



Production of yeast protein by cultivation of different species in molasses enriched whey

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Yeasts were the first microorganisms known, the best studied and generally best accepted by consumers, Yeasts are rarely toxic or pathogenic and can be used in human and animal diets. Although their protein content rarely exceeds 60%, their concentration in essential amino acids such as lysine, tryptophan and threonine is satisfactory. This research was carried out to produce single cell protein (SCP) in whey and whey with different concentration of molasses (0, 10, 20, 30 and 40%) by *Kluyveromyces Fragilis*, *Candida Pesdutropicalis*, *Sacchomyces Cerevisi* and *Candida Intermedia* yeasts. For this purpose 1ml of 10^{-3} dilute of each grown yeast in sabouroud dextrose broth was added to each experimental culture and then the cultures were incubated and cell culture and lactose determination according to growth time were carried out and biomass were measured finally. The results showed that *Kluyveromyces Fragilis* yeast could have grown, consuming the lactose present in culture and producing considerable amount of biomass than other yeasts. By increasing the molasses concentration, the amount of biomass increased ($P < 0.05$). The amount of biomass produced was 16.2, 18.7, 19.2, 19.7 and 19.5 g/lit in 0, 10, 20, 30 and 40% of molasses.

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