ABSTRACT

Cassava (Manihot esculenta Crantz) is the primary commodity of carbohydrate following rice and corn. This stock is perceived inferior by the majority of the societies. In spite of it’s advantageous in creating many kinds of delicious food. The lower stock period and HCN content might be handled through processing cassava into flour. The major hindrance is that it lacks of expanding. Therefore, we have to give special treatment, either physically or chemical, in hope that the cassava flour may expand well. One proposed way is by using 1% lactate acid fermentation. The objectives of the study as follows: 1) To find out the duration of submerge differences toward the qualities of cassava flour, 2) To learn the cake quality toward the fermentation cassava flour proportion toward the use of wheat flour in the cake making.

This study conducted in two steps. First, the making of cassava flour by using fermentation to sink cassavas into 1% lactate acid level 5, and repeated three times by using group random design. Five level treatments are (A1 = TKF 12 hours), (A2 = TKF 24 hours), (A3 = TKF 36 hours), (A4 = TKF 48 hours), and (A5 = TKF 60 hours). In the second step, applying proportional factors of TKF (fermented cassava flour) and TT (wheat flour) toward cake making on 2 levels, B1 (TT 0%) and B2 (TT 50%). Therefore, we obtain 10 levels of treatment combinations and 1 control by using TT 100% without cassava flour.

The study has showed that the best result of fermentation treatment with the submerging 1% lactate acid was 36 hours (A3), with the water content 10.5%, starch 70.76%, ashes level 2.17%, sucrose content 32.42%, expansion level 741.88%, solubility 92.16%, viscosity 2644.44 mPas, the gross fiber 6.00%, HCN 0.85 mg/1000. The finest application on cake making was A5B2 (TKF 50% + TT 50%) examined of its texture and swell volume, whereas in the terms of color organoleptic, aroma and appearance, the best result taken from the combination of A3B2 (TKF 50% + TT 50%) and A4B1 (TKF 100%), slightly differs with the A0B0 (TT 100%) or control.