

PENGARUH INJEKSI EMULSI MINYAK JAGUNG (*Zea mays*) TERHADAP KUALITAS KIMIA DAN SENSORIS STEAK *MELTIQUE* DAGING SAPI PERANAKAN ONGOLE

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INTISARI

Penelitian ini bertujuan untuk mengetahui kualitas kimia dan sensoris *steak* daging sapi lokal yang diinjeksi dengan emulsi minyak jagung dalam pembuatan daging *meltique*. Bahan pembuatan daging *meltique* meliputi daging sapi Peranakan Ongole (PO), minyak jagung, air, *Isolate Soy Protein* (ISP), dan pewarna makanan putih. Perlakuan dalam penelitian ini adalah injeksi emulsi minyak jagung dengan total injeksi 0; 54,6; 81,9; dan 109,2 gram; serta terdapat kontrol positif berupa daging *meltique* komersial yang diinjeksi dengan minyak kanola, dengan empat kali pengulangan. Parameter yang diamati yaitu kualitas kimia antara lain kadar air, protein, lemak, dan kolagen, serta kualitas sensoris antara lain warna, aroma, rasa, tekstur, dan daya terima. Analisis data uji kualitas kimia menggunakan analisis variansi Rancangan Acak Lengkap (RAL) pola searah dan dilanjutkan dengan uji *Duncan New Multiple Range Test* (DMRT). Analisis data uji sensoris menggunakan uji *Kruskal Wallis Test* dan dilanjutkan dengan uji *Mann-Whitney*. Injeksi emulsi minyak jagung memberikan pengaruh ($P < 0,05$) pada kadar air, protein, lemak, dan kolagen. Nilai kualitas kimia terbaik pada total injeksi emulsi 81,9 gram dengan kadar air 70,81%; protein 22,85%; lemak 5,13%; dan kolagen 2,08%. Injeksi emulsi minyak jagung memberikan pengaruh ($P < 0,05$) pada rasa, tekstur, dan daya terima. Nilai kualitas sensoris terbaik pada total injeksi emulsi minyak jagung 81,9 gram dengan skor rasa 6,56; tekstur 6,56; dan daya terima 6,67. Kesimpulan dalam penelitian ini menunjukkan bahwa injeksi emulsi minyak jagung dalam pembuatan *steak meltique* terhadap kualitas kimia dan kualitas sensoris terbaik terdapat pada total injeksi emulsi minyak jagung 81,9 gram karena menurunkan kadar air, meningkatkan kadar protein, lemak, dan kolagen, serta menghasilkan kualitas sensoris yang terbaik.

Kata kunci: *Steak*, Daging *Meltique*, Emulsi, Minyak Jagung, Kualitas Kimia, Sensoris, Daging Sapi Peranakan Ongole.

THE EFFECT OF CORN OIL EMULSION (*Zea mays*) INJECTION ON THE CHEMICAL AND SENSORY QUALITIES OF ONGOLE CROSSBRED MELTIQUE BEEF STEAK

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ABSTRACT

The research aimed to determine the chemical and sensory quality of local beef that are injected with the emulsion of corn oil in meltique meat. The ingredients for making meltique meat include the ongole (PO) beef, corn oil, water, Isolate Soy Protein (ISP), and opaque white food coloring. The treatment in this research has been an injection of corn oil emulsion at total injection of 0; 54.6; 81.9; And 109.2 grams and there is a positive control of commercial meltique meat injected with canola oil, with four times the repetition. The parameters observed were chemical quality are moisture, protein, fat, and collagen, as well as sensory qualities such as color, aroma, taste, texture, and acceptability. The chemical quality test data was conducted using a unidirectional Completely Randomized Design (CRD) analysis of variance followed by the Duncan New Multiple Range Test (DMRT). The sensory test data were analyzed using the Kruskal Wallis Test and followed by the Mann-Whitney Test. The Injection of corn oil emulsion effects ($P < 0.05$) on moisture, protein, fat, and collagen. The best chemical quality results were obtained at total of 81.9 grams of corn oil emulsion injection, with a moisture content at 70.81%; protein at 22.85%; fat at 5.13%; and collagen at 2.08%. The injection of Corn oil emulsion had a significant effects ($P < 0.05$) on taste, texture, and acceptability. The best sensory quality values were observed at total of 81.9 grams of corn oil emulsion injection, with taste at 6.56; texture at 6.56; and acceptability at 6.67. The conclusion of this research indicates that the optimal total emulsion injection of corn oil emulsion in the meltique steak, resulting in the best chemical and sensory quality, is found at 81,9 grams total injection. This total emulsion injection lowering moisture levels, increased protein, fat, and collagen, and produced the highest sensory qualities.

Keywords: Steak, Meltique Meat, Emulsion, Corn Oil, Chemical Quality, Sensory, Ongole Breed.