



Effect of chromium contamination on soil microbial community

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Chromium is considered one of the main pollutants by the Environmental Protection Agency (EPA). Although chromium can exist in a number of oxidation states, hexavalent chromium [Cr(VI)] and trivalent chromium [Cr(III)] are the most common forms in soil. During recent years several significant studies on the environmental impact of chromium have been made. Our research group applied classical and molecular approaches to study the impact of chromium on soil microbial communities. Short, medium and long term effects of chromate contamination in soils were studied by analyzing phototrophic and heterotrophic bacterial, and by monitoring total microbial communities (1, 3-6). Moreover several bacteria showing high resistance to Cr(VI) and Cr(VI)-reducing capabilities were isolated from chromium polluted environments and deeply characterized for possible development of soil bioremediation strategies (2, 6-7).

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