

研究简报

氮和磷在饲养-堆腐环中的循环率及有机肥料养分利用率

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收稿日期 2005-1-26 修回日期 2005-5-23 网络版发布日期 接受日期

摘要

关键词

分类号

Recycling rate of N and P through a feeding-composting cycle and their recoveries in agro-ecosystems

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Abstract

A five-year experiment indicated that the average loss rate of N and P in harvested products through a feeding-composting cycle was about 50% and 15%, respectively. Under high yield condition, the amount of recycled N and P from 80% harvested products and through a feeding-composting cycle in farming systems was about 37~51 and 8~14 kg·hm⁻², equivalent to 25%~34% of N and 32%~56% of P from chemical fertilizers applied each year to the systems. The apparent recoveries of N and P in organic manure increased with the prolongation of fertilization, indicating a synergetic residual effect existed, and was 61% and 39% in average in the five-year experiment. The use of nutrients recycled in the farming systems could not only improve soil fertility, but also increase the recoveries of nutrients and reduce the use of chemical fertilizers.

Key words [Feeding-composting system](#) [Recycling rate](#) [Recoveries of N and P in organic manure](#)

DOI:

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