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LAMPIRAN -LAMPIRAN



Optimization Software:
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LAMPIRAN 1:

HASIL ANALISIS UNIVARIATE KULTUL EMBRIO 48 JAM

EMBRIO DUA SEL

Descriptive Statistics

Dependent Variable: Duasel

Perlakuan	Mean	Std. Deviation	N
1.00	32.2750	31.22556	4
2.00	9.3750	18.75000	4
3.00	12.5000	14.43376	4
4.00	16.8750	20.14272	4
Total	17.7563	21.69448	16

Tests of Between-Subjects Effects

Dependent Variable: Duasel

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1237.777 ^a	3	412.592	.850	.493
Intercept	5044.551	1	5044.551	10.398	.007
Perlakuan	1237.777	3	412.592	.850	.493
Error	5821.983	12	485.165		
Total	12104.310	16			
Corrected Total	7059.759	15			

a. R Squared = .175 (Adjusted R Squared = -.031)

Multiple Comparisons

Dependent Variable: Duasel

LSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1.00	2.00	22.9000	15.57506	.167	-11.0351	56.8351
	3.00	19.7750	15.57506	.228	-14.1601	53.7101
	4.00	15.4000	15.57506	.342	-18.5351	49.3351
	Total	-22.9000	15.57506	.167	-56.8351	11.0351
2.00	3.00	-3.1250	15.57506	.844	-37.0601	30.8101
	4.00	-7.5000	15.57506	.639	-41.4351	26.4351
	Total	-19.7750	15.57506	.228	-53.7101	14.1601
	Total	3.1250	15.57506	.844	-30.8101	37.0601
3.00	4.00	-4.3750	15.57506	.784	-38.3101	29.5601



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4.00	1.00	-15.4000	15.57506	.342	-49.3351	18.5351
	2.00	7.5000	15.57506	.639	-26.4351	41.4351
	3.00	4.3750	15.57506	.784	-29.5601	38.3101

Based on observed means.

The error term is Mean Square(Error) = 485.165.

EMBRIO EMPAT SEL

Descriptive Statistics

Dependent Variable: empatsel

Perlakuan	Mean	Std. Deviation	N
1.00	32.2500	18.04522	4
2.00	27.9250	15.10703	4
3.00	35.3250	28.46909	4
4.00	49.3250	17.57714	4
Total	36.2063	20.08039	16

Tests of Between-Subjects Effects

Dependent Variable: empatsel

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1028.437 ^a	3	342.812	.819	.508
Intercept	20974.281	1	20974.281	50.139	.000
Perlakuan	1028.437	3	342.812	.819	.508
Error	5019.893	12	418.324		
Total	27022.610	16			
Corrected Total	6048.329	15			

a. R Squared = .170 (Adjusted R Squared = -.037)

Multiple Comparisons

Dependent Variable: empatsel

LSD

Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
1.00	4.3250	14.46244	.770	-27.1860	35.8360
2.00	-3.0750	14.46244	.835	-34.5860	28.4360
3.00	-17.0750	14.46244	.261	-48.5860	14.4360
4.00	-4.3250	14.46244	.770	-35.8360	27.1860
3.00	-7.4000	14.46244	.618	-38.9110	24.1110



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	4.00	-21.4000	14.46244	.165	-52.9110	10.1110
3.00	1.00	3.0750	14.46244	.835	-28.4360	34.5860
	2.00	7.4000	14.46244	.618	-24.1110	38.9110
	4.00	-14.0000	14.46244	.352	-45.5110	17.5110
4.00	1.00	17.0750	14.46244	.261	-14.4360	48.5860
	2.00	21.4000	14.46244	.165	-10.1110	52.9110
	3.00	14.0000	14.46244	.352	-17.5110	45.5110

Based on observed means.

The error term is Mean Square(Error) = 418.324.

EMBRIO DELAPAN SEL

Descriptive Statistics

Dependent Variable: delpnsl

Perlakuan	Mean	Std. Deviation	N
1.00	26.4000	10.54830	4
2.00	33.1250	19.72467	4
3.00	34.7750	24.33384	4
4.00	25.3750	22.33598	4
Total	29.9188	18.33329	16

Tests of Between-Subjects Effects

Dependent Variable: delpnsl

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	267.562 ^a	3	89.187	.224	.878
Intercept	14322.106	1	14322.106	36.000	.000
Perlakuan	267.562	3	89.187	.224	.878
	4774.082	12	397.840		
	19363.750	16			
	5041.644	15			

3 (Adjusted R Squared = -.184)



Optimization Software:
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Multiple Comparisons

Dependent Variable: delpnsl

LSD

(I) Perlakuan	(J) Perlakuan	Mean Difference			95% Confidence Interval	
		(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1.00	2.00	-6.7250	14.10390	.642	-37.4548	24.0048
	3.00	-8.3750	14.10390	.564	-39.1048	22.3548
	4.00	1.0250	14.10390	.943	-29.7048	31.7548
2.00	1.00	6.7250	14.10390	.642	-24.0048	37.4548
	3.00	-1.6500	14.10390	.909	-32.3798	29.0798
	4.00	7.7500	14.10390	.593	-22.9798	38.4798
3.00	1.00	8.3750	14.10390	.564	-22.3548	39.1048
	2.00	1.6500	14.10390	.909	-29.0798	32.3798
	4.00	9.4000	14.10390	.518	-21.3298	40.1298
4.00	1.00	-1.0250	14.10390	.943	-31.7548	29.7048
	2.00	-7.7500	14.10390	.593	-38.4798	22.9798
	3.00	-9.4000	14.10390	.518	-40.1298	21.3298

Based on observed means.

The error term is Mean Square(Error) = 397.840.

EMBRIO ENAM BELAS SEL

Descriptive Statistics

Dependent Variable: enamblssel

Perlakuan	Mean	Std. Deviation	N
1.00	9.0750	18.15000	4
2.00	27.5000	24.66441	4
3.00	17.4000	19.86974	4
4.00	8.4250	11.78654	4
Total	15.6000	18.92103	16

Tests of Between-Subjects Effects

Dependent Variable: enamblssel

Type III Sum of Squares	df	Mean Square	F	Sig.
955.625 ^a	3	318.542	.866	.485
3893.760	1	3893.760	10.585	.007
955.625	3	318.542	.866	.485
4414.455	12	367.871		
9263.840	16			
Corrected Total	15			



a. R Squared = .178 (Adjusted R Squared = -.028)

Multiple Comparisons

Dependent Variable: enamblssel

LSD

(I) Perlakuan	(J) Perlakuan	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
		(I-J)			Lower Bound	Upper Bound
1.00	2.00	-18.4250	13.56229	.199	-47.9747	11.1247
	3.00	-8.3250	13.56229	.551	-37.8747	21.2247
	4.00	.6500	13.56229	.963	-28.8997	30.1997
2.00	1.00	18.4250	13.56229	.199	-11.1247	47.9747
	3.00	10.1000	13.56229	.471	-19.4497	39.6497
	4.00	19.0750	13.56229	.185	-10.4747	48.6247
3.00	1.00	8.3250	13.56229	.551	-21.2247	37.8747
	2.00	-10.1000	13.56229	.471	-39.6497	19.4497
	4.00	8.9750	13.56229	.521	-20.5747	38.5247
4.00	1.00	-.6500	13.56229	.963	-30.1997	28.8997
	2.00	-19.0750	13.56229	.185	-48.6247	10.4747
	3.00	-8.9750	13.56229	.521	-38.5247	20.5747

Based on observed means.

The error term is Mean Square(Error) = 367.871.

LAMPIRAN 2: HASIL ANALISIS UNIVARIATE KULTUL EMBRIO 96 JAM

DELAPAN SEL

Descriptive Statistics

Dependent Variable: delpnsel

Perlakuan	Mean	Std. Deviation	N
1.00	47.4250	12.76933	4
2.00	16.7500	14.16863	4
3.00	15.2000	13.73536	4
4.00	16.3000	16.40203	4
Total	16.1688	18.59519	16



Optimization Software:
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Tests of Between-Subjects Effects

Dependent Variable: delpnsel

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2722.237 ^a	3	907.412	4.418	.026
Intercept	10135.456	1	10135.456	49.351	.000
Perlkuan	2722.237	3	907.412	4.418	.026
Error	2464.478	12	205.373		
Total	15322.170	16			
Corrected Total	5186.714	15			

a. R Squared = .525 (Adjusted R Squared = .406)

Multiple Comparisons

Dependent Variable: delpnsel

LSD

(I) Perlkuan	(J) Perlkuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1.00	2.00	30.6750*	10.13344	.011	8.5961	52.7539
	3.00	32.2250*	10.13344	.008	10.1461	54.3039
	4.00	26.1250*	10.13344	.024	4.0461	48.2039
2.00	1.00	-30.6750*	10.13344	.011	-52.7539	-8.5961
	3.00	1.5500	10.13344	.881	-20.5289	23.6289
	4.00	-4.5500	10.13344	.661	-26.6289	17.5289
3.00	1.00	-32.2250*	10.13344	.008	-54.3039	-10.1461
	2.00	-1.5500	10.13344	.881	-23.6289	20.5289
	4.00	-6.1000	10.13344	.558	-28.1789	15.9789
4.00	1.00	-26.1250*	10.13344	.024	-48.2039	-4.0461
	2.00	4.5500	10.13344	.661	-17.5289	26.6289
	3.00	6.1000	10.13344	.558	-15.9789	28.1789

Based on observed means.

The error term is Mean Square(Error) = 205.373.

*. The mean difference is significant at the .05 level.

ENAM BELAS SEL

Descriptive Statistics

enamblssel

Mean	Std. Deviation	N
6.6250	7.39656	4
6.6750	11.18135	4
6.2000	18.14185	4
6.0500	20.61011	4
Total	50.8875	16



Optimization Software:
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Tests of Between-Subjects Effects

Dependent Variable: enamblssel

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	640.953 ^a	3	213.651	.915	.463
Intercept	41432.602	1	41432.602	177.511	.000
Perlkuan	640.953	3	213.651	.915	.463
Error	2800.905	12	233.409		
Total	44874.460	16			
Corrected Total	3441.857	15			

a. R Squared = .186 (Adjusted R Squared = -.017)

Multiple Comparisons

Dependent Variable: enamblssel

LSD

(I) Perlkuan	(J) Perlkuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1.00	2.00	-10.0500	10.80298	.371	-33.5877	13.4877
	3.00	-15.5750	10.80298	.175	-39.1127	7.9627
	4.00	-15.4250	10.80298	.179	-38.9627	8.1127
2.00	1.00	10.0500	10.80298	.371	-13.4877	33.5877
	3.00	-5.5250	10.80298	.618	-29.0627	18.0127
	4.00	-5.3750	10.80298	.628	-28.9127	18.1627
3.00	1.00	15.5750	10.80298	.175	-7.9627	39.1127
	2.00	5.5250	10.80298	.618	-18.0127	29.0627
	4.00	.1500	10.80298	.989	-23.3877	23.6877
4.00	1.00	15.4250	10.80298	.179	-8.1127	38.9627
	2.00	5.3750	10.80298	.628	-18.1627	28.9127
	3.00	-.1500	10.80298	.989	-23.6877	23.3877

Based on observed means.

The error term is Mean Square(Error) = 233.409.

TIGA PULUH DUA SEL



Descriptive Statistics

Dependent Variable: tigaduasel

Perlkuan	Mean	Std. Deviation	N
1.00	28.3500	9.64175	4
2.00	28.5750	5.44266	4
3.00	28.5750	9.76844	4

4.00	22.6500	7.96430	4
Total	23.0375	12.09495	16

Tests of Between-Subjects Effects

Dependent Variable: tigaduasel

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1350.002 ^a	3	450.001	6.396	.008
Intercept	8491.623	1	8491.623	120.689	.000
Perlkuan	1350.002	3	450.001	6.396	.008
Error	844.315	12	70.360		
Total	10685.940	16			
Corrected Total	2194.318	15			

a. R Squared = .615 (Adjusted R Squared = .519)

Multiple Comparisons

Dependent Variable: tigaduasel

LSD

(I) Perlkuan	(J) Perlkuan	Mean Difference (I-J)			95% Confidence Interval	
		Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1.00	2.00	-24.2250*	5.93126	.002	-37.1481	-11.3019
	3.00	-20.2250*	5.93126	.005	-33.1481	-7.3019
	4.00	-14.3000*	5.93126	.033	-27.2231	-1.3769
2.00	1.00	24.2250*	5.93126	.002	11.3019	37.1481
	3.00	4.0000	5.93126	.513	-8.9231	16.9231
	4.00	9.9250	5.93126	.120	-2.9981	22.8481
3.00	1.00	20.2250*	5.93126	.005	7.3019	33.1481
	2.00	-4.0000	5.93126	.513	-16.9231	8.9231
	4.00	5.9250	5.93126	.338	-6.9981	18.8481
4.00	1.00	14.3000*	5.93126	.033	1.3769	27.2231
	2.00	-9.9250	5.93126	.120	-22.8481	2.9981
	3.00	-5.9250	5.93126	.338	-18.8481	6.9981

d means.

Mean Square(Error) = 70.360.

ence is significant at the .05 level.



Lampiran 3. Dokumentasi Penelitian



Ovarium Sapi



Bunsen



Media Maturasi



Mikroskop



Bahan Media Maturasi



Bahan Media Fertilisasi



Proses Pembuatan Media Kultur



Pembuatan Media Kultur



Nitrogen cair



Spinner



Pipet dan Selang



Larutan NaCl 0.9%



Mikropipet dan Tip



Cawan dan Pinset



Oven

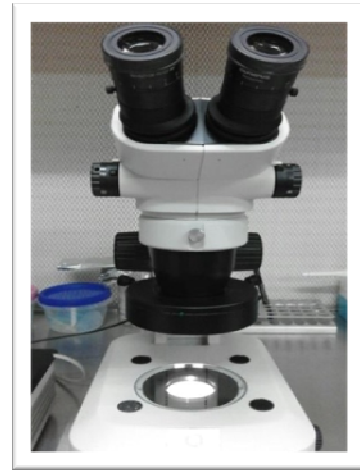


Stirer

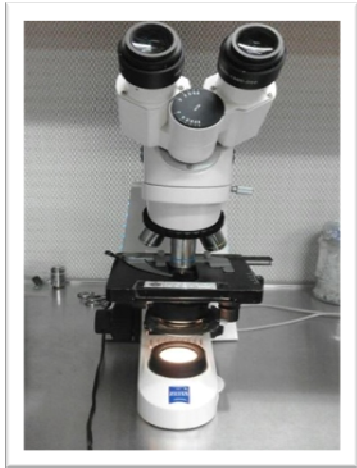




Inkubator



Microskop Stereo



Inverted



4



Minitube



Cawan Petri



Straw Sperma



Ovarium Sapi

RIWAYAT HIDUP



MUHAMMAD NASRULLAH (I 111 13

032) lahir di Benteng, 28 Desember 1994.

Anak keempat dari pasangan Syamsuddin dan

Rosmayani. Mengenyam pendidikan tingkat

dasar di MIS Aisyiyah Benteng Selayar dan

lulus pada tahun 2007. Setelah selesai dari bangku Sekolah Dasar,

penulis kemudian melanjutkan pendidikan lanjutan pertama di

SMP Alquran Babussalam Selayar dan lulus pada tahun 2010.

Pada tahun yang sama penulis melanjutkan pendidikan menengah

atas di SMA Negeri 1 Selayar dan lulus pada tahun 2013. Pada

tahun yang sama, penulis diterima di salah satu Perguruan

Tinggi Negeri di Makassar yaitu Fakultas Peternakan

Universitas Hasanuddin dengan program Strata Satu (S1).

Selama masa perkuliahan, penulis aktif di salah satu himpunan di

Fakultas Peternakan yaitu Himpunan Mahasiswa Produksi

Ternak (HIMAPROTEK). Dan penulis berhasil menyelesaikan

studi sarjana selama 7 tahun dan lulus pada tahun 2020.

