# Studies on fermentative production of Beta Carotene from Phaffia rhodozyma

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## Abstract

Plating of the astaxanthin-producing yeast Phaffia rhodozyma on yeast-malt agar media containing different concentration of Beta-Ionone gave colonies with yellow orange pigment after 6 to 8 days of fermentation. Isolation of Beta-Carotene producing colonies were done, followed by testing for pigment production in shake flasks, demonstrated that pigment concentration were increased two-to five fold for Beta-Carotene content compared with the parental one.

It was found from our study that Beta-Carotene production was improved by addition of Beta-Ionone at concentration of about 10-4 and 2×10-4 after sixth day of fermentation. By using different carbon and magnesium source yield of Beta-Carotene content could be increased to higher level with sucrose 283.01 µg/g, ammonium sulphate (234.80 µg/g) and magnesium sulphate (218.65 µg/g).

## Biography

Bibhu Prasad Panda has completed his PhD from Jamia Hamdard, New Delhi India. He is currently working as Sr. assistant professor in Pharmacy at Jamia Hamdard, India. He has over 80 publications related to industrial biotechnology and nutraceutical. Conducted several project related to fermentation and nutraceutical development and international technology transfer.

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