

TECHNOLOGY OFFER

ENZYME-RICH EXTRACT FOR IMPROVEMENT OF AQUAFEEDS

Background

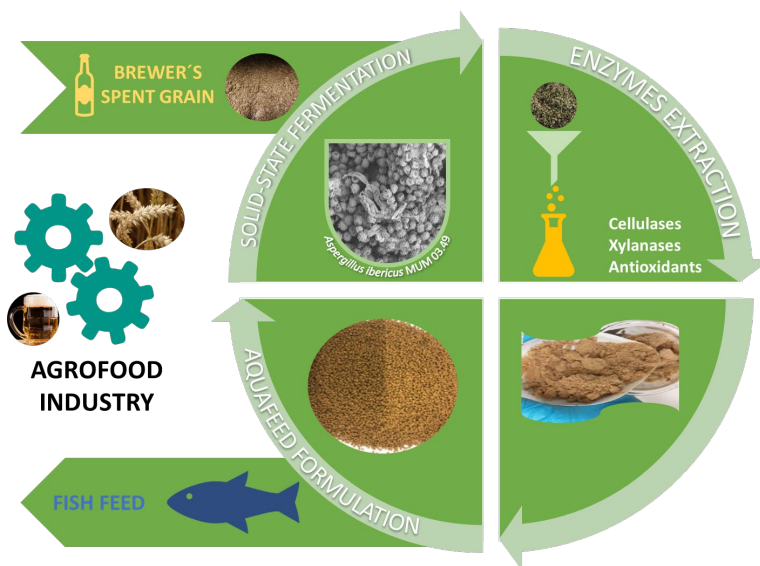
As the world population is increasing exponentially, there is a great demand for food. To meet this demand, there is a need for improved and efficient feed production, namely protein-rich aquafeed.

Brewer's spent grain (BSG) is lignocellulosic biomass mainly composed of fiber and proteins, a desirable byproduct of the brewing industry. BSG can be transformed into enzyme-rich extracts through solid-state fermentation (SSF).

Technology

The present technology transforms BSG through SSF (using *Aspergillus ibericus*) into a valuable enzyme-rich extract that can be used as a feed additive in animal diets, preferably fish diets.

The extract is used as a pre-treatment process for plant feedstuff-based diets, helping to release sugars and amino acids, leading to high diet and protein efficiencies. By increasing nutritional value, the quantity of diet per kg of fish produced can be reduced.



Advantages

- Low-cost production from agro-industrial by-products;
- Increased bioavailability and digestibility of aquafeeds;
- Higher feed conversion ratio and weight gain;
- Waste reduction, eco-friendly technology.

PATENT STATUS

European Patent Application
EP4070666

Priority date: 08.04.2021

Granted in Europe

DEVELOPMENT STAGE

TRL4 – Technology validated in lab

Further development for validation in large scale setups required.

APPLICATIONS

Pre-treatment of feedstuff-based diets;
Aquafeed additive.

COOPERATION

Research Cooperation Agreement;
Licensing Agreement.

KEYWORDS

Aquaculture
Plant feedstuff
Enzyme
Aquafeed additives

DEVELOPED BY

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