# PENGARUH KONSENTRASI EKSTRAK DAUN KENIKIR (*Cosmos caudatus* Kunth) DAN LAMA PERENDAMAN DAGING KAMBING TERHADAP SIFAT KIMIA, FISIK, TINGKAT KESUKAAN *NUGGET*

## INTISARI


Daging kambing merupakan salah satu bahan pangan asal ternak hewani yang sangat bermanfaat bagi manusia, karena memiliki nilai gizi yang tinggi yaitu kaya akan protein, lemak, vitamin dan mineral. Daging kambing bergizi tinggi, namun tekstur daging kambing keras dan alot serta baunya yang khas sehingga membatasi bentuk pengolahannya. Hal ini mempengaruhi penerimaan masyarakat untuk mengkonsumsi daging kambing. Salah satu tanaman yang mengandung enzim protease yaitu kenikir (*cosmos caudatus kunth*). Oleh karena itu perlu dilakukan perendaman daging kambing dalam ekstrak daun kenikir pada pengolahan *nugget* untuk mengempukkan daging. Tujuan dari penelitian ini adalah untuk mengevaluasi pengaruh konsentrasi ekstrak kenikir dan lama perendaman terhadap sifat kimia, fisik dan tingkat kesukaan *nugget* daging kambing.

Penelitian ini menggunakan rancangan acak lengkap (RAL) dua faktor yaitu konsentrasi kenikir (15%, 20%, 25%) dan lama perendaman (45 menit dan 60 menit). Analisis kimia *nugget* kambing meliputi kadar air, abu dan protein. pengujian fisik *nugget* meliputi daya ikat, susut masak, tekstur, dan warna. Sifat organoleptik diuji berdasarkan tingkat kesukaan. Data yang diperoleh dianalisis statistik dengan tingkat kepercayaan 95% dan dilanjutkan *Duncan Multiple Range Test* (DMRT) jika terdapat perbedaan nyata.

Hasil penelitian menunjukkan bahwa konsentrasi kenikir dan lama perendaman berpengaruh nyata terhadap sifat kimia, fisik dan tingkat kesukaan *nugget* daging kambing. Penentuan sifat kimia dan fisik berdasarkan *nugget* paling disukai yaitu pada perlakuan 15% dengan lama perendaman 45 menit. Hasil kadar air *nugget* yaitu sebesar 61,02 (%bb), kadar abu sebesar 3,93 (%bb), protein sebesar 14,33 (%bb). Sifat fisik daya ikat air sebesar 60,11 (%), susut masak sebesar 6,69 (%), tekstur sebesar 523,45 (g), warna berdasarkan kecerahan terbaik 46,71 (L) yaitu tidak terlalu hijau.



**Kata kunci :** Daging kambing, *nugget*, kenikir, enzim

# THE EFFECT OF MISCHIEVOUS (*Cosmos caudatus* Kunth) LEAVES EXTRACTS CONCENTRATION AND SOAKING TIME OF GOAT MEAT ON THE CHEMICAL PROPERTIES PHYSICAL AND PREFERENCE LEVEL OF NUGGET


## ABSTRACT

Mutton is one of the food ingredients of animal origin that is very beneficial for humans because it has high nutritional value, rich in protein, fat, vitamins and minerals. Mutton is highly nutritious, mutton has a hard and tough texture and a distinctive smell that limits the processing form. Those characteristics affect people's reception to consume mutton. One of the plants containing protease enzymes is kenikir (Cosmos caudatus kunth). so it is necessary to soak the mutton in kenikir leaf extract, which contains protease enzymes that can tenderize the meat. This research aims to determine the effect of the concentration of kenikir extract and the length of immersion time on the chemical, physical and level of preference of mutton nuggets.

This research used a completely randomized design (CRD) with two factors, namely the concentration of kenikir (15%, 20%, and 25%) and the length of immersion time (45 minutes and 60 minutes). The chemical analysis of mutton nuggets included moisture, ashes, and protein content, while the physical testing of nuggets includes binding capacity, cooking loss, texture, and colour. Organoleptic properties were tested based on the level of preference. The data obtained were statistically analyzed with a 95% confidence level and continued with the Duncan Multiple Range Test (DMRT) if there was a significant difference.

The results showed that the concentration of kenikir and the length of immersion time significantly affected the chemical, physical, and level of preference of mutton nuggets. Determination of chemical and physical properties based on the most preferred nugget is the 15% treatment with 45 minutes of immersion. The results of the nugget water content were 61.02 (% of wet basis), ash content was 3.93 (% of wet basis), protein content was 14.33 (% of wet basis). Physical properties of water holding capacity of 60.11 (%), cooking loss of 6.69 (%), the texture of 523.45 (g), colour based on the best brightness 46.71 (L), which is not too green.



**Keywords :** Mutton, nugget, mischievous, enzyme