

TECHNOLOGY OF DETERMINATION OF THE EFFECT OF ANTIBIOTICS ON THE INDUSTRIAL STRAINS BY THE DISK DIFFUSION METHOD.

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The actuality of this topic is due to much interest has been to industrial biotechnology, which is often associated with reduced energy consumption, greenhouse gas emissions, and waste generation, and also may enable the paradigm shift from fossil fuel-based to bio-based production of value-added chemicals

The fundamental force that drives the development and implementation of industrial biotechnology is the market economy, as biotechnology promises highly efficient processes at lower operating and capital expenditures. Still there are major problems in the production, like the use of antibiotics, and a large number of extracellular proteases, which attack secreted cloned foreign proteins [1].

Bacillus strains continue to be the dominant enzyme-producing microorganisms in applied and industrial microbiology, there also are other strains of industrial microorganism, which can be used to get renown in industrial biotechnology, and market itself. These organisms can be an important source of industrial products, which can be used in all branches of industry, because of the proven capability of these species to produce and secrete gram quantities per litre of enzymes, biofuel, and proteins, they have been considered as potential saviours of the economy.[2]

Increasing demand on the rapidly depleting petroleum resources, and the increasing awareness on the harmful effects of the toxic and greenhouse gases generated by burning petroleum have resulted in an interest in alternative fuels. While bioethanol is being considered actively as a gasoline alternative or supplement, there is also a renewed interest in butanol produced using the biological route, though the ways of the synthesis are not ideal, they can be used already as a start for brighter future .[3]

The article analyzes scientific works and international experience in studying the properties of antibiotics on industrial strains of microorganisms, which can improve already known routes of synthesis of useful products.

References:

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