

SOIL MICROBIAL COMMUNITY IN POST MINING SITES IN SAHARA MINE IL RECLAIMED BY SMACRA AND PRE SMACRA TECHNOLOGIES¹

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Abstract: Microbial respiration, microbial biomass, direct counts of bacterial and PLFA were studied in sweetgum, oak, and pine plantation planted on SMACRA treated sites (graded with topsoil application) and ungraded spoil, and compared to seminatural forest and soil from margin of old cemetery which is expected to be close to original grassland vegetation. Generally topsoil sites have higher microbial biomass and respiration. PLFA indicated that microbial community in ungraded sites was closer to forest while topsoil sites were closer to grassland.

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