

Charakterystyka bakterii rodzaju *Thermus* i ich przydatność w biotechnologii

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Characterization of bacteria of the genus *Thermus* and their biotechnological importance

Summary

Gram-negative, aerobic bacteria of the genus *Thermus* which have been isolated from many natural and artificial, thermal environments are used as a source of thermostable restriction nucleases and DNA polymerase, as well as can be exploited for the production of many other enzymes with a great industrial importance. The strains belonging to the genus *Thermus* utilize carbohydrates, amino acids, carboxylic acids and peptides and their optimal growth temperatures ranged from 55 to 85°C. This review is focused on the adaptation of *Thermus* strains to thermostability and on characterisation and possible application of their enzymes.

Key words:

genus *Thermus*, thermozymes, thermophiles, peptydoglycan, glycosidases, trehaloze synthase.

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