ABSTRACT

THE EFFECT OF EXTRACT POWDER GREEN TEA (Camellia sinensis) AND BLACK TEA (Camellia sinensis (L.) O.K.) THE ADDITION OF STARCH DIGESTIBILITY AND ANTIOXIDANT ACTIVITY PROPERTIES OF FUNCTIONAL RICE

By

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Rice as a staple food can also be used as a raw material for functional food. By using certain cooking technique, rice can be developed into functional food. One method for procesing rice into functional rice an addiing tea pholypenol during cooking. This method has an advantage of lowering the starch digestibility of the rice. This low digestible rice is very potential diet for people suffering from diabetes mellitus. This study was intented to find the optimal concentration of tea that caused the lowest starch digestibility of functional rice. The study was designed as factorial experiment and arranged in a Complete Randomized Block Design (CRBD) with four replications. The first factor was the type of tea (T) consisted of green tea (T1) and black tea (T2). The second factor was the concentration of the tea (K) : (K1) 0%, (K2) 1%, (K3) 2%, (K4) 3%, (K5) 4%, and (K6) 5%. The homogenity and additivity of the data were tested using Barlett and Tuckey tests and continued tested using ANOVA, then further tested using contrast orthogonal and polynomials orthogonal of 1% and 5% level of significance. The result showed that the addition of green tea at concentration of 5% of was found to be the best treatment as indicated by the lowest starch digestibility and highest antioxidant activity. The overall acceptance of green tea-functional rice 3,6 (like).

Keywords : antioxidant, functional food, rice, starch, tea