

Pretreatment of Sugar Cane Molasses for Improved Carotenoid Production

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The influence of metal-chelating agents on carotenoid production from sugar cane molasses by *Rhodotorula glutinis* was studied. Potassium ferrocyanide pre-treated molasses caused an increase in the final carotenoid production of about 38% with respect to control culture. When EDTA was added as possible as early stage of cultivation under the condition without any pretreatment of molasses, it had stimulatory effect on the production of carotenoid, whereas, the addition of ferroncyanide in the cultivation resulted in the inhibition of cell growth significantly, followed the depression of carotenoid production. Optimum concentration of EDTA was 0.05% for the maximum production of carotenoid, molasses medium broth contained a number of cations which could be reduced by PFC pretreatment techniques.