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FOREST BIODIVERSITY IN SOROCABA'S METROPOLITAN REGION

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Forest fragmentation influences the loss of habitat and may lead to a decrease in biodiversity. In the region of Sorocaba all forests were fragmented producing patches of various sizes. Recently the region has been transformed in RMS (Sorocaba's Metropolitan Region) and it promotes further urbanization, industrialization and consequent destruction of natural vegetation. This study aims to diagnose regional forest biodiversity in the RMS, in order to evidence endangered species, and sites with great diversity that need legal protection. The survey was carried out in 9 areas (within 5 cities). The plot method was used, with 12 samples in each area, totaling 1.08 ha. All woody individuals with DBH (diameter at breast height) of 5 cm or more were collected. The phytosociological parameters and Shannon Index were calculated, which in this case represents gamma diversity because the study was done on a landscape scale. We sampled 1,750 individuals, 57 families and 247 species. The families with the greatest richness were Fabaceae, Myrtaceae and Lauraceae, and those with the highest IVC were Fabaceae, Anacardiaceae and Lauraceae. Among the species with the highest IVC there are several pioneer species, common in degraded areas such as *Lithrea molleoides*, *Moquiniastrum polymorphum*, and *Piptadenia gonoacantha*. But there are also late species such as *Copaifera langsdorfii*, *Machaerium villosum* and *Cryptocaria aschersoniana*. The H' was quite high (4.72) when compared among others studies in the region, where was showed H' from 3.3 to 4.01. These results indicate that the region still maintains a great diversity, which needs to be protected. The studied areas of the cities of Boituva and Itu (north of Sorocaba) presented the greatest richness and diversity index, and they have areas extremely threatened since the Sorocaba-Itu axis is an area of industrial and road expansion, demonstrating that these areas require effective legal protection.