



## **Validation tools for fish species identification: Seafood DNA database and Plasmidic Standards**

*Fish species identification is needed to label correctly the different seafood products and their presentations. In order to avoid possible fraud in the labelling of seafood, different methodologies have been developed during the last years to fulfil the European Union regulations (EC No 104/2000) that indicate the need to label seafood products with their scientific name to assure traceability data transmission through the whole chain.*

*AZTI-Tecnalia has launched a free DNA database ([http://www.azti.es/dna\\_database/](http://www.azti.es/dna_database/)) as part of the work developed in the Traceability pillar of the SEAFOODplus Integrated project. This database contains more than 700 reference mitochondrial DNA sequences from the most important commercial fish species throughout Europe, including gadoids, tunas and hakes. This database is a handy tool for validating fish species identification techniques, and provides a dynamic system to facilitate the management of DNA sequences in order to set alignments and finding polymorphisms, among others. Each DNA reference sequence is characterized (labelled with a tag at 5' and 3' ends) facilitating their location in the genome. In addition, it is a useful source of information to set innovative DNA techniques allowing the comparison of results obtained in different laboratories and will be periodically updated with new DNA sequences.*

*On the other hand, to date validation of DNA methodologies have been performed using a DNA template previously extracted from some well characterised fish samples. But this type of techniques introduces a variation parameter during the DNA extraction step. To solve this handicap, plasmidic standards have been developed. These standards have the same characteristics and composition which ensure the standardization of measurements and procedures, and thus allowing the comparison of results obtained in different laboratories. These standards have been applied for patenting, and will probably constitute the first patent coming from SEAFOODplus. If you are interested or you wish to obtain further information, you can contact us in: [mpardo@suk.azti.es](mailto:mpardo@suk.azti.es)*