

## Abundance, biomass and diversity of the soil fauna in degraded areas under recuperation in the central Amazon region

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The soil fauna plays an important role in the stability of decomposition processes and as a result its abundance, biomass and species composition, may influence the nutrient cycles in agroecosystems. Therefore abundance, functional group - composition and biomass of the these organisms were studied in plots of polyculture forestry systems and in plots of nearby secondary and primary forest. Evaluation of macrofauna from Berlese samples shows a substitution of several faunal groups in the anthropogenic systems when compared with primary forest. In primary forest social soil insects (ants, termites) and earthworms appeared with larger individual numbers, whereas in the polycultures, other decomposer groups like isopods and diplopods had higher abundances. Roughly the same trends are confirmed by biomass calculations, although some groups (e.g. ants, diplopods) behave quite differently in biomass than in abundances.