# ABSTRAK

## PREDIKSI KADAR AIR DAGING KAMBING BERDASARKAN LUAS JEJAK AIR YANG DIHASILKAN DENGAN PENEKANAN 2 KILOGRAM

Wijdan Izdihar

Daging kambing memiliki kandungan lemak yang lebih rendah dibandingkan dengan daging domba dan daging sapi. Kandungan lemak daging kambing 45% lebih rendah dibandingkan dengan daging domba dan 50% lebih rendah dibandingkan dengan daging sapi. Kadar nutrisi pada daging kambing termasuk kadar air digunakan sebagai dasar penentuan kualitas daging kambing. Tujuan penelitian ini adalah untuk mendapatkan rumus fungsi linear dari luas jejak air untuk memperkirakan kadar normal air daging berdasarkan hasil uji tekan pada daging kambing yang diberi beban sebanyak 2 kilogram.

Metode tekan modifikasi merupakan sebuah metode untuk mendeteksi penambahan air pada daging dengan menekan daging menggunakan beban 2 kg pada sampel daging lima gram. Penekanan dilakukan pada suatu kertas saring di antara dua plat kaca selama lima menit. Jejak air yang terbentuk kemudian dihitung luasnya dengan menggunakan *planimeter*.

Hasil penelitian didapat rata-rata luas jejak air terlebar adalah sampel B8 dengan rata-rata luas jejak air sebesar 35,27 $cm^2$ memiliki kadar air sebesar 74,19%. Rata-rata luas jejak air terkecil adalah sampel B10 dengan rata-rata luas jejak air sebesar 10,99 $cm^2$ memiliki kadar air sebesar 71,34%.

Analisis nutrisi pada sampel daging kambing menunjukkan rata-rata kadar air dalam sampel sebesar 73,36±1,91, rata-rata kadar abu sampel sebesar 1,02±0,06, rata-rata kadar protein sampel sebesar 3,87±2,34 dan rata-rata kadar lemak sampel sebesar 20,27±0,61. Hasil analisis *Kolmogorov-Smirnov* menunjukkan bahwa data terdistribusi normal (P>0,05). Hasil analisis koefisien regresi didapat persamaan regresi linear Y = 69,039 + 0,177X. Hasil perhitungan dengan persamaan regresi didapatkan luas maksimal untuk mencapai kadar air maksimal adalah sebesar 39 $cm^2$ dengan kadar air sebesar 75,942%

Kata kunci : Daging kambing, nutrisi, *planimeter*, regresi linear, tekan.

# *ABSTRACT*

## PREDICTION OF GOAT MEAT WATER CONTENT BASED ON THE AREA OF WATER FOOTPRINT BY 2 KILOGRAMS PRESSURE

Wijdan Izdihar

Goat meat has lower fat compared to mutton and beef. Goat meat fat has 45% lower than mutton and 50 % lower than beef. Nutrient levels in goat meat included water content as the basis for determined the quality of goat meat. The purposed of this research was to obtain a linear function formula from the trace area to estimate the normal water content by pressing the goat meat with 2 kilograms load.

Modified of the pressed method could detected the addition of water in goat meat by pressed the sample with 2 kilograms load on 5 grams of sample. Pressured placed on a filter paper between two glass plates for five minutes. The water footprint area then calculated with the planimeter.

The results showed that the widest average water footprint area was B8 sample with an average water trace area of 35,27 $cm^2$ had a water content of 74,19%. While the smallest average water footprint was B10 with an average water footprint of 10,99 $cm^2$ had a water content of 71,34%.

Nutritional analyzed on goat meat samples showed that the average water content in the sample was 73,36 ± 1.91, the average ash content of the sample was 1,02 ± 0,06, the average protein content of the sample was 3,87 ± 2,34 and the average fat content of the sample was 20,27 ± 0,61. The results of the Kolmogorov-Smirnov analyzed showed that data was normally distributed (P>0,05). The results of the regression coefficient analyzed obtained a linear regression equation Y = 69,039 + 0,177X. The results of calculations with the regression equation obtained the maximum area to reach the maximum moisture content of 39 $cm^2$ with a moisture content of 75,942%.

Keywords : Goat meat, nutrition, planimeter, linear regression, press.