



Press release - February 25 2020

OLMIX and INRAE: a global partnership for the promotion of algae in sustainable farming systems and plant production.

On February 25, 2020, Philippe Mauguin, President and CEO of INRAE (National Research Institute for Agriculture, Food, and Environment) and Hervé Balusson, CEO of Olmix group, signed a first framework agreement which aims at strengthening their collaboration in the fields of both environment and animal nutrition and health with the shared objective of developing sustainable and economically viable agricultural food systems.

The value chain for marine algae is expanding. The growing interest it triggers comes from the nutritional quality of algae and their richness in bioactive molecules which make them potentially usable both in the field of human and animal food and in the field of plant nutrition and health. Olmix and INRA (INRAE after the merge with Irstea on January, 1 2020) have had an ongoing and fruitful research partnership since 2012. The aim of this collaboration was to evaluate the effect of different compounds rich in marine sulfated polysaccharides on a wide range of biological activities able to improve production performance and the resistance of animals to infections. The research performed *in vitro* and *in vivo* highlighted that some of the tested extracts could be efficiently used in feeds as natural products to stimulate the immune response of livestock animals, protect the mucous membranes from pathogens and reduce the use of medical products on farms.

Olmix and INRAE share the same vision of the agricultural and food needs for the future. This contract allows to align the priorities as far as research, innovation and economic benefits are concerned. It also gives an opportunity to diversify interactions around the interest of algae extract use in both animal and plant health sectors:

- Impact of algae extracts on nutrition and health of farm animals, aquaculture sector and on food product quality, in an antibiotic-free approach (identification of biological markers and mechanisms of action).
- Research on algae extracts composition, structure and link with their biological activities
- Identification of active ingredients and their mode of action on plant nutrition and health.
- Sustainable plant production routes, incorporating innovative algae-based crop protection strategies, linked to soil health.

"This framework agreement allows us to strengthen our already solid collaboration in the sector of nutrition and health of farm animals and to diversify our collaboration in the plant nutrition and health sector. This is a great example of partnership with the industry that our research institute is keen to develop, to accelerate the development of innovative products that respect the soil and the environment. "Philippe Mauguin, CEO of INRAE

"This framework contract is both a recognition of our work with INRAE and an incentive to strengthen it. For 20 years, Olmix has been developing algo-based solutions with one objective: to provide economically viable solutions to farmers, for them to produce healthy and sustainable food". Hervé Balusson, CEO of Olmix. **Contacts : INRAE** Mustapha Berri – <u>el.mostapha.berri@inrae.fr</u> In charge of partnerships and innovation Direction of Partnership of transfer and innovation

OLMIX

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Created on January 1, 2020, **the French National Research Institute for Agriculture, Food, and Environment (INRAE)** is a major player in research and innovation. INRAE carries out targeted research and resulted from the merger of INRA and IRSTEA. It is a community of 12,000 people with 268 research, experimental research, and support units located in 18 regional centres throughout France. Internationally, INRAE is among the top research organisations in the agricultural and food sciences as well as in the plant and animal sciences. It also ranks 11th globally in ecology and environmental science. It is the world's leading research organisation specialising in agriculture, food, and the environment. INRAE's main goal is to be a key player in the transitions necessary to address major global challenges. Faced with a growing world population, climate change, resource scarcity, and declining biodiversity, the institute is developing solutions that involve multiperformance agriculture, high-quality food, and the sustainable management of resources and ecosystems.

OLMIX is a specialist in biotechnologies and has developped a full biorefinery process to valorise marine algae in Plant, Animal and Human nutrition and health. This contract comes after several years of scientific collaborations in Animal care with INRAe that have enabled OLMIX to develop SEARUP® (Algae based solution supporting natural defenses through drinking water) and ALGIMUN® (Algae based solution supporting natural defenses & gut health through feed) and publish PEER REVIEWED articles about the mode of action of MSP® IMMUNITY, a marine algae extract rich in specific sulfated polysaccharide contained in both products (Berri et al. 2017, 2018 (MSP® Immunity mode of action), Bussy et al 2019 (MSP® Immunity effect on immune transfer from sow to litter). This contract is thus a new step in the relationship with the public institute and will allow OLMIX to further study the activities of its different algae based solutions.

Actually OLMIX has already started new scientific collaboration with different INRAe units specialized in infections and health and in mycotoxins.