



## Acetochlor influence on soil microbial communities

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The chloroacetanilide herbicide acetochlor [2-chloro-N-(ethoxymethyl)-N-(2-ethyl-6-methylphenyl)-acetamide] was used to control the weeds on a maize (*Zea mays* L.) field experiment. Acetochlor was applied to soil at three different concentrations between 2.2 and 4.0 l/ha after sowing the crop. Before sowing a control soil sample was collected. At days 7, 14 and 21 after application soil sample were collected and analyzed to determine the herbicide effect on the microbial communities (Gram positive bacteria, Gram negative bacteria and micromycetes). The objective of this research was to determine the influence of acetochlor on the total number of microorganisms, on the relationship between the main groups (bacteria and fungi), and on the micromycetes spectrum determined in each variant of our experiment.