

## OTIMIZATION OF THE CONDITIONS OF DNA EXTRACTION OF A CACAO (*Theobroma cacao* L.) POPULATION AIMING TO OBTAIN MICROSATELLITES MARKERS

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Advances in molecular biology made possible the manipulation of the DNA and culminated in the sprouting of different types of molecular markers. However, depending on the species in study and the laboratories conditions, some modifications and adaptations are necessary to obtain clear and reproductive patterns of DNA bands. The objective of this study was to optimize the conditions of DNA extraction of 188 F<sub>1</sub> cacao plants originated from the cross CCN51 X TSH 1188. We were interested in high amount/quality of DNA aiming to obtain microsatellites markers for the construction of a genetic linkage map. For the increase of the DNA quality and concentration, different repetitions of washings with isoamyl chloroform-alcohol and precipitation times were tested with alcohol isopropanol, respectively. The primer UENF/CEPLAC69 was used to test the amplification of microsatellites. The results showed that the increase in the precipitation time (16 hours) and 4 repetitions of washings favored the attainment of DNA with superior amount and quality. The adjustments carried through in this work may be of great importance to increase the quality of information generated by the technique of microsatellites in population under study.

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