

农学—应用研究

微生物菌剂榕风在油枯堆肥中的应用研究

李成学¹, 宋建群^{2,2}, 郭建芳¹, 谢春琼¹

1. 云南农业大学资源与环境学院

2.

摘要:

为充分利用油枯资源, 加快其堆肥化进程, 研究了油枯堆肥在加入微生物菌剂榕风和调节初始C/N的条件下, 其堆体温度、pH、硝态氮含量、铵态氮含量和C/N的动态变化规律, 以期了解榕风和初始C/N对堆肥腐熟进程的影响。结果表明, 调节初始C/N至25, 同时添加菌剂, 能够提高堆体温度上升幅度(50~60℃), 并持续近10天; 能促进NH₄⁺-N向NO₃⁻-N的转化; C/N变化明显, 从最初的25下降至末期的13, 腐熟时间提前近20天。说明添加榕风菌剂能加快油枯堆肥时间, 改善堆肥质量。

关键词: 堆肥进程

Study on the Appliance of Microbial Strains Rongfeng When Composting Canola Meal

Abstract:

In order to accelerate the process of the composting of canola meal, this paper studied the effect of microbial agent and different C/N on the dynamic changes of temperature, pH, NH₄⁺-N and NO₃⁻-N concentrations and C/N ratio during the composting of canola meal. The results showed that adjusting original C/N ratio to 25, which was able to make the temperature rise and accelerate the translation from NH₄⁺-N to NO₃⁻-N. At the same time, adding the microbial agent was capable of rising to the highest temperature (50-60℃), lasting about 10 days, causing organic matters decomposing rapidly, and the C/N changing obviously from original 25 to 13 in the end, advancing the composting time for 20 days. On suitable conditions, adding microbial agent of Rongfeng was beneficial to improve the composting processes and qualities, and microbial agent of Rongfeng benefit the composting of canola meal.

Keywords: compost's course

收稿日期 2011-03-10 修回日期 2011-05-12 网络版发布日期 2011-09-06

DOI:

基金项目:

云南省教育厅基金(08Y0174), 云南农业大学农科中心学生创新基金

通讯作者: 郭建芳

作者简介:

作者Email: guo_jf0507@ynau.edu.cn

参考文献:

本刊中的类似文章

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF(609KB)
- ▶ [HTML全文]
- ▶ 参考文献[PDF]
- ▶ 参考文献

服务与反馈

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ 引用本文
- ▶ Email Alert
- ▶ 文章反馈
- ▶ 浏览反馈信息

本文关键词相关文章

- ▶ 堆肥进程

本文作者相关文章

- ▶ 李成学
- ▶ 宋建群
- ▶ 郭建芳
- ▶ 谢春琼

PubMed

- ▶ Article by Li,C.H
- ▶ Article by Song,J.Q
- ▶ Article by Guo,J.F
- ▶ Article by Xie,C.Q