

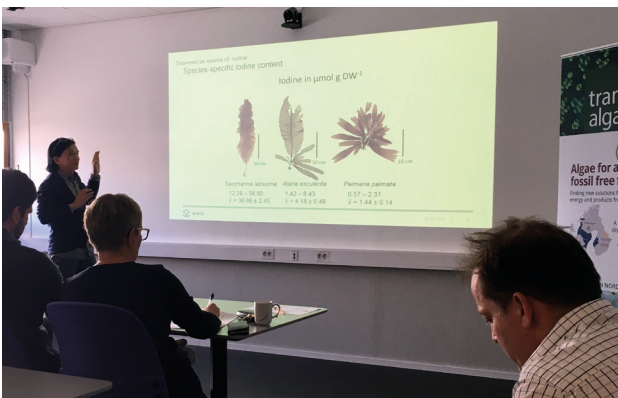


## Algae in Norway

### OPEN SEMINAR IN BODØ

The 5<sup>th</sup> of October, the TransAlgae project together with Nordland Research Institute invited interested people to learn more about the research that is going on in the Bodø area. About 30 people attended and networked at Nord University in Bodø.

Besides several presentations from the TransAlgae-project, Nord University presented the different research areas on algae; a new large project called A2F (Algae to future) coordinated by NIBIO; Nordland Fylkeskommune about their strategy on algae and finally Nordland Research Institute talked about Spatial Management and co-creation.



Michael Roleda, NIBIO acted both as a moderator and as a presenter at the algae seminar.

### EXITING VISIT AT NIBIO'S LABORATORY

In connection to the project meeting, we visited the laboratory at NIBIO. Seawater from the fjord is pumped up from 200 m depth and used in the lab. Different species of macroalgae are maintained and the project group had the opportunity to taste three different species of macroalgae.



Aquarium at NIBIO's laboratory. The green *Ulva* is used for food.

The green algae in the picture is *Ulva*. This species locally known as "havsalat" has been successfully cultivated by the businessman Daniel Aluwini of Arctic Seaweed AS in collaboration with NIBIO. The "havsalat" has already been sold to some restaurants. Arctic Seaweed is now waiting for permission to start up their own cultivation business in Andoya in Nordland. Michael Roleda, NIBIO thinks that production of algae will be a big business in Norway in about 10-20 years depending on the attitude of the locals to include macroalgae in their diet and governmental support to cultivate algae for other applications.

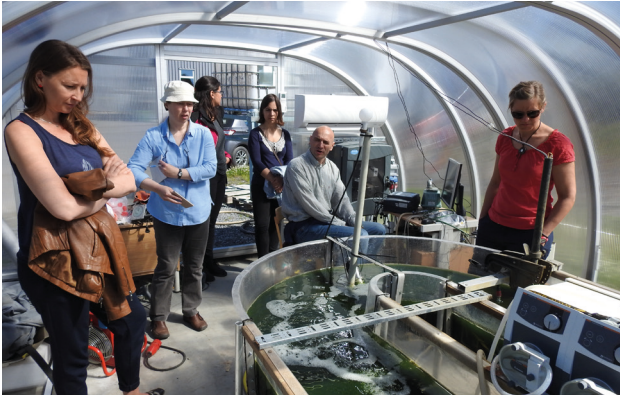


One of three fresh macroalgae that were tasted.

# TransAlgae activities during the summer

## CROSS-BORDER LEARNING

In late June, University of Vaasa visited SLU. Both the pilot cultivation units at Dåva and Vakin as well as the laboratory were visited. The future goal is to build a pilot unit in Vaasa.



## CULTIVATION

- Nattviken Invest has continued to develop a cascade cultivation system that will be harvested in October.
- At SLU, several kg of microalgae have been harvested.
- At University of Vaasa, cultivation in lower temperatures is tested by using waste water from the waste water treatment plant in Vaasa.

## NEW RESULTS

Read about TransAlgae at [bioekonomi.fi](http://bioekonomi.fi) written by Andreas Willfors, Novia UAS.

New infosheets are published at our project web, [biofuel-region.se/transalgae](http://biofuel-region.se/transalgae)

## No 6, Algae cultivation - Different techniques

This is a compilation of possible techniques for cultivation of micro- and macroalgae.

## No 7, Comparison of methods. - Determination of biodiesel yields in microalgae

Sandra Lage at SLU has compared and identified the best method for determination of the lipid content in algae.

## No 8, Development of seaweed cultivation for food

Daniel Aluwini and Michael Roleda describe the development of the seaweed *Ulva* to be used as food.

## YOUNG INTERNATIONAL STUDENTS LEARNED ABOUT TRANSALGAE AT NOVIA

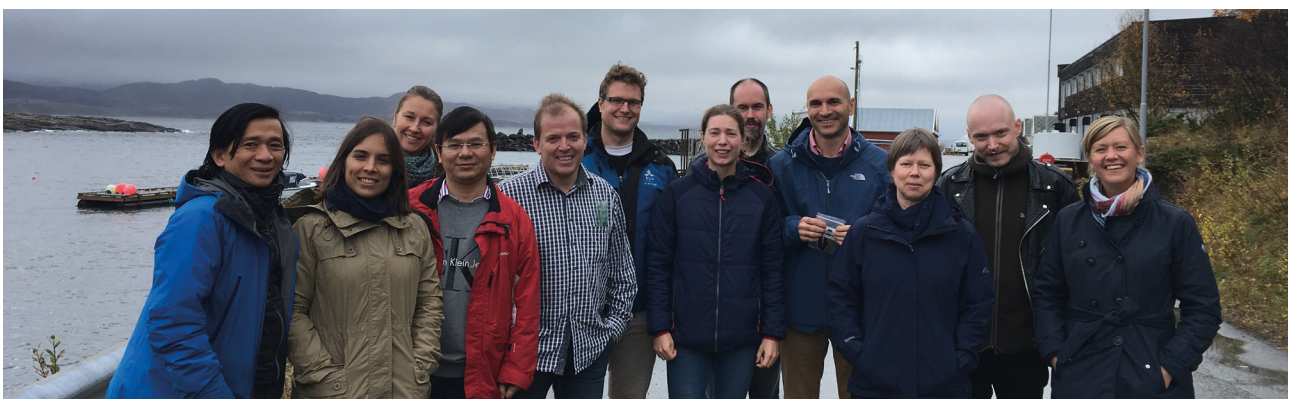
A group of young students with teachers from European Darksy Protectors visited Novia UAS within an Erasmus project. They were introduced to the TransAlgae project and especially the research on biogas from algae by Andreas Willfors. The laboratory for measurements on the biomethane potential was shown for the students. Nina Åkerback also showed the pilot unit for phosphorous recovery which is used in another BA-project; NP-balans.



## CONTACT

Ida Norberg

[ida.norberg@biofuelregion.se](mailto:ida.norberg@biofuelregion.se)



**Interreg**  
Botnia-Atlantica  
European Regional Development Fund



**NOVIA**  
UNIVERSITY OF APPLIED SCIENCES



Nattviken Invest



**BioFuel Region**