

# 苯丙胺酸與丙胺酸添加對白殭菌素產量影響之探討

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## 摘要

本研究以搖瓶培養方式進行，以苯丙胺酸-丙胺酸添加的二次交叉試驗法探討本土白殭菌(*Beauveria bassiana* A1)生成白殭菌素(beauvericin; BEA)產量所需之最適胺基酸添加組合及其最適濃度之試驗。先前回應曲面法試驗的結果顯示，當以25.0 g/L 葡萄糖、10.0 g/L NZM broth、5.0 mL/L 玉米萃取液及2.0 g/L 磷酸氫二鉀為培養基質時，且此基質初始酸鹼值為pH 5.7，在26 溫度下，以150 rpm振盪培養六天後，白殭菌BEA產量為1.34 mg/L；若上述培養基質經苯丙胺酸-丙胺酸添加的二次交叉試驗法探討後，實驗結果發現，唯有單獨添加0.2 g/L 苯丙胺酸於培養基質時，其BEA產量可提高至2.74~2.99 mg/L。然而，丙胺酸添加可能對白殭菌BEA產量有抑制作用。

關鍵詞：白殭菌、白殭菌素、苯丙胺酸、丙胺酸

## 目錄

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