GENETIC CHARACTERIZATION OF CAMBUCI (CAMPOMANESIA PHAE) BY MOLECULAR MARKERS

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The cambucizeiro (Campomanesia phaea) is an endangered species. It belongs to the Myrtaceae family and is native of Brazil that has the potential to be exploited as fruit crop in the form of juices, sweet and jams. However, this exploration requires more knowledge about the species and the literature concerning Cambuci is scarce in all areas of research and non-existent when it comes to genetic characterization of the species. This characterization should start from the only germplasm banks (BAG) available and maintained by the "Coordenadoria de Assistência Técnica Integral – CATI". Considering this context, an initial interesting approach is the use of molecular markers. Therefore, this study was done with the aim of characterizing genetically 80 Cambuci accessions of CATI’s BAG, through the application of Inter Simple Sequence Repeat (ISSR) markers. Through the principal coordinate analysis, 80 Cambuci accessions were genetically organized into three groups. The three cluster groups also confirmed by UPGMA cluster analysis method, thus corroborating the veracity of the results. The fact that cambucizeiro accessions clustered into three groups, demonstrates that ISSR markers were efficient in discriminating Cambuci accessions and verify the existence of genetic variability among them. This genetic variability can be exploited and contribute to the genetic improvement of the species as well as for its conservation.

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