



## [\[Screening of Bacillus sp. strains to produce thermostable alpha-amylase\]](#)

<https://arctichealth.org/en/permalink/ahliterature85142>

Source: Mikrobiol Z. 2007 Sep-Oct;69(5):26-34

Language: Ukrainian

Publication Type: Article

Abstract: Fifteen thermostable alpha-amylases have been obtained as a result of screening of 76 Bacillus sp. strains, isolated from different natural substrates. They have shown 30-100% of their activities after 60 min of incubation at 100 degrees C. Seven thermostable a-amylases demonstrated 100% of their activities after 60 min of incubation at 100 degrees C. These enzymes showed maximal activities at pH 9.0 and exhibited 10-30% of activities at pH 11.0 and 12.0. These properties make them promising for future research and possible practical use. In this paper we have proposed a modified iodometric method for measurement and calculation of alpha-amylases activity. The influence of ammonium sulfate on protein concentration measurement by Bradford method was demonstrated and a necessity of dialysis after precipitation with ammonium sulfate was proposed.

PubMed ID: 18217351 [View in PubMed](#) 