

DNA ANALYSIS OF OLD AGED BLOOD STAIN STORED IN ROOM TEMPERATURE

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There have been great developments on the forensic DNA analysis in recent 20 years. Therefore, we have tried to know whether we can get the proper results, if we perform the forensic DNA analysis on old aged samples for past cases. We have used blood stain samples for the test, which were stored under the same conditions (blood was smeared on the cotton gauze, dried and stored under room temperature without sunlight) grouped by storage time (5, 10 and 20 years). Human genomic DNAs which were purified from blood stains, were quantified and genotyped for human STR (short tandem repeat) loci. After the quantitative analysis, we could know that quantities of total human DNA purified from samples have been reduced, and quantities of digested DNA have increased by the elapsed time. However we could get the result of full STR loci analyzed, even for the oldest samples (20 years). In conclusion, we have found that blood stains stored even for 20 years in room temperature could be analyzed by the STR DNA methods.

KEYWORDS: Forensic DNA, STR, Old aged blood stain