

黄土丘陵区侵蚀土壤质量评价

许明祥¹; 刘国彬¹; 赵允格²

1. 中国科学院水利部水土保持研究所西北农林科技大学 陕西杨凌712100; 中2. 中国科学院水利部水土保持研究所黄土高原土壤侵蚀与旱地农业国家重点实验室 陕西杨凌712100

Quality assessment of erosion soil on hilly Loess Plateau

XU Ming-xiang¹; LIU Guo-bin¹; ZHAO Yun-ge^{2*}

1 Inst. of Soil and Water Conservation; CAS and MWR; Northwest Univ. of Agric. And forest; Yangling; Shaanxi 712100; China; of Soil and Water Conservation; CAS and MWR; Yangling; Shaanxi 712100; China

[摘要](#)[参考文献](#)[相关文章](#)Download: [PDF \(1599KB\)](#) [HTML](#) 0KB Export: [BibTeX](#) or [EndNote \(RIS\)](#) [Supporting Info](#)

摘要 通过建立侵蚀土壤质量单因素评价模型和综合评价模型,选出了黄土丘陵区适宜的侵蚀土壤质量评价方法,定量评价了该区土地利用方式对土壤质量的影响。结果表明,采用加权综合法对土壤质量进行综合评价能够较好地反映土壤质量的实际情况,敏感地反映土地利用方式变化对土壤质量的影响。应用因子分析法所筛选的8项土壤质量简化评价指标能够很好地反映29项综合评价指标的信息,评价结果具有较高的代表性。拟定了黄土丘陵区侵蚀土壤质量分级标准,将研究区土壤质量分为5级。黄土丘陵区10种土地利用类型间土壤质量差异显著,以天然乔木林地土壤质量最佳,属1级;其次是天然灌木林地和大棚菜地,土壤质量属2级;天然草地土壤质量属于3级,人工乔灌林地土壤质量接近3级;人工草地、撂荒地、农地和果园土壤质量属于4级。

关键词: 土壤质量 评价模型 土壤质量分级 黄土丘陵区 土壤质量 评价模型 土壤质量分级 黄土丘陵区

Abstract: Through establishing single factor and integrated assessment models, suitable assessment method for erosion soil quality on hilly Loess Plateau was selected. Quantitative assessments of soil qualities in different land utilization types was also performed in this paper. The results showed that soil quality evaluation with weighted integrated method could preferably reflect the actual situation of assessed soils and effects the variation of land utilization on soil quality (sensitively.) The 8 simple soil quality indicators screened out by factor analysis reflected the information of 29 soil (integrate) assessment indicates well and results of assessment be of high representative. Furthermore, the criteria of (classification) for erosion soil quality were studied out. Soil quality of research area was classified into 5 grades. The (research) results also (indicated) that soil quality on the hilly Loess plateau was significantly different due to different land utilization types. Soil quality in natural forestland was the best and was classified into should belong to grade 1. Soil quality in natural shrub land and green house was classified into grade 2. The next one was natural grassland and its soil quality grade was 3. Soil quality in planted woodland and shrub land was close to grade 3. Planted grassland, revegetated grassland, cropland and orchard had a soil quality of grade 4.

Keywords:

引用本文:

许明祥¹; 刘国彬¹; 赵允格².黄土丘陵区侵蚀土壤质量评价[J] 植物营养与肥科学报, 2005,V11(3): 285-XU Ming-xiang¹; LIU Guo-bin¹; ZHAO Yun-ge².Quality assessment of erosion soil on hilly Loess Plateau[J] Acta Metallurgica Sinica, 2005,V11(3): 285-

Service

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [Email Alert](#)
- ▶ [RSS](#)

作者相关文章