POS-C38

PD en Análisis Forense

BIG GAME SPECIES IDENTIFICATION BY HIGH-RESOLUTION MELTING / TAMAÑA HANDIKO EHIZAKIEN IDENTIFIKAZIOA HIGH-RESOLUTION MELTING TEKNIKAREN BITARTEZ

ANDRES LOPEZ-OCEJA Y MARIAN MARTINEZ DE PANCORBO

BIOMICs Research Group, Lascaray Ikergunea Research Center, University of the Basque Country UPV/EHU. Vitoria-Gasteiz, (Spain).

Poaching is a problem that requires new tools associated with genetics cases. In the case of game species, species identification is essential evidence for identifying offenders. The degradation level shown in forensic samples reduces the usefulness of the usual DNA barcodes; thus, the use of mini barcodes whose sizes are below 200 bp is recommended to achieve optimal amplifications. The analysis of reduced amplicons can be carried out by high-resolution melting (HRM). This technique has advantages, such as low cost and short time, bringing the same level of discrimination of species as analytical methods based on Sanger sequencing. The Cytochrome B (CytB) is a mitochondrial gene that has been widely used in taxonomic and forensic studies and provides a more accurate reconstruction than other genes on the phylogeny of mammals on the levels of super-order, order, and family. When short amplicons with a reduced power of discrimination are used, the analysis of loci with a high level of phylogenetic discrimination, such as CytB, is recommended.