ABSTRACT

This aims of this study was to determine soluble protein, fats, amino acids, and fatty acids profile of fermented sweet potato flour with red yeast rice during fermentation. Sweet potato flour was prepared through fermentation with addition 5% of red yeast rice and fermented for 0, 1, 2, 3, 4 days. The soluble protein and fat profiles were determined using Biuret and soxhlet methods, while the amino acid and fatty acid profiles were determined using UPLC and GC. The highest protein was obtained at the 3rd day fermentation with 11.89% while the highest fat profile was obtained at the 4th day fermentation with 2.49%. The third day fermentation period increases the profile of amino acids and fatty acid profiles. Increased amino acid is Aspartate, Glutamate, Serine, Glysin, Histidine, Arginine, Threonin, Alanine, Prolin, Tyrosine, Valine, Methionine, Cysteine, Isoleucine, Leucine, Phenyl Alanine, and Lysin. While the increased fatty acids are Linoleic Acid and Linolenic Acid.

Keywords: sweet potato, red yeast rice, protein, and fat