



**PERFORMANCE EDIBLE COATING CONTAINING OLEORESIN FROM GINGER EMPRIT (ZINGIBER OFFIVINALE VAR. AMARUM) AND ITS EFFECT ON CONSUMER PREFERENCE PROPERTIES**

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<https://doi.org/10.34302/crpfst/2019.11.3.15>

**Article history:**

Received:

1 January 2019

Accepted:

2 August 2019

**Keywords:**

*Ginger Oleoresin;*

*Food Microbiology;*

*Shelf life;*

*Edible;*

*Meatball.*

**ABSTRACT**

Ginger oleoresin (GO) as natural compounds becoming widely used to edible film, and coating for extending shelf life product. The objective of this study was to investigate the performance oleoresin and accept of consumer sensory properties from ginger emprit. Preliminary UHPLC-MS assay analysis showed that most components of oleoresin (24.7%) geranial and then gingerdione (10.2%). The methods were active concentration 1%, 1.5% and 2% (wt) GO applied onto edible coating toward beef meatballs. The resulting minimum inhibitory showed GO 1.5% was the optimum concentration against Gram-positive bacteria (*S. aureus*) 4.3 mm and Gram-negative bacteria (*Salmonella*) 0.5 mm. During the storage period, minimum meatballs quality was determined based on microbiological (Total Plate Count/TPC) and pH. Meatballs with edible containing GO 1.5% preserve the best quality with resulted in 1.83 log reduction of TPC and average pH value at 5.7. On sensory properties, the attribute was colour, taste, flavour intensity, juiciness, and hardness. Only 2% GO concentration has a negative effect on colour.