# The Validation of the DNA Extraction Method from *Apis mellifera* L.

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**Abstract**

Even already common technique, the DNA extraction from insect tissue is not yet validated method in Romanian research laboratories, which must fulfill the requests off the present quality standards, as SR EN ISO: 17025.

The necessity of being competitive on worldwide research market in the field imposed enhanced preoccupations for more accurate results beginning with elementary DNA analyses as extraction.

The validation of the method of DNA extraction from *Apis mellifera* L. tissue was the aim of our work. The honeybee samples were harvested from the apiary of the Department of Technology of Honeybee Rearing from the University of Agricultural Sciences and Veterinary Medicine Cluj – Napoca in August 2007. DNA was extracted according to the protocol proposed by Hunt et al., 1999 and modified by Wilkes and Oldroyd, 2003. The NANODROP device was used for purity measurements. In order to elaborate the validation protocol the following parameters were calculated: detection limit, quantification limit, repeatability, reproducibility and uncertainty.

The calculations imposed by the validation method of DNA extraction from *Apis mellifera* L. tissue were performed. The obtained results allow us to implement this protocol.

Key words: DNA, validation, uncertainty

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