

抗真菌轉基因西瓜之分子分析

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摘要

西瓜為葫蘆科雙子葉植物，並且在熱帶及亞熱帶地區是一種重要的經濟蔬果。真菌病害時常導致嚴重的經濟損失，而殺真菌劑是一般控制西瓜真菌性病害的方法。在考慮殺真菌劑會對於環境生態系統產生有害及不安全的影響，利用轉基因抵抗真菌是一種更好且合適的控制真菌病原的方法。在先前的瓶內接種立枯絲核菌試驗中發現，轉基因西瓜品系具有來自木瓜的抗真菌蛋白基因(Cp-AFP3)或結合抗真菌蛋白與幾丁質分解?基因(Cp-AFP3-CHI)，對於立枯絲核菌是具有抗性的。利用RT-PCR分析AFP3基因及chitinase基因的轉錄表現，並且利用西方墨點法分析chitinase 的蛋白質表現。表現抗性的株系其蛋白質的表現量較高。

關鍵詞：抗真菌蛋白、幾丁質分解?、基因轉殖

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