

題名:Analysis of Destruxins Produced from *Metarhizium anisopliae* by
Capillary Electrophoresis

作者:劉正民

Liu CM; Huang SS; Tzeng YM;

貢獻者:醫學檢驗暨生物技術學系

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摘要:Destruxins are insecticidal metabolites of a fungus, *Metarhizium anisopliae*. These metabolites are usually secreted into the culture medium during growth. The structure of destruxins is classified as being a cyclic hexadepsipeptide. More than 35 different destruxins have been characterized with a wide range of insecticidal activities. In this report, the destruxins are extracted by acetonitrile and crystallization by lyophilization. The final crystal is subjected for capillary electrophoresis analysis. Because destruxins are relatively hydrophobic compounds, micellar electrokinetic capillary chromatography is used in this series of experiments. The borate-based running buffer is optimized according to (1) boric acid concentration, (2) sodium dodecyl sulfate (SDS) concentration, (3) acetonitrile concentration, and (4) the pH of the running buffer. Optimization is based on resolution and running speed. The results indicate that 20 mM boric acid with 40 mM SDS plus 10% acetonitrile with pH 9.24 is the best set of conditions for both resolution and running speed.