## Abstract

The aim of this study was to determine the effect of substitution of wheat flour and purple yam flour on the physical quality, chemical quality, and sensory quality of roll cake. There were five treatments with three repetitions. Purple yam flour substitution rate is 0%; 15%; 30%; 45%; 60% in roll cake. The results showed that the roll cake had significant effect ( $\alpha$ =0.05) on the swelling power, hardness, and organoleptic test (hedonic and hedonic quality of aroma, color, taste, and texture). However, there was no significant effect ( $\alpha$ =0.05) on moisture content, ash content, protein content, fat content, and carbohydrate content. Roll cake with good results and still acceptable to the panelists was the subtitution of 15% purple yam flour with the parameters of the roll cake soft texture (score 4.3), the taste was slightly sweet (score 3.5), the smell was rather strong (score 2.5), and the color purplish yellow (score 2.2) with a hardness level of 6.6 N, swelling power of 78.76%, wate content (33.25%), ash content (0.90%), protein content (7.38%), fat content (26.52%), carbohydrate content (31.96%), dietary fiber content (2.86%), and anthocyanin content (42.37mg/kg).

Keywords: wheat flour, purple yam flour, roll cake.