

## TECHNOLOGY OFFER

# NEW HYDROLYSATES TO CONTROL BACTERIAL INFECTIONS IN FISH

## Background

Bacterial outbreaks, particularly *Tenacibaculum maritimum* infections, often occur in marine aquaculture farms, resulting in high mortality rates.

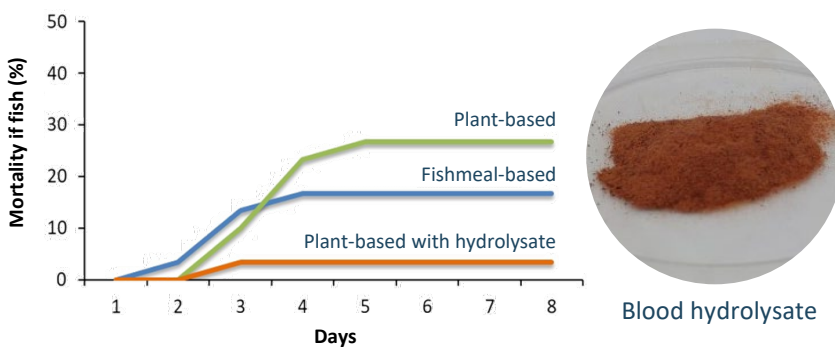
Until now, outbreaks are usually treated with antibiotics, which can lead to the development of resistant bacteria.

Blood hydrolysates can contain useful compounds including bioactive peptides with interesting properties, such as antioxidant, mineral-binding, immunomodulatory or antimicrobial, which makes them useful in fish farming as an alternative to antibiotic use.

## Technology

This invention relates to a method to obtain a blood hydrolysate (BH), from slaughter industry by-product – preferably swine blood.

The BH extract has a high protein content (20-30 wt.%) and is rich in bioactive peptides. It can be used as a food supplement in aquafeeds to promote fish robustness and control bacterial infections - specifically in the prevention or treatment of *T. maritimum* infections.



## Advantages

- Increases economic value of slaughter industry by-products;
- Promotes fish production in marine fish farms;
- Peptides reduce the fish susceptibility to pathogens and address fish bacterial infections as an alternative to antibiotics;
- Minimizes waste, contributing to circular economy.

## PATENT STATUS

International Patent Application  
via PCT WO2022058962  
Priority date: 17.09.2020  
Pending in Europe

## DEVELOPMENT STAGE

TRL 3 – Experimental proof of concept  
Further research required

## APPLICATIONS

Medicated Feed;  
Aquafeed additive

## COOPERATION

Licensing agreement;  
R&D partnership.

## KEYWORDS

Blood hydrolysates  
Feed supplement  
Aquafeeds  
Peptides  
Bacterial infections

## DEVELOPED BY

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