



一株产抗菌物质链霉菌的筛选及鉴定

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Isolation and identification of a strain of Streptomyces with antimicrobial activity

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摘要 从土壤中分离到一株对棉花黄萎病菌 (*Verticillium dahliae*) 有较强拮抗作用的链霉菌菌株HCCB10124, 研究其拮抗性表明, 对10种常见的病原真菌和部分细菌有拮抗作用, 但对植物病原性真菌的抑制效果高于细菌. 其形态特征、培养特性、生理生化特性、细胞壁组分与链霉菌属中的白网链霉菌 (*Streptomyces albireticuli*) 相同, 16S rDNA序列的同源性达99%. 根据多项分类原则和系统进化树的构建分析, 将该菌株初步归属于白网链霉菌.

关键词: 白网链霉菌 链霉菌HCCB10124 抑菌活性 筛选鉴定 白网链霉菌 链霉菌HCCB10124 抑菌活性 筛选鉴定

Abstract: A strain HCCB10124 was isolated from the soil against pathogenic fungus *Verticillium dahliae*. The growth of 10 plant pathogens and some bacteria were strongly inhibited by strain HCCB10124 on PDA plate, but unobvious effects on bacteria comparatively. The morphology, cultural characteristics, physiological and biochemical properties, chemotaxonomy and 16S rDNA sequences of this strain were studied. The results exhibited that the homology of 16S rDNA between *Streptomyces* strain HCCB10124 and *Streptomyces albireticuli* reached 99%. A phylogenetic tree was constructed by comparing with the published 16S rDNA sequences of the related species. According to the multiclassification principle and the phylogenetic analysis, the *Streptomyces* strain HCCB10124 should be nomenclatured as *Streptomyces albireticuli*.

Key words: *Streptomyces* strain HCCB10124 antimicrobial activity screening and identification *Streptomyces albireticuli* *Streptomyces* strain HCCB10124 antimicrobial activity screening and identification

收稿日期: 2009-03-18;

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引用本文:

汪学军, 闵长莉, 陈代杰. 一株产抗菌物质链霉菌的筛选及鉴定[J]. 华东师范大学学报(自然科学版), 2010, 2010(2): 134-140.

WANG Xue jun, MIN Chang li, CHEN Dai jie. Isolation and identification of a strain of *Streptomyces* with antimicrobial activity[J]. Journal of East China Normal University(Natural Sc, 2010, 2010(2): 134-140.

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