

研究报告

土壤养分循环实地采样调查方法

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摘要

讨论了一种在区域尺度上研究生态系统中土壤养分循环的样区采样及调查方法.即在满足土壤养分循环研究所要求的代表性、重现性、随机性及时间性等原则的基础上,利用地形图及航空照片等资料,在区域中选定合适面积和数量的样区后,在各样区内按统一标准采集土壤和植物样品.考虑区域土壤养分循环受自然环境条件和社会经济条件等因素的制约,野外采样过程中有必要对采样单元的实地情况进行调查记载,并就样区内所有农户的基本状况、种植业结构及肥料投入等有关土壤养分循环的影响因子进行农户调查.对我国亚热带农业生态系统中土壤养分循环进行了案例研究,探讨了该采样调查方法在土壤养分循环研究中的应用.

关键词 [样区](#) [采样调查](#) [土壤养分循环](#) [方法](#) [区域生态系统](#)

分类号

An on-the-spot sampling and survey method for soil nutrient cycling study

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Abstract

In this paper, an on-the-spot sampling and survey method for studying the soil nutrient cycling in a regional scale was discussed, with considering the principles of representation, reproducibility, randomness and timeliness. Firstly, some representative sampling areas in a definite region should be selected, based on the relevant hypsographic maps and airscapes. During the course of sampling soil and plant, a field survey related to the sampling sites should be carried out to understand the natural affecting factors on the soil nutrient cycling in a regional agro-ecosystem scale. Moreover, the farmers' basic status, crop production, and applied amount of fertilizers and their allotment should be also investigated. A case study of nutrient cycling in subtropical regions of China was carried out to approach the application of the method in the study of soil nutrient cycling in some regions.

Key words

[Sampling area](#) [Sampling and survey](#) [Soil nutrient cycling](#) [Method](#) [Regional ecosystem](#)

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