# EVALUATION OF NUCLEIC ACID INTEGRITY IN ARTIFICIALLY AGED SOYBEAN SEEDS USING QPCR

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**Summary**

Germplasm banks monitoring is usually carried out using germination test that does not allowed identification of stages of germination power loss, which evolves many processes including the degradation of nucleic acids. Analyzes of DNA integrity on seeds have been done using many methodologies that are in general based on evaluation of degraded DNA and require large amount of DNA. The objective of this study was to evaluate the use of qPCR to analyze the nucleic acid integrity of seeds submitted to different accelerated aging times. Three different length amplicons (86, 193, 491 bp) were tested using DNA extracted from seeds artificially aged for 0, 6, 12, 24, 48, 72, and 96h. Amplicons were amplified in all samples, but differentiation among aging times increased according the length of the amplicon. That indicates qPCR could be used to evaluate the integrity of the seeds during aging, since it differentiated the samples. Besides, it requires low amounts of DNA.

**Key-words:** Seed conservation, DNA integrity, qPCR