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Genetic Parameters as Indicators of Sustainability and Diversity of Schinus terebinthifolius Populations in the Riparian Area of the São Francisco River

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Abstract: There is growing interest in defining indicators of sustainability, which are important for monitoring the conservation of native forests, particularly in areas of permanent protection. These indicators are references for assessing the state of the forest and the status of the depredated area and its ability to maintain species populations. The aim of the present study was to select genetic parameters as indicators of sustainability for Schinus terebinthifolius Raddi. Fragments located in riparian areas between the Sergipe and Alagoas States in Brazil. This species has been exploited for traditional communities, which represent 20% of the incoming. This study was carried out using the indicators suggested by the Organization for Economic Cooperation and Development, which were identified as Driving-Pressure-State-Impact-Response (DPSIR) factors. The genetic parameters were obtained in five populations located on the shores and islands of the São Francisco River, one of the most important rivers in Brazil. The framework for Schinus conservation suggests seventeen indicators of sustainability. In accordance with genetic parameters, the populations are isolated, and these genetic parameters can be used to monitor the sustainability of those populations in riparian area with the aim of defining strategies for forest restoration.

Keywords: alleles, molecular markers, genetic diversity, biodiversity

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