

Improvement of Monacolin K. and Decreasing of Citrinin Content in Korkor 6 (RD 6) Red Yeast Rice

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Abstract : A strain of *Monascus purpureus* CMU001 was used to prepared red yeast rice from Thai glutinous rice Korkor 6 (RD 6). Adding of different amounts of histidine (156, 312, 625, and 1250 mg in 100 g of rice grains)) under aerobic and air limitation (air-lock) condition were used in solid fermentation. Determination of the yield as well as monacolin K content was done. Citrinin content was also determined in order to confirm the safety use of prepared red yeast rice. It was found that under air-lock condition with 1250 mg of histidine addition gave the highest yield of 37.40 g of dried red yeast rice prepared from 100 g of rice. Highest 5.72 mg content of monacolin K was obtained under air-lock condition with 312 mg histidine addition. In the other hand, citrinin content was found to be less than 24462 ng/g of all dried red yeast rice samples under the experimental methods used in this work.

Keywords : red yeast rice, Thai glutinous rice, monacolin K., citrinin

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