

SELECTION OF ISSR TO PRELIMINAR CHARACTERIZATION OF A CUPUASSU GERMPLASM FROM EMBRAPA WESTERN AMAZONIAN.Souza, A das GC¹; Sousa, NR¹; da Silva, GF¹; de Souza, MG¹¹Embrapa Amazônia Ocidental

nelcimar.sousa@cmaa.embrapa.br

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Cupuassu is an important permanent tree crop commonly used in agricultural production systems in the Amazon region, because cupuassu fruit pulp has a good acceptance on the market. The conservation of germplasm, characterization and evaluation consist of the main strategies for identification of genotypes that can be explored in programs of genetic improvement. On the other hand, the characterization and evaluation studies allow for the knowledge of the qualities and potentialities of the germplasm accessions. The ISSR analysis provided information on the frequency of various simple sequence repeats in the genome. The objective of the work was to select markers ISSR (Inter Single Sequence Repeats) to examine the genetic diversity of Active Germplasm Bank of Cupuassu (BAG - Cupuassu) from Embrapa Western Amazonian. Initially, one hundred UBC primers, originated from the University of British Columbia, were evaluated to select a set of primers that could be useful for genetic diversity studies. They were analyzed in ten accessions collected in different localities of the Amazonian region and 25 ISSR primers were selected for their ability to produce clear and reproducible patterns of bands. Out of the 25 primers selected, 10 primers produced distinct and scorable bands with number of polymorphic bands per primer varied from 2 to 5. The di-nucleotide repeats anchored at 3' ends were more common, among which (GA)_n, (AC)_n and (GT)_n. The results indicate that ISSR markers can provide a quick and reliable assessment of genetic diversity in cupuassu germplasm (*Theobroma grandiflorum*).

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