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Microbial biomass, desidrogenasy activity and nutrient absorption in a mining soil in the Amazon area after the intrudction of Green Manure *

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The knowledge of the biological processes in soils that were degraded in some way and are being put in recovery it has been showing to infer about the degree of maturity, disturbance or recovery the one that such systems are subject of great importance, besides the direct influence in the productivity of those systems once it is indispensable to the nutrient cycling. The present work is used of soil biological parameters, besides the analysis of the vegetable material to verify the influence of the successive plantation of legume species in a mining soil in recovery process. This work is part of the recovery program in degraded areas for the mining company, implanted starting from 1999 and in partner with universities. The microbial activity was determined starting from the quantification of the microbial biomass of the carbon and the nitrogen (BMC and BMN), the desidrogenasy activity and FDA hydrolysis was evaluated in a pit mining after 1, 2 and 3 and of a deposition area of I reject after a year of plantation of a legumes cocktail: *Cajanu cajan*, *Mucuna aterrima* and *Crotalária juncea*, compared with the forest soil and with areas without plantation. The variance analysis detected significant differences between the forest soil and the other treatments for BMC already for BMN the forest, the floor of it plows with plantation of 1 and 3 years didn't present significant differences. The desidrogenasy presented higher values, differing of the others in the forest. The treatments in the mine pit with plantation of 1, 2 and 3 years didn't present significant differences.

Word-keys: microbial biomass, desidrogenasy, green manure, recovery of degraded

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