REDUCTION OF AGRICULTURE WASTAGE TO ETHANOL BY SOLID STATE FERMENTATION

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Nowadays environment contaminations are one of the most important problems for human. A large amount of the contaminations are related to agriculture wastages.

Waste date is one of the environmental contaminations.

In this paper, ethanol was produced from waste date by solid state fermentation process. The microorganisms that have been used in this process are yeast, fungi, and bacteria. In comparison with other microorganisms, yeast has a high resistance against variation in environment conditions.

In this study, the effect of humidity, Nitrogen and phosphor sources on ethanol production have been studied. The results show that the optimum amount of humidity is 80% and the maximum rate of ethanol production observed at the first day.

The optimum concentrations of $(NH_4)_2SO_4$ and K_2HPO_4 are 2gr/l and 9 gr/lit respectively.