

研究报告

杉木心材精油抑菌活性及其化学成分研究

叶舟; 林文雄; 陈伟; 俞新妥

福建农林大学生命科学学院, 福州 350002

收稿日期 2005-6-20 修回日期 2005-10-18 网络版发布日期 接受日期

摘要

通过水蒸气蒸馏法提取杉木心材精油,并进行柱层析分离、气-质联用分析和抑菌活性试验,比较分析了精油含量、化学组成和抑菌活性成分.结果表明,杉木心材精油含量为1.794~2.076(w/w);气-质联用分析共分离出47个色谱峰,鉴定出27个化合物(占精油总量的99%),其中主要成分为柏木脑(76.27%);杉木心材精油对大肠杆菌、金黄色葡萄球菌、枯草芽孢杆菌、伤寒沙门氏菌等均有较明显的抑制作用;柏木脑是杉木精油的主要抑菌活性成分.

关键词 [杉木](#); [精油](#); [抑菌活性](#); [柏木脑](#)

分类号

Chemical components and antimicrobial activity of essential oils in *Cunninghamia lanceolata* heartwood

YE Zhou,LIN Wenxiong,CHEN Wei,YU Xintuo

College of Life Science,Fujian Agricultural and Forestry University,Fuzhou 350002,China

Abstract

In this study,the essential oils in *Cunninghamia lanceolata* heartwood were water-steam distilled,and their chemical components were analyzed by column chromatography and GC-MS,with their antimicrobial activity tested. The results showed that the essential oils content was 1.794~2.076(w/w),and 47 peaks were separated.27 compounds,accounted for 99% of crude essential oils,were identified.The essential oils had an obvious antimicrobial activity against *Escherichia coli*,*Staphylococcus aureus*,*Bacillus subtilis* and *Salmonella typhi*,and cedrol,occupying 76.27% of essential oils,was the major component with antimicrobial activity.

Key words [Cunninghamia lanceolata](#) [Essential oils](#) [Antimicrobial activity](#) [Cedrol](#)

DOI:

通讯作者

扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(518KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [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 “杉木; 精油; 抑菌活性; 柏木脑” 的相关文章](#)

▶ 本文作者相关文章

- [叶舟](#)
- [林文雄](#)
- [陈伟](#)
- [俞新妥](#)