

## OPTIMUM BIOLOGICAL SAMPLE SIZE FOR REAL-TIME PCR STUDY

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- **ABSTRACT:** *The polymerase chain reaction (PCR) is a scientific technique used in molecular biology for amplifying fragments of a sample of DNA or RNA, Genetic research in coffee culture have been greatly expanded and in most cases the samples consist of collecting leaves or fruits of different plants representing more than one sampling stage, in the sampling in two stages or sub-sampling, called hierarchical sampling, individuals,  $n_1$  primary units are selected, and  $n_2$  individuals are selected from each of them, to determine the optimum size of the biological sample is necessary to have data obtained from experiments conducted and which faith full y express the variability in coffee plants and fruits of plants to allow the conditions may vary according to the genes studied.*
- **KEYWORDS:** *qPCR; two stages; biological samples; gene expression.*

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