

白藜蘆醇對綠膿桿菌之抑制效果研究

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摘要

本研究將市售50%與98%純度之白藜蘆醇 (resveratrol, 3,5,4'-trihydroxystilbene) 分別溶於含有不同濃度DMSO (Dimethyl sulfoxide) 之 10% 乙醇溶液中, 再進行其對綠膿桿菌(*Pseudomonas aeruginosa*) 之抑菌效果探討。研究結果顯示, 50% 與 98% 純度白藜蘆醇對綠膿桿菌具有相似之抑菌效果, 一般而言, 98% 純度白藜蘆醇的抑菌效果大於 50% 純度者, 但實際上其差異性不顯著, 在第 4 小時培養時間時, 其抑菌效果達到最佳狀態, 但與白藜蘆醇的添加濃度與純度似乎無任何關係; 白藜蘆醇的抑菌效果隨即降低, 在第 8~12 小時培養時間時, 其抑菌效果為最差, 而後其抑菌效果逐漸增加而至穩定狀態。另外, DMSO 添加濃度亦影響白藜蘆醇的抑菌效果, 其抑菌效果在 0.8% DMSO 添加濃度下達到最佳狀態, 但隨其添加濃度增加而有少許下降趨勢。最後, 若以 1.0 mg/ml 白藜蘆醇添加於含有 0.8% DMSO 之 10% 乙醇溶液中, 白藜蘆醇對綠膿桿菌的抑菌效果可能達到最佳狀態。

關鍵詞: 白藜蘆醇、綠膿桿菌、抑菌活性、濃度

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