

THE EFFECT OF RIBWORT (*PLANTAGO LANCEOLATA*) AND ITS MYCORRHIZAS  
ON THE GROWTH OF MICROFLORA IN SOIL CONTAMINATED WITH USED  
ENGINE OIL

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**Abstract:** The aim of the work was to estimate the influence of plants mycorrhizas on the number of hydrocarbons degrading bacteria, saprophytic bacteria and molds fungi during the remediation of the soil samples contaminated with used engine oil. The investigation were carried out in laboratory conditions. Nine modifications of the soil substrate were prepared and divided into three groups: the first one – without used engine oil; the second one – with 10% (w/w) of used engine oil; the third one – with 25% (w/w) of used oil. In each group one sample was sown with ribwort, one was inoculated with living spores of mycorrhizal fungi and sown with ribwort, and the third one was left without plants and mycorrhizal fungi. The sample of the uncontaminated soil was the control. The investigation showed a significant effect of used engine oil, the presence of ribwort and mycorrhizal fungi on the number of soil microorganisms. The increase of the number of hydrocarbons degrading bacteria, in respect to the control sample was observed in the used engine oil contaminated samples. The seeding of soil samples with plants and additional inoculation with spores of mycorrhizal fungi stimulated the increase of the number of microorganisms in the all studied groups.