

Development of microsatellite markers for the endangered Neotropical tree species *Tibouchina papyrus* (Melastomataceae)

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ABSTRACT. We isolated and characterized 12 microsatellite loci for *Tibouchina papyrus* (Melastomataceae), an endangered species with narrow and disjunct range, endemics to a few localities in “cerrado rupestre” from Central Brazil. These microsatellites were obtained by sequencing of a genomic shotgun library for primer design. Leaves from 96 individuals collected in the three known local populations were genotyped using the 12 primers designed to analyze the polymorphisms at each locus. The number of alleles per locus ranged from one to six; two loci were monomorphic. Among the polymorphic loci, expected heterozygosities ranged from 0.161 to 0.714. Combined paternity exclusion probability was 0.957 and combined genetic identity (0.051) was high for studies

on parentage. *Tibouchina papyrus* is a rare and endemic tree species of outcrop quartzite and sandstone soils, with highly isolated populations, which may have lead to the low degree of polymorphism that we detected. Also, motifs of most loci are larger than dinucleotide, which typically display lower levels of polymorphism.

Key words: Cerrado; “Pau-papel”; Shotgun library; SSR; STR