Alget2 project Webinar on Food safety, Quality and Regulatory standards.

5th of November 2020

Food safety, regulatory and quality standards



Faroese Food and Veterinary Authority Arni Petersen, official inspector



Industry

- Two companies active in seaweed production in the Faroes
- ► TARI Faroe Seaweed (www.tari.fo)
 - ► Aquaculture and harvesting of seaweed. Production in collaboration with Faroe Marine Products.

- Ocean Rainforest (<u>www.oceanrainforrest.com</u>)
 - Aquaculture and production of seaweedproducts.

Legislation, licenses - status

- > 3 licences for aquaculture of seaweed granted in 2020 (Funningsfjørður, Kalbaksfjørður, Fámjin (lívtarastøð))
- ▶ 2 applications for seaweedcultivation in the process
- Regulation on licences for aquacultur of e.g. Seaweed found in (governmental oreder 81/2019 and 82/2019)
- ► The government is proposing 300.000 DKr on the national budget for 2021 for developing and implementing legislation and enforcement on organic seaweed production in the Faroes

Food safety

- HFS is participating in a project: Alaria esculenta; from spore to dinner plate.
 - Results on microbiology and content of seaweed
 - Coliforms
 - ▶ Spring 0 to 25 CFU/mL
 - ► Autumn 0 to 120 CFU/mL
 - ► E.coli
 - ► Spring 0-10 CFU/mL
 - Autumn 0-10 CFU/mL
 - Likely affected by weather (wind and rain)

Food Safety

Content of heavy metals measured in *Alaria esculenta*, *Laminaria digitata* and *Saccharina latissima* in the Faroe Islands (mg/kg dw)

| Heavy metals | A. esculenta spring (cultivated) | A. esculenta summer (cultivated) | S. latissima spring (cultivated) | S. latissima summer (cultivated) | S. latissima autumn (cultivated) | L. digitata (self seeded) |
|-------------------------|--|----------------------------------|--|--|--|------------------------------|
| Arsenic (As) | 34,9 - 44,2 | 44,2 | 57,7 | 57,7 | 57,5 | 44,2 |
| Inorganic Arsenic (IAs) | 0,063 - 0,3 | 0,3 | 0,2 | 0,2 | 0,2 | 0,3 |
| Cadmium (Cd) | 3,39 - 4,1 | 4,4 | 2,3 | 2,3 | 2,3 | 2,2 |
| Mercury (Hg) | 0,0032 - 0,0039 | <0,06 | <0,06 | <0,06 | <0,06 | <0,06 |
| Lead (Pb) | 0,3 - 0,99 | 0,3 | 0,2 | 0,2 | 0,2 | 0,3 |

Grandorf Bak, U. (2019); Mols-Mortensen, A. (unpublished data)

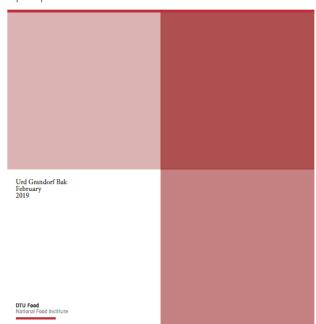
Food Safety

We are looking at scientific publications on seaweed in the Faroe Islands

Seaweed cultivation in the Faroe Islands



An investigation of the biochemical composition of selected macroalgal species, optimised seeding technics, and open-ocean cultivation methods from a commercial perspective



Grandorf Bak, U. (2019). Seaweed cultivation in the Faroe Islands: An investigation of the biochemical composition of selected macroalgal species, optimised seeding technics, and open-ocean cultivation methods from a commercial perspective. Kgs. Lyngby, Denmark: Technical University of Denmark.

https://backend.orbit.dtu.dk/ws/portalfiles/portal/183321338/THESIS URD FINAL sendt.pdf

Food Safety

► HFS is participating in a project with food safety authorities in the other Nordic countries on the issue of food safety in seaweed





Thank you!