

MOLECULAR TECHNIQUE FOR *ANGUILLA ANGUILLA* AND *A. JAPONICA* SPECIMENS DISCRIMINATION BASED ON COMPARISON OF HOMOLOGOUS mtDNA D-LOOP REGION SEQUENCES

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Summary. In order to clarify whether declared eels belong to *A. japonica* species or not, molecular technique which is based on PCR with Ang1 primer pair and alignment of newly obtained sequences with homologous *A. anguilla*, *A. rostrata* and *A. japonica* sequences from the GenBank, was used. It was shown that identification of *A. anguilla*, *A. rostrata* and *A. japonica* species based on analysis of 450-455 bp homologous mtDNA D-loop region sequences is reliable. After the study of 31 eels of uncertain origin it became clear that all investigated mtDNA D-loop region sequences belong to *A. japonica* species. Since this molecular technique is a powerful tool for *A. anguilla* and *A. japonica* discrimination, thus it could be used as an alternative to other methods.

Keywords: *Anguilla* sp., molecular technique, D-loop, species identification.