ABSTRACT

Vira Anggraeni. 24020120120010. **Diversification of Bogor Bean Tempeh (Vigna subterranea) with the Addition of Red Yeast Rice: Analysis of Antioxidants, Quality and Nutritional Content.** Guided by Arina Tri Lunggani dan Endang Kusdiyantini.

Bogor Bean Tempeh with the addition of red yeast rice is a fermented product with the addition of red yeast rice as a starter. Starter is one of the important players in the fermentation process. Fermented products by microbes generally have the potential as antioxidant agents such as tempeh. Bogor beans are one of the alternative food ingredients that have not been utilized properly by the community. This study has diversified products in the form of Bogor bean tempeh with the addition of red yeast rice of 2%, 3%, and 4%. The parameters tested were antioxidant activity with the DPPH method on a spectrophotometer with a wavelength of 517 nm, proximate content test (protein, fat, ash, water, carbohydrates), and organoleptic test (aroma, color, texture) with the hedonic method. The data obtained were analyzed using a normality test, ANOVA with a confidence level of 95%. The results showed that Bogor bean tempeh had the strongest antioxidant activity with an IC_{50} of 19.7567 ppm, namely with the addition of 4% red yeast rice concentration. IC_{50} is a concentration that provides 50% free radical inhibition. Organoleptic tests showed that Bogor peanut tempeh with the addition of red yeast rice had better consumer acceptance compared to Bogor peanut tempeh without the addition of red yeast rice.

Keyword : Antioxidants, Tempeh, Bogor Beans, Red Yeast Rice, DPPH