#### 研究简报

松材线虫对其携带的细菌繁殖的影响

林峰; 赵博光

南京林业大学森林资源与环境学院,南京 210037

收稿日期 2005-6-20 修回日期 2005-9-30 网络版发布日期 接受日期

摘要

关键词

分类号

# Effects of pine wood nematode on propagation of its carrying bacteria

LIN Feng, ZHAO Boguang

College of Forestry Resources and Environment, Nanjing Forestry University, Nanjing 210037, China

### 扩展功能

#### 本文信息

- ▶ Supporting info
- ▶ PDF(296KB)
- ▶[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 无 相关文章
- ▶本文作者相关文章
- 林峰
- 赵博光

#### Abstract

In this paper, the aseptic eggs of *Bursaphelenchus xylophilus* were obtained after treated with 30% H<sub>2</sub>O<sub>2</sub>, and cultured with *Pinus thunbergii* callus. Ten *B.xylophilus*-carrying bacterial strains directly isolated from diseased *P.thugbergii* and *P.massoniana* in six epidemic provinces *i.e.*, GcM6-2A *Pseudomonas putida*, GcM6-1A *P.putida*, ZpB1-2A *P.putida*, HeM2A *Pseudomonas* sp., HeM1A *Pseudomonas* sp., HeM142B *Pseudomonas* sp., GcM1-3A *P.cepacia* and HM3 *Pantoeu* sp., ZpB4-2B *Staphylococcus sciuri* and ZpB2-3A *Enterobacter amnigenus*, were collected, and the effects of axenic *B.xylophilus* (ABx) on their propagation were studied. The results showed that pine wood nematode (PWN) promoted the propagation of 7 bacterial strains in *Pseudomonas* and 1 bacterial strain in *Pantoeu* sp., including *Pseudomonas putida*, *P.putida*, *P.putida*, *Pseudomonas* sp., *Pseudomonas* sp

Pseudomonas sp., P.cepacia and Pantoeu sp., but inhibited Staphylococcus sciuri and Enterobacter amnigenus, which could explain the phenomenon that Pseudomonas was the prevailing genus of the bacteria carried by PWN, and might provide essential nutrition to the bacteria. The close relationship between PWN and bacterial strains in Pseudomonas might account for the pine wood nematode disease.

**Key words** Pine wood nematode disease Pathogenic bacteria Complex infection Propagation

DOI: