

記錄 編號	6311
狀態	NC094FJU00105004
助教 查核	
索書 號	
學校 名稱	輔仁大學
系所 名稱	生命科學系
舊系 所名 稱	
學號	493546053
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論文 名稱 (中)	台灣溫泉區新穎嗜熱性 alphaproteobacteria 之研究
論文 名稱 (英)	Studies on novel thermophilic alphaproteobacteria isolated from hot springs in Taiwan
其他 題名	
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校內 全文 開放 日期	
校外 全文	

開放日期	
全文不開放理由	
電子全文送交國圖.	
國圖全文開放日期.	
檔案說明	
電子全文	
學位類別	碩士
畢業學年度	94
出版年	
語文別	中文
關鍵字(中)	嗜熱性細菌
關鍵字(英)	alphaproteobacteria hot springs
摘要(中)	<p>本實驗取自丹大溫泉、鹿角坑溫泉、四稜溫泉及烏來溫泉的樣區水中，經篩選分離、培養在 50 oC 後，發現上述四個樣區的溫泉水中皆可篩選出 12 株相近粉紅色的細菌，將這些細菌的 16S rDNA 保守序列片段與 NCBI databases 資料庫比對。經過初步的基本測試後，挑選了編號 NTU-400、NTU-402、NTU-1162、NTU-1290、NTU-1611 五株菌株來做研究。根據形態、生理、生化實驗及 16S rDNA 序列結果分析可將這五株菌分為兩群，此兩群菌株彼此間相似度為 92.5 % ~ 93.4 %。第一群包括 NTU-400、NTU-402，此兩株菌為粉紅色菌落革蘭氏陰性球菌，與 <i>Roseomonas gilardii</i> ATCC49956T 16S rDNA 相似度分別為 94.3 % 及 94.2 %，且彼此之</p>

	<p>間的相似度為 99 %，DNA G+C 含量為 68.6 及 70.2 mol%；第二群包括實驗菌株 NTU-1162、NTU-1290、NTU-1611 此三株菌為粉橘色菌落革蘭氏陰性短桿菌，與 <i>Roseomonas lacus</i> TH-G33T 16S rDNA 親緣相似度分別為 96.8 % 及 96.7 % 及 96.1 %，且彼此之間的相似度為 99.0 % ~ 99.7 % 之間，DNA G+C 含量為 60.4 ~ 64.1 mol%。所有分離株皆有運動性，單一鞭毛，且最適生長條件為 30 ~ 50 oC，pH 5 ~ pH 12；在酵素的測試方面，皆有很強的氧化?反應、觸?活性 alkaline phosphatase、esterase。脂肪酸組成多以 16:0、18:0、18:1 為主；在抗生素抗性的測試部份，所有的菌株對於抑制細胞壁合成之抗生素 vancomycin，抑制細胞膜功能之抗生素 polymyxin B、colistin 及抑制核酸合成之抗生素 nalidixic acid 有較好的抗性。藉由本實驗鑑定的結果建議：第一群實驗菌株 NTU-400 與 NTU-402 可分類為 alphaproteobacteria 的新菌屬；而第二群實驗菌株 NTU-1162、NTU-1290、NTU-1611 則分類為 <i>Roseomonas</i> 屬中另一新菌種。</p>
<p>摘要 (英)</p>	<p>In this study, the samples of hot springs CL, WR, LGK, DD were serially diluted, spread on modified <i>Thermus</i> medium and further incubated at 50 oC. In total, 12 strains were obtained from 4 hot spring samples. The 16S rDNA sequences of 12 strains were determined, and then analyzed in NCBI database of 12 strains. Five strains NTU-400, NTU-402, NTU-1162, NTU-1290, and NTU-1611 were selected to be representatives for further research, which demonstrated with 93 % ~ 94 % similarity of 16S rDNA sequences to <i>Roseomonas gilardii</i> ATCC49956T. According to the 16S rDNA sequences and morphological, physiological, and biochemical experiments, the isolated strains can be clustered into two groups. The two groups showed 92.5 % ~ 93.4 % similarity of 16S rDNA sequences each other. Group I including experimental strains NTU-400 and NTU-402 showed 94.3 % and 94.2 % similarity to <i>Roseomonas gilardii</i> ATCC49956T respectively and 99.8 % each other. Both strains are Gram-negative, pink-pigmented, cocci and the DNA G + C contents were 68.6 and 70.2 mol% . Group II including NTU-1162, NTU-1290 and NTU-1611 strains showed 96.8 %, 96.7 % and 96.1 % similarity of 16S rDNA sequences to <i>Roseomonas lacus</i> TH-G33T respectively, and 99.0 % ~ 99.7 % each other. The strains are gram negative, orange-pigmented, rods and the DNA G + C contents are 60.4, 62.5 and 64.1 mol% . All the isolates have a single polar flagellum, the optimal growth temperature at 30 ~ 50 oC, PH 5 ~ 12 and maximal growth temperature at 55 oC. Oxidase, catalase, alkaline phosphatase and esterase are evidently positive. They are positive in reactions of β - hemolysis. The major compositions of cellular fatty acids are C16:0, C18:0 and C18:1. These isolates were resistant to the Vancomycin (30 μ g), Polymyxin (300 U), Colistin (10 μ g) and Nalidixic acid (30 μ g). According to the morphological, physiological and genetic results, the group I can be classified as a new genus of alphaproteobacteria, while group II can be a new species of genus <i>Roseomonas</i>.</p>
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論文 頁數	114
附註	
全文 點閱 次數	
資料 建置 時間	
轉檔 日期	
全文 檔存 取記 錄	
異動 記錄	M admin Y2008.M7.D3 23:18 61.59.161.35