



BEYOND PESTICIDES

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October 12, 2016

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: Glucono Delta-Lactone

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.

In reviewing this substance, the NOSB must apply the criteria in the Organic Foods Production Act (OFPA), that its use—

- (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.¹

Classification

The current annotation –“production by the oxidation of D-glucose with bromine water is prohibited”—was added to ensure that glucono delta-lactone would be produced by microbial or enzymatic processes and hence be nonsynthetic. However, the 2016 technical review (TR) states, “There are many chemical methods of gluconic acid synthesis other than bromine water.” Hence, the current annotation is not sufficient to ensure that the glucono delta-lactone (GDL) in use in organic processing is nonsynthetic.² It also states that some enzymes used in the production of GDL may be genetically engineered. The NOSB should not relist GDL without an annotation change to correct these issues.

¹ OFPA §6517(c)(1)(A). Further details at OFPA §6518(m).

² Lines 281-287.

Glucono delta-lactone is not essential to organic production and handling.

GDL was originally listed because of its use in making “silken” tofu. However, the annotation does not limit its use to tofu production, and the TR says, “Silken tofu can be produced with coagulants other than GDL, but the process is not as convenient, because the soymilk must be chilled to slow coagulation. However, the flavor may be better.”³ The TR also lists alternative materials and/or practices for other uses of GDL.

The TR lists other uses of GDL that are allowed by the listing: “a curing and pickling agent, a leavening agent, a pH control agent, and as a sequestrant.”⁴ The need for GDL for these uses has not been supported.

Conclusion

The technical review calls into question the need for GDL. It also challenges the appropriateness of listing GDL on §205.605(a) without an annotation change. We therefore oppose the relisting of GDL as it currently appears. If the NOSB chooses to relist GDL, it should ensure that the listing is consistent with its classification –that is, if it is relisted on §205.605(a), then the annotation should require a nonsynthetic. It should also restrict the use of GDL to tofu production because that is the only use that has been supported.

Thank you for your consideration of these comments.

Sincerely,



Terry Shistar, Ph.D.
Board of Directors

³ Lines 761-763.

⁴ Lines 23-24.