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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 ID # AMS-NOP-25-0034

Re. HS: Sunset 606

These comments to the National Organic Standards Board (NOSB) on its Fall 2025 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.

It is time to stop adding listings to §606 and phase out current listings.

Organic production is grown up now, and any agricultural commodity can be produced organically. Listing on §606 only stifles organic production of new organic crops and promotes chemical-intensive production. Finally, in the time that it takes to add new regulations, petitioners could develop the demand for the organic product.

Pesticide exposure poses tremendous health threats to humans, especially the farmworkers who work in chemical-intensive operations.[1] Given the human impacts, the crash of insect populations worldwide,[2] the vulnerability of pollinators to synthetic pesticides,[3] and habitat destruction in nonorganic agriculture, it is crucial that we move away from any

[1] See Beyond Pesticides databases, Pesticide-Induced Diseases Database https://beyondpesticides.org/resources/pesticide-induced-diseases-database/overview, Eating With a Conscience https://beyondpesticides.org/resources/eating-with-a-conscience/overview, and the Pesticide Gateway https://beyondpesticides.org/resources/pesticide-gateway.
[2] https://beyondpesticides.org/dailynewsblog/2019/02/study-predicts-demise-of-insects-within-decades-if-pesticide-dependence-continues/.
[3] https://beyondpesticides.org/programs/bee-protective-pollinators-and-pesticides/what-the-science-shows.

dependence on non-organic ingredients. Thus, our reviews of sunsets for §606 materials summarize some impacts of producing these materials in a chemical-intensive system. Our analysis of the impact of using ingredients produced with conventional, chemical-intensive, non-organic practices relies to three databases—(i) USDA's Organic Integrity Database (OID); (ii) Beyond Pesticides' database, Eating with a Conscience (EWAC), which relies on Food and Drug Administration set tolerances and scientific reviews of pesticide hazards, and; (iii) California's Department of Pesticide Regulation, Pesticide Illness Surveillance Program (PISP), historical data.

We cannot predict which of the pesticides allowed to be used on a product (or component/feed of a product) on §606 will actually be used on that product. If the HS thinks that information is important, then it should request it from USDA. However, any of the pesticides we list that have tolerances for use on the product may be used on any particular batch of the nonorganic product. We observe that when the HS refers to the health effects of materials on §606, it does so without examining the effects of chemical residues. Determining whether glycerin, for example, belongs on §606 by looking at health and environmental effects of the pure substance in isolation from the effects of its production and residues is wholly inadequate.

Questions that need to be addressed before renewing any listing on §606.

Materials on §205.606 are allowed in products labeled as organic if they are agriculturally produced but have been found to not be commercially available as organic. The NOSB needs to know what the barriers are to producing the product organically. The Handling Subcommittee should get documented answers to the following questions in determining the barriers to organic production, for both petitions and sunsets.

1. What are the proximity constraints for either a manufactured or raw agricultural commodity in organic form? Examples include perishability, political climate (war zone) of the area where the agricultural production occurs, and the location of the manufacturing facility.
2. Is there insufficient raw organic agricultural production within the necessary proximity of the main manufacturing facility? Shipping costs are not to be part of the consideration.
3. Are there other manufacturing facilities that may have organic agricultural raw ingredient production nearby, or could be enticed to produce this ingredient in an organic form?
4. If raw agricultural production is required in a specific climate or soil type where there currently is no organic production and prospects for organic production are difficult (climate, transportation, war etc.), has production in other areas of the world been researched and work begun to develop new sources of organic crop production of the source ingredients for this product?
5. If there is only non-organic production near a manufacturing facility, what are the barriers to having these producers transition some or all of their production to organic?

6. Have the petitioner and users of this §205.606 ingredient worked with both the manufacturing facilities and pools of growers in the area to develop a supply of raw organic crops to produce this ingredient?
7. Is the demand for this ingredient across the organic industry sufficient to meet the minimum manufacturing production run?
8. Have all possible manufacturers (domestic and international) of this ingredient been researched to determine their minimum production runs and regions where the raw agricultural ingredient or ingredients are grown?
9. Can the ingredient be manufactured from not only raw agricultural ingredients, but possibly a secondary manufactured ingredient, such as beet color made not only from raw organic beets, but also from a preprocessed beet juice or beet powder that could be obtained in an organic form? Another example would be instant nonfat dry milk powder made not just from liquid organic skim milk, but from non-instant organic nonfat dry milk powder.
10. Is the process by which this product is manufactured patented, and if so, is the manufacturer willing to produce an organic equivalent?
11. Is there documentation of the petitioner's efforts to develop organic production?
12. Can the petitioner prove that a specific flavor profile can only be achieved from the petitioned material grown in a specific region?

Carnauba Wax

Reference: 205.606(a) Carnauba wax.

Non-organic carnauba wax should not be used if organic carnauba wax is available. Since the TR documents the availability of organic carnauba wax, and 21 suppliers of organic carnauba wax are listed in OID, the HS should delist it.

There is a possibility that carnauba wax extracted by a processor that is not certified may have been extracted using volatile synthetic solvents. There is also a possibility that some certifiers or materials review organizations may permit formulations using ancillary substances that are not permitted in organic products. Finally, consumers should be informed of the presence of nonorganic waxes—organic fruits and vegetables are generally assumed to be 100% organic. Therefore, we request that the listing for carnauba wax be annotated with, "Not extracted using volatile synthetic solvents; contains only ancillary substances approved for organic production; presence must be labeled on individual items."

Colors

Colors listed on §606 are grown using synthetic fertilizers and pesticides. As nonessential components of food, it is not appropriate to introduce the inevitable toxic residues that they carry into organic food. These colors should be removed from §205.606 because they are commercially available in organic form in sufficient supply; non-organic colors are derived from agricultural products grown using chemical-intensive agriculture; pigments are highly concentrated, and most often extracted from parts of fruits or vegetables likely to contain the highest levels of contaminants; current research is lacking to determine any

resulting impact to human health; and consumers expect organic food to be unadulterated—that is, without having its essential characteristics manipulated with the addition of non-organic ingredients to enhance colors, nutritional values, or flavors.

In its review, HS must consider the addition of toxic residues and examine claims of the essentiality of these nonorganic colors in organic food. Without examining these factors, the NOSB fails to meet the required standard of review.

Beet juice extract color

There are 115 listings for organic beet juice, and 6 listings with both "color" and "beet" in OID.

California Farmworker Poisonings, 1992–2010: 3 reported (CA acreage: 25,100). 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 EWAC database shows that while beets grown with toxic chemicals show low pesticide residues on the finished commodity, there are 45 pesticides with established tolerances for beets, 19 are acutely toxic, creating a hazardous environment for farmworkers,[4] 39 are linked to chronic health problems (such as cancer), 17 contaminate streams or groundwater, and 40 are poisonous to wildlife.

Pollinator Impacts: In addition to habitat loss due to the expansion of agricultural and urban areas, the EWAC database shows that there are 18 pesticides registered for use on beets that are considered toxic to honey bees and other insect pollinators. This crop is dependent on pollinators. This crop is foraged by pollinators.

The evaluation of beet juice color must take into consideration the use of pesticides in the non-organic production of beets and the availability of organic beets for this purpose, as well as the potential availability of the color if the demand existed.

Beta carotene extract color

The regulations at §205.2 define a non-agricultural substance as, "A substance that is not a product of agriculture, such as a mineral or a bacterial culture, that is used as an ingredient in an agricultural product. For the purposes of this part, a nonagricultural ingredient also includes any substance, such as gums, citric acid, or pectin, that is extracted from, isolated from, or a fraction of an agricultural product so that the identity of the agricultural product is unrecognizable in the extract, isolate, or fraction." Beta carotene seems to fit that definition.

Nevertheless, beta carotene extract is made from carrots as well as algae, and OID lists 953 sources of organic carrots.

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[4] To learn more about farmworkers, see http://www.beyondpesticides.org/organicfood/conscience/farmworkers.php.

California Farmworker Poisonings, 1992–2010: 35 reported (CA acreage: 63,000). 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 EWAC database shows that while carrots grown with toxic chemicals show low pesticide residues on the finished commodity, there are 42 pesticides with established tolerances, 17 are acutely toxic, creating a hazardous environment for farmworkers, 39 are linked to chronic health problems (such as cancer), 17 contaminate streams or groundwater, and 42 are poisonous to wildlife. The EWAC database shows that there are 21 pesticides registered for use on carrots that are considered toxic to honey bees and other insect pollinators. This crop is dependent on pollinators. This crop is foraged by pollinators.

The evaluation of beta carotene extract color must take into consideration the use of pesticides in the non-organic production of carrots and the availability of organic carrots for this purpose, as well as the potential availability of the color if the demand existed.

Black/Purple carrot juice color

OID contains 51 listings for organic black carrot and 54 listings for organic purple carrot.

California Farmworker Poisonings, 1992–2010: 35 reported (CA acreage: 63,000). 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 EWAC database shows that while carrots grown with toxic chemicals show low pesticide residues on the finished commodity, there are 42 pesticides with established tolerances for carrots, 17 are acutely toxic, creating a hazardous environment for farmworkers, 39 are linked to chronic health problems (such as cancer), 17 contaminate streams or groundwater, and 42 are poisonous to wildlife.

Pollinator Impacts: In addition to habitat loss due to the expansion of agricultural and urban areas, the EWAC database shows that there are 21 pesticides registered for use on carrots that are considered toxic to honey bees and other insect pollinators. This crop is dependent on pollinators. This crop is foraged by pollinators.

The evaluation of black/purple carrot juice color must take into consideration the use of pesticides in the non-organic production of carrots and the availability of organic carrots for this purpose, as well as the potential availability of the color if the demand existed.

Chokeberry, aronia juice color

OID contains 55 listings for organic aronia.

Pesticide Tolerances—Health and Environmental Effects: The EWAC database shows that while aronia berries grown with toxic chemicals show low pesticide residues on the finished commodity, there are 20 pesticides with established tolerances for aronia, 9 are acutely toxic, creating a hazardous environment for farmworkers, 18 are linked to chronic health problems (such as cancer), 6 contaminate streams or groundwater, and 18 are poisonous to wildlife.

Pollinator Impacts: In addition to habitat loss due to the expansion of agricultural and urban areas, the EWAC database shows that 6 pesticides registered for use on aronia are considered toxic to honey bees and other insect pollinators. This crop is dependent on pollinators. This crop is foraged by pollinators.

The evaluation of aronia juice color must take into consideration the use of pesticides in the non-organic production of aronia and the availability of organic aronia for this purpose, as well as the potential availability of the color if the demand existed.

Elderberry juice color

OID contains 33 listings for organic elderberries and 54 for organic elderberry juice.

Pesticide Tolerances —Health and Environmental Effects: The EWAC database shows that while elderberries grown with toxic chemicals show low pesticide residues on the finished commodity, there are 49 pesticides with established tolerances for elderberries, 18 are acutely toxic creating a hazardous environment for farmworkers, 45 are linked to chronic health problems (such as cancer), 18 contaminate streams or groundwater, and 46 are poisonous to wildlife.

Pollinator Impacts: In addition to habitat loss due to the expansion of agricultural and urban areas, the EWAC database shows that there are 22 pesticides registered for use on elderberries that are considered toxic to honey bees and other insect pollinators.

The evaluation of elderberry juice color must take into consideration the use of pesticides in the non-organic production of elderberries and the availability of organic elderberries for this purpose, as well as the potential availability of the color if the demand existed.

Grape skin extract color

There are 437 listings for organic grapes in OID and 1 listing for organic grape skin extract.

California Farmworker Poisonings, 1992–2010: 1,234 reported (CA acreage: 796,000). 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 EWAC database shows that while grapes grown with toxic chemicals show low pesticide residues on the finished commodity, there are 124 pesticides with established tolerances for grapes, 38 are acutely toxic creating a hazardous environment for farmworkers, 110 are linked to chronic health problems (such as cancer), 28 contaminate streams or groundwater, and 100 are poisonous to wildlife.

Pollinator Impacts: In addition to habitat loss due to the expansion of agricultural and urban areas, the EWAC database shows that there are 40 pesticides registered for use on grapes are considered toxic to honey bees and other insect pollinators. This crop is dependent on pollinators. This crop is foraged by pollinators.

The evaluation of grape skin extract color must take into consideration the use of pesticides in the non-organic production of grapes and the availability of organic grapes for this purpose, as well as the potential availability of the color if the demand existed.

Purple sweet potato juice color

There are 32 listings for organic purple sweet potatoes in OID and 1 for purple sweet potato juice.

Pesticide Tolerances —Health and Environmental Effects: The EWAC database shows that while sweet potatoes grown with toxic chemicals show low pesticide residues on the finished commodity, there are 48 pesticides with established tolerances for sweet potatoes, 23 are acutely toxic creating a hazardous environment for farmworkers, 46 are linked to chronic health problems (such as cancer), 17 contaminate streams or groundwater, and 46 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 25 pesticides registered for use on sweet potatoes that are considered toxic to honey bees and other insect pollinators. This crop is foraged by pollinators.

The evaluation of purple sweet potato juice color must take into consideration the use of pesticides in the non-organic production of purple sweet potatoes and the availability of organic purple sweet potatoes for this purpose, as well as the potential availability of the color if the demand existed.

Red cabbage extract color

OID contains 58 listings for organic red cabbage.

California Farmworker Poisonings, 1992–2010: 6 reported (CA acreage: 14,200). 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 cabbage grown with toxic chemicals show low pesticide residues on the finished commodity, there are 49 pesticides with established tolerances for cabbage, 32 are acutely toxic creating a hazardous environment for farmworkers, 48 are linked to chronic health problems (such as cancer), 18 contaminate streams or groundwater, and 44 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 28 pesticides registered for use on cabbage that are considered toxic to honey bees and other insect pollinators. This crop is foraged by pollinators.

The evaluation of red cabbage extract color must take into consideration the use of pesticides in the non-organic production of red cabbage and the availability of organic red cabbage for this purpose, as well as the potential availability of the color if the demand existed.

Red radish extract color

OID contains 15 listings for organic red radishes and 357 for organic radishes.

Pesticide Tolerances —Health and Environmental Effects: The database shows that while radishes grown with toxic chemicals show low pesticide residues on the finished commodity, there are 40 pesticides with established tolerances for radishes, 18 are acutely toxic creating a hazardous environment for farmworkers, 37 are linked to chronic health problems (such as cancer), 17 contaminate streams or groundwater, and 38 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 22 pesticides registered for use on radishes that are considered toxic to honey bees and other insect pollinators. This crop is dependent on pollinators. This crop is foraged by pollinators.

The evaluation of red radish extract color must take into consideration the use of pesticides in the non-organic production of red radishes and the availability of organic red radishes for this purpose, as well as the potential availability of the color if the demand existed.

Saffron extract color

There are 44 listings for organic saffron in the OID.

Pesticide Tolerances —Health and Environmental Effects: The database shows that while saffron grown with toxic chemicals show low pesticide residues on the finished commodity, there are 5 pesticides with established tolerances for saffron, 1 is acutely toxic creating a hazardous environment for farmworkers, 4 are linked to chronic health problems (such as cancer), 3 contaminate streams or groundwater, and 5 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 4 pesticides registered for use on saffron that are considered toxic to honey bees and other insect pollinators.

The evaluation of saffron extract color must take into consideration the use of pesticides in the non-organic production of saffron and the availability of organic saffron for this purpose, as well as the potential availability of the color if the demand existed.

Cornstarch, native

Reference: 205.606(v) (1) Cornstarch (native)

Non-organic corn production is an intensive user of pesticides and synthetic fertilizers. Most of the non-organic corn is also genetically modified. There are 13 listings for organic cornstarch in the OID and 69 for organic corn starch.

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 tolerances for field corn products. Of these, at least 38 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 registered for use on field corn products that are considered toxic to honey bees and other insect pollinators. This crop is foraged by pollinators.

The evaluation of cornstarch must take into consideration the use of pesticides in the non-organic production of corn and ensure that GMO corn is not used in organic products. The NOSB must consider the availability of organic corn for this purpose, as well as the potential availability of cornstarch if the demand existed.

We found 13 suppliers of “cornstarch” listed in the Organic Integrity Database (OID); however, there are an additional 69 suppliers listed for “corn starch,” for a total of 82 suppliers listed in the OID. We agree with the proposal of the HS to remove cornstarch from §205.606.

Glycerin

Glycerin is a product of fermentation and is a good example of why guidance is needed on National List materials that are produced by fermentation. Glycerin had been listed on §605(b), with the annotation, “produced by hydrolysis of fats and oils.” In Spring 2015, saying, “Petitioner has requested removal of glycerin from §205.605(b) (synthetic materials for handling), stating that there is now sufficient quantity of organically produced glycerin and that synthetic glycerin is no longer required,” glycerin was reclassified as agricultural and added to §606.

Glycerin is nonagricultural.

While the reclassification is consistent with the NOP guidance NOP 5033 and associated decision tree NOP 5033-2, it is not consistent with the definition of "nonagricultural" in the regulations:

> *Nonagricultural substance.* A substance that is not a product of agriculture, such as a mineral or a bacterial culture, that is used as an ingredient in an agricultural product. For the purposes of this part, a nonagricultural ingredient also includes any substance, such as gums, citric acid, or pectin, that is extracted from, isolated from, or a fraction of an agricultural product so that the identity of the agricultural product is unrecognizable in the extract, isolate, or fraction.[5]

As demonstrated in the TR, glycerin is made by a number of processes. Until 2015, the product of one process, hydrolysis of fats and oils, was listed on the National List (§205.603 and §205.605(b)) as a synthetic. It is still on the list at §205.603. The petitioner who asked to delist synthetic glycerin produces "organic" glycerin through fermentation of organic cornstarch. This glycerin is considered "organic" because it is considered a processed form of organic cornstarch, and because "fermentation" is an allowed form of processing. The 2015 recommendation resulted in glycerin for use in processed food being listed only on §205.606 – apparently accepting the argument of the petitioner that it should be so listed in order to impose the commercial availability restriction.

Glycerin produced by fermentation should be removed from §606.

Ancillary substances, which were not addressed in creating this listing in 2015, must be addressed by either stating that there are none or by listing those allowable. In considering what other substances might be present in glycerin made by fermentation, residues of processing aids in cornstarch or other substrates should be included.

Listing glycerin produced by fermentation on §606 means allowing a product of fermenting cornstarch made from corn produced by chemical-intensive agriculture. Non-organic corn production is an intensive user of pesticides and synthetic fertilizers. Most of the non-organic corn is also genetically modified.

Corn

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 tolerances for field corn products. Of these, at least 38 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 registered for use on field corn

[5] §205.2.

products that are considered toxic to honey bees and other insect pollinators. This crop is foraged by pollinators.

Under what authority do we allow glycerin?

We do not support the classification of glycerin made by fermentation as agricultural and therefore oppose its relisting on §205.606. As stated above, in proposing this listing, the HS said, "Petitioner has requested removal of glycerin from §205.605(b) (synthetic materials for handling), stating that there is now sufficient quantity of organically produced glycerin and that synthetic glycerin is no longer required." If this is true, then the listing of glycerin on §606 would appear to be unnecessary.

But if glycerin is not agricultural, then it can be used in organic products only if listed on §605(a) or §605(b). Glycerin made by fermentation of agricultural products should be examined, and annotated if necessary, to determine classification as synthetic or nonsynthetic. Glycerin is an example of the issues that should be addressed in decisions involving fermentation products before listing and relisting such materials.

Inulin-oligofructose enriched (IOE)

Reference: 205.606(l) Inulin-oligofructose enriched (CAS # 9005-80-5)

In Fall 2015, the NOSB voted unanimously to remove inulin-oligofructose from the National List. After ten years, it has not been removed. It should be removed and taken off the NOSB agenda.

Product of fermentation According to the patent included in the petition, IOE consists of inulin extracted from chicory, sunchokes, or agave "co-processed" with fructooligosaccharides (FOS). The inulin is extracted with hot water followed by a purification process involving treatment with lime, in which the calcium hydroxide reacts with carbon dioxide and absorbs unwanted components, leaving a residue that is further treated with ion exchange and carbon filtration. Up to that stage, it could be called an agricultural product. However, the addition of FOS, a synthetic nonagricultural ingredient, creates a synthetic nonagricultural product.[6] Therefore, IOE does not belong on §205.606, but should be petitioned for §205.605(b).

OID contains 224 listings for organic inulin. There are also 134 listings for organic chicory in the OID, 36 for organic sunchokes, and 337 for organic agave.

[6] In 2015, we commented on FOS: "The TR describes FOS as a synthetic material. . . , '[C]ommercial quantities are produced by a controlled process and combination of ingredients (sucrose, water, enzyme, hydrochloric acid, or sodium hydroxide) that does not occur in nature.' . . . [S]ince the manufacture involves a chemical change that does not occur in nature, FOS should be petitioned for inclusion on §205.605(b)."

Chicory

Pesticide Tolerances —Health and Environmental Effects: The database shows that while chicory grown with toxic chemicals show low pesticide residues on the finished commodity, there are 24 pesticides with established tolerances for chicory, 8 are acutely toxic creating a hazardous environment for farmworkers, 20 are linked to chronic health problems (such as cancer), 8 contaminate streams or groundwater, and 21 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 7 pesticides registered for use on chicory that are considered toxic to honey bees and other insect pollinators. This crop is dependent on pollinators. This crop is foraged by pollinators.

Sunchokes

Pesticide Tolerances —Health and Environmental Effects: The database shows that while sunchokes grown with toxic chemicals show low pesticide residues on the finished commodity, there are 57 pesticides with established tolerances for sunchokes, 16 are acutely toxic creating a hazardous environment for farmworkers, 47 are linked to chronic health problems (such as cancer), 14 contaminate streams or groundwater, and 46 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 14 pesticides registered for use on sunchokes that are considered toxic to honey bees and other insect pollinators. This crop is dependent on pollinators. This crop is foraged by pollinators.

Agave

Pesticide Tolerances —Health and Environmental Effects: The database shows that while agave grown with toxic chemicals show low pesticide residues on the finished commodity, there are 14 pesticides with established tolerance for agave, 6 are acutely toxic creating a hazardous environment for farmworkers, 14 are linked to chronic health problems (such as cancer), 2 contaminate streams or groundwater, and 12 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 4 pesticides registered for use on agave that are considered toxic to honey bees and other insect pollinators. This crop is dependent on pollinators. This crop is foraged by pollinators. Pollinators include bats.

Beyond Pesticides supports the removal of IOE from §205.606 because IOE is not an agricultural product. In addition, the evaluation of IOE must investigate the use of pesticides in the non-organic production of the host species and the potential availability of organic inulin if the demand existed. The HS must identify allowed ancillary substances and ensure that toxic chemicals are not permitted.

Orange shellac

Reference: 205.606(r) Orange shellac-unbleached (CAS # 9000-59-3)

Orange shellac is produced from the secretions of the lac insect (*Kerria lacca*), which sucks the sap of several host trees. As far as we can determine, there are few pests that harm host trees, so few pesticides are likely to be used in shellac production. However, this is an issue that the HS should address.

TAP reviewers and the TR raised issues associated with compatibility and ancillary substances. It appears that shellac is used as a preservative when applied as a coating to fruit, which is the major use addressed by the TAP and TR. It is used to provide a barrier preventing the loss of moisture and the movement of gases through the skin of the fruit. While the regulations permit the use of natural materials for this use, the reviewers point out that consumers do not expect organic produce to be waxed, especially without notifying consumers, some of whom may be allergic to shellac or its ancillary substances. The TR and TAP mention a number of possible ancillary substances, including the toxic antimicrobial morpholine. It is important to identify which of these ancillary substances are allowed in orange shellac used on organic produce.

The HS highlighted the need for evaluation of orange shellac to investigate the use of pesticides in the non-organic production of the host species and the potential availability of organic orange shellac if the demand existed; further clarity concerning ancillary substances to ensure that toxic chemicals are not permitted; and the question of whether orange shellac, as formulated, and applied to fruit meets consumer expectations for organic produce. These issues should be addressed by the HS before the next sunset.

Thank you for your consideration of these comments.

Sincerely,

Terry Shistar, Ph.D.
Board of Directors