



## **Ecological Restoration in the State of São Paulo**

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Ecological restoration is an emerging field of restoration ecology, and is widely used as an important tool for biodiversity conservation. This study evaluated physical, chemical and microbiological parameters of four restored forests soils of different ages (16, 26, 60 and 99 years), a remnant forest and their agricultural surroundings inserted into phytogeographical domain Atlantic Forest in the State of São Paulo. To process the data it was used the principal component analysis to measure the discrimination of soils due to the different locations and types of land use. The principal component analysis differentiated the forests of their agricultural environments and locations with a prevalence of physical and chemical parameters in the distinction between the matrices. The parameters soil organic matter, total cation exchange capacity, phosphorus, soil bulk density, porosity, microbial biomass carbon and microbial activity had higher averages in the forests matrices, being higher in older forests. There was differentiation in soil quality of the studied forests, where the highest rates were obtained in the remaining forest soils and older forest restoration projects. All forest areas showed higher rates compared to their respective agricultural environments.