ABSTRAKSI

Crawling cassava or sweet potato (Ipomoea batatas) is an agricultural commodity which has good prospect in future. Sweet potato has been traditionally cultivated among others gaplek (dried cassava) or flour, sweet potato chips, sweet potato kremes, getuk or compound of sweet potato, sweet potato pie trays, and tape sweet potato. In this study of sweet potato sweet potato purple and orange will be substituted in the manufacture buns so it is expected to increase the economic value of sweet potatoes, as well as a high source of antioxidants. With sweet potato substitution in making dumplings it will have have soft tekstur and have a nice flower power and can increase the nutritional value of the buns. This research was conducted in order to know the effect of sweet potato varieties on soil physical and chemical properties of sweet potato dumplings and to determine the effect of sweet potato paste (getuk) substitution percentage of its physical and chemical properties of sweet potato dumplings. This research conducted by using a factorial randomized block design with two factors which factor I is a sweet potato varieties (Beta I (orange sweet potato) and MSU-03028-10 (purple sweet potato). Factor II is the substitution rate of sweet potato paste that consists of 5 levels of (0%, 10%, 20%, 30%, 40%), in order to obtain 10 combinations with 3 replicates. Based on physical and chemical analysis of sweet potato dumplings, the best sweet potato quality is resulted from the combination of U1P2 and U2 P2. (MSU -03028-10) with the substitution level of sweet potato reaching 20% with 31.50% water content, anthosianin of 104.18 mg/100g), sugar reduction of 6.31%, the number of pores is 41.67 and its expansive power reaching 79.21% (after fermentation) and its second expansive power reaching 140.21% (after steaming). In U2P2 (Beta I, with its substitution level of 20% of sweet potato, it has water content of 32.27%, the total of carotene is 124.58 (mcg/100g), the sugar reduction of 7.32%, the number of pores of 37.67 and its expansive power of first stage (after fermentation) is 80.25% and its expansive power reaching (after steaming) is 136.53%.