TECHNOLOGY OFFER

TELEOST FISH LARVAL DIETS SUPPLEMENTED WITH NATURAL EXTRACTS FOR FISH GROWTH PERFORMANCE

Background

Senegalese sole and gilthead seabream are two valuable flatfish species that have low survival rates during the hatchery phase.
Fish larvae have high growth potential, but also high cellular metabolism, leading to oxidative damage and protein degradation.

Technology

Fish growth is dependent on feed quality and composition.
The present invention relates to a premium-quality teleost fish larval diet, supplemented with natural extracts of curcumin, green tea and grape seed. The inclusion of plant extracts in fish diets can promote multiple functional physiological changes including antioxidant, anti-inflammatory and immunostimulant responses.
Antioxidants play a key role in protein turnover by reducing oxidative damage in skeletal muscle, promoting growth performance in the long-term.
The invention also describes a method for improving fish growth performance by providing these diets to fish during the larvae and post-larvae phases.

Advantages

- Improves teleost fish growth performance;
- Enhances survival rate of fish larvae;
- Enhances protein digestion;
- Promotes antioxidant defenses in fish, preventing protein oxidative damage;
- Environmental friendly and natural diet.

PATENT STATUS

International Patent Application via PCT WO2020261162
Priority date: 26.06.2019
Pending in Europe

DEVELOPMENT STAGE

TRL4 – Technology validated in lab
Further development for validation in large scale setups required.

APPLICATIONS

Marine fish larval diets.

COOPERATION

Research Cooperation Agreement;
Licensing Agreement.

KEYWORDS

Aquaculture
Larval diets
Teleost fish
Natural extracts
Antioxidants

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