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Soil and Water Research

Analysis of soil degradation in the Czech Republic: GIS approach

Šarapatka B., Bednář M., Novák P.:

Soil & Water Res., 5 (2010): 108-112

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In our work, we have evaluated the available data on the individual types of soil damage, which has been processed in the Czech Republic in recent decades. The individual types of degradation (water erosion, wind erosion, soil compaction, extreme soils (clay soils), loss of organic matter, acidification, dryness impact, and intoxication) were classified in one of three groups: physical degradation, desertification and chemical degradation. Each type of degradation was assigned a specific weight reflecting the importance of this kind of soil degradation. The maps of individual areas of degradation were processed by overlay and assigning weighting techniques in ArcView Spatial Analyst GIS environment to create the final maps for each class of the degradation threat. The same technique was used to create the final map showing the most troubled areas in the Czech Republic, threatened by soil damage.

Keywords:

degradation; GIS; modelling; soil

[[fulltext](#)]

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