

March 12, 2021

MEMORANDUM TO THE NATIONAL ORGANIC STANDARDS BOARD

FROM: Jennifer Tucker, Ph.D.
Deputy Administrator
National Organic Program

SUBJECT: Request to Review *Lithothamnion* Classification

The National Organic Program (NOP) requests that the National Organic Standards Board (NOSB) provide recommendations related to the eligibility of *Lithothamnion* to be certified organic. The NOP is requesting the NOSB's recommendation(s) to help address inconsistencies between certifiers and to ensure that organic operations, certifiers, and other interested parties have an opportunity to provide input. The NOP requests the NOSB address the classification of collected *Lithothamnion* as "agricultural" or "nonagricultural" and if it may be certified as a "wild crop" under the USDA organic regulations.

Lithothamnion is a genus of coralline marine red algae containing calcareous deposits within its cell walls. *Lithothamnion* is also referred to as "calcified seaweed," "seaweed-derived calcium," "maerl," and "calcified maerl." Ground *Lithothamnion* is used in processed products as a source of calcium. A U.S. Food and Drug Administration (FDA) generally recognized as safe (GRAS) notice has been published for seaweed-derived calcium for the intended use: "in foods in general as a source of dietary calcium for food enrichment and fortification purposes at various levels that range up to 4.0 percent."¹

A *Lithothamnion* product was petitioned to be added to the National List in February 2007 (see "Calcium, Seaweed Derived" on the Petitioned Substances USDA webpage).² In 2008, the NOSB recommended that "calcium, seaweed derived" did not need to be considered for addition to 205.605(a) "since use of this material is currently allowed through the existing listing of Nutrient Minerals on the National List §205.605(b)."

Since the NOSB recommendation, the NOP has received questions about whether USDA organic regulations allow the certification of *Lithothamnion*. Organic certification allows organic handlers to use ingredients in organic products without the content counting as part of the 5 percent nonorganic ingredient component. The NOP previously informed a certifier that *Lithothamnion* is a nonagricultural product and therefore cannot be certified organic. Since then,

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https://www.cfsanappsexternal.fda.gov/scripts/fdcc/?set=GRASNotices&id=28&sort=GRN_No&order=DESC&startrow=1&type=column&search=GRN%20No%2E%C2%A4DECIMAL%C2%A428

² The petition and NOSB recommendation can be found under "calcium, seaweed derived" at: <https://www.ams.usda.gov/sites/default/files/media/Calcium%20Seaweed%20Petition.pdf>

the NOP has learned that two certifiers certify *Lithothamnion* under the wild crop portion of the USDA organic regulations. Additionally, seven operations are certified to handle organic *Lithothamnion*, identified in the Organic Integrity Database as: “*Lithothamnium*,” “*Lithothamnion superpositum*,” “*Lithothamnion sp.*,” “*Lithothamnion*,” and “*Lithothamnion calcareum*.”

Certifiers that the NOP consulted provided the following information:

- Certifiers did not clarify how an agricultural determination was made.
- *Lithothamnion superpositum* algae species have life spans between 50-100 years and appear to favor the volcanic sand/gravel deposits along the coastline shelves near to the shore of Iceland, most concentrated in the West Fjords. During their life span, the algae fronds accumulate seawater minerals, calcifying the fronds. Calcified pieces of the algae break off the live plants, and currents move this material to lower shelves further offshore.
- Harvesting in Brazil is done by dredging dead calcareous skeleton sediment material of *Lithothamnion* algae (algae shells), that has detached and accumulated in deposit areas by tide movements, from deep waters off the continental shelf of Brazil. State Secretariat for the Environment and Natural Resources - SEMA of the State of Maranhão in Brazil issues licensing for this processing as “biodetritric limestone.” Harvesting in Iceland is done by dredging calcified marine algae from (dead) *Lithothamnion sp.* from mines in the sea (100 yards or more offshore, avoiding the live plants) in fjords.
- After harvest, *Lithothamnion* is washed/heat treated, dried, milled, and packaged.

We are requesting the NOSB’s recommendation(s) to help us address inconsistencies between certifiers and to ensure that organic operations, certifiers, and other interested parties have an opportunity to provide input.

We thank you in advance for your work on this topic, and we look forward to your recommendations.