

研究报告

几种硝化抑制剂对土壤和小白菜硝酸盐含量及产量的影响

余光辉^{1,2},张杨珠¹,王大娟²

¹湖南农业大学资源环境学院,长沙 410128; ²中山大学环境科学与工程学院,广州 510275

收稿日期 2005-1-27 修回日期 2005-8-21 网络版发布日期 接受日期

摘要

通过田间试验,对湖南长沙地区的红菜园土和冲积菜园土两种土壤条件下氢醌(HQ)、双氰胺(DCD)和硫脲(TU)3种硝化抑制剂对土壤和小白菜硝酸盐含量及小白菜产量的影响进行研究.结果表明,3种硝化抑制剂在试验的各个时期均不同程度地降低了土壤和小白菜的硝酸盐含量,其中以双氰胺的效果最好.但不同供试土壤条件下的试验结果不完全一致.3种硝化抑制剂均可不同程度提高小白菜产量,其中双氰胺效果最好,且在红菜园土的增产效果比冲积菜园土显著.

关键词 [硝化抑制剂](#) [土壤](#) [小白菜](#) [硝酸盐](#) [产量](#)

分类号

Effects of nitrification inhibitors on nitrate content in soil and pakchoi and on pakchoi yield

YU Guanghui^{1,2},ZHANG Yangzhu¹,WAN Dajuan²

¹College of Resource and Environment,Hunan Agricultural University,Changsha 410128,China; ²School of Environment and Engineering,Zhongshan University,Guangzhou 510275,China

Abstract

A field experiment was conducted on two soil types in the Changsha suburb of Hunan Province to study the effects of hydroquinone (HQ),dicyandiamide (DCD) and thiourea (TU) on the nitrate content in soil and pakchoi and on the yield of pakchoi.The results showed that all the test nitrification inhibitors could significantly decrease the nitrate content in soil and pakchoi during whole growth stage,among which,DCD had the best effect,but the effect was differed on different soil types.Nitrification inhibitors could increase pakchoi yield,DCD was also the best one,and the effect was significantly better on vegetable garden red soil than on vegetable garden alluvial soil.The nitrate content in soil and pakchoi was the highest about 40 days after pakchoi transplanting.

Key words [Nitrification inhibitor](#) [Soil](#) [Pakchoi](#) [Nitrate](#) [Yield](#)

DOI:

通讯作者

扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(421KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [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](#)

▶ [复制索引](#)

▶ [Email Alert](#)

▶ [文章反馈](#)

▶ [浏览反馈信息](#)

相关信息

▶ [本刊中 包含“硝化抑制剂”的 相关文章](#)

▶ [本文作者相关文章](#)

· [余光辉](#)

·

· [张杨珠](#)

· [王大娟](#)