



Long-term effect on some chemical parameter and microbial diversity in a conifer forest soil

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Soil microbiota are one of the soil components most affected by wildfires. The data from the present study were obtained from a conifer forest soil at Sierra de Gredos (Ávila, central Spain) twenty years after fire of low-to-moderate intensity. A set of soil characteristics indicated the extent to which the spontaneous recovery of the soil is produced as a result of vegetation regrowth. Ten months after fire a strong increase in soil pH, organic C and N, and exchangeable Ca and K, with respect the control soil. Eighteen years after this fire it was observed a decrease of soil organic C and N, whereas other variables such as pH, exchangeable Ca and K were slightly increased with respect to control soil.

Is summe a change in soil microbiota was observed due to wildfire, with a decrease in fungi and bacteria population, Also some changes in microbial community was detected,

Key words: Forest Fire, soil microbiology, chemical soil properties