



Genetic diversity of the Neotropical tree *Hancornia speciosa* Gomes in natural populations in Northeastern Brazil

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ABSTRACT. Mangabeira (*Hancornia speciosa* Gomes) is a fruit tree of the Apocynaceae family, which is native to Brazil and is a very important food resource for human populations in its areas of occurrence. Mangabeira fruit is collected as an extractive activity, and no domesticated varieties or breeding programs exist. Due to a reduction in the area of ecosystems where it occurs, mangabeira is threatened by genetic erosion in Brazil. The objective of this study was to characterize and evaluate the genetic diversity of 38 mangabeira individuals collected from natural populations in Pernambuco State using inter-simple sequence repeat (ISSR) molecular markers. The ISSR methodology generated a total of 93 loci; 10 were monomorphic and 83 were polymorphic. The average number of loci per

primer was 15.5, ranging from 9 (#UBC 866) to 21 (#UBC 834). The results showed a high level of genetic diversity (0.30), and found that only around 30% of genetic variability is distributed among populations ($G_{ST} = 0.29$, $\Phi_{ST} = 0.30$), with the remainder ($\Phi_{CT} = 70\%$) found within each population, as expected for forest outcrossing species. Estimates for historic gene flow (1.18) indicate that there is some isolation of these populations, and some degree of genetic differentiation.

Key words: Mangabeira; Apocynaceae; Genetic resources; Molecular markers