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

Re. HS Tocopherols

These comments to the National Organic Standards Board (NOSB) on its Fall 2016 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.

These comments address both the proposed annotation change and the additional listing for tocopherol:

- Amend the annotation for tocopherols listed at §205.605(b) of the National List to read as follows: Tocopherols – Derived from vegetable oil.
- List Tocopherols at §205.605(a) of the National List. Tocopherols – derived from vegetable oil.

We support the additional listing on §205.605(a) as a way to encourage the use of nonsynthetic tocopherols, and we understand the reasoning behind removing the annotation “when rosemary extracts are not a suitable alternative.” However, all non-organic tocopherols meeting the proposed annotations of either listing are extracted from non-organic vegetable oil. Vegetable oil may be extracted from a number of oil-rich seeds, but about 80 percent of the vegetable oil comes from soybeans.¹ Below are the pesticides with established tolerances (residue limits for pesticides used in the U.S. or by countries exporting to the U.S.) for soybeans. While not all the pesticides on the list are applied to all soybeans, there is no way to tell which pesticides are applied to particular crop.

**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 EWAC 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, 75 are linked to chronic health problems (such as cancer), 28 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 32 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](https://www3.epa.gov/ttnchie1/ap42/ch09/final/c9s11-1.pdf).

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

The evaluation of tocopherols must take into consideration the use of pesticides in the non-organic production of soybeans and ensure that GMO soy is not used in production of organic products.

In addition to the impacts of chemical-intensive culture—including the use of genetically-engineered varieties—the process of turning soybeans (or other oilseeds) into vegetable oil involves extraction with a solvent like hexane and refining using alkali.²

**Encourage a transition to tocopherols from organic oils.**
The HS has proposed a first step—creating a separate listing for nonsynthetic tocopherols. Hopefully, that could be followed by a sunsetting of synthetic tocopherols. In view of the use of pesticides and GMO soy in producing nonorganic soy oil, the next step should be removing of all exemptions for nonorganic tocopherols. This would be facilitated by adding an expiration date—the same as the sunset date—for both listings.

Thank you for your consideration of these comments.

Sincerely,

Terry Shistar, Ph.D.
Board of Directors

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² [https://www3.epa.gov/ttnchie1/ap42/ch09/final/c9s11-1.pdf](https://www3.epa.gov/ttnchie1/ap42/ch09/final/c9s11-1.pdf)