

环境工程 地理学

## 一株高效高温菌的筛选初步鉴定和性质研究

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收稿日期 2007-12-1 修回日期 2008-2-25 网络版发布日期 2008-6-17 接受日期 2008-6-17

**摘要** 从高温堆肥物料中通过平板培养法分离、纯化并筛选出一株高效高温菌YB16.YB16具有同时分解淀粉、蛋白质、油脂和纤维素等大分子有机物的能力.经鉴定YB16为革兰氏阳性, 杆状, 有芽孢, 好氧, G+Cmol%为50.66%, 初步鉴定YB16属于芽孢杆菌属.pH生长范围为 6.0~9.0, 最适生长温度为65 ℃左右.

**关键词** [高温菌](#) [鉴定](#) [芽孢杆菌](#) [降解能力](#) [G+C mol%](#)

分类号 [Q948](#)

## Screening identification and properties of a strain of thermophilic bacterium with strong degradation ability (Chinese)

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### Abstract

A strain of thermophilic bacterium with strong degradation ability named YB16 was plate-screened from thermophilic compost materials. The selected strain can decompose organic macromolecules such as starch, protein, lipid and cellulose simultaneously. YB16 was aerobic, Gram positive, rod, and formed spore and capsule. The results of DNA UV absorbency showed that G+C mol% of YB16 was about 50.66%. It was considered to be a variety of *Bacillus* sp. YB 16 grew well at pH6.0~9.0. The optimal growth temperature was about 65 ℃.

**Key words** [thermophilic bacteria](#) [identification](#) [Bacillus sp.](#) [degradation ability](#) [G+C mol%](#)

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