



Fucosan: Newsletter No. 2

Noumerous extracts created and properties identified



01.08.2018 - During the joint project meeting on the 31st of May in Kiel, the scientists exchanged their initial experiences gained by extracting and characterising fucoidans. Beforehand, the project partners had produced several extracts out of different types of algae, provided by project partner CRM, partly harvested at own site, partly bought from external suppliers. The fucoidans of the six utilised algae differ in their chemical properties. Depending on origin, molecular size as well as the test system fucoidans can provoke opposite effects.

Purification and exact characterisation therefore are essential. During these processes, the partners determine parameters like degree of sulphation, protein concentration, monosaccharide composition and molecular mass. As a next step, the partners generate further extracts of algae in order to produce larger amounts of fucoidans and to verify the previous results.

Project Advisory Group gives hints for networking possibilities



02.06.2018 - The Project Advisory Group had its first meeting on 1 June. Its members praised the mature systematic and comprehensive approach of the project. They also provided valuable information on networking opportunities and the further course of action of the project partners. It became clear during the discussion that the FucoSan partners need partners from industry, especially for the production of medical products. Back row (from left to right):

- Wolfgang-Dieter Glanz, Bundesverband Aquakultur e.V.
 - Dr. Per Spindler, Biopeople
 - Efthalia Arvaniti, PhD, SUBMARINER Network for Blue Growth
 - Dr. Kristin Krüger, Fraunhofer Einrichtung für Marine Biotechnologie
- Front row:
- Ass. Prof. Søren Laurentius Nielsen, PhD, Roskilde University
 - Claire Hellio, European Society for Marine Biotechnology
 - Dr. Imke Schneemann, Life Science Nord Management GmbH



Too warm – algae have to be harvested



22.05.2018 - The warmest April since the beginning of weather recording also caused the water temperatures to rise early this year. Some brown algae do not tolerate this well, they prefer the cooler water as they are originally native to the North Atlantic. In the cooler months also sufficient nutrients are available in the water, which are important for algae growth.

That is why project partner Verena Sandow from CRM had to harvest the sugar kelp (*Saccharina latissima*), which she cultivates in an algae farm, early and resettle it in tanks. The biologist took a harvesting boat to the Kiel Fjord and cut off 30 kg of fresh leaves. 'We had to bring in the algae and mussel larvae, which now occur massively with the heat.' Now, they swim in the water tanks at CRM and wait to be processed for characterisation.

Sustainable processes to obtain brown algae from the Baltic Sea

CRM operates a seaweed and mussel farm (sugar kelp - *Saccharina latissima*, mussel - *Mytilus edulis*). The idea of the IMTA is to use synergies and thus not only to relieve the burden on the ecosystem, but also to increase and stabilize production. Regionality, selection of possible coastal areas and (indigenous) species, added value through the use of technology and know-how as well as consumer-oriented product diversification are the "guardrails" of these business developments.

Project Facts

- 8 partner organisations
- 7 network partners
- Duration: Mar 2017 – Feb 2020
- Budget: 3,8 mio. Euro, thereof 2,2 mio. Euro funding
- Lead partner: University Medical Centre Schleswig-Holstein, Campus Kiel
- Supported by the European Regional Development Fund
more: www.interreg5a.eu