

PEDO-GEOMORPHOLOGICAL FACTORS LIMITING SOIL FERTILITY IN MĂDÂRJAC COMMUNE, IAȘI COUNTY

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Abstract

The edaphic cover is an essential constituent of the environment, as well as a natural resource with multiple uses for mankind. Soil quality is affected to a smaller or larger extent by one or more restrictions. Their harmful influences materialize in soil features and functions deterioration, which affects their bioproductive capacity, with consequences on agricultural produce quality and food safety. These restrictions are caused either by natural factors, or by agricultural and industrial anthropic actions, which may have a synergic yet negative effect, leading to soil quality decrease and even soil function annihilation. The following main soil degradation factors were identified in Mădârjac Commune: gleying, stagnogleying, surface erosion, landslide and gully. The pedo-geomorphological study conducted revealed strong-excessive gleying in 6%, mild gleying in 20%, moderate-strong stagnogleying in 22%, mild stagnogleying in 43%, excessive surface erosion in 8%, moderate-strong erosion in 48%, mild erosion in 15%, and landslide and gully in 45% of the whole charted area of 1369 ha.

Key words: gleying, stagnogleying, erosion, landslide, gully