ABSTRACT

IRMA MARLINA. Development of Artificial Rice From Breadfruit as Alternative for Food Diversification. Under Supervision of AHMAD SULAEMAN.

Consumption of rice as carbohydrate source in Indonesia was higher than many other countries, about 139kg/capita/years. In fact, Indonesia is rich of carbohydrate sources beside paddy rice such as tubers (taro, yam, casava, sweet potato), sago, corn, sorghum, barley and breadfruit. Breadfruit is one of potential carbohydrate source which may be uses to reduce the dependence of paddy rice and support food diversification.

The aim of this study was to develop artificial rice from breadfruit flour as carbohydrate source and soybean flour as protein source. Completely randomized design was applied in this experiment. The artificial rice was processed from mixture of breadfruit flour and soybean flour with five levels of soybean that added: 0, 10, 20, 30, and 40%. Sensory evaluation for color, aroma, taste, stickness and uniformity was carried out using semi-treated panelist.

There were significant differences in color, aroma, taste, stickiness, uniformity and overall acceptability of the artificial rice. Artificial rice with 30% soybean flour added was the most liked by the panelist. This formula contained higher protein and fat compared to paddy rice. Protein and fat content of this formula was 17.49% (wb) and 5.45% (wb). Carbohydrate content of artificial rice formula was 64.37% (wb) and energy content was 376 kal/100g or 115kal/100g cooked rice.

Keyword: Artificial rice, diversification, bread fruit.