

DAFTAR PUSTAKA

- Abbasi, H. A., and M. Kazemi. 2011. "Detection of Polymorphism of the Insulin-like Growth Factor-I (IGF-I) Gene in Mazandaran Native Chicken Using PCR-RFLP Method." *African Journal of Biotechnology* 10(61):13351–54. doi: 10.5897/AJB11.1325.
- Abo Ghanima, M Mahmood., M E. Abd El-Hack, Aljohara M. Al-Otaibi, Samia Nasr, Najlaa H. Almohmadi, Ayman E. Taha, Mariusz Jaremko, and Nagwa I. El-Kasrawy. 2023. "Growth Performance, Liver and Kidney Functions, Blood Hormonal Profile, and Economic Efficiency of Broilers Fed Different Levels of Threonine Supplementation during Feed Restriction." *Poultry Science* 102(8). doi: 10.1016/j.psj.2023.102796.
- Ali, A., K. Javed, A. Ali, M. Akram, M. Dawood, and A. H. Saleem. 2016. "Polymorphism of Insulin-like Growth Factor-1 Gene and Its Association with Growth Rate in Desi Chicken of Pakistan." *Journal of Animal and Plant Sciences* 26(3):858–61.
- Amills, M., N. Jiménez, D. Villalba, M. Tor, E. Molina, D. Cubiló, C. Marcos, A. Francesch, A. Sánchez, and J. Estany. 2003. "Identification of Three Single Nucleotide Polymorphisms in the Chicken Insulin-like Growth Factor 1 and 2 Genes and Their Associations with Growth and Feeding Traits." *Poultry Science* 82(10):1485–93. doi: 10.1093/ps/82.10.1485.
- Azhar, M., Rahmawati Rahmawati, U. Sara, and M. Taufik. 2022. "Respons Organ Saluran Pencernaan Dan Morfologi Usus Halus Ayam Lokal Dengan In-Ovo Feeding Menggunakan L-Arginine." *Jurnal Ilmu Dan Industri Peternakan* 8(1):1–10. doi: 10.24252/jiip.v8i1.25667.
- Azhar, M., U. Sara, D. P. Rahadja, and W. Pakiding. 2019. "Pengaruh In Ovo Feeding L-Arginine Terhadap Konsumsi Pakan , Pertambahan Berat Badan , Dan Konversi Pakan Ayam Kampung." *Peternakan Lokal* 1(2):16–20.
- Beccavin, C., B. Chevalier, L. A. Cogburn, J. Simon, and M. J. Duclos. 2001. *Insulin-like Growth Factors and Body Growth in Chickens Divergently Selected for High or Low Growth Rate*. Vol. 168.
- Cormack, R. M., D. L. Hartl, and A. G. Clark. 1997. *Principles of Population Genetics*. Vol. 46.
- Daryono, B. S. dan Ayudha B.I Perdamaian. 2019. *Karakterisasi Dan Keragaman Genetik Ayam Lokal Indonesia*. Pertama. Yogyakarta: Gajah Mada University Press.
- Eom, S. Yeon, and M.M Kim. 2024. "The Effect of IGFBP3 Gene Knockout by the CRISPR/Cas9 System on the IGF-1 Pathway in Murine Cells." *Archives*

of Gerontology and Geriatrics 125:105484. doi:
<https://doi.org/10.1016/j.archger.2024.105484>.

Foye, O. T., Z. Uni, and P. R. Ferket. 2006. "Effect of in Ovo Feeding Egg White Protein, β -Hydroxy- β - Methylbutyrate, and Carbohydrates on Glycogen Status and Neonatal Growth of Turkeys." *Poultry Science* 85(7):1185–92. doi: 10.1093/ps/85.7.1185.

Fred W. Allendorf, Gordon H. Luikart, Sally N. Aitken. 2013. *Conservation and the Genetics of Populations*. 2nd ed. edited by C. UK. Wiley-Blackwell Publishing.

Guha N. 2013. "Assays for GH, IGF-I, and IGF Binding Protein-3." *Hormone Assays in Biological Fluids* 1065:117–28.

Graffelman, Jan, D. Jain, and B. Weir. 2017. "A Genome-Wide Study of Hardy–Weinberg Equilibrium with next Generation Sequence Data." *Human Genetics* 136(6):727–41. doi: 10.1007/s00439-017-1786-7.

Hashim, H. O., and M.B. S. Al-Shuhaib. 2019. "Exploring the Potential and Limitations of PCR-RFLP and PCR-SSCP for SNP Detection: A Review." *Journal of Applied Biotechnology Reports* 6(4):137–44. doi: 10.29252/JABR.06.04.02.

Hosnedlova, Bozena, K. Vernerova, R. Kizek, R. Bozzi, J. Kadlec, Vladislav Curn, F. Kouba, C. Fernandez, V. Machander, and H. Horna. 2020a. "Associations between IGF1, IGFBP2 and Tgf β 3 Genes Polymorphisms and Growth Performance of Broiler Chicken Lines." *Animals* 10(5):1–24. doi: 10.3390/ani10050800.

Hutami, Rosy, H. Bisyri, H. Nuraini, and R. Ranasasmita. 2018. "DNA Extraction from Raw Meat for Analysis with the Loop-Mediated Isothermal Amplification (LAMP) Method." *Jurnal Agroindustri Halal* 4(2).

J. Hou, K. Qu, P. Jia, Q. Hanif, J. Zhang, N. Chen, R. Dang, H. Chen, B. Huang. 2020. "A SNP in PLAG1 Is Associated with Body Height Trait in Chinese Cattle." *Animal Genetic* 51(1):87–90. doi: <https://doi.org/10.1111/age.12872>.

Khadem, Alireza, H. Hafezian, and G. R-Mianji. 2010. "Association of Single Nucleotide Polymorphisms in IGF-I, IGF-II and IGFBP-II with Production Traits in Breeder Hens of Mazandaran Native Fowls Breeding Station." *African Journal of Biotechnology* 9(6):805–10. doi: 10.5897/ajb09.1231.

Laron, Z. 2001. "Insulin-like Growth Factor 1 (IGF-1): A Growth Hormone." *Clin Pathol*.

- Nassiry, A. Javanmard, Reza Tohidi Reza Tohidi. 2009. "Application of Statistical Procedures for Analysis of Genetic Diversity in Domestic Animal Populations." *American Journal of Animal and Veterinary Sciences* 4(4):136–41. doi: 10.3844/ajavsp.2009.136.141.
- Nataamijaya, A. Gozali. 2010. "Pengembangan Potensi Ayam Lokal Untuk Menunjang Peningkatan Kesejahteraan Petani." *Jurnal Litbang Pertanian* (10):131–38.
- Nei M. and S. Kumar. 2000. *Molecular Evolution and Phylogenetics*. Oxford University Press.
- Nugroho, Kristianto, D. Satyawan, I. M. Tasma, and P. Lestari. 2022. "Genomic DNA Extraction: The Critical Stage in Plant Molecular Analysis Activities." *Jurnal AgroBiogen* 18(1):33. doi: 10.21082/jbio.v18n1.2022.p33-44.
- Ogunpaimo, Olaiwola J., Henry T. Ojoawo, Mathew Y. Wheto, Ayotunde O. Adebambo, and Olufunmilayo A. Adebambo. 2021. "Association of Insulin-like Growth Factor 1 (IGF1) Gene Polymorphism with the Reproductive Performance of Three Dual-Purpose Chicken Breeds." *Translational Animal Science* 5(4). doi: 10.1093/tas/txab215.
- Promwatee. 2014. "Association of Single Nucleotide Polymorphisms in GHSR, IGF1, CGH and IGF2BP2 Genes on Growth Traits in Thai Native Chickens (Chee and Pradu Hang Dam)." *Khon Kaen Agriculture Journal (Thailand)* 261–70.
- Rachma, Sri, H. Harada, M. I.A. Dagong, L. Rahim, and K. I. Prahesti. n.d. Study Off Body Dimension Of Gaga Chicken, Germ Plasm Of Local Chicken from South Sulawesi- Indonesia. *International Journal Of Plant, Animal and Environmental Science*. 3(4):204-209.
- Saifullah, S. 2021. "Keragaman Gen Calpastatin Dan Hubungannya Dengan Sifat Pertumbuhan, Kualitas Karkas, Dan Kualitas Daging Tiga Jenis Ayam Kampung."
- San Millán, R. María, Ilargi M. Ballesteros, A. Rementeria, J. Garaizar, J. Bikandi, S. M. Firth, and R. C. Baxter. 2002. "Cellular Actions of the Insulin-like Growth Factor Binding Proteins." *Endocrine Reviews* 23(1):2–5. doi: 10.1210/er.2001-0033.
- Setyawati, Retno, and S. Zubaidah. *Optimasi Konsentrasi Primer Dan Suhu Annealing Dalam Mendeteksi Gen Leptin Pada Sapi Peranakan Ongole (PO) Menggunakan Polymerase Chain Reaction (PCR)*. Vol. 4. Online.
- Yuwono T. 2006. *Teori Dan Aplikasi Polymerase Chain Reaction*. Yogyakarta: Cv. Andi Offset.

Zhou, H., A. D. Mitchell, J. P. McMurtry, C. M. Ashwell, and S. J. Lamont. 2005. "Insulin-like Growth Factor-I Gene Polymorphism Associations with Growth, Body Composition, Skeleton Integrity, and Metabolic Traits in Chickens." *Poultry Science* 84(2):212–19. doi: 10.1093/ps/84.2.212.

Lampiran 1. Pemeliharaan Alope



Lampiran 2. Identifikasi Gen IGF-1



Lampiran 3. Kode Etik Pemeliharaan



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN
KOMITE ETIK PENELITIAN UNIVERSITAS HASANUDDIN
RSPTN UNIVERSITAS HASANUDDIN
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR
Sekretariat : Lantai 2 Gedung Laboratorium Terpadu
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.



Contact Person: dr. Agussalim Bukhari.,MMed,PhD, SpCK TELP. 081241850858, 0411 5780103, Fax : 0411-581431

REKOMENDASI PERSETUJUAN ETIK

Nomor : 363/UN4.6.4.5.31/ PP36/ 2023

Tanggal: 5 Juni 2023

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH23040216		No Sponsor	
Peneliti Utama	Ridha Tunnisa, S.Pt		Sponsor	
Judul Peneliti	STUDI ASSOSIASI GEN INSULIN LIKE GROWTH FACTOR-1 (IGF-1) DAN MYOSTATIN (MSTN) PADA SIFAT PERTUMBUHAN AYAM ALLOPE GENERASI KETIGA			
No Versi Protokol	1		Tanggal Versi	4 April 2023
No Versi PSP			Tanggal Versi	
Tempat Penelitian	Laboratorium Ternak Unggas dan Laboratorium Bioteknologi Terpadu Fakultas Peternakan Universitas Hasanuddin Makassar			
Jenis Review	<input type="checkbox"/> Exempted	Masa Berlaku	Frekuensi review lanjutan	
	<input checked="" type="checkbox"/> Expedited	5 Juni 2023 sampai 5 Juni 2024		
	<input type="checkbox"/> Fullboard Tanggal			
Ketua KEP Universitas Hasanuddin	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)	Tanda tangan		
Sekretaris KEP Universitas Hasanuddin	Nama dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)	Tanda tangan		

Kewajiban Peneliti Utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Laporan SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

Lampiran 4. Analisa PopGen

```

*****
*
*      POPULATION GENETIC ANALYSIS      *
*
*****

```

Date :
2024/1/2
Time :
19:32:45

Data Description : Test Data Set II: Diploid Data

```

*****
*****
**
**      Single-Population Descriptive
Statistics      **
*
*****
*****

```

* Population : 1 @ Locus : IGF-1 *

Genotypes	Obs. (O)	Exp. (E)	(O-E) ² /E
$2 \cdot O \cdot \ln(O/E)$			
(A, A)	10	5.9874	10.2584
(B, A)	34	42.0251	-14.4097
(B, B)	76	71.9874	8.2447

Chi-square test for Hardy-Weinberg equilibrium :

Chi-square : 4.445185
Degree of freedom : 1
Probability : 0.035000

Likelihood ratio test for Hardy-Weinberg equilibrium :

G-square : 4.093465
Degree of freedom : 1
Probability : 0.043049

Allele Frequency of population 1 :

Allele \ Locus	IGF-1
A	0.2250
Allele B	0.7750

Lampiran 5. Olah Data Minitab Sifat Pertumbuhan

PENGUKURAN MINGGU KE -4 JANTAN

Descriptive Statistics: PANJANG SHANK, LINGK SHANK, PJ KE3, JRK ANTR TLG PUBIS, P.PAHA BAWAH, P.PAHA ATAS, P. DADA, DALAM DADA, LING. DADA, LEBAR DADA, P.PUNGGUNG, PANJ. SAYAP, LING.LEHER, PANJG LEHER

Statistics

Variable	Genotipe	Mean	SE Mean	StDev
PANJANG SHANK	AA	4.400	0.130	0.292
	AB	4.2500	0.0930	0.3481
	BB	4.2606	0.0825	0.4736
LINGK SHANK	AA	2.4800	0.0490	0.1095
	AB	2.4071	0.0462	0.1730
	BB	2.4606	0.0550	0.3162
PJ KE3	AA	3.2400	0.0980	0.2191
	AB	3.3571	0.0609	0.2277
	BB	3.3424	0.0519	0.2979
JRK ANTR TLG PUBIS	AA	1.200	0.105	0.235
	AB	1.1786	0.0395	0.1477
	BB	1.2121	0.0313	0.1799
P.PAHA BAWAH	AA	7.040	0.284	0.635
	AB	7.250	0.139	0.521
	BB	6.936	0.114	0.654
P.PAHA ATAS	AA	5.360	0.169	0.378
	AB	5.3000	0.0419	0.1569
	BB	5.3212	0.0677	0.3887
P. DADA	AA	7.480	0.180	0.402
	AB	7.829	0.135	0.504
	BB	7.485	0.138	0.794
DALAM DADA	AA	5.120	0.235	0.526
	AB	5.300	0.116	0.433
	BB	5.2303	0.0875	0.5028
LING. DADA	AA	14.840	0.432	0.966
	AB	15.457	0.212	0.794
	BB	14.958	0.186	1.071

LEBAR DADA	AA	3.3800	0.0800	0.1789
	AB	3.3071	0.0759	0.2841
	BB	3.2758	0.0745	0.4280
P.PUNGGUNG	AA	9.660	0.486	1.088
	AB	9.036	0.239	0.894
	BB	9.1212	0.0984	0.5650
PANJ. SAYAP	AA	11.680	0.188	0.421
	AB	12.471	0.187	0.700
	BB	12.193	0.161	0.927
LING.LEHER	AA	5.200	0.205	0.458
	AB	4.957	0.118	0.443
	BB	5.0273	0.0865	0.4970
PANJG LEHER	AA	7.880	0.432	0.965
	AB	8.286	0.130	0.485
	BB	7.900	0.144	0.826

General Linear Model: PANJANG SHANK versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.09294	0.04647	0.25	0.779
Error	49	9.09379	0.18559		
Total	51	9.18673			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.430799	1.01%	0.00%	0.00%

General Linear Model: LINGK SHANK versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.03373	0.01687	0.23	0.798
Error	49	3.63607	0.07421		
Total	51	3.66981			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.272407	0.92%	0.00%	0.00%

General Linear Model: PJ KE3 versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
--------	----	--------	--------	---------	---------

Genotype	2	0.05369	0.02684	0.35	0.703
Error	49	3.70689	0.07565		
Total	51	3.76058			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.275047	1.43%	0.00%	0.00%

General Linear Model: JRK ANTR TLG PUBIS versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.01108	0.005542	0.18	0.839
Error	49	1.53872	0.031403		
Total	51	1.54981			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.177208	0.72%	0.00%	0.00%

General Linear Model: P.PAHA BAWAH versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.9674	0.4837	1.26	0.293
Error	49	18.8234	0.3842		
Total	51	19.7908			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.619799	4.89%	1.01%	0.00%

General Linear Model: P.PAHA ATAS versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.01362	0.006809	0.06	0.943
Error	49	5.72715	0.116881		
Total	51	5.74077			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.341878	0.24%	0.00%	0.00%

General Linear Model: P. DADA versus Genotype**Analysis of Variance**

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	1.213	0.6067	1.23	0.301
Error	49	24.139	0.4926		
Total	51	25.352			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.701878	4.79%	0.90%	0.00%

General Linear Model: DALAM DADA versus Genotype**Analysis of Variance**

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.1254	0.06269	0.26	0.769
Error	49	11.6377	0.23750		
Total	51	11.7631			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.487344	1.07%	0.00%	0.00%

General Linear Model: LING. DADA versus Genotype**Analysis of Variance**

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	2.774	1.3869	1.40	0.257
Error	49	48.627	0.9924		
Total	51	51.401			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.996185	5.40%	1.54%	0.00%

General Linear Model: LEBAR DADA versus Genotype**Analysis of Variance**

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.05038	0.02519	0.18	0.840
Error	49	7.03789	0.14363		
Total	51	7.08827			

Model Summary

<u>S</u>	<u>R-sq</u>	<u>sq(adj)</u>	<u>sq(pred)</u>
0.378986	0.71%	0.00%	0.00%

General Linear Model: P.PUNGGUNG versus Genotype

Analysis of Variance

<u>Source</u>	<u>DF</u>	<u>Adj SS</u>	<u>Adj MS</u>	<u>F-Value</u>	<u>P-Value</u>
Genotype	2	1.511	0.7554	1.46	0.242
Error	49	25.339	0.5171		
Total	51	26.850			

Model Summary

<u>S</u>	<u>R-sq</u>	<u>sq(adj)</u>	<u>sq(pred)</u>
0.719116	5.63%	1.77%	0.00%

General Linear Model: PANJ. SAYAP versus Genotype

Analysis of Variance

<u>Source</u>	<u>DF</u>	<u>Adj SS</u>	<u>Adj MS</u>	<u>F-Value</u>	<u>P-Value</u>
Genotype	2	2.367	1.1835	1.68	0.198
Error	49	34.600	0.7061		
Total	51	36.967			

Model Summary

<u>S</u>	<u>R-sq</u>	<u>sq(adj)</u>	<u>sq(pred)</u>
0.840309	6.40%	2.58%	0.00%

General Linear Model: LING.LEHER versus Genotype

Analysis of Variance

<u>Source</u>	<u>DF</u>	<u>Adj SS</u>	<u>Adj MS</u>	<u>F-Value</u>	<u>P-Value</u>
Genotype	2	0.2178	0.1089	0.47	0.626
Error	49	11.2997	0.2306		
Total	51	11.5175			

Model Summary

<u>S</u>	<u>R-sq</u>	<u>sq(adj)</u>	<u>sq(pred)</u>
0.480216	1.89%	0.00%	0.00%

General Linear Model: PANJG LEHER versus Genotype

Analysis of Variance

<u>Source</u>	<u>DF</u>	<u>Adj SS</u>	<u>Adj MS</u>	<u>F-Value</u>	<u>P-Value</u>
Genotype	2	1.545	0.7723	1.32	0.276
Error	49	28.605	0.5838		
Total	51	30.150			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.764054	5.12%	1.25%	0.00%

PENGUKURAN MINGGU KE-10

Descriptive Statistics: PANJANG SHANK, LINGK SHANK, PJ KE3, JRK ANTR TLG PUBIS, P.PAHA BAWAH, P.PAHA ATAS, P. DADA, DALAM DADA, LING. DADA, LEBAR DADA, P.PUNGGUNG, PANJ. SAYAP, LING.LEHER, PANJG LEHER

Statistics

Variable	Genotype	Mean	SE Mean	StDev
PANJANG SHANK	AA	7.3600	0.0927	0.2074
	AB	7.143	0.132	0.494
	BB	6.930	0.143	0.820
LINGK SHANK	AA	3.700	0.110	0.245
	AB	3.7071	0.0539	0.2018
	BB	3.5606	0.0531	0.3051
PJ KE3	AA	5.660	0.262	0.586
	AB	5.343	0.118	0.442
	BB	5.3788	0.0887	0.5098
JRK ANTR TLG PUBIS	AA	1.5000	0.0949	0.2121
	AB	1.3786	0.0604	0.2259
	BB	1.4939	0.0328	0.1886
P.PAHA BAWAH	AA	11.020	0.294	0.657
	AB	11.314	0.153	0.571
	BB	11.030	0.172	0.988
P.PAHA ATAS	AA	8.140	0.280	0.627
	AB	8.371	0.168	0.627
	BB	8.072	0.114	0.652
P. DADA	AA	11.260	0.201	0.451
	AB	11.871	0.198	0.743
	BB	11.597	0.179	1.028
DALAM DADA	AA	8.380	0.191	0.427
	AB	8.314	0.205	0.768
	BB	8.370	0.117	0.675

LING. DADA	AA	21.980	0.570	1.274
	AB	22.489	0.347	1.299
	BB	21.955	0.311	1.789
LEBAR DADA	AA	4.980	0.332	0.743
	AB	4.4393	0.0967	0.3617
	BB	4.8485	0.0978	0.5619
P.PUNGGUNG	AA	13.740	0.485	1.085
	AB	14.907	0.239	0.896
	BB	14.230	0.268	1.537
PANJ. SAYAP	AA	19.060	0.596	1.333
	AB	18.964	0.351	1.312
	BB	18.787	0.252	1.449
LING.LEHER	AA	6.720	0.301	0.672
	AB	6.979	0.104	0.389
	BB	7.179	0.193	1.106
PANJG LEHER	AA	12.820	0.346	0.773
	AB	12.350	0.243	0.910
	BB	11.658	0.208	1.196

General Linear Model: PANJANG SHANK versus Genotipe

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotipe	2	1.051	0.5254	1.04	0.363
Error	49	24.856	0.5073		
Total	51	25.907			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.712225	4.06%	0.14%	0.00%

General Linear Model: LINGK SHANK versus Genotipe

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotipe	2	0.2525	0.12625	1.65	0.202
Error	49	3.7481	0.07649		
Total	51	4.0006			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.276571	16.31%	2.49%	0.00%

General Linear Model: PJ KE3 versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.3978	0.1989	0.80	0.456
Error	49	12.2214	0.2494		
Total	51	12.6192			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.499417	3.15%	0.00%	0.00%

General Linear Model: JRK ANTR TLG PUBIS versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.1382	0.06911	1.71	0.192
Error	49	1.9824	0.04046		
Total	51	2.1206			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.201138	6.52%	2.70%	0.00%

General Linear Model: P.PAHA BAWAH versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.8334	0.4167	0.55	0.581
Error	49	37.1948	0.7591		
Total	51	38.0283			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.871251	2.19%	0.00%	0.00%

General Linear Model: P.PAHA ATAS versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.8844	0.4422	1.07	0.352
Error	49	20.3033	0.4144		
Total	51	21.1877			

Model Summary

S	R-sq	sq(adj)	R-sq(pred)
0.643702	4.17%	0.26%	0.00%

General Linear Model: P. DADA versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	1.533	0.7664	0.90	0.414
Error	49	41.770	0.8525		
Total	51	43.303			

Model Summary

S	R-sq	sq(adj)	R-sq(pred)
0.923285	3.54%	0.00%	0.00%

General Linear Model: DALAM DADA versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	0.0334	0.01671	0.04	0.965
Error	49	22.9748	0.46887		
Total	51	23.0083			

Model Summary

S	R-sq	sq(adj)	R-sq(pred)
0.684744	0.15%	0.00%	0.00%

General Linear Model: LING. DADA versus Genotype

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotype	2	2.884	1.442	0.54	0.586
Error	49	130.842	2.670		
Total	51	133.726			

Model Summary

<u>S</u>	<u>R-sq</u>	<u>sq(adj)</u>	<u>R-sq(pred)</u>
1.63409	2.16%	0.00%	0.00%

General Linear Model: LEBAR DADA versus Genotype

Analysis of Variance

<u>Source</u>	<u>DF</u>	<u>Adj SS</u>	<u>Adj MS</u>	<u>F-Value</u>	<u>P-Value</u>
Genotype	2	1.936	0.9681	3.39	0.042
Error	49	14.011	0.2859		
Total	51	15.947			

Model Summary

<u>S</u>	<u>R-sq</u>	<u>sq(adj)</u>	<u>R-sq(pred)</u>
0.534738	12.14%	8.55%	0.00%

General Linear Model: P.PUNGGUNG versus Genotype

Analysis of Variance

<u>Source</u>	<u>DF</u>	<u>Adj SS</u>	<u>Adj MS</u>	<u>F-Value</u>	<u>P-Value</u>
Genotype	2	6.667	3.333	1.80	0.176
Error	49	90.731	1.852		
Total	51	97.398			

Model Summary

<u>S</u>	<u>R-sq</u>	<u>sq(adj)</u>	<u>R-sq(pred)</u>
1.36075	6.84%	3.04%	0.00%

General Linear Model: PANJ. SAYAP versus Genotype

Analysis of Variance

<u>Source</u>	<u>DF</u>	<u>Adj SS</u>	<u>Adj MS</u>	<u>F-Value</u>	<u>P-Value</u>
Genotype	2	0.5282	0.2641	0.13	0.875
Error	49	96.6994	1.9735		
Total	51	97.2277			

Model Summary

<u>S</u>	<u>R-sq</u>	<u>sq(adj)</u>	<u>R-sq(pred)</u>
1.40480	0.54%	0.00%	0.00%

General Linear Model: LING.LEHER versus Genotipe

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotipe	2	1.114	0.5570	0.64	0.534
Error	49	42.927	0.8761		
Total	51	44.041			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.935978	2.53%	0.00%	0.00%

General Linear Model: PANJG LEHER versus Genotipe

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Genotipe	2	8.845	4.422	3.68	0.032
Error	49	58.904	1.202		
Total	51	67.748			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
1.09641	13.06%	9.51%	4.25%

Comparisons for LEBAR DADA

Tukey Pairwise Comparisons: Genotipe

Grouping Information Using the Tukey Method and 95% Confidence

Genotipe	N	Mean	Grouping
AA	5	4.98000	A
BB	33	4.84848	A
AB	14	4.43929	A

Means that do not share a letter are significantly different.

Comparisons for PANJG LEHER

Tukey Pairwise Comparisons: Genotipe

Grouping Information Using the Tukey Method and 95% Confidence

Genotipe	N	Mean	Grouping
AA	5	12.8200	A
AB	14	12.3500	A
BB	33	11.6576	A

Means that do not share a letter are significantly different.

PENGUKURAN MINGGU KE-4 BETINA

Descriptive Statistics: PANJANG SHANK, LINGK SHANK, PJ KE3, JRK ANTR TLG PUBIS, P.PAHA BAWAH, P.PAHA ATAS, P. DADA, DALAM DADA, LING. DADA, LEBAR DADA, P.PUNGGUNG, PANJ. SAYAP, LING.LEHER, PANJG LEHER

Statistics

Variable	GENOTIPE	Mean	SE Mean	StDev
PANJANG SHANK	AA	4.2200	0.0860	0.1924
	AB	4.1850	0.0895	0.4004
	BB	4.2209	0.0876	0.5743
LINGK SHANK	AA	2.2400	0.0510	0.1140
	AB	2.4200	0.0667	0.2984
	BB	2.4349	0.0599	0.3927
PJ KE3	AA	3.3400	0.0510	0.1140
	AB	3.420	0.118	0.528
	BB	3.3860	0.0649	0.4257
JRK ANTR TLG PUBIS	AA	1.0600	0.0400	0.0894
	AB	1.2400	0.0303	0.1353
	BB	1.2186	0.0269	0.1763
P.PAHA BAWAH	AA	7.040	0.346	0.773
	AB	6.950	0.141	0.630
	BB	6.753	0.139	0.912
P.PAHA ATAS	AA	5.260	0.169	0.378
	AB	5.1900	0.0611	0.2732
	BB	5.323	0.132	0.867
P. DADA	AA	7.640	0.323	0.723
	AB	7.720	0.123	0.548
	BB	7.474	0.197	1.278
DALAM DADA	AA	5.120	0.111	0.249
	AB	5.3950	0.0766	0.3426
	BB	5.2907	0.0917	0.6015
LING. DADA	AA	15.360	0.244	0.546
	AB	15.275	0.260	1.165
	BB	14.884	0.340	2.227
LEBAR DADA	AA	2.980	0.177	0.396
	AB	3.405	0.123	0.552
	BB	3.3442	0.0669	0.4388

P.PUNGGUNG	AA	9.240	0.160	0.358
	AB	9.070	0.141	0.631
	BB	8.940	0.160	1.048
PANJ. SAYAP	AA	13.420	0.838	1.874
	AB	12.150	0.253	1.130
	BB	12.084	0.178	1.168
LING.LEHER	AA	4.9200	0.0860	0.1924
	AB	4.975	0.102	0.456
	BB	5.012	0.124	0.816
PANJG LEHER	AA	8.060	0.380	0.850
	AB	8.090	0.113	0.507
	BB	7.887	0.112	0.733

General Linear Model: PANJANG SHANK versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.0181	0.009066	0.03	0.966
Error	65	17.0447	0.262226		
Total	67	17.0628			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.51208	0.11%	0.00%	0.00%

General Linear Model: LINGK SHANK versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.1705	0.08527	0.67	0.513
Error	65	8.2217	0.12649		
Total	67	8.3922			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.35565	1.203%	0.00%	0.00%

General Linear Model: PJ KE3 versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.0307	0.01535	0.08	0.926
Error	65	12.9556	0.19932		
Total	67	12.9863			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.446450	0.24%	0.00%	0.00%

General Linear Model: JRK ANTR TLG PUBIS versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.1330	0.06649	2.56	0.085
Error	65	1.6851	0.02592		
Total	67	1.8181			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.161012	7.31%	4.46%	0.80%

General Linear Model: P.PAHA BAWAH versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.7598	0.3799	0.55	0.579
Error	65	44.8690	0.6903		
Total	67	45.6288			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.830838	1.67%	0.00%	0.00%

General Linear Model: P.PAHA ATAS versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.2444	0.1222	0.24	0.790
Error	65	33.5867	0.5167		
Total	67	33.8312			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.718832	0.72%	0.00%	0.00%

General Linear Model: P. DADA versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.8560	0.4280	0.37	0.695
Error	64	74.7252	1.1676		
Total	66	75.5812			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
1.08055	1.13%	0.00%	0.00%

General Linear Model: DALAM DADA versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.3409	0.1705	0.63	0.537
Error	65	17.6738	0.2719		
Total	67	18.0147			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.521444	1.89%	0.00%	0.00%

General Linear Model: LING. DADA versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	2.664	1.332	0.37	0.693
Error	65	235.188	3.618		
Total	67	237.852			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
1.90218	1.12%	0.00%	0.00%

General Linear Model: LEBAR DADA versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.7317	0.3659	1.64	0.202

Error	65	14.5035	0.2231
Total	67	15.2353	

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.472368	4.80%	1.87%	0.00%

General Linear Model: P.PUNGGUNG versus GENOTIPE**Analysis of Variance**

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.5432	0.2716	0.33	0.723
Error	65	54.2368	0.8344		
Total	67	54.7800			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.913462	0.99%	0.00%	0.00%

General Linear Model: PANJ. SAYAP versus GENOTIPE**Analysis of Variance**

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	8.073	4.037	2.74	0.072
Error	65	95.637	1.471		
Total	67	103.710			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	1.21298	7.78%	4.95%	0.00%

General Linear Model: LING.LEHER versus GENOTIPE**Analysis of Variance**

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.0480	0.02398	0.05	0.953
Error	65	32.0497	0.49307		
Total	67	32.0976			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.702191	0.15%	0.00%	0.00%

General Linear Model: PANJG LEHER versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.6158	0.3079	0.66	0.520
Error	65	30.3055	0.4662		
Total	67	30.9213			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.682816	1.99%	0.00%	0.00%

PENGUKURAN MINGGU KE -10 BETINA

Descriptive Statistics: PANJANG SHANK, LINGK SHANK, PJ KE3, JRK ANTR TLG PUBIS, P.PAHA BAWAH, P.PAHA ATAS, P. DADA, DALAM DADA, LING. DADA, LEBAR DADA, P.PUNGGUNG, PANJ. SAYAP, LING.LEHER, PANJG LEHER

Statistics

Variable	GENOTIPE	Mean	SE Mean	StDev
PANJANG SHANK	AA	6.820	0.153	0.342
	AB	6.820	0.124	0.554
	BB	6.519	0.129	0.849
LINGK SHANK	AA	3.300	0.114	0.255
	AB	3.4350	0.0563	0.2519
	BB	3.2953	0.0354	0.2319
PJ KE3	AA	5.180	0.246	0.550
	AB	5.090	0.111	0.496
	BB	5.026	0.109	0.713
JRK ANTR TLG PUBIS	AA	1.3800	0.0800	0.1789
	AB	2.185	0.676	3.023
	BB	1.572	0.120	0.789
P.PAHA BAWAH	AA	10.660	0.293	0.654
	AB	10.790	0.165	0.739
	BB	10.740	0.139	0.910
P.PAHA ATAS	AA	8.500	0.286	0.640
	AB	8.075	0.141	0.632
	BB	8.291	0.150	0.981
P. DADA	AA	11.680	0.171	0.383
	AB	14.42	3.35	1.497

	BB	11.140	0.205	1.342
DALAM DADA	AA	7.280	0.388	0.867
	AB	7.930	0.184	0.824
	BB	7.809	0.126	0.829
LING. DADA	AA	21.220	0.577	1.289
	AB	22.87	1.13	5.05
	BB	22.737	0.763	5.004
LEBAR DADA	AA	4.540	0.244	0.546
	AB	4.715	0.145	0.648
	BB	4.749	0.147	0.963
P.PUNGGUNG	AA	13.720	0.650	1.453
	AB	14.508	0.264	1.179
	BB	14.358	0.230	1.508
PANJ. SAYAP	AA	18.000	0.599	1.340
	AB	17.790	0.349	1.561
	BB	17.721	0.261	1.710
LING.LEHER	AA	7.040	0.447	0.999
	AB	7.045	0.153	0.686
	BB	7.002	0.134	0.881
PANJG LEHER	AA	10.940	0.522	1.167
	AB	11.680	0.244	1.090
	BB	11.421	0.162	1.061

General Linear Model: PANJANG SHANK versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	1.436	0.7180	1.28	0.286
Error	65	36.565	0.5625		
Total	67	38.001			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.750027	3.78%	0.82%	0.00%

General Linear Model: LINGK SHANK versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
--------	----	--------	--------	---------	---------

GENOTIPE	2	0.2735	0.13676	2.39	0.100
Error	65	3.7246	0.05730		
Total	67	3.9981			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.239376	6.84%	3.97%	0.00%

General Linear Model: PJ KE3 versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.1398	0.06989	0.17	0.847
Error	65	27.2479	0.41920		
Total	67	27.3876			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.647455	0.51%	0.00%	0.00%

General Linear Model: JRK ANTR TLG PUBIS versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	5.821	2.910	0.95	0.393
Error	65	199.880	3.075		
Total	67	205.701			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
1.75359	2.83%	0.00%	0.00%

General Linear Model: P.PAHA BAWAH versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.0779	0.03895	0.05	0.947
Error	65	46.8191	0.72029		
Total	67	46.8970			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.848701	0.17%	0.00%	0.00%

General Linear Model: P.PAHA ATAS versus GENOTIPE**Analysis of Variance**

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.9925	0.4963	0.65	0.526
Error	65	49.6538	0.7639		
Total	67	50.6463			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.874016	1.96%	0.00%	0.00%

General Linear Model: P. DADA versus GENOTIPE**Analysis of Variance**

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	147.9	73.96	1.11	0.336
Error	65	4333.7	66.67		
Total	67	4481.7			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
8.16535	3.30%	0.33%	0.00%

General Linear Model: DALAM DADA versus GENOTIPE**Analysis of Variance**

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	1.691	0.8457	1.23	0.299
Error	65	44.746	0.6884		
Total	67	46.438			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.829701	3.64%	0.68%	0.00%

General Linear Model: LING. DADA versus GENOTIPE**Analysis of Variance**

Source	DF	Adj SS	Adj MS	F-Value	P-Value
---------------	-----------	---------------	---------------	----------------	----------------

GENOTIPE	2	11.50	5.752	0.24	0.786
Error	65	1543.79	23.751		
Total	67	1555.30			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	4.87346	0.74%	0.00%	0.00%

General Linear Model: LEBAR DADA versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.1974	0.09871	0.13	0.875
Error	65	48.1249	0.74038		
Total	67	48.3224			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	0.860456	0.41%	0.00%	0.00%

General Linear Model: P.PUNGGUNG versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	2.482	1.241	0.62	0.542
Error	65	130.344	2.005		
Total	67	132.826			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
	1.41608	1.87%	0.00%	0.00%

General Linear Model: PANJ. SAYAP versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.371	0.1857	0.07	0.934
Error	65	176.309	2.7124		
Total	67	176.681			

Model Summary

	S	R-sq	sq(adj)	sq(pred)
--	----------	-------------	----------------	-----------------

1.64695 0.21% 0.00% 0.00%

General Linear Model: LING.LEHER versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	0.0276	0.01378	0.02	0.981
Error	65	45.5113	0.70017		
Total	67	45.5388			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.836764	0.06%	0.00%	0.00%

General Linear Model: PANJG LEHER versus GENOTIPE

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
GENOTIPE	2	2.385	1.193	1.03	0.363
Error	65	75.295	1.158		
Total	67	77.681			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
1.07628	3.07%	0.09%	0.00%

Lampiran 6. Data Genotipe Betina

NO	NO CAGES	SEX	ALEL	IGF-1 GENOTIPE
1	B 004	BETINA	B	BB
2	B 011	BETINA	B	BB
3	B 012	BETINA	B	BB
4	B 013	BETINA	B	BB
5	B 014	BETINA	B	BB
6	B 015	BETINA	B	BB
7	B 017	BETINA	A	AB
8	B 020	BETINA	A	AB
9	B 021	BETINA	A	AB
10	B 022	BETINA	A	AB
11	B 023	BETINA	B	BB
12	B 028	BETINA	B	BB
13	B 030	BETINA	B	BB
14	B 033	BETINA	A	AB
15	B 035	BETINA	A	AB
16	B 037	BETINA	B	BB
17	B 039	BETINA	B	BB
18	B 042	BETINA	B	BB
19	B 049	BETINA	A	AB
20	B 050	BETINA	A	AB
21	B 052	BETINA	A	AB
22	B 053	BETINA	B	BB
23	B 054	BETINA	B	BB
24	B 055	BETINA	B	BB
25	B 057	BETINA	A	AB
26	B 058	BETINA	A	AA
27	B 060	BETINA	A	AB
28	B 061	BETINA	B	BB
29	B 062	BETINA	A	AB
30	B 063	BETINA	B	BB
31	B 064	BETINA	B	BB
32	A 002	BETINA	B	BB
33	A 003	BETINA	B	BB
34	A 004	BETINA	B	BB
35	A 005	BETINA	B	BB
36	A 009	BETINA	A	AB
37	A 010	BETINA	A	AB
38	A 011	BETINA	A	AB
39	A 012	BETINA	A	AA
40	A 013	BETINA	B	BB
41	A014	BETINA	B	BB

42	A 015	BETINA	A	AB
43	A 016	BETINA	A	AB
44	A 017	BETINA	B	BB
45	A 019	BETINA	A	AB
46	A 026	BETINA	A	AB
47	A 027	BETINA	A	AA
48	A 028	BETINA	B	BB
49	A 030	BETINA	B	BB
50	A 035	BETINA	B	BB
51	A 038	BETINA	B	BB
52	A 039	BETINA	B	BB
53	A 040	BETINA	B	BB
54	A 042	BETINA	B	BB
55	A 043	BETINA	B	BB
56	A 044	BETINA	B	BB
57	A 045	BETINA	B	BB
58	A 047	BETINA	B	BB
59	A 048	BETINA	B	BB
60	A 049	BETINA	A	AB
61	A 050	BETINA	B	BB
62	A 051	BETINA	B	BB
63	A 054	BETINA	B	BB
64	A 055	BETINA	A	AA
65	A 057	BETINA	A	AA
66	A 058	BETINA	B	BB
67	A 059	BETINA	B	BB
68	A 062	BETINA	B	BB

Lampiran 7. Data Genotipe Jantan

NO	NO CAGES	SEX	IGF-1	
			ALEL	genotipe
1	B 001	JANTAN	B	BB
2	B 002	JANTAN	B	BB
3	B 003	JANTAN	B	BB
4	B 005	JANTAN	B	BB
6	B 008	JANTAN	B	BB
7	B 009	JANTAN	B	BB
8	B 010	JANTAN	B	BB
9	B 016	JANTAN	A	AA
10	B 018	JANTAN	B	BB
11	B 024	JANTAN	B	BB
12	B 025	JANTAN	B	BB
13	B 026	JANTAN	B	BB
14	B 027	JANTAN	B	BB
15	B 029	JANTAN	A	AB
16	B 031	JANTAN	A	AB
17	B 032	JANTAN	A	AB
18	B 034	JANTAN	A	AA
19	B 036	JANTAN	A	AB
20	B 038	JANTAN	A	AB
21	B 040	JANTAN	B	BB
22	B 041	JANTAN	B	BB
23	B 043	JANTAN	B	BB
24	B 044	JANTAN	A	AA
25	B 045	JANTAN	B	BB
26	B 046	JANTAN	A	AA
27	B 047	JANTAN	A	AB
28	B 051	JANTAN	B	BB
29	A 001	JANTAN	A	AB
30	A 006	JANTAN	B	BB
31	A 007	JANTAN	B	BB
32	A 008	JANTAN	B	BB
33	A 018	JANTAN	A	AB
34	A 020	JANTAN	A	AB
35	A 021	JANTAN	B	BB
36	A 022	JANTAN	B	BB
37	A 023	JANTAN	B	BB
38	A 024	JANTAN	B	BB
39	A 025	JANTAN	B	BB
40	A 029	JANTAN	B	BB
41	A 031	JANTAN	B	BB

42	A 032	JANTAN	B	BB
43	A 033	JANTAN	B	BB
44	A 036	JANTAN	A	AB
45	A 037	JANTAN	B	BB
46	A 041	JANTAN	A	AB
47	A 046	JANTAN	B	BB
48	A 052	JANTAN	A	AB
49	A 053	JANTAN	B	BB
50	A 060	JANTAN	A	AA
51	A 061	JANTAN	A	AB
52	A 063	JANTAN	A	AB

RIWAYAT HIDUP



Ridha Tunnisa lahir di Takalala Kabupaten Soppeng pada tanggal 13 Februari 1991. Penulis merupakan anak kedua dari pasangan Alm. Rusli HAnreng dan Almh. Fatmawaty Abdullah. Penulis menamatkan Taman Kanak-Kanak Tahun 1997, Sekolah Dasar tahun 2003. Melanjutkan SMP di SMPN 1 Marioriwawo pada tahun 2003-2006. Jenjang menengah atas di sekolah kejuruan SPP Negeri Rappang/ SMKN 4 Sidrap saat ini pada tahun 2006-2009. Penulis melanjutkan ke jenjang S1 di Fakultas Peternakan Universitas Hasanuddin dan selesai di tahun 2013. Sempat meniti karir selama 4 tahun di Perusahaan Peternakan yang ada di Pare-pare dan Makasar. Penulis membangun rumah tangga pada tahun 2017 dan menjadi Ibu Rumah Tangga Seutuhnya. Tahun 2022 memberanikan diri untuk melanjutkan studi Magister di Fakultas Peternakan Universitas Hasanuddin, Makasar.