

# ANALYSIS OF THE PURITY OF DNA ISOLATED FROM BLOOD SAMPLES AT PINZGAU CATTLE

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## **Abstract**

*There is an increasing interest in the genetic quantification of bovine DNA. Analysis of genetic diversity using DNA extracted from the blood is affected by the quality and the quantity of the DNA extracts, which are critical factors that limit the accuracy and sensitivity of molecular studies. The purpose of this paper is to show the quantity and purity of DNA isolated from a number of 24 blood samples from Pinzgau cattle, using two basic techniques, the automatic DNA extraction technique, using Maxwell™ 16 and 16 MDx instruments and the spectrophotometric quantification technique, using Nanodrop ASP-3700 spectrophotometer. The obtained results are considered satisfactory in terms of the purity of the obtained DNA extracts, 13 samples having the DNA isolate contaminated with proteins based on the absorbance ratio A260/A280 lower than 1.7, the solution in this situation being the repetition of the protein precipitation process.*

**Key words:** *bovines, DNA quantification, DNA purity, spectrophotometry*