The impact of enzyme technology in food processing.

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Introduction

The lowering the activation energy required to initiate numerous biochemical reactions, enzymes act as biocatalysts. It plays an important role throughout the life cycle of fruits and vegetables. After harvesting, they remain active and can be undesirably degraded in organoleptic and nutritional value. In the processing of fruits and vegetables, enzymes are often used to hydrolyze various polysaccharides and extract various intracellular compounds.

Traditional textile wet processing industries produce hazardous waste and use large amounts of fresh water, non-renewable energy, and hazardous chemicals that cannot be broken down in the body. This has a negative impact on product quality, the environment and human health. This chapter describes. Advances in manufacturing technology for bioprocessing fiber enzymes, ideal conditions for achieving high activity/ functionality and stability, contaminant management, potential utility in source reduction and/or end processing, and fiber and/or chemical fibers [1].

Enzymatic hydrolysis of pretreated lignocellulosic biomass is an ideal alternative to acid hydrolysis for bioethanol production. This is primarily limited by pretreatment requirements and economic considerations arising from enzyme production costs and specific activities. The intensive use of fresh water, non-renewable energy, non-biodegradable hazardous chemicals and the subsequent generation of hazardous waste in the traditional wet textile processing industry are critical to product quality, ecosystems and human health. have a serious negative impact[2].

India's pulp and paper industry is one of the fastest growing industries in the country and has seen tremendous growth in recent years. Government policies create ongoing pressure on the paper industry to maintain a clean and green environment at all costs. Enzymes act as biocatalysts in numerous biochemical reactions by lowering the activation energy required to initiate these reactions. It plays an important role throughout the life cycle of fruits and vegetables. They remain active after harvesting and can have undesirable effects on organoleptic and nutritional value. widely used in the processing industry [3].

Enzymatic hydrolysis of pretreated lignocellulosic biomass is an ideal alternative to acid hydrolysis for bioethanol production, which arises mainly from pretreatment requirements and enzyme production costs and specific activities. Limited by economic considerations. The search for a cheaper and better enzyme took many years[4].

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