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**Effective degradation of aflatoxin B₁ using a novel thermophilic microbial
consortium TADC7**

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Abstract

We constructed a novel thermophilic microbial consortium, TADC7, with stable and efficient aflatoxin B₁ (AFB₁) degradation activity. The microbial consortium degraded more than 95% of the toxin within 72 h when cultured with AFB₁, and the optimum temperature was 55–60 °C. TADC7 tolerated high doses of AFB₁, with no inhibitory effects up to 5000 µg L⁻¹ AFB₁; moreover, the degradation kinetics fit well with the Monod model. The proteins or enzymes in the TADC7 cell-free supernatant played a

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