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LAMPIRAN

1. Dokumentasi Penelitian



Ket. Persiapan penampungan semen



Ket. Proses penampungan semen



Ket. Membuat Fraksi atas dan bawah



Ket. Proses *sexing* spermatozoa



Ket. Menghitung konsentrasi spermatozoa



Ket. Hasil konsentrasi spermatozoa menggunakan *photometer SDM 6*

2. Hasil Analisis Ragam

Motilitas

Univariate Analysis of Variance

[DataSet1] C:\Users\WINDOWS 8.1\Documents\Rahmat\PROPOSAL S2\lapisan atas.sav

Between-Subjects Factors

		Value Label	N
Perlakuan P	1	Kontrol	10
	2	10%	10
	3	15%	10
	4	20%	10
Perlakuan A	0		10
	1	A1	15
	2	A2	15

Tests of Between-Subjects Effects

Dependent Variable: Hasil

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	266232.533 ^a	7	38033.219	5.522E3	.000
P	11.431	2	5.715	.830	.445
A	40.787	1	40.787	5.922	.021
P * A	2.390	2	1.195	.174	.841
Error	227.277	33	6.887		
Total	266459.810	40			

a. R Squared = .999 (Adjusted R Squared = .999)

Estimated Marginal Means

1. Perlakuan P

Dependent Variable: Hasil

Perlakuan P	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Kontrol	87.986 ^a	.830	86.298	89.674
10%	80.094 ^a	.830	78.406	81.782
15%	79.291 ^a	.830	77.603	80.979
20%	78.583 ^a	.830	76.895	80.271

a. Based on modified population marginal mean.

2. Perlakuan A

Dependent Variable: Hasil

Perlakuan A	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0	87.986 ^a	.830	86.298	89.674
A1	78.157 ^a	.678	76.778	79.535
A2	80.489 ^a	.678	79.110	81.867

a. Based on modified population marginal mean.

3. Perlakuan A * Perlakuan P

Dependent Variable: Hasil

Perlakuan A	Perlakuan P	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
0	Kontrol	87.986	.830	86.298	89.674
	10%	. ^a	.	.	.
	15%	. ^a	.	.	.
	20%	. ^a	.	.	.
A1	Kontrol	. ^a	.	.	.
	10%	79.256	1.174	76.868	81.644
	15%	78.158	1.174	75.770	80.546
	20%	77.056	1.174	74.668	79.444
A2	Kontrol	. ^a	.	.	.
	10%	80.932	1.174	78.544	83.320
	15%	80.424	1.174	78.036	82.812
	20%	80.110	1.174	77.722	82.498

a. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Post Hoc Tests

Perlakuan P

Multiple Comparisons

Hasil
LSD

(I) Perlakuan P	(J) Perlakuan P	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	10%	7.8920*	1.17364	.000	5.5042	10.2798
	15%	8.6950*	1.17364	.000	6.3072	11.0828
	20%	9.4030*	1.17364	.000	7.0152	11.7908
10%	Kontrol	-7.8920*	1.17364	.000	-10.2798	-5.5042
	15%	.8030	1.17364	.499	-1.5848	3.1908
	20%	1.5110	1.17364	.207	-.8768	3.8988
15%	Kontrol	-8.6950*	1.17364	.000	-11.0828	-6.3072
	10%	-.8030	1.17364	.499	-3.1908	1.5848
	20%	.7080	1.17364	.550	-1.6798	3.0958
20%	Kontrol	-9.4030*	1.17364	.000	-11.7908	-7.0152
	10%	-1.5110	1.17364	.207	-3.8988	.8768
	15%	-.7080	1.17364	.550	-3.0958	1.6798

Based on observed means.

The error term is Mean Square(Error) = 6.887.

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

Homogeneous Subsets

Perlakuan A

Multiple Comparisons

Hasil
LSD

(I) Perlakuan n A	(J) Perlakuan n A	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0	A1	9.8293*	1.07138	.000	7.6496	12.0091
	A2	7.4973*	1.07138	.000	5.3176	9.6771
A1	0	-9.8293*	1.07138	.000	-12.0091	-7.6496
	A2	-2.3320*	.95828	.021	-4.2816	-.3824
A2	0	-7.4973*	1.07138	.000	-9.6771	-5.3176
	A1	2.3320*	.95828	.021	.3824	4.2816

Based on observed means.

The error term is Mean Square(Error) = 6.887.

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

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Perlakuan P	1	Kontrol	5
	2	30%	10
	3	45%	10
	4	60%	10
Perlakuan A	0		5
	1	A1	15
	2	A2	15

Tests of Between-Subjects Effects

Dependent Variable: Hasil

Source	Type II Sum of Squares	df	Mean Square	F	Sig.
Model	236621.553 ^a	7	33803.079	6.354E3	.000
P	.020	2	.010	.002	.998
A	8.802	1	8.802	1.655	.209
P * A	2.773	2	1.386	.261	.772
Error	148.957	28	5.320		
Total	236770.509	35			

a. R Squared = .999 (Adjusted R Squared = .999)

Estimated Marginal Means

1. Perlakuan P

Dependent Variable: Hasil

Perlakuan P	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Kontrol	87.986 ^a	1.031	85.873	90.099
30%	81.257 ^a	.729	79.763	82.751
45%	81.201 ^a	.729	79.707	82.695
60%	81.203 ^a	.729	79.709	82.697

a. Based on modified population marginal mean.

2. Perlakuan A

Dependent Variable: Hasil

Perlakuan A	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0	87.986 ^a	1.031	85.873	90.099
A1	80.679 ^a	.596	79.459	81.899
A2	81.762 ^a	.596	80.542	82.982

a. Based on modified population marginal mean.

3. Perlakuan A * Perlakuan P

Dependent Variable: Hasil

Perlakuan A	Perlakuan P	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
0	Kontrol	87.986	1.031	85.873	90.099
	30%	. ^a	.	.	.
	45%	. ^a	.	.	.
	60%	. ^a	.	.	.
A1	Kontrol	. ^a	.	.	.
	30%	80.67834	1.031	78.221	83.137
	45%	81.024	1.031	78.565	82.791
	60%	80.3	1.031	78.911	82.447
A2	Kontrol	. ^a	.	.	.
	30%	82.180	1.031	80.067	84.293
	45%	81.724	1.031	79.611	83.837
	60%	81.382	1.031	79.269	83.495

a. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Post Hoc Tests

Perlakuan P

Multiple Comparisons

Hasil
LSD

(I) Perlakuan P	(J) Perlakuan P	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	30%	6.7290*	1.26332	.000	4.1412	9.3168
	45%	6.7850*	1.26332	.000	4.1972	9.3728
	60%	6.7830*	1.26332	.000	4.1952	9.3708
30%	Kontrol	-6.7290*	1.26332	.000	-9.3168	-4.1412
	45%	.0560	1.03149	.957	-2.0569	2.1689
	60%	.0540	1.03149	.959	-2.0589	2.1669
45%	Kontrol	-6.7850*	1.26332	.000	-9.3728	-4.1972
	30%	-.0560	1.03149	.957	-2.1689	2.0569
	60%	-.0020	1.03149	.998	-2.1149	2.1109
60%	Kontrol	-6.7830*	1.26332	.000	-9.3708	-4.1952
	30%	-.0540	1.03149	.959	-2.1669	2.0589
	45%	.0020	1.03149	.998	-2.1109	2.1149

Based on observed means.

The error term is Mean Square(Error) = 5.320.

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

Homogeneous Subsets

Perlakuan A

Multiple Comparisons

Hasil
LSD

(I) Perlakuan A	(J) Perlakuan A	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0	A1	7.3073*	1.19107	.000	4.8675	9.7471
	A2	6.2240*	1.19107	.000	3.7842	8.6638
A1	0	-7.3073*	1.19107	.000	-9.7471	-4.8675
	A2	-1.0833	.84221	.209	-2.8085	.6419
A2	0	-6.2240*	1.19107	.000	-8.6638	-3.7842
	A1	1.0833	.84221	.209	-.6419	2.8085

Based on observed means.

The error term is Mean Square(Error) = 5.320.

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

Konsentrasi

Between-Subjects Factors

		Value Label	N
Perlakuan P	1	Kontrol	5
	2	10%	10
	3	15%	10
	4	20%	10
Perlakuan A	0		5
	1	A1	15
	2	A2	15

Tests of Between-Subjects Effects

Dependent Variable: Hasil

Source	Type II Sum of Squares	df	Mean Square	F	Sig.
Model	16.406 ^a	7	2.344	117.008	.000
P	.002	2	.001	.046	.955
A	.001	1	.001	.073	.789
P * A	.005	2	.002	.123	.885
Error	.561	28	.020		
Total	16.967	35			

a. R Squared = .967 (Adjusted R Squared = .959)

Estimated Marginal Means

1. Perlakuan P

Dependent Variable: Hasil

Perlakuan P	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Kontrol	1.524 ^a	.063	1.395	1.654
10%	.404 ^a	.045	.313	.496
15%	.405 ^a	.045	.314	.497
20%	.388 ^a	.045	.297	.480

a. Based on modified population marginal mean.

2. Perlakuan A

Dependent Variable: Hasil

Perlakuan A	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0	1.524 ^a	.063	1.395	1.654
A1	.392 ^a	.037	.317	.467
A2	.406 ^a	.037	.331	.481

a. Based on modified population marginal mean.

3. Perlakuan A * Perlakuan P

Dependent Variable: Hasil

Perlakuan A	Perlakuan P	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
0	Kontrol	1.524	.063	1.395	1.654
	10%	. ^a	.	.	.
	15%	. ^a	.	.	.
	20%	. ^a	.	.	.
A1	Kontrol	. ^a	.	.	.
	10%	.415	.063	.286	.545
	15%	.390	.063	.261	.520
	20%	.371	.063	.241	.501
A2	Kontrol	. ^a	.	.	.
	10%	.393	.063	.264	.523
	15%	.420	.063	.290	.550
	20%	.405	.063	.276	.535

a. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Post Hoc Tests

Perlakuan P

Multiple Comparisons

Hasil
LSD

(I) Perlakuan P	(J) Perlakuan P	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	10%	1.11990*	.077518	.000	.96111	1.27869
	15%	1.11900*	.077518	.000	.96021	1.27779
	20%	1.13600*	.077518	.000	.97721	1.29479
10%	Kontrol	-1.11990*	.077518	.000	-1.27869	-.96111
	15%	-.00090	.063293	.989	-.13055	.12875
	20%	.01610	.063293	.801	-.11355	.14575
15%	Kontrol	-1.11900*	.077518	.000	-1.27779	-.96021
	10%	.00090	.063293	.989	-.12875	.13055
	20%	.01700	.063293	.790	-.11265	.14665
20%	Kontrol	-1.13600*	.077518	.000	-1.29479	-.97721
	10%	-.01610	.063293	.801	-.14575	.11355
	15%	-.01700	.063293	.790	-.14665	.11265

Based on observed means.

The error term is Mean Square(Error) = .020.

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

Homogeneous Subsets

Perlakuan A

Multiple Comparisons

Hasil
LSD

(I) Perlakuan A	(J) Perlakuan A	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0	A1	1.13193*	.073085	.000	.98223	1.28164
	A2	1.11800*	.073085	.000	.96829	1.26771
A1	0	-1.13193*	.073085	.000	-1.28164	-.98223
	A2	-.01393	.051679	.789	-.11979	.09193
A2	0	-1.11800*	.073085	.000	-1.26771	-.96829
	A1	.01393	.051679	.789	-.09193	.11979

Based on observed means.

The error term is Mean Square(Error) = .020.

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

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Perlakuan P	1	Kontrol	5
	2	30%	10
	3	45%	10
	4	60%	10
Perlakuan A	0		5
	1	A1	15
	2	A2	15

Tests of Between-Subjects Effects

Dependent Variable: Hasil

Source	Type II Sum of Squares	df	Mean Square	F	Sig.
Model	15.705 ^a	7	2.244	117.044	.000
P	.016	2	.008	.412	.666
A	.001	1	.001	.042	.840
P * A	.005	2	.002	.120	.888
Error	.537	28	.019		
Total	16.242	35			

a. R Squared = .967 (Adjusted R Squared = .959)

Estimated Marginal Means

1. Perlakuan P

Dependent Variable: Hasil

Perlakuan P	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Kontrol	1.524 ^a	.062	1.397	1.651
30%	.393 ^a	.044	.304	.483
45%	.374 ^a	.044	.284	.463
60%	.338 ^a	.044	.248	.427

a. Based on modified population marginal mean.

2. Perlakuan A

Dependent Variable: Hasil

Perlakuan A	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0	1.524 ^a	.062	1.397	1.651
A1	.373 ^a	.036	.300	.447
A2	.363 ^a	.036	.290	.436

a. Based on modified population marginal mean.

3. Perlakuan A * Perlakuan P

Dependent Variable: Hasil

Perlakuan A	Perlakuan P	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
0	Kontrol	1.524	.062	1.397	1.651
	30%	. ^a	.	.	.
	45%	. ^a	.	.	.
	60%	. ^a	.	.	.
A1	Kontrol	. ^a	.	.	.
	30%	.405	.062	.278	.532
	45%	.389	.062	.263	.516
	60%	.326	.062	.199	.452
A2	Kontrol	. ^a	.	.	.
	30%	.381	.062	.254	.508
	45%	.358	.062	.231	.485
	60%	.350	.062	.223	.477

a. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Post Hoc Tests

Perlakuan P

Multiple Comparisons

Hasil
LSD

(I) Perlakuan P	(J) Perlakuan P	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	30%	1.13100*	.075833	.000	.97566	1.28634
	45%	1.15050*	.075833	.000	.99516	1.30584
	60%	1.18640*	.075833	.000	1.03106	1.34174
30%	Kontrol	-1.13100*	.075833	.000	-1.28634	-.97566
	45%	.01950	.061917	.755	-.10733	.14633
	60%	.05540	.061917	.379	-.07143	.18223
45%	Kontrol	-1.15050*	.075833	.000	-1.30584	-.99516
	30%	-.01950	.061917	.755	-.14633	.10733
	60%	.03590	.061917	.567	-.09093	.16273
60%	Kontrol	-1.18640*	.075833	.000	-1.34174	-1.03106
	30%	-.05540	.061917	.379	-.18223	.07143
	45%	-.03590	.061917	.567	-.16273	.09093

Based on observed means.

The error term is Mean Square(Error) = .019.

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

Homogeneous Subsets

Perlakuan A

Multiple Comparisons

Hasil
LSD

(I) Perlakuan A	(J) Perlakuan A	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0	A1	1.15080*	.071496	.000	1.00435	1.29725
	A2	1.16113*	.071496	.000	1.01468	1.30759
A1	0	-1.15080*	.071496	.000	-1.29725	-1.00435
	A2	.01033	.050555	.840	-.09322	.11389
A2	0	-1.16113*	.071496	.000	-1.30759	-1.01468
	A1	-.01033	.050555	.840	-.11389	.09322

Based on observed means.

The error term is Mean Square(Error) = .019.

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

Viabilitas

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Perlakuan P	1	Kontrol	5
	2	10%	10
	3	15%	10
	4	20%	10
Perlakuan A	0		5
	1	A1	15
	2	A2	15

Tests of Between-Subjects Effects

Dependent Variable: Hasil

Source	Type II Sum of Squares	df	Mean Square	F	Sig.
Model	225644.280 ^a	7	32234.897	7.060E3	.000
P	7.660	2	3.830	.839	.443
A	26.133	1	26.133	5.724	.024
P * A	.830	2	.415	.091	.913
Error	127.843	28	4.566		
Total	225772.122	35			

a. R Squared = .999 (Adjusted R Squared = .999)

Estimated Marginal Means

1. Perlakuan P

Dependent Variable: Hasil

Perlakuan P	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Kontrol	85.106 ^a	.956	83.149	87.063
10%	80.166 ^a	.676	78.782	81.550
15%	79.165 ^a	.676	77.781	80.549
20%	79.035 ^a	.676	77.651	80.419

a. Based on modified population marginal mean.

2. Perlakuan A

Dependent Variable: Hasil

Perlakuan A	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0	85.106 ^a	.956	83.149	87.063
A1	78.522 ^a	.552	77.392	79.652
A2	80.389 ^a	.552	79.259	81.519

a. Based on modified population marginal mean.

3. Perlakuan A * Perlakuan P

Dependent Variable: Hasil

Perlakuan A	Perlakuan P	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
0	Kontrol	85.106	.956	83.149	87.063
	10%	. ^a	.	.	.
	15%	. ^a	.	.	.
	20%	. ^a	.	.	.
A1	Kontrol	. ^a	.	.	.
	10%	79.448	.956	77.491	81.405
	15%	78.206	.956	76.249	80.163
	20%	77.912	.956	75.955	79.869
A2	Kontrol	. ^a	.	.	.
	10%	80.884	.956	78.927	82.841
	15%	80.124	.956	78.167	82.081
	20%	80.158	.956	78.201	82.115

a. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Post Hoc Tests

Perlakuan P

Multiple Comparisons

Hasil
LSD

(I) Perlakuan P	(J) Perlakuan P	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	10%	4.94000*	1.170359	.000	2.54263	7.33737
	15%	5.94100*	1.170359	.000	3.54363	8.33837
	20%	6.07100*	1.170359	.000	3.67363	8.46837
10%	Kontrol	-4.94000*	1.170359	.000	-7.33737	-2.54263
	15%	1.00100	.955595	.304	-.95645	2.95845
	20%	1.13100	.955595	.247	-.82645	3.08845
15%	Kontrol	-5.94100*	1.170359	.000	-8.33837	-3.54363
	10%	-1.00100	.955595	.304	-2.95845	.95645
	20%	.13000	.955595	.893	-1.82745	2.08745
20%	Kontrol	-6.07100*	1.170359	.000	-8.46837	-3.67363
	10%	-1.13100	.955595	.247	-3.08845	.82645
	15%	-.13000	.955595	.893	-2.08745	1.82745

Based on observed means.

The error term is Mean Square(Error) = 4.566.

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

Homogeneous Subsets

Perlakuan A

Multiple Comparisons

Hasil
LSD

(I) Perlakuan A	(J) Perlakuan A	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0	A1	6.58400*	1.103425	.000	4.32374	8.84426
	A2	4.71733*	1.103425	.000	2.45707	6.97760
A1	0	-6.58400*	1.103425	.000	-8.84426	-4.32374
	A2	-1.86667*	.780240	.024	-3.46492	-.26842
A2	0	-4.71733*	1.103425	.000	-6.97760	-2.45707
	A1	1.86667*	.780240	.024	.26842	3.46492

Based on observed means.

The error term is Mean Square(Error) = 4.566.

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

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Perlakuan P	1	Kontrol	5
	2	30%	10
	3	45%	10
	4	60%	10
Perlakuan A	0		5
	1	A1	15
	2	A2	15

Tests of Between-Subjects Effects

Dependent Variable: Hasil

Source	Type II Sum of Squares	Df	Mean Square	F	Sig.
Model	234954.253 ^a	7	33564.893	7.911E3	.000
P	.546	2	.273	.064	.938
A	7.610	1	7.610	1.794	.191
P * A	5.860	2	2.930	.691	.510
Error	118.800	28	4.243		
Total	235073.052	35			

a. R Squared = .999 (Adjusted R Squared = .999)

Estimated Marginal Means

1. Perlakuan P

Dependent Variable: Hasil

Perlakuan P	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Kontrol	85.106 ^a	.921	83.219	86.993
30%	81.522 ^a	.651	80.188	82.856
45%	81.204 ^a	.651	79.870	82.538
60%	81.441 ^a	.651	80.107	82.775

a. Based on modified population marginal mean.

2. Perlakuan A

Dependent Variable: Hasil

Perlakuan A	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0	85.106 ^a	.921	83.219	86.993
A1	80.885 ^a	.532	79.796	81.975
A2	81.893 ^a	.532	80.803	82.982

a. Based on modified population marginal mean.

3. Perlakuan A * Perlakuan P

Dependent Variable: Hasil

Perlakuan A	Perlakuan P	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
0	Kontrol	85.106	.921	83.219	86.993
	30%	. ^a	.	.	.
	45%	. ^a	.	.	.
	60%	. ^a	.	.	.
A1	Kontrol	. ^a	.	.	.
	30%	80.412	.921	78.525	82.299
	45%	80.872	.921	78.985	82.759
	60%	81.372	.921	79.485	83.259
A2	Kontrol	. ^a	.	.	.
	30%	80.868	.921	80.745	84.519
	45%	81.536	.921	79.649	83.423
	60%	82.632	.921	79.623	83.397

a. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Post Hoc Tests

Perlakuan P

Multiple Comparisons

Hasil
LSD

(I) Perlakuan P	(J) Perlakuan P	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	30%	3.5840*	1.12821	.004	1.2730	5.8950
	45%	3.9020*	1.12821	.002	1.5910	6.2130
	60%	3.6650*	1.12821	.003	1.3540	5.9760
30%	Kontrol	-3.5840*	1.12821	.004	-5.8950	-1.2730
	45%	.3180	.92118	.733	-1.5689	2.2049
	60%	.0810	.92118	.931	-1.8059	1.9679
45%	Kontrol	-3.9020*	1.12821	.002	-6.2130	-1.5910
	30%	-.3180	.92118	.733	-2.2049	1.5689
	60%	-.2370	.92118	.799	-2.1239	1.6499
60%	Kontrol	-3.6650*	1.12821	.003	-5.9760	-1.3540
	30%	-.0810	.92118	.931	-1.9679	1.8059
	45%	.2370	.92118	.799	-1.6499	2.1239

Based on observed means.

The error term is Mean Square(Error) = 4.243.

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

Homogeneous Subsets

Perlakuan A

Multiple Comparisons

Hasil
LSD

(I) Perlakuan A	(J) Perlakuan A	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0	A1	4.2207*	1.06368	.000	2.0418	6.3995
	A2	3.2133*	1.06368	.005	1.0345	5.3922
A1	0	-4.2207*	1.06368	.000	-6.3995	-2.0418
	A2	-1.0073	.75214	.191	-2.5480	.5334
A2	0	-3.2133*	1.06368	.005	-5.3922	-1.0345
	A1	1.0073	.75214	.191	-.5334	2.5480

Based on observed means.

The error term is Mean Square(Error) = 4.243.

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

Abnormalitas

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Perlakuan P	1	Kontrol	5
	2	10%	10
	3	15%	10
	4	20%	10
Perlakuan A	0		5
	1	A1	15
	2	A2	15

Tests of Between-Subjects Effects

Dependent Variable: Hasil

Source	Type II Sum of Squares	df	Mean Square	F	Sig.
Model	2246.953 ^a	7	320.993	2.769E3	.000
P	1.550	2	.775	6.685	.004
A	.005	1	.005	.046	.832
P * A	.073	2	.036	.314	.733
Error	3.245	28	.116		
Total	2250.198	35			

a. R Squared = .999 (Adjusted R Squared = .998)

Estimated Marginal Means

1. Perlakuan P

Dependent Variable: Hasil

Perlakuan P	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Kontrol	6.152 ^a	.152	5.840	6.464
10%	8.033 ^a	.108	7.812	8.254
15%	8.222 ^a	.108	8.001	8.443
20%	8.581 ^a	.108	8.360	8.802

a. Based on modified population marginal mean.

2. Perlakuan A

Dependent Variable: Hasil

Perlakuan A	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0	6.152 ^a	.152	5.840	6.464
A1	8.292 ^a	.088	8.112	8.472
A2	8.265 ^a	.088	8.085	8.445

a. Based on modified population marginal mean.

3. Perlakuan A * Perlakuan P

Dependent Variable: Hasil

Perlakuan A	Perlakuan P	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
0	Kontrol	6.152	.152	5.840	6.464
	10%	. ^a	.	.	.
	15%	. ^a	.	.	.
	20%	. ^a	.	.	.
A1	Kontrol	. ^a	.	.	.
	10%	7.980	.152	7.668	8.292
	15%	8.250	.152	7.938	8.562
	20%	8.646	.152	8.334	8.958
A2	Kontrol	. ^a	.	.	.
	10%	8.086	.152	7.774	8.398
	15%	8.194	.152	7.882	8.506
	20%	8.516	.152	8.204	8.828

a. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Post Hoc Tests

Perlakuan P

Multiple Comparisons

Hasil
LSD

(I) Perlakuan P	(J) Perlakuan P	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	10%	-1.8810*	.18647	.000	-2.2630	-1.4990
	15%	-2.0700*	.18647	.000	-2.4520	-1.6880
	20%	-2.4290*	.18647	.000	-2.8110	-2.0470
10%	Kontrol	1.8810*	.18647	.000	1.4990	2.2630
	15%	-.1890	.15225	.225	-.5009	.1229
	20%	-.5480*	.15225	.001	-.8599	-.2361
15%	Kontrol	2.0700*	.18647	.000	1.6880	2.4520
	10%	.1890	.15225	.225	-.1229	.5009
	20%	-.3590*	.15225	.026	-.6709	-.0471
20%	Kontrol	2.4290*	.18647	.000	2.0470	2.8110
	10%	.5480*	.15225	.001	.2361	.8599
	15%	.3590*	.15225	.026	.0471	.6709

Based on observed means.

The error term is Mean Square(Error) = .116.

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

Homogeneous Subsets

Perlakuan A

Multiple Comparisons

Hasil
LSD

(I) Perlakuan A	(J) Perlakuan A	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0	A1	-2.1400*	.17581	.000	-2.5001	-1.7799
	A2	-2.1133*	.17581	.000	-2.4735	-1.7532
A1	0	2.1400*	.17581	.000	1.7799	2.5001
	A2	.0267	.12431	.832	-.2280	.2813
A2	0	2.1133*	.17581	.000	1.7532	2.4735
	A1	-.0267	.12431	.832	-.2813	.2280

Based on observed means.

The error term is Mean Square(Error) = .116.

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

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Perlakuan P	1	Kontrol	5
	2	30%	10
	3	45%	10
	4	60%	10
Perlakuan A	0		5
	1	A1	15
	2	A2	15

Tests of Between-Subjects Effects

Dependent Variable: Hasil

Source	Type II Sum of Squares	df	Mean Square	F	Sig.
Model	2482.809 ^a	7	354.687	2.027E3	.000
P	3.365	2	1.682	9.613	.001
A	.881	1	.881	5.032	.033
P * A	.147	2	.074	.420	.661
Error	4.900	28	.175		
Total	2487.709	35			

a. R Squared = .998 (Adjusted R Squared = .998)

Estimated Marginal Means

1. Perlakuan P

Dependent Variable: Hasil

Perlakuan P	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Kontrol	6.152 ^a	.187	5.769	6.535
30%	8.299 ^a	.132	8.028	8.570
45%	8.794 ^a	.132	8.523	9.065
60%	9.113 ^a	.132	8.842	9.384

a. Based on modified population marginal mean.

2. Perlakuan A

Dependent Variable: Hasil

Perlakuan A	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0	6.152 ^a	.187	5.769	6.535
A1	8.564 ^a	.108	8.343	8.785
A2	8.907 ^a	.108	8.685	9.128

a. Based on modified population marginal mean.

3. Perlakuan A * Perlakuan P

Dependent Variable: Hasil

Perlakuan A	Perlakuan P	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
0	Kontrol	6.152	.187	5.769	6.535
	30%	. ^a	.	.	.
	45%	. ^a	.	.	.
	60%	. ^a	.	.	.
A1	Kontrol	. ^a	.	.	.
	30%	8.046	.187	7.663	8.429
	45%	8.712	.187	8.329	9.095
	60%	8.934	.187	8.551	9.317
A2	Kontrol	. ^a	.	.	.
	30%	8.552	.187	8.169	8.935
	45%	8.876	.187	8.493	9.259
	60%	9.292	.187	8.909	9.675

a. This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

Post Hoc Tests

Perlakuan P

Multiple Comparisons

Hasil

LSD

(I) Perlakuan P	(J) Perlakuan P	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	30%	-2.1470*	.22913	.000	-2.6163	-1.6777
	45%	-2.6420*	.22913	.000	-3.1113	-2.1727
	60%	-2.9610*	.22913	.000	-3.4303	-2.4917
30%	Kontrol	2.1470*	.22913	.000	1.6777	2.6163
	45%	-.4950*	.18708	.013	-.8782	-.1118
	60%	-.8140*	.18708	.000	-1.1972	-.4308
45%	Kontrol	2.6420*	.22913	.000	2.1727	3.1113
	30%	.4950*	.18708	.013	.1118	.8782
	60%	-.3190	.18708	.099	-.7022	.0642
60%	Kontrol	2.9610*	.22913	.000	2.4917	3.4303
	30%	.8140*	.18708	.000	.4308	1.1972
	45%	.3190	.18708	.099	-.0642	.7022

Based on observed means.

The error term is Mean Square(Error) = .175.

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

Homogeneous Subsets

Perlakuan A

Multiple Comparisons

Hasil
LSD

(I) Perlakuan A	(J) Perlakuan A	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0	A1	-2.4120*	.21602	.000	-2.8545	-1.9695
	A2	-2.7547*	.21602	.000	-3.1972	-2.3122
A1	0	2.4120*	.21602	.000	1.9695	2.8545
	A2	-.3427*	.15275	.033	-.6556	-.0298
A2	0	2.7547*	.21602	.000	2.3122	3.1972
	A1	.3427*	.15275	.033	.0298	.6556

Based on observed means.

The error term is Mean Square(Error) = .175.

RIWAYAT HIDUP



RAHMAT Lahir di Kota Pinrang, 05 januari 1998 sebagai anak Kedua dari Andering dan Mutmainnah. Tinggal di Desa Makkawaru, Kecamatan Mattiro Bulu, Kabupaten Pinrang. Menempuh pendidikan pada Sekolah Dasar Negeri 76 Pinrang

dan lulus pada tahun 2010, penulis kemudian melanjutkan pendidikan lanjutan pertama di SMPN 1 Mattiro Bulu dan lulus pada tahun 2013 kemudian penulis melanjutkan pendidikan menengah atas di SMAN 11 Pinrang, dan lulus pada tahun 2016. Setelah lulus SMA, penulis melanjutkan pendidikan S1 di Universitas Hasanuddin Fakultas Peternakan dan lulus pada tahun 2021. Selanjutnya pada tahun yang sama penulis melanjutkan pendidikan Magister di Universitas Hasanuddin.