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Chemical and Physical Soil Restoration in Mining Areas

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The current trend of ecological restoration is to address the recovery of degraded areas by ecosystemic way, overcoming the rehabilitation process. In this sense, the topsoil and other complementary techniques in mining areas plays an important role in soil recovery. The aim of this study was to contextualize the soil improvement, with the use of topsoil through chemical and physical attributes, relative to secondary succession areas in restoration, as well as in reference ecosystems (natural forest). Eighteen areas were evaluated, six in forest restoration process, six native forests and six just mining areas. The areas were sampled in the depths of 0-5, 5-10, 10-20, 20-40 and 40-60 cm. Chemical indicators measured were parameters of soil fertility and texture, macroporosity, microporosity, density and total porosity as physical parameters. The forest restoration using topsoil was effective in triggering a process of soil recovery, promoting, in seven years, chemical and physical characteristics similar to those of the reference ecosystem.