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Molecular biomarker analysis — DNA barcoding of fish and fish products using defined mitochondrial cytochrome b and cytochrome c oxidase I gene segments

*Analyse de biomarqueurs moléculaires — Codes-barres d'ADN de
poissons et de produits à base de poisson à l'aide de segments de
gènes mitochondriaux de cytochrome b et cytochrome c oxydase I*

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Foreword

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Introduction

Food safety is a key aspect in terms of consumer protection. In the last three decades, globalization has taken place in the trade of food. Fish trade channels are becoming steadily longer and more complicated so that sophisticated traceability tools are needed to ensure food safety. Correct food labelling is a prerequisite to ensure safe fish products and fair trade as well as to minimize illegal, unreported and unregulated (IUU) fishing. In particular, the fact that fish is increasingly being processed in export countries makes the identification of species by morphological characteristics impossible. The development of reliable, harmonized and standardized protocols for the authentication of fish products is necessary to ensure consumer protection and the detection of potential food fraud.