## SOIL MICROFUNGAL COMMUNITIES IN THREE VARIOUS POST-MINING AREAS (WYOMING, TENNESSEE, AND INDIANA)<sup>1</sup>

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Abstract: Microscopic fungi were studied in soils of three post-mining areas (Tennessee, Wyoming, and Indiana) using mainly soil dilution plate method. Isolations carried out in 2008 and 2011. Studied sites differ in plant cover, recultivation type and age, and geographical conditions. Microfungal diversity was found distinct from various studied post-mining areas and some differences were also estimated between 2008 and 2011 studies. *Goidanichiella barronii* isolated from native forest in Laurel Grove (Tennessee) is the first record of this fungus for the USA. CFU counts show differences among studied years and post-mining areas, the lowest values were found in Wyoming soils.

**Additional Key Words**: grassland, forest, reclamation, natural succession, species diversity, CFU counts

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