

TECHNOLOGY OFFER

NEW HYDROLYSATES TO CONTROL INFECTIONS, METHODS AND USES THEREOF

This invention relates to a method to obtain a new hydrolysate, and uses thereof. Namely an extract from blood hydrolysate (BH), this new extract may be used as a food supplement in aquafeeds to promote fish robustness and control bacterial infections. The extract or composition of the present disclosure may be used in medicine or veterinary, namely in the prevention or treatment of *Tenacibaculum maritimum* infections.

KEYWORDS

Blood hydrolysates

Food supplement

Aquafeeds

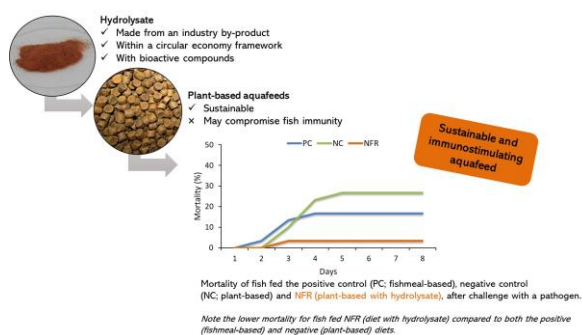
Peptides

Bacterial infections

DESCRIPTION

Bacterial outbreaks often occur in marine aquaculture farms, with a very high impact on fish health status, resulting in high mortality rates in aquaculture production and economic losses. Until now, outbreaks have usually been treated by antibiotics, but antibiotic use may 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.



ADVANTAGES & INNOVATIONS

Bioactive peptides are small amino acid chains with interesting properties (beyond their nutritional value), including antioxidant, mineral-binding, immunomodulatory or antimicrobial activities.

This solution represents a good strategy to reduce fish susceptibility to pathogens. It i) promotes fish production in marine fish farms; ii) increases the economic value of a slaughter industry by-product; and iii) minimizes waste, contributing to a circular economy.

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INTELLECTUAL PROPERTY RIGHTS

Patent status

International Patent Application via PCT [WQ2022058962](#)

Priority date: 17.09.2020

Pending in EU



STAGE OF DEVELOPMENT

TRL 3 – Experimental proof of concept



COOPERATION OPPORTUNITY

Licensing agreement.

R&D partnership.



RELEVANT PUBLICATIONS

Inventors: Pintado M.M., Valente L., Resende D., Costas B., Casimiro M.M., Pereira C. 2020. Provisional Patent Application PT 116742 – NEW HYDROLYSATES TO CONTROL INFECTIONS, METHODS AND USES THEREOF. Applicants: UCP - Universidade Católica Portuguesa, CIIMAR – Centro Interdisciplinar de Investigação Marinha e Ambiental, Universidade do Porto, ESAC - Escola Superior Agrária de Coimbra



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