

Biological feedstocks in industrial biotechnology

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Abstract

Industrial biotechnology, also known as white or environmental biotechnology, is the application of nature's toolset to the production of bio-based chemicals, materials, and fuels. Industrial biotechnology has become much more broadly applicable due to recently developed genetic techniques. The techniques are used to produce various biomass and high-performance organisms to produce target materials. Today, corn wet and dry mills, and pulp and paper mills are examples of biorefinery facilities that produce some combination of food, feed, power, and industrial and consumer products.

Top ten value added chemicals from biomass were selected and investigated the prospects of manufacture and marketability. It is expected that increased profitability makes it more attractive for new bio-based companies. And increased productivity and efficiency can also be achieved through operations that lower the overall energy intensity of the biorefinery, and maximize the use of all feedstock components, byproducts, and waste streams.

References

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