

## DAFTAR PUSTAKA

- Abustam, E. 2012. Ilmu Daging : Aspek Produksi, Kimia, Biokimia dan Kualitas. Masagena Press : Makassar.
- Afrila, A dan B. Santoso. 2011. *Water holding capacity* (WHC), kadar protein, dan kadar air dendeng sapi pada berbagai konsentrasi ekstrak jahe (*Zingiber officinale roscoe*) dan lama perendaman yang berbeda. Jurnal Ilmu dan Teknologi Hasil Ternak. 6 (2): 41- 46.
- Agustina, K.K., I.M.R.D Cahya., G.M. Widyantara., I.B.N. Swacita., A.A.G.O. Dharmayudha dan M.D. Rudyanto. 2017. Nilai gizi dan kualitas fisik daging sapi Bali berdasarkan jenis kelamin dan umur. Buletin Veteriner Udayana, 9(2) : 156-163.
- Armansyah, A., F. S. Ratulangi, dan G. D. G. Rembet. 2018. Pengaruh penggunaan bubuk jahe merah (*zingiber officinale var. rubrum*) terhadap sifat hedonik bakso daging kambing. Jurnal Zootek. 38 (1) : 93-101.
- Bahtiar., E. Abustam dan K. Kiramang. 2014. Pengaruh konsentrasi asap cair dan lama penyimpanan terhadap daya ikat air dan daya putus daging. Jurnal Ilmu-Ilmi Peternakan. 1 (3) : 191-200.
- Barata, Y.K., N.L.P. Sriyani dan A.A.P. Wibawa. 2022. Pengaruh lama marinasi bubuk kayu manis (*Cinnamomum burmannii*) terhadap hedonik daging sapi Bali. Majalah Ilmiah Peternakan. 25 (1) : 52-56.
- Darmayanti, E. Rianto, dan E. Purbowati. 2013. Pengaruh kualitas pakan terhadap keempukan daging pada kambing kacang jantan. Animal agriculture journal. 2 (4) : 56 – 62.
- Ernawati, F., N. Imanningsih., N. Nurjanah., E. Sahara., D. Sundari., A. Y. Arifin dan M. Prihatini. 2018. Nilai pH dan kualitas zat gizi makro daging beku, dingin dan segar pada pasar tradisional dan pasar swalayan. Penelitian Gizi dan Makanan. 41 (1) : 21-30.
- Kalahrodi, M.M., H. Baghaei., B. Emadzadeh., dan M. Bolandi. 2021. Degradation of myofibrillar and sarcoplasmic proteins as a function of marinating time and marinade type and their impact on textural quality and sensory attributes of m. semitendinosus beefsteak. Journal of Food Processing and Preservation. 45 (9).
- Kim, M., Hamilton, S. E., Guddat, L. W. and Overall, C. M. 2007. Plant collagenase: unique collagenolytic activity of cysteine proteases from ginger. Biochimica et Biophysica Acta 1770: 1627-1635.
- Kurniasari, L., I. Hartati., R.D. Ratnani dan I. Sumantri. 2008. Kajian ekstraksi minyak jahe menggunakan microwave assisted extraction (MAE). Momentum. 4 (2) : 47-52.

- Mahardika, R.W., H. Ibrahim., Nurulhusna dan A. Awang. 2017. Efficacy of four species of zingiberaceae extract against vectors of dengue, chikungunya and filariasis. *Tropical Biomedicine*. 34 (2) : 375-387.
- Mangalisu, A., dan A. Permatasari. 2019. Optimalisasi antioksidan daging ayam kampung unggul sinjai (akusi) dengan marinasi bubuk kulit nanas (*Ananas comosus (L.) merr*). *Jurnal Ilmu Pertanian*. 4 (2) : 81-87.
- Masriany, M., A. Sari dan D. Armita. 2020. Diversitas senyawa volatile dari berbagai jenis tanaman dan potensinya sebagai pengendali hama yang ramah lingkungan. *Prosiding Seminar Nasional Biologi di Era Pandemi Covid-19*.
- Nuraeni, S., B. Supangkat, dan J. Iskandar. 2022. Kajian etnobotani tanaman rempah sebagai bumbu, obat dan kias. *Indonesian Journal of Anthropology*. 7 (1) : 27-38.
- Nurhayati, T., E. Chasanah dan S. Bahri. 2013. Potensi inhibitor katepsin dari dua spesies dan satu hibrid kulit ikan patin dalam menghambat aktivitas katepsin ikan patin siam. *Jurnal Pascapanen dan Bioteknologi Kelautan dan Perikanan*. 8(2) : 93-102.
- Nurwantoro., V.P. Bintoro., A.M. Legowo., A. Purnomoadi., L.D. Ambara., A. Prokoso dan S. Mulyani. 2012. Nilai pH, kadar air, dan total *Escherichia coli* daging sapi yang dimarinasi dalam jus bawang putih. *Jurnal Aplikasi Teknologi Pangan*. 1 (2) : 20-22.
- Patriani, P., T. V. Sari dan T. H. Wahyuni. 2022. Marinasi menggunakan buah patikala terhadap kualitas fisikokimia daging ayam kampung. *Prosiding Nasional*. Universitas Abdurachman Saleh Situbondo.
- Prayitno, S.S., J. Sumarmono dan A. H. D. Rahardjo. 2020. Pengaruh lama perendaman daging itik afkir pada ekstrak kulit buah carica (*Carica candamarcensis*) terhadap keempukan dan susut masak daging. *Jurnal Peternakan Nusantara*. 6 (1) : 15-20.
- Prihatiningsih, R., B. E. Setiani dan Y. B. Pramono. 2021. Pengaruh metode thawing terhadap kadar protein, kadar lemak, dan protein terlarut daging ayam petelur afkir beku. *Jurnal Teknologi Pangan*. 5 (2) : 64-70.
- Said, M.I., E. Abustam., H.M. Ali., F.N. Yuliati dan V. Tenrisanna. 2017. Karakteristik fisik dan hedonik daging sapi Bali pada beberapa rumah potong hewan (RPH) di sulawesi selatan.
- Sartika, R.I., B.R. Handayani dan W. Werdiningsih. 2018. Pengaruh lama marinasi terhadap mutu rarity daging sapi tradisional.
- Siddik, N.S. “ Tahukah kamu, ternyata jahe dapat digunakan sebagai pengempuk alami daging”. [hmp.fapet.ugm.ac.id](https://hmp.fapet.ugm.ac.id/2021/10/12/tahukah-kamu-ternyata-jahe-dapat-digunakan-sebagai-pengempuk-alami-daging/). 12 Oktober 2021.

- Suantika, R., L. Suryaningsih dan J. Gumilar. 2017. Pengaruh lama perendaman dengan menggunakan sari jahe terhadap kualitas fisik (daya ikat air, keempukan dan pH) daging domba. *Jurnal Ilmu Ternak*. 17 (2) : 67-72.
- Suratno., A. Husni., R. Riyanti dan D. Septinova. 2020. Pengaruh lama perendaman daging sapi dalam blend jahe (*Zingiber officinale roscoe*) terhadap pH dan keempukan. *Jurnal Riset dan Inovasi Peternakan*. 4 (2) : 92-97.
- Suryati, T., I.S. Arief dan B.N. Polii. 2008. Korelasi dan kategori keempukan daging berdasarkan hasil pengujian menggunakan alat dan panelis. *Animal Production*. 10 (3) : 188-193.
- Susanti, S., V.P.Bintoro., A. Hintono., N. Zuniati dan F. Arifan. 2020. Optimasi substitusi saus tomat dengan ekstrak buah semu jambu monyet pada formulasi bumbu marinasi steak. *Jurnal Ilmiah Sains*. 20 (2) : 134-140.
- Suwiti, N.K., I.P. Suastika., I.B.N. Swacita dan I.N.K. Besung. 2014. Studi histologi dan histomorfometri daging sapi Bali dan wagyu. *Jurnal Veteriner*. 16 (3) : 432-438.
- USDA National Nutrition Database (<http://www.nutrition-and-you.com/ginger-root.html>)
- Wahyuni D., F. Yosi dan G. Muslim. 2019. Kualitas sensoris daging kambing yang dimarinasi menggunakan larutan mentimun (*Cucumis sativus L.*). *Jurnal Peternakan Sriwijaya*. 8 (1) : 4-20.
- Wahyuningtias, D. 2010. Uji hedonik hasil jadi kue menggunakan bahan non instant dan instant. *Binus Business Review*. 1 (1) : 116-125.
- Wiraharja, R.S., Heidy., S. Rustam dan M. Iskandar. 2011. Kegunaan jahe untuk mengatasi gejala mual dalam kehamilan. *Damianus Journal of Medicine*. 10 (3) : 161-170.
- Yusop, S.M., M.G. Sullivan dan J.P. Kerry. 2011. Marinating and enhancement of the nutritional content of processed meat products. *Woodhead Publishing Series in Food Science, Technology and Nutrition*. 421-449.

## LAMPIRAN

### Lampiran 1. Analisis Statistik Daya Putus Daging (DPD) Mentah Sapi Bali Dewasa

#### Rata-rata dan Standar Deviasi DPD Mentah Daging Sapi Bali Dewasa

LEVEL	LAMA	Mean	Std. Deviation	N
A1	B1	1.4300	.01000	3
	B2	1.4033	.04619	3
	B3	1.3467	.02517	3
	Total	1.3933	.04555	9
A2	B1	1.4100	.02646	3
	B2	1.3733	.06807	3
	B3	1.3133	.01155	3
	Total	1.3656	.05615	9
A3	B1	1.3467	.02517	3
	B2	1.2867	.01155	3
	B3	1.2500	.02000	3
	Total	1.2944	.04558	9
A4	B1	1.2033	.02517	3
	B2	1.1667	.01528	3
	B3	1.1133	.01155	3
	Total	1.1611	.04226	9
Total	B1	1.3475	.09469	12
	B2	1.3075	.10252	12
	B3	1.2558	.09453	12
	Total	1.3036	.10187	36

#### Analisis Ragam DPD Mentah Daging Sapi Bali Dewasa

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.342 <sup>a</sup>	11	.031	35.556	.000
Intercept	61.178	1	61.178	69918.251	.000
LEVEL	.290	3	.097	110.666	.000
LAMA	.051	2	.025	28.965	.000
LEVEL * LAMA	.001	6	.000	.199	.974
Error	.021	24	.001		
Total	61.542	36			
Corrected Total	.363	35			

a. R Squared = .942 (Adjusted R Squared = .916)

Uji Lanjut Duncan Level Pemberian Jahe terhadap DPD Mentah

LEVEL	N	Subset		
		1	2	3
A4	9	1.1611		
A3	9		1.2944	
A2	9			1.3656
A1	9			1.3933
Sig.		1.000	1.000	.058

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .001.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = ,05.

Uji Lanjut Duncan Lama Marinasi Daging terhadap DPD Mentah

LAMA	N	Subset		
		1	2	3
B3	12	1.2558		
B2	12		1.3075	
B1	12			1.3475
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .001.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = ,05.

**Lampiran 2. Analisis Statistik Daya Putus Daging (DPD) Masak Sapi Bali Dewasa dengan Pemberiam Jahe dan Lama Marinasi**

Rata-rata dan Standar Deviasi DPD Masak Daging Sapi Bali Dewasa

LEVEL	LAMA	Mean	Std. Deviation	N
A1	B1	2.2333	.03055	3
	B2	2.0000	.02646	3
	B3	1.5367	.06351	3
	Total	1.9233	.30939	9
A2	B1	2.1900	.05568	3
	B2	1.9567	.12014	3
	B3	1.4100	.03464	3
	Total	1.8522	.35340	9
A3	B1	1.9533	.05508	3
	B2	1.7367	.21221	3
	B3	1.2433	.08386	3
	Total	1.6444	.33627	9
A4	B1	1.6767	.12220	3
	B2	1.6267	.27574	3
	B3	1.1033	.21733	3
	Total	1.4689	.33194	9
Total	B1	2.0133	.24001	12
	B2	1.8300	.22511	12
	B3	1.3233	.20056	12
	Total	1.7222	.36642	36

Analisis Ragam DPD Masak Daging Sapi Bali Dewasa

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4.264 <sup>a</sup>	11	.388	21.366	.000
Intercept	106.778	1	106.778	5885.776	.000
LEVEL	1.148	3	.383	21.096	.000
LAMA	3.066	2	1.533	84.493	.000
LEVEL * LAMA	.050	6	.008	.459	.831
Error	.435	24	.018		
Total	111.477	36			
Corrected Total	4.699	35			

a. R Squared = .907 (Adjusted R Squared = .865)

Uji Lanjut Duncan Level Pemberian Jahe terhadap DPD Masak

LEVEL	N	Subset		
		1	2	3
A4	9	1.4689		
A3	9		1.6444	
A2	9			1.8522
A1	9			1.9233
Sig.		1.000	1.000	.274

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .018.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = ,05.

Uji Lanjut Duncan Lama Marinasi Daging terhadap DPD Masak

LAMA	N	Subset		
		1	2	3
B3	12	1.3233		
B2	12		1.8300	
B1	12			2.0133
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .018.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = ,05.

### Lampiran 3. Analisis Statistik Penilaian Hedonik Berdasarkan Rasa Daging Sapi Bali yang Dimarinasi dengan Jahe

#### Rata-rata dan Standar Deviasi Penilaian Hedonik Berdasarkan Rasa

LEVEL	LAMA	Mean	Std. Deviation	N
A1	B1	3.6333	.20817	3
	B2	3.8267	.49410	3
	B3	4.0748	.00000	3
	Total	3.8449	.32955	9
A2	B1	3.8667	.20817	3
	B2	3.9167	.05774	3
	B3	4.0800	.37470	3
	Total	3.9544	.23686	9
A3	B1	4.0667	.15275	3
	B2	4.1000	.10000	3
	B3	4.1000	.00000	3
	Total	4.0889	.09280	9
A4	B1	4.3667	.05774	3
	B2	4.4000	.10000	3
	B3	4.4667	.05774	3
	Total	4.4111	.07817	9
Total	B1	3.9833	.31575	12
	B2	4.0608	.31788	12
	B3	4.1804	.23671	12
	Total	4.0748	.29573	36

#### Analisis Ragam Penilaian Hedonik Berdasarkan Rasa Daging Sapi Bali Dewasa

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.012 <sup>a</sup>	11	.183	4.184	.002
Intercept	597.758	1	597.758	13675.197	.000
LEVEL	1.626	3	.542	12.396	.000
LAMA	.236	2	.118	2.705	.087
LEVEL * LAMA	.150	6	.025	.571	.749
Error	1.049	24	.044		
Total	600.819	36			
Corrected Total	3.061	35			

a. R Squared = .657 (Adjusted R Squared = .500)



Uji Lanjut Duncan Level Jahe terhadap Penilaian Hedonik Berdasarkan Rasa

LEVEL	N	Subset		
		1	2	3
A1	9	3.8449		
A2	9	3.9544	3.9544	
A3	9		4.0889	
A4	9			4.4111
Sig.		.278	.185	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .044.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = ,05.

Uji Lanjut Duncan Lama Marinasi terhadap Penilaian Hedonik Berdasarkan Rasa

LAMA	N	Subset	
		1	2
B1	12	3.9833	
B2	12	4.0608	4.0608
B3	12		4.1804
Sig.		.373	.174

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .044.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = ,05.

**Lampiran 4. Analisis Statistik Penilaian Hedonik Berdasarkan Aroma Daging yang Dimarinasi dengan Jahe**

Rata-rata dan Standar Deviasi Penilaian Hedonik Berdasarkan Aroma Daging

LEVEL	LAMA	Mean	Std. Deviation	N
A1	B1	5.1667	.05774	3
	B2	5.1333	.05774	3
	B3	4.9667	.05774	3
	Total	5.0889	.10541	9
A2	B1	5.1333	.05774	3
	B2	5.1000	.00000	3
	B3	4.9000	.10000	3
	Total	5.0444	.12360	9
A3	B1	5.1000	.10000	3
	B2	5.0000	.10000	3
	B3	4.8333	.05774	3
	Total	4.9778	.13944	9
A4	B1	5.0167	.10408	3
	B2	4.9000	.10000	3
	B3	4.8233	.02517	3
	Total	4.9133	.11169	9
Total	B1	5.1042	.09160	12
	B2	5.0333	.11547	12
	B3	4.8808	.08229	12
	Total	5.0061	.13374	36

Analisis Ragam Penilaian Hedonik Berdasarkan Aroma Daging Sapi Bali Dewasa

Source	Type III Sum of				
	Squares	df	Mean Square	F	Sig.
Corrected Model	.490 <sup>a</sup>	11	.045	7.842	.000
Intercept	902.201	1	902.201	158900.432	.000
LEVEL	.160	3	.053	9.369	.000
LAMA	.313	2	.156	27.529	.000
LEVEL * LAMA	.018	6	.003	.516	.790
Error	.136	24	.006		
Total	902.827	36			
Corrected Total	.626	35			

a. R Squared = .782 (Adjusted R Squared = .683)

Uji Lanjut Duncan Level Pemberian Jahe terhadap Penilaian Hedonik Berdasarkan Aroma Daging

LEVEL	N	Subset		
		1	2	3
A4	9	4.9133		
A3	9	4.9778	4.9778	
A2	9		5.0444	5.0444
A1	9			5.0889
Sig.		.082	.073	.223

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .006.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = ,05.

Uji Lanjut Duncan Lama Marinasi Daging terhadap Penilaian Hedonik Berdasarkan Aroma Daging

LAMA	N	Subset		
		1	2	3
B3	12	4.8808		
B2	12		5.0333	
B1	12			5.1042
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .006.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = ,05.

**Lampiran 5. Analisis Statistik Penilaian Hedonik Berdasarkan Aroma Jahe Daging Sapi Bali yang Dimarinasi dengan Jahe**

Rata-rata dan Standar Deviasi Penilaian Hedonik Berdasarkan Aroma Jahe

LEVEL	LAMA	Mean	Std. Deviation	N
A1	B1	.7667	.05774	3
	B2	.8667	.11547	3
	B3	.9000	.10000	3
	Total	.8444	.10138	9
A2	B1	3.0333	.05774	3
	B2	3.1333	.11547	3
	B3	3.1667	.05774	3
	Total	3.1111	.09280	9
A3	B1	3.1000	.10000	3
	B2	3.1333	.05774	3
	B3	3.2000	.00000	3
	Total	3.1444	.07265	9
A4	B1	3.2000	.10000	3
	B2	3.2333	.05774	3
	B3	3.2667	.05774	3
	Total	3.2333	.07071	9
Total	B1	2.5250	1.06440	12
	B2	2.5917	1.04399	12
	B3	2.6333	1.04736	12
	Total	2.5833	1.02246	36

Analisis Ragam Penilaian Hedonik Berdasarkan Aroma Jahe

Source	Type III Sum of				
	Squares	df	Mean Square	F	Sig.
Corrected Model	36.437 <sup>a</sup>	11	3.312	518.466	.000
Intercept	240.250	1	240.250	37604.348	.000
LEVEL	36.357	3	12.119	1896.870	.000
LAMA	.072	2	.036	5.609	.010
LEVEL * LAMA	.008	6	.001	.217	.967
Error	.153	24	.006		
Total	276.840	36			
Corrected Total	36.590	35			

a. R Squared = .996 (Adjusted R Squared = .994)

Uji Lanjut Duncan Level Pemberian jahe terhadap Penilaian Hedonik Berdasarkan Aroma Jahe

LEVEL	N	Subset		
		1	2	3
A1	9	.8444		
A2	9		3.1111	
A3	9		3.1444	
A4	9			3.2333
Sig.		1.000	.385	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .006.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = ,05.

Uji Lanjut Duncan Lama Marinasi Daging terhadap Penilaian Hedonik Berdasarkan Aroma Jahe

LAMA	N	Subset	
		1	2
B1	12	2.5250	
B2	12	2.5917	2.5917
B3	12		2.6333
Sig.		.052	.214

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .006.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = ,05.

**Lampiran 6. Analisis Statistik Penilaian Hedonik Berdasarkan Kesukaan Aroma Daging Sapi Bali yang Dimarinasi dengan Jahe**

Rata-rata dan Standar Deviasi Penilaian Hedonik Berdasarkan Kesukaan Aroma

LEVEL	LAMA	Mean	Std. Deviation	N
A1	B1	4.5667	.11547	3
	B2	4.5900	.01732	3
	B3	4.6000	.10000	3
	Total	4.5856	.07828	9
A2	B1	4.5700	.04359	3
	B2	4.6000	.10000	3
	B3	4.6667	.05774	3
	Total	4.6122	.07513	9
A3	B1	4.5833	.07638	3
	B2	4.7000	.00000	3
	B3	4.7600	.05292	3
	Total	4.6811	.09062	9
A4	B1	4.6167	.10408	3
	B2	4.7333	.05774	3
	B3	4.7667	.05774	3
	Total	4.7056	.09501	9
Total	B1	4.5842	.07891	12
	B2	4.6558	.08174	12
	B3	4.6983	.09360	12
	Total	4.6461	.09536	36

Analisis Ragam Penilaian Hedonik Berdasarkan Kesukaan Aroma

Source	Type III Sum of				
	Squares	df	Mean Square	F	Sig.
Corrected Model	.188 <sup>a</sup>	11	.017	3.160	.009
Intercept	777.109	1	777.109	143466.193	.000
LEVEL	.086	3	.029	5.303	.006
LAMA	.080	2	.040	7.376	.003
LEVEL * LAMA	.022	6	.004	.683	.665
Error	.130	24	.005		
Total	777.427	36			
Corrected Total	.318	35			

a. R Squared = .592 (Adjusted R Squared = .404)

Uji Lanjut Duncan Level Pemberian Jahe terhadap Penilaian Hedonik Berdasarkan Kesukaan Aroma

LEVEL	N	Subset		
		1	2	3
A1	9	4.5856		
A2	9	4.6122	4.6122	
A3	9		4.6811	4.6811
A4	9			4.7056
Sig.		.450	.059	.488

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .005.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = ,05.

Uji Lanjut Duncan Lama Marinasi Daging terhadap Penilaian Hedonik Berdasarkan Kesukaan Aroma

LAMA	N	Subset	
		1	2
B1	12	4.5842	
B2	12		4.6558
B3	12		4.6983
Sig.		1.000	.170

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .005.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = ,05.

**Lampiran 7. Analisis Statistik Penilaian Hedonik Berdasarkan Keempukan Daging Sapi Bali yang Dimarinasi dengan Jahe**

Rata-rata dan Standar Deviasi Penilaian Hedonik Berdasarkan Keempukan

LEVEL	LAMA	Mean	Std. Deviation	N
A1	B1	4.3000	.10000	3
	B2	4.5333	.05774	3
	B3	4.6333	.11547	3
	Total	4.4889	.16915	9
A2	B1	4.8667	.05774	3
	B2	4.9000	.10000	3
	B3	4.9333	.05774	3
	Total	4.9000	.07071	9
A3	B1	4.9000	.10000	3
	B2	4.9233	.06807	3
	B3	4.9667	.15275	3
	Total	4.9300	.10173	9
A4	B1	5.0333	.25166	3
	B2	5.2333	.05774	3
	B3	5.3000	.10000	3
	Total	5.1889	.18333	9
Total	B1	4.7750	.31945	12
	B2	4.8975	.26643	12
	B3	4.9583	.26443	12
	Total	4.8769	.28694	36

Analisis Ragam Penilaian Hedonik Berdasarkan Keempukan

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.566 <sup>a</sup>	11	.233	17.719	.000
Intercept	856.245	1	856.245	65044.999	.000
LEVEL	2.261	3	.754	57.257	.000
LAMA	.209	2	.105	7.949	.002
LEVEL * LAMA	.095	6	.016	1.207	.336
Error	.316	24	.013		
Total	859.127	36			
Corrected Total	2.882	35			

a. R Squared = .890 (Adjusted R Squared = .840)



Uji Lanjut Duncan Level Pemberian Jahe terhadap Penilaian Hedonik Berdasarkan Keempukan

LEVEL	N	Subset		
		1	2	3
A1	9	4.4889		
A2	9		4.9000	
A3	9		4.9300	
A4	9			5.1889
Sig.		1.000	.584	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .013.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = ,05.

Uji Lanjut Duncan Lama Marinasi Daging terhadap Penilaian Hedonik Berdasarkan Keempukan

LAMA	N	Subset	
		1	2
B1	12	4.7750	
B2	12		4.8975
B3	12		4.9583
Sig.		1.000	.206

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .013.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = ,05.

**Lampiran 8. Analisis Statistik Penilaian Hedonik Berdasarkan Tingkat Kesukaan Daging Sapi Bali yang Dimarinasi dengan Jahe**

**Rata-rata dan Standar Deviasi Penilaian Hedonik Berdasarkan Tingkat Kesukaan**

<b>LEVEL</b>	<b>LAMA</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
A1	B1	3.6667	.15275	3
	B2	3.7667	.05774	3
	B3	3.7967	.17616	3
	Total	3.7433	.13379	9
A2	B1	4.1000	.10000	3
	B2	4.2667	.15275	3
	B3	4.2900	.11533	3
	Total	4.2189	.14040	9
A3	B1	4.2333	.11547	3
	B2	4.4167	.38188	3
	B3	4.4200	.07211	3
	Total	4.3567	.22282	9
A4	B1	4.3667	.11547	3
	B2	4.6000	.10000	3
	B3	4.6067	.09018	3
	Total	4.5244	.14791	9
Total	B1	4.0917	.29375	12
	B2	4.2625	.37119	12
	B3	4.2783	.32965	12
	Total	4.2108	.33455	36

**Analisis Ragam Penilaian Hedonik Berdasarkan Tingkat Kesukaan**

<b>Source</b>	<b>Type III Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Corrected Model	3.317 <sup>a</sup>	11	.302	12.055	.000
Intercept	638.320	1	638.320	25518.632	.000
LEVEL	3.044	3	1.015	40.566	.000
LAMA	.257	2	.129	5.139	.014
LEVEL * LAMA	.016	6	.003	.104	.995
Error	.600	24	.025		
Total	642.238	36			
Corrected Total	3.917	35			

a. R Squared = .847 (Adjusted R Squared = .777)

Uji Lanjut Duncan Level Pemberian Jahe terhadap Penilaian Hedonik Berdasarkan Tingkat Kesukaan

LEVEL	N	Subset		
		1	2	3
A1	9	3.7433		
A2	9		4.2189	
A3	9		4.3567	
A4	9			4.5244
Sig.		1.000	.077	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .025.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = ,05.

Uji Lanjut Duncan Lama Marinasi Daging terhadap Penilaian Hedonik Berdasarkan Tingkat Kesukaan

LAMA	N	Subset	
		1	2
B1	12	4.0917	
B2	12		4.2625
B3	12		4.2783
Sig.		1.000	.808

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .025.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = ,05.

**Lampiran 9. Analisis Statistik Uji Protein Terlarut Daging Sapi Bali yang Dimarinasi dengan Jahe**

**Rata-rata dan Standar Deviasi Uji Protein Terlarut Daging Sapi Bali Dewasa**

LEVEL	LAMA	Mean	Std. Deviation	N
A1	B1	64.2000	.03000	3
	B2	64.2667	.02887	3
	B3	64.2700	.02000	3
	Total	64.2456	.04126	9
A2	B1	64.3100	.01000	3
	B2	64.3300	.01000	3
	B3	64.3400	.01000	3
	Total	64.3267	.01581	9
A3	B1	64.3100	.01000	3
	B2	64.3333	.01155	3
	B3	64.3667	.01528	3
	Total	64.3367	.02693	9
A4	B1	64.4000	.03000	3
	B2	64.4500	.02000	3
	B3	64.4667	.01528	3
	Total	64.4389	.03586	9
Total	B1	64.3050	.07646	12
	B2	64.3450	.07103	12
	B3	64.3608	.07489	12
	Total	64.3369	.07585	36

**Analisis Ragam Protein Terlarut Daging Sapi Bali Dewasa yang Dimarinasi Jahe**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.192 <sup>a</sup>	11	.017	47.368	.000
Intercept	149012.727	1	149012.727	403342720.068	.000
LEVEL	.170	3	.057	153.070	.000
LAMA	.020	2	.010	26.895	.000
LEVEL * LAMA	.003	6	.000	1.341	.278
Error	.009	24	.000		
Total	149012.928	36			
Corrected Total	.201	35			

a. R Squared = .956 (Adjusted R Squared = .936)

Uji Lanjut Duncan Level Pemberian Jahe terhadap Uji Protein Terlarut

LEVEL	N	Subset		
		1	2	3
A1	9	64.2456		
A2	9		64.3267	
A3	9		64.3367	
A4	9			64.4389
Sig.		1.000	.281	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .000.

a. Uses Harmonic Mean Sample Size = 9.000.

b. Alpha = ,05.

Uji Lanjut Duncan Lama Marinasi Daging terhadap Uji Protein Terlarut

LAMA	N	Subset	
		1	2
B1	12	64.3050	
B2	12		64.3450
B3	12		64.3608
Sig.		1.000	.055

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .000.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = ,05.

## Lampiran 10. Dokumentasi Penelitian



## BIODATA PENELITI



**Faika Arif** biasa dipanggil Faika lahir pada tanggal 23 Juni 2001 di Gunung Jati Desa Bonto Macinna, Kecamatan Gantarang, Kabupaten Bulukumba, Sulawesi Selatan. Penulis merupakan anak ke-dua dari tiga bersaudara, lahir dari pasangan ayah Arifuddin dan ibu Sudraeni. Penulis memulai pendidikannya pada tahun 2005 – 2007 di TK Al – Qur’an. Kemudian pada tahun 2007, penulis mulai bersekolah di SD negeri 203 Bonto Macinna dan lulus pada tahun 2013. Penulis melanjutkan pendidikannya ke Madrasah Tsanawiyah Negeri 1 Bulukumba pada tahun 2013–2016. Penulis aktif berorganisasi pada kegiatan pramuka, OSIS, dan aktif mengikuti kegiatan. Tahun 2016–2019 penulis bersekolah di SMA Negeri 1 Bulukumba lalu melanjutkan pendidikan strata-1 (S1) di Universitas Hasanuddin, Fakultas Peternakan, Makassar jalur SNMPTN. Penulis bergabung dalam FOSIL (Forum Studi Ilmiah) dan Himpunan Mahasiswa Teknologi Hasil Ternak (HIMATEHATE-UH). Tahun 2022 penulis lolos didanai dalam kegiatan PKM, dan bersama tim melakukan kegiatan *volunteer* terkait budidaya maggot di Kabupaten Gowa. Besar harapan penulis dapat berkontribusi dalam dunia peternakan Indonesia khususnya di Sulawesi Selatan.