

Genetic diversity of natural populations of *Anemopaegma arvense* (Bignoniaceae) in the Cerrado of São Paulo State, Brazil

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ABSTRACT. Catuaba (*Anemopaegma arvense*), a Bignoniaceae species endemic to Cerrado regions, shows anticancer properties and is widely used as a stimulant in traditional medicine. We evaluated the genetic diversity of seven populations found in the State of São Paulo, using random amplified polymorphic DNA markers. After optimization of the amplification reaction, 10 selected primers produced 70 reproducible bands, with 72.8% polymorphism. The greatest genetic diversity was observed within populations (71.72%). Variation estimates, θ^B (0.2421) and Φ_{ST} (0.283), obtained by inter- and intra-population analysis of genetic variability of catuaba, indicated

considerable population structure. However, the r value 0.346 ($P = 0.099$), calculated by the Mantel test, indicates that the genetic diversity among populations is not strongly structured in geographical space, although there appears to be a tendency towards structuring.

Key words: Random amplified polymorphic DNA; Preservation; Bignoniaceae; Medicinal plant