents only represent the tip of the iceberg because it only reflects reported incidents in one state. It is widely recognized that pesticide incidents are underreported and often misdiagnosed.

**Pesticide Tolerances —Health and Environmental Effects:** The database shows that while oranges grown with toxic chemicals show low pesticide residues on the finished commodity, there are 73 pesticides with established tolerance for oranges, 30 are acutely toxic creating a hazardous environment for farmworkers, 66 are linked to chronic health problems (such as cancer), 19 contaminate streams or groundwater, and 60 are poisonous to wildlife.

**Pollinator Impacts:** In addition to habitat loss due to the expansion of agricultural and urban areas, the database shows that there are 34 pesticides used on oranges that are considered toxic to honey bees and other insect pollinators. For more information on how to protect pollinators from pesticides, see Beyond Pesticides' BEE Protective webpage.

- This crop is dependent on pollinators.
- This crop is foraged by pollinators.

## **Apples**

**California Farmworker Poisonings, 1992–2010:** 104 reported (CA acreage: 17,500). These poisoning incidents only represent the tip of the iceberg because it only reflects reported incidents in one state. It is widely recognized that pesticide incidents are underreported and often misdiagnosed.

**Pesticide Tolerances —Health and Environmental Effects:** The database shows that while apples grown with toxic chemicals show low pesticide residues on the finished commodity, there are 109 pesticides with established tolerance for apples, 39 are acutely toxic

---

<sup>1</sup> <http://www.beyondpesticides.org/organicfood/conscience/index.php?pid=610>.

creating a hazardous environment for farmworkers, 94 are linked to chronic health problems (such as cancer), 25 contaminate streams or groundwater, and 92 are poisonous to wildlife.

**Pollinator Impacts:** In addition to habitat loss due to the expansion of agricultural and urban areas, the database shows that there are 44 pesticides used on apples that are considered toxic to honey bees and other insect pollinators. For more information on how to protect pollinators from pesticides, see Beyond Pesticides' BEE Protective webpage.

- This crop is dependent on pollinators.
- This crop is foraged by pollinators.

A listing on §205.606 should be limited to high methoxyl pectin (HMP), which is extracted from citrus peel and apple pomace. The evaluation of high methoxyl pectin must take into consideration the use of pesticides in the non-organic production of apples and oranges and the availability of organic fruit for this purpose, as well as the potential availability of organic pectin if the demand existed.

### **Conclusion**

A listing on §205.606 should be limited to high methoxyl pectin (HMP), which is extracted from citrus peel and apple pomace. In reviewing the impact of the manufacture of HMP, the HS must consider the impacts of raising the non-organic crops used to produce it. Since low methoxyl pectin (LMP) is synthetic because it is the result of a chemical process that demethylates high methoxyl pectin, it should be delisted and considered for listing on §205.605(b).

### **Casings, from processed intestines**

**Reference: 205.606(a) casings, from processed intestines.**

The 2019 Technical Report on collagen gel, gelatin, and casings addresses the manufacture and use of casings. While it states that casings from organic animal sources are available, it does not address the question of whether they are or could be sufficient to meet the demand for casings for organic sausages. It also does not address the impacts of the chemical-intensive system that is necessary for nonorganic production of casings. The NOSB must identify the barriers to meeting the demand with organic casings.

Non-organic casings are made from the intestines of non-organic livestock. As a product of nonorganic livestock production, the HS must consider the impacts of the livestock production system that is the source of the casings. Conventional livestock production relies on chemically-intensive grain production and typically results in air and water pollution from concentrated animal feeding operations.

Non-organic livestock production is dependent on chemically-intensive production of corn and soybeans.

## Corn

Non-organic corn production is an intensive user of pesticides and synthetic fertilizers. Most of the non-organic corn is also genetically modified.

**Pesticide Tolerances —Health and Environmental Effects:** The database shows that while field corn products grown with toxic chemicals show low pesticide residues on the finished commodity, there are 109 pesticides with established tolerance for field corn products. Of these, at least 39 are acutely toxic creating a hazardous environment for farmworkers, 98 are linked to chronic health problems (such as cancer), 38 contaminate streams or groundwater, and 88 are poisonous to wildlife.

**Pollinator Impacts:** In addition to habitat loss due to the expansion of agricultural and urban areas, the database shows that there are 40 pesticides used on field corn products that are considered toxic to honey bees and other insect pollinators. For more information on how to protect pollinators from pesticides, see Beyond Pesticides' BEE Protective webpage.

- This crop is foraged by pollinators.

## Soybeans

**California Farmworker Poisonings, 1992–2010:** 1 reported. This poisoning incident represents only the tip of the iceberg because it only reflects reported incidents in one state. It is widely recognized that pesticide incidents are underreported and often misdiagnosed.

**Pesticide Tolerances —Health and Environmental Effects:** The database shows that while soybeans grown with toxic chemicals show low pesticide residues on the finished commodity, there are 83 pesticides with established tolerance for soybeans, 38 are acutely toxic creating a hazardous environment for farmworkers, 76 are linked to chronic health problems (such as cancer), 31 contaminate streams or groundwater, and 75 are poisonous to wildlife.

**Pollinator Impacts:** In addition to habitat loss due to the expansion of agricultural and urban areas, the database shows that there are 35 pesticides used on soybeans that are considered toxic to honey bees and other insect pollinators. For more information on how to protect pollinators from pesticides, see Beyond Pesticides' BEE Protective webpage.

- This crop is dependent on pollinators.
- This crop is foraged by pollinators.
- 

In 2015, the Handling Subcommittee said, “Slaughterhouses do not separate certified organic and non-organic offal. Certified organic intestines from certified animals are not available commercially.” Since organic meat producers do produce intestines, the NOSB should investigate the possibility of allowing them to profit from the production of organic intestines.

## Conclusion

The evaluation of casings from processed intestines must take into consideration the use of pesticides in the non-organic production of corn and soybeans and ensure that GMO grains are not used in producing organic products. The NOSB must consider the availability of organic intestines for this purpose, as well as the potential availability of casings if the demand was enhanced by removal of this listing. The NOSB should discuss ways to encourage the availability of organic casings and add an expiration date as a way of incentivizing the development of an organic alternative.

## Potassium acid tartrate

Reference: 205.606

FDA regulations require that “potassium acid tartrate” be obtained as a byproduct of wine manufacture.<sup>2</sup> As such, the impacts of its production are very similar to those of tartaric acid.

## Classification

Potassium acid tartrate has been reclassified and is now on §205.606.

## Environmental and health impacts

Since potassium acid tartrate must be made from grape wine, the evaluation of tartaric acid must thus take into consideration the use of pesticides in the non-organic production of grapes and the availability of organic grape wine for this purpose, as well as the potential availability of potassium acid tartrate from organic grape wine if the demand existed. The following impacts are derived from the Beyond Pesticides web-based database *Eating with a Conscience*.<sup>3</sup>

## Grapes

**California Farmworker Poisonings, 1992–2010:** 1,234 reported (CA acreage: 796,000). These poisoning incidents only represent the tip of the iceberg because they only reflect reported incidents in one state. It is widely recognized that pesticide incidents are underreported and often misdiagnosed.

**Pesticide Tolerances —Health and Environmental Effects:** The database shows that while grapes grown with toxic chemicals show low pesticide residues on the finished commodity, there are 124 pesticides with established tolerance for grapes, 38 are acutely toxic creating a hazardous environment for farmworkers, 108 are linked to chronic health problems (such as cancer), 20 contaminate streams or groundwater, and 99 are poisonous to wildlife.

**Pollinator Impacts:** In addition to habitat loss due to the expansion of agricultural and urban areas, the database shows that there are 34 pesticides used on grapes that are considered toxic to honey bees and other insect pollinators. For more information on how to protect pollinators from pesticides, see Beyond Pesticides' BEE Protective webpage.

- This crop is dependent on pollinators.

---

<sup>2</sup> Technical Review of Potassium Acid Tartrate, 2017. Lines 222-224.

<sup>3</sup> <http://www.beyondpesticides.org/resources/eating-with-a-conscience/choose-a-crop?foodid=19>.

- This crop is foraged by pollinators.

## Essentiality

Those who supported the relisting of potassium acid tartrate have said:

- Potassium acid tartrate, commonly known as potassium bitartrate and cream of tartar, is used by the wine industry to adjust acidity. Potassium bitartrate is a natural byproduct of the winemaking process, precipitating out of wine to produce tartrate crystals. Potassium bitartrate may be added to wines to adjust acidity to ensure that wine meets consumer expectations for flavor.
- It is a common, safe leavening agent. It is used in many organic baked goods.

However, the TR suggests that potassium acid tartrate from organic grapes should be available if the market existed for it:

An alternative to potassium acid tartrate, currently classified as a synthetic nonagricultural substance, would be to isolate cream of tartar from organically grown grapes. Organically grown grapes were found to contain as much as or more tartaric acid than conventionally grown grapes (Henick-Kling 1995), depending on the degree of maturity of the grapes. Organic grapes used to produce wine consequently would be expected to create at least as much lees and argol during the winemaking process as conventionally grown grapes. Isolation of potassium acid tartrate from winemaking sediments can be accomplished using processes and substances permitted by the NOP regulations (e.g., water extraction; activated charcoal as filtering aid), thus raising the question of whether potassium acid tartrate could be eligible for organic certification.<sup>4</sup>

Use of potassium acid tartrate from organic wine would eliminate the impacts associated with chemical-intensive grape production.

## Conclusion

Although cream of tartar (potassium acid tartrate) appears to be a useful ingredient that presents few hazards, as listed on §205.606, it is the result of chemical-intensive agriculture. It should be sunsetted and sourced from organic grapes. It is an ingredient in many recipes that seems to be absent in many kitchens, so cooks have learned to do without it.<sup>5</sup>

Thank you for your consideration of these comments.

Sincerely,



Terry Shistar, Ph.D.  
Board of Directors

---

<sup>4</sup> TR, lines 496-504.

<sup>5</sup> <http://www.fitday.com/fitness-articles/nutrition/healthy-eating/substitutes-for-cream-of-tartar.html>.