



PAQMAN

MARINE BACTERIA FROM MARINE ANIMALS: NEW NATURAL PROBIOTICS FOR SUSTAINABLE AQUACULTURE

The PAQMAN project involves developing natural, innovative probiotics for the shellfish and fish farming industries and thus providing long-term solutions to the incidences of infection which are undermining the aquaculture sector.

The probiotic strains tested as part of the PAQMAN project are derived from the natural microbiota of healthy marine animals. The 6 strains recommended as probiotics have been selected for their anti-biofilm and/or antibacterial action against pathogenic bacteria in aquaculture. The microencapsulation strategy chosen will allow for controlled dispersion of the probiotics within the farms.

During the PAQMAN project, the impact of the probiotics on zootechnical performance – growth and survival for example – resistance to pathogenic agents and their effect on the farming environment – the biofilm and microbiota of the animals reared – will be evaluated in a hatchery and nursery.

The aquaculture species targeted are the European flat oyster and the sea bass. The effective conditions for administering the probiotics identified for these two model species will be extended to farms raising variegated scallop and gilthead seabream.

The PAQMAN project therefore offers the opportunity to deploy innovative, bio-inspired technology to increase the safety of aquaculture production.

Partners

Companies

CRC Bretagne Nord, Morlaix
Seanova, Clohars-Fouesnant

Research centers

Laboratoire de Biotechnologie et Chimie
Marines de l'Université de Bretagne
Occidentale, Quimper [Project Developer]
ANSES (Agence Nationale de Sécurité
Sanitaire de l'alimentation, de
l'environnement et du travail), Brest

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870 K€