ABSTRACT

Choiru Nisa (0000002501)

UTILIZATION OF AMBON BANANA PEEL, KEPOK BANANA AND RAJA BANANA FOR KEFIR BEVERAGE

Banana peel has been to contain carbohydrates, proteins, fats, vitamins and minerals. The purpose of this research is the utilization of banana peel in the manufacture of kefir beverage. The combination of ratio skim milk (3.2 ml, 4.8 ml, 6.4 ml, 8 ml) and white sugar (3.2 gram, 4.8 gram, 6.4 gram, 8 gram). Kefir starter fermented for 12 hours. Added kefir starter as much as 4 ml on kefir beverage and fermented for 24 hours. The results showed the selected ratio is skim milk 6.4 ml and sugar 8 gram. Selected ratios were analyzed for toxicity test, proximate test, GC-MS test, food fiber test, antioxidant analysis, total phenolic analysis, total flavonoid, and organoleptic test. Banana peel kefir beverage, result of toxicity test 457.14 ppm, contains 88.86% of water, 0.39% of ash, 0% fat, 0.32% of protein and 10.43% of carbohydrate. Banana peel kefir beverage also contains total phenolic 578.18 mg GAE/L sample, total flavonoid 86.17 mg QE/L, IC₅₀ value that is 21262.1 mg/L. The highest GC-MS test results were 2-Propanone, 1,3-dihydroxy 16.40%, 5-Hydroxymethylfurfural 14.76%, and Lactic acid 9.48%. Based on the results of scoring and hedonic test, banana kefir beverage extract is still acceptable by panelists.

Keywords: kefir beverage, kefir grain, kefir starter, banana peel