



## SEABIOZ

### POTENTIAL MICROBIAL ORIGINS OF BIOSTIMULANT PROPERTIES IN A BROWN ALGAE HOLOBIONT EXTRACT

New, bio-based solutions to further develop sustainable agriculture include the use of biocontrol strategies, and biostimulants of plant origin such as aqueous seaweed extracts.

The most widely used biomass for producing biostimulants is the brown alga *Ascophyllum nodosum*. Commercial extracts of this seaweed have been shown to improve plant growth and mitigate some abiotic and biotic stresses.

One unique feature of *A. nodosum* is its mutualistic association with the fungal endophyte *Mycophycias ascophylli* and other microbes to form a holobiont.

Many questions remain about the nature and origin of the active compounds in seaweed extracts. Are these bioactive metabolites produced by the host or by its microbiota?

The main objective of SEABIOZ is to answer these questions by combining a multi-omics approach with systems biology.

#### Partners

##### COM\_PROJECTS\_CATEGORIE\_PARTNER\_ENTREPRISES

Groupe Roullier / Agro Innovation International

##### Research centers

Station Biologique de Roscoff [\[Project Developer\]](#)  
IRISA, Lannion  
LBIZM : Laboratoire de Biologie Intégrative des modèles marins, Roscoff  
Muséum National d'Histoire Naturelle, Concarneau

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Agence National de Recherche

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