ABSTRACT

A’IMMATUL FAUZIYAH. Analysis of Potency and Nutrition Content of Rice Bran Cookies. Under direction of YAYUK FARIDA BALIWATI and SRI ANNA MARLIYATI

Rice bran, by product of rice milling, has a good nutrition content and potential as source of carbohydrate. The utilization of rice bran for human consumption is still limited. So far, it is used merely as feed. The objectives of this research were (1) to investigate the potency of rice bran, i.e. its availability and as source of carbohydrate, (2) to find the best formula of cookies, (3) to analyze nutrition content, fibre content, and antioxidant capacity of the best formula of cookies, and (4) to analyze cost production of cookies making. In 2009, rice bran availability in Indonesia was 8,700,290 ton or equal to 1,271,368 ton carbohydrate. The formula of cookies that accepted organoleptically is the cookies made by mixed of wheat flour : rice bran were 65 : 35%. Water, ash, protein, fat, and carbohydrate content (wet basis) of the best formula of cookies that made by substitution of wheat flour with conventional and functional rice bran were 3.21 and 2.94, 3.02 and 2.92, 7.32 and 6.46, 28.88 and 28.24, 56.26 and 58.31, respectively, and not different statistically except for carbohydrate content. Fibre content of both cookies formula were not significantly different and each was 9.78 and 10.53 (wet basis). Antioxidant capacity of its were 70.87% and 69.03%. AEAC of both formula of cookies was not significantly different and each was 27.06 and 32.13 mg. The price of its were Rp 58,837/kg and Rp 54,851/kg.

Keywords: Rice bran, cookies, potency, fibre content, capacity of antioxidant