

## THE ROLE OF MICROBIAL COMMUNITIES IN BIOREMEDIATION

### ÚLOHA MIKROBIÁLNÍHO SPOLEČENSTVA V BIOREMEDIACÍCH

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#### **Abstract:**

Recent research in the environmental microbiology and the knowledge resulting from the clean-up engineering based on the bioremediation show that the really powerful biological agent is the mixed community of microorganisms. Mixed community of microorganisms (which has been exposing by the selection pressure of the contaminant) may be also used as a bioaugmentation agent in bioremediation. In this paper, basic review about microbial communities in clean-up is presented. Secondary, the real application of biological agents (produced by EPS) are demonstrated as case studies, for example the biodegradation of crude oil, chlorinated hydrocarbons, waste fet, and endocrine disruptors.

#### **Keywords:**

microbial communities, biodegradation, selection pressure, bioaugmentation agent, environmental pollutants