





New Sustainable Aquaculture Techniques in the Atlantic Area (Portuguese Region)

PROJECT IDENTIFICATION: EAPA_1059/2018 - ACCESS2SEA

www.access2sea.eu







UAlg

INIVEDCID











NEW SUSTAINABLE AQUACULTURE TECHNIQUES IN THE ATLANTIC AREA REGION (PORTUGUESE 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.

The following new sustainable aquaculture technique was identified by the Portuguese Partners of the Access2Sea Project, Centro Interdisciplinar de Investigação Marinha e Ambiental da Universidade do Porto and Universidade do Algarve, and are detailed in the Case Study below of Atlantik Fish

1) Atlantik Fish

The production of *Pescado da Maré* [®] (*Fish from the sea*), in a semi-intensive regime, allows the food diet of our fish to be complemented with food that enters with water, and which grows naturally in the tanks, such as shrimps, polychaetes, algae, bivalves, crabs and others.

Tidal tanks will recreate the cycle and natural environment of the fish in the estuary and marsh areas, allowing fish to behave in the same way as wild fish. The feeding is complemented with natural food, which gives our fishes the appearance and to the meat the flavor and consistency identical to wild fish, resulting in a meat rich in Omega 3 and other polyunsaturated oils.

The fattening tanks were old salinas (salt ponds) that were converted into fish tanks, and were constructed only with the land existing in the sapal (saltmarsh), which allows to offer to the fish a natural environment, as for example, with water that enters in the tanks also enter juvenile fishes, wild flounders or eels, which then grow naturally within the tanks until they reach commercial size.

Another crucial feature for the quality of the sea bream and bass is the reduced number of fishes per tank, which allows them to have space to swim, rest and feed freely. This allows the meat a greater consistency and a uniform distribution of fat, achieving an identical quality to wild fish. The juveniles of sea bream and bass come from the best certified maternities, guaranteeing their biological and

















food safety, through the screening and traceability processes, thus reducing the pressure on wild fish stocks.

The company considers fishing as critical process in order to guarantee the quality of their fish. This is why it is done in the early hours of the day and using a traditional fishing net. After the siege, the fish is placed as quickly as possible in cold water, which allows them to die from thermal shock and not by asphyxiation or exhaustion, ensuring a rapid death and maintaining their characteristics and nutrients for a longer period of time. Then the fish is packed in a room, where all the parameters are controlled to guarantee quality and food safety for our customers, according to the HAACP standards. Packaging is carried out in a modern fish calibration and sorting line using the latest technology available on the market. Only in this way the *Pescado da Maré* [®] (*Fish from the sea*) can ensure the traceability and monitoring standards of food quality throughout the production cycle.

More recently, the company has diversified the production by dedicating three tanks for the production of oysters. The oysters are oysters with a quality and quantity of meat that allow them to be classified as special oysters.

Reference: Plano Estratégico para a Aquicultura Portuguesa 2014 -2020. Direção Geral de Recursos Naturais, Segurança e Serviços Marítimos (DGRM). Ministério da Agricultura e do Mar.

From: https://www.atlantikfish.com/en/production-model/





ctadua



JAlg













CEEI Bahía de Cádiz

C/ Manantial, 13. Edificio CEEI Polígono Ind. Las Salinas de San Jose Bajo 11500 El Puerto de Santa María (Cádiz) - Spain Tlf: (+34) 956 860 654 / Fax: (+34) 956 860 028 E-mail: asuarez@ceeicadiz.com Web: www.ceeicadiz.com



Partners



Centro Tecnológico de Acuicultura de Andalucía Muelle Comercial S/N 11500 El Puerto de Santa María (Cádiz) - Spain Tlf: (+34) 956 56 93 63 E-mail: mm.agraso@ctaqua.es Web: www.ctaqua.es



Innovation & Management Centre CLG T/A WESTBIC 11 Galway Technology Centre, Wellpark Road Galway, H91 E2W5 - (Ireland) Tlf: (+353) 86 2574978 E-mail: smccormack@westbic.ie web: www.westbic.ie



Swansea University Centre for Sustainable Aquatic Research Wallace Stores, Singleton Park SA2 8PP - Swansea Tlf: +44(0) 1792 29 53 83 E-mail: p.n.howes@swansea.ac.uk web: www.swansea.ac.uk



Technopole Quimper Cornuaille 2 rue François Briant de Laubriere 29000 Quimper - Francia Tlf: +33(0)298 100 200 E-mail: rachel.sellin@tech-guimper.fr web: www.tech-quimper.fr



University of Algarve CRIA - Pavilhão B1 8005-139 Faro (Portugal) Tlf: +351 289 800 097 E-mail: ajmarq@ualg.pt web: www.ualg.pt



Associated Partners

 Technopole Brest Iroise www.tech-brest-iroise.fr

Cuideachta Feamainn Turtar Gorm Teo (TSC - Bleu Turtle) www.theseaweedcompany.com

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

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



Údarás na Gaeltachta Na Forbacha, Co. Dublín. Galway Tel: 091-503100 Fax: 091-503101 E-mail: foh@udaras.ie web: www.udaras.ie



CIIMAR | Interdisciplinary Centre of Marine and Environmental Research of the University of Porto Novo Edifício do Terminal de Cruzeiros do Porto de Leixões Avenida General Norton de Matos, S/N 4450-208 Matosinhos | Portugal | Tlf: (+351) 223 401 852 E-mail: rodrigo.ozorio@ciimar.up.pt web: www.ciimar.up.pt



Investir en Finistere 46, quai de la Douane CS 63825 29238, Brest cedex 2 Tlf: +33 (0)298 339 773 E-mail: a.coppens@investir29.fr web: www.investir29.fr



www.access2sea.eu