





New Sustainable Aquaculture Techniques in the Atlantic Area

(Brittany Region)

PROJECT IDENTIFICATION: EAPA_1059/2018 - ACCESS2SEA









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NEW SUSTAINABLE AQUACULTURE TECHNIQUES IN THE ATLANTIC AREA REGION (BRITTANY REGION)

As part of the programme of work including in Work Package Six of the Access2Sea project, Action Four involved Project Partners undertaking to research and analyse new aquaculture techniques being developed in their regions. This research is aimed at fostering a more sustainable industry by facilitating the dissemination of techniques which could be of value in addressing the needs of companies in other territories of the Atlantic Area Region.

A number of new sustainable aquaculture techniques were identified by the Partners of the Access2Sea Project from the Brittany Region, INVESTIR EN FINISTÈRE & Tecnopole Quimper-Cornouaille. They are listed below under the following categories:

- 1) Technological Innovations
- 2) Culture of New Species

1) Technological Innovations

- Innovations presented at the *Salon National de la Conchylicutlure et des cultures marines* (9th and 10th of October 2019) including:
 - Creation of a storing tray for closed systems (SMO SERVICE MAINTENANCE OSTRÉICOLE)
 - New range of ultra-light and economical bio-composite sieve tubes. Global solution for the purification of shells (Polyway)
 - New heat pumps and cooling units to cool or heat up basins (Aquassys)
 - New light working coats and equipment for aquaculture workers (Aquavitex)
 - \circ $\;$ Oyster tracker software to manage aquaculture farms (Eureka Mer)
- INTERREG Projects:
 - InvertebrateIT New feed systems based on proteins from insects, one pilot project developed with the company Innovafeed (Technopole Quimper Cornouaille)





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- Integrate CEVA and its partners aim at disseminating IMTA methods in the atlantic area (CEVA)
- Pole Mer's certified projects
 - Project VEGEAQUA aiming at identifying aquaculture species capable of being fed with vegetables instead of fish proteins (Ecloseries Marines de Gravelines)
 - Project A_FISH aiming at using fresh fish by-products to feed fishes raised in piscicultures (Halieutica)
 - PREDADOR 1 and 2 developing anti sea bream nets and alarm to protect oysters' farms (Actris)
 - PERLE 1 and 2 projects restoring of native oysters in Brittany (CRC Bretagne Nord)
- Other innovations and projects:
 - Multizone an Automatic feeding system for finfish aquaculture developed by Westair
 - Development of an offshore Integrated Multi-trophique Aquaculture farm with seaweeds and trout (Symbiomer)
 - 22 sites of production having Recirculating Aquaculture Systems in France (figure combining marine and freshwater environment)

2) Culture of new species

- Development of polyculture: In the Brest area, about 80 percent of aquaculture farms are focusing on the development of only one species. However, thanks to the development of sea weed cultures, new innovative types of farming have been launched. For instance, it is now possible to produce shellfish in deep water thanks to the multi trophic aquaculture approach.
- HoloFarm project: Development of *holothuriculture* (sea cucumbers), it is financed by the National EMFF, it aims at offering 3 new species: *Holothuria forskali*, *Holothuria tubulosa and Parastichopus regalis* (AQUA B)
- Bio abalone production (France Haliotis)
- Development of king prawns without antibiotics, pollution and freezing (Lisaqua)
- Project SC2E cultivating tropical prawns in Brittany (Martrop)
- Development of the production of the variegated scallop (Ferme marine de l'Ile d'Arun)
- Cultivation of macro-seaweeds in offshore environment, on around 150 hectares (Algolesko)





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Údarás na Gaeltachta





References:

- Program of the Salon National de la Conchylicutlure et des cultures marines : <u>https://www.salon-ostreiculture.com/en/innovations</u>
- Étude sur la pisciculture en circuit « recirculé » Rapport final 2019, from : <u>https://www.franceagrimer.fr/Actualite/Filieres/Peche-et-aquaculture/2019/Etude-sur-la-pisciculture-en-circuit-recircule-Rapport-final-2019</u>
- List of the pole mer's certified projects: <u>https://www.pole-mer-bretagne-atlantique.com/fr/ressources-biologiques-marines</u>







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Lead Partner



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Associated Partners

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> Association of Aquaculture Marine **Businesses of Andalusia (ASEMA)** www.asemaonline.com

 Union Chamber of Algae and Marine Vegetables (CSAVM) www.chambre-syndicale-algues.org



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