

TYPICAL METHOD OF SEA BASS STOCKS

Description:

The seabass (*Dicentrarchus labrax*) is one of the species with great interest in European aquaculture. The success of modern aquaculture is based on the control over the reproduction of the species, on the best knowledge of their biology, and on technological innovations. However, in the cultivation of seabass there are many difficulties that arise in the control and management of the reproductive stocks, mainly due to the high number of individuals that are managed, the difficulty to identify the parents or the eggs or larvae in the first months of development. These and other aspects make a comprehensive control of the reproduction of this species in captivity impossible. Likewise, the control of traceability is a challenge to guarantee the food safety of the products derived from the commercial exploitation of this species. It is, therefore, essential to have precise tools that allow knowing and evaluating the genetic structure of both wild and cultivated populations. Thus, the present invention provides a new molecular tool based on microsatellite markers, consisting of co-amplification by PCR and analysis of at least 6 loci together to carry out the typing of this species.

Keywords:

[Genetics](#), [Agricultura](#), [Pedigree](#), [Detection Kit](#), [Pcr Techniques](#), [Seabass](#)

Sectors:

[Biotechnology](#), [Fisheries](#), [Agriculture and Marine Resources](#)

Areas:

[Marine and Aquaculture](#), [Biotechnology](#), [Procedures](#), [Detection and Diagnosis](#), [Aquaculture](#)



Advantages:

The use of the protocol object of the present invention, or of the corresponding kits, presents, among others, the following advantages: -The implemented multiplex PCR method reduces the time and cost of the technique, minimizing the risk of handling errors, since it considerably minimizes handling. -The proposed methodology is simple, solid and reproducible, which ensures accurate results. -The analysis only requires a small amount of DNA, which can be obtained, among others, from eggs, larvae, fin, blood, tissues of dead or cut fish and even processed. - It is very useful for quality control of aquaculture farms, controlling and improving even the reproductive stocks of seabass.

Uses and Applications:

The method object of the present invention, as well as the corresponding kits in it, allow, in a fast and reliable way, to obtain enough information from an individual or group of individuals to carry out population studies, or to establish kinship relationships with great precision. In addition, this tool is useful in the genetic characterization of natural or cultivated populations, as well as in the reconstruction of the pedigree in clutches obtained in a company in the sector.

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