Sensory, Physicochemical and Antioxidants Evaluation of Kecombrang (Etlingera elatior) Preservative Powder with Foam-mat Drying Method for Beef Meatballs Products

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Abstract	This study aims to determine the effect of the type and concentration of preservative powder with foam-mat drying method to produce optimal beef meatballs products seen from the chemical, sensory, and antioxidant evaluation. This study used an experimental method with a randomized block design with the factors being studied were the type of powder of kecombrang plant parts, namely flowers and stems with the concentrations used, namely 0%, 1%, 2%, and 3%. Physicochemical analysis was performed on moisture content, pH, and total protein hydrolyzed (Formol test). The sensory evaluation was carried out by 25 trained people using the descriptive and hedonic testing methods on a scale of 1-5 (very dislike to very much like). Meanwhile, the best treatment from the results of physicochemical and sensory evaluation was analyzed of bioactive compounds (antioxidants) was carried out on total flavonoids and total phenols. The results showed that the best treatment combination was the type of flower preservative with a concentration of 2% which had characteristics with an average moisture content of 57.19 ÃƒÂ,Ã‚Â± 5.71%, pH 7.1 ÃƒÂ,Ã‚Â± 0.21, hydrolyzed protein content (Formol) 1.40 ÃƒÂ,Ã‚Â± 0.35%, whitish-gray color (2.72 ÃƒÂ,Ã‚Â± 1.40), scents of meat and kecombrang (3.64 ÃƒÂ,Ã‚Â± 0.49), slightly chewy texture (3.52 ÃƒÂ,Ã‚Â± 0.65), flavored with meat and kecombrang (3.68 ÃƒÂ,Ã‚Â± 0.75), is rather preferenced by panelists (3.12 ÃƒÂ,Ã‚Â± 0.97), and results of antioxidants evaluation were total flavonoids 2.42 mg QE / 100 mg, total phenolic 179.53 mg QE / 100 mg. The concentration of kecombrang flower and stems powder suitable for adding to beef meatballss is seen from the physicochemical and sensory evaluation up to 2%.
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