



Ecological restoration of litter in mined areas

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The success of ecological restoration projects depends on going monitoring of key ecological variables to determine if a desired trajectory has been established and, in the case of mining sites, nutrient cycling recovery plays an utmost importance. This study aimed to quantify and compare the annual litter production in native forests, and in restoration sites established in bauxite mines. We collected samples in 6 native forest remnants and 6 year-old restoration sites every month for a period of one year, in the city of Poços de Caldas/MG, SE Brazil. 120 wire collectors were used (0,6x0,6) and suspended 30cm above the soil surface. The material was dried until constant weight, weighed and fractionated in leaves, branches and reproductive material. The average annual litter production was 2,6 Mg ha⁻¹ in native forests and 2,1 in forest in restoration sites, differing statistically. Litter production was higher in the rainy season, especially in September. Among the litter components, the largest contributor to total production was the fraction leaves, with 55,4% of the total dry weight of material collected, followed by reproductive material which contributed 24,5% and branches, with 20%. We conclude that the young areas in restoration process already restored important part, but still below the production observed in native areas.