Pedobiological and pedo-ecological researches on the quality of soil resources

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Biological activity of the soil characterizes the soil fertility and it reflects the ecological vocation of soil microflora. In this paper we present the results of the eco-pedological and pedo-biological researches accomplished in the forestry ecosystems (Quercus sp.) located in North-Eastern of Romania- Moldavian Plateau, county Iasi. The studies of soil microflora pointed out the physiological activity (soil respiration and cellulosolysae) and the enzymatic activity (catalase, invertase, urease and total phosphatase) in the ecological conditions. Our results showed the moderate to high values for physiological activity of the soil, moderate values for enzymatic activity and low to moderate values for the indicators of soil quality. These values pointed out the moderate to high levels, significant for the biochemical processes of transformation of the organic matter, in the humification trend and the partial mineralization of organic matter.