

LAMPIRAN



Lampiran 01. Analisis Data Rata-rata Konsumsi Pakan Harian dengan menggunakan RAL

Tabel 04. Data rata-rata konsumsi pakan harian

	P ₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	ΣX
U ₁	-	-	164.43	-	147.98	178.52	168.12	-	659.05
U ₂	170.52	180.88	150.18	137.55	158.02	174.19	167.86	165.02	1304.22
U ₃	156.09	171.02	-	169.76	165.26	149.76	163.69	168.71	1144.29
ΣY	326.61	351.90	314.61	307.31	471.26	502.47	499.67	333.73	3107.56
Ȳ	163.31	161.80	157.31	153.66	157.09	167.49	166.56	166.87	163.56

Sumber : Data primer : Setyowati, 2004

Perhitungan-perhitungan

$$FK = \frac{(3107.56)^2}{19} = \frac{9656929.15}{19} = 508747.88$$

$$JKT = \{(170.52)^2 + \dots + (168.71)^2\} - 508747.88$$

$$= 510996.12 - 508747.88$$

$$= 2248.24$$

$$JKP = \left\{ \frac{(326.61)^2}{2} + \dots + \frac{(333.73)^2}{2} \right\} - 508747.88$$

$$= \{53337.05 + 61916.81 + 49489.73 + 47219.72 + 74028.66 + 84158.70 +$$

$$83223.37 + 55687.86\} - 508259.43$$

$$= 509550.49 - 508747.88$$

$$= 802.61$$

$$JKG = JKT - JKP$$

$$= 2248.24 - 802.61$$

$$= 1445.63$$

Tabel Anova

Sumber Varians	db	JK	KT	Fh	Ft(5%)
Perlakuan	7	802.61	114.66	0.87	3.01
Galat	11	1445.63	131.42		
total	18	2228.12			

Dari tabel anova diatas $F_h < F_t$ maka tidak ada perbedaan yang signifikan antar perlakuan

Lampiran 02. Analisis Data Rata-rata Konsumsi Minum Harian dengan menggunakan RAL

Tabel 05. Data rata-rata konsumsi minum harian

	P ₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	ΣX
U ₁	-	-	437.81	-	374.42	452.67	482.38	-	1747.28
U ₂	366.88	405.19	401.09	427.71	450.10	488.09	414.70	431.90	3385.66
U ₃	475.73	461.52	-	452.75	310.14	419.52	479.84	556.45	3155.95
ΣY	842.61	866.71	838.90	880.46	1134.66	1360.28	1376.92	988.35	8288.89
Ȳ	421.31	433.36	419.45	440.23	378.22	453.43	458.97	494.18	436.26

Sumber : Setyowati :2004

Perhitungan-perhitungan:

$$FK = \frac{(8288.89)^2}{19} = \frac{66023844.51}{19} = 3474939.18$$

$$\begin{aligned} JKT &= \{(366.88)^2 + \dots + (556.45)^2\} - 3474939.18 \\ &= 3521326.20 - 3474939.18 \\ &= 46387.02 \end{aligned}$$

$$\begin{aligned} JKP &= \left\{ \frac{(842.61)^2}{2} + \dots + \frac{(988.35)^2}{2} \right\} - 3474939.18 \\ &= \{354995.81 + 375593.11 + 351876.61 + 387604.91 + 429151.11 + 616787.23 + \\ &631969.56 + 488417.86\} - 3616089.34 \\ &= 3490802.50 - 3474939.18 \\ &= 15863.31 \end{aligned}$$

$$\begin{aligned} JKG &= JKT - JKP \\ &= 46387.02 - 15863.31 \\ &= 30523.70 \end{aligned}$$

Tabel Anova

Sumber Varians	db	JK	KT	Fh	Ft(5%)
Perlakuan	7	15863.31	2266.19	0.82	3.01
Galat	11	30523.70	2774.88		
total	18	2228.12			

Dari tabel anova diatas $F_h < F_t$ maka tidak ada perbedaan yang signifikan antar perlakuan

Lampiran 03. Analisis Data rata-rata Pertambahan Bobot Badan Ayam per minggu dengan menggunakan RAL

Tabel 06. Data rata-rata pertambahan bobot badan ayam per minggu

	P ₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	ΣX
U ₁	-	-	546.67	-	518.5	512	478	-	2055.17
U ₂	536.5	525.33	472.17	496.33	560.33	586.17	563.5	548.67	4289
U ₃	567.33	517.33	-	628.5	564	560.5	533.67	608	3979.33
ΣY	1103.83	1042.66	1018.84	1124.83	1642.83	1658.67	1575.17	1156.67	10323.5
Ȳ	551.92	521.33	509.42	562.42	547.61	552.89	525.06	578.34	543.42

Sumber : Setyowati :2004

Perhitungan-perhitungan

$$FK = \frac{(10323.5)^2}{19} = \frac{106574652.3}{19} = 5609192.22$$

$$JKT = \{(536.5)^2 + \dots + (608)^2\} - 5609192.22$$

$$= 5638776.01 - 5609192.22$$

$$= 29583.79$$

$$JKP = \left\{ \frac{(1103.83)^2}{2} + \dots + \frac{(1156.67)^2}{2} \right\} - 5609192.22$$

$$= \{609220.33 + 543569.94 + 519017.47 + 632621.26 + 899630.14 + 917062.06 + 82705.35 + 668942.74\} - 5609192.22$$

$$= 5617117.45 - 5609192.22$$

$$= 7925.23$$

$$JKG = JKT - JKP$$

$$= 29583.79 - 7925.23$$

$$= 21658.56$$

Tabel Anova

Sumber Varians	db	JK	K'T	Fh	Ft(5%)
Perlakuan	7	7925.23	1132.18	0.58	3.01
Galat	11	21658.56	1968.96		
total	18	29583.79			

Dari tabel anova diatas $F_h < F_t$ maka tidak ada perbedaan yang signifikan antar perlakuan.

Lampiran 04. Analisis Data Jumlah Eritrosit dengan menggunakan RAL

Tabel 07. Data Jumlah Eritrosit

	P ₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	ΣX
U ₁	-	-	4080000	-	2880000	3570000	3940000	-	14470000
U ₂	3500000	4020000	4030000	2550000	2690000	3600000	3750000	3000000	27140000
U ₃	3535000	3825000	-	2830000	2690000	3550000	3900000	3220000	23550000
ΣY	7035000	7845000	8110000	5380000	8260000	10720000	11590000	6220000	65160000
Ȳ	3517500	3922500	4055000	2690000	2753333	3573333	3863333	3110000	21720000

Sumber : Setyowati : 2004

Perhitungan:

$$FK = \frac{(65160000)^2}{19} = \frac{4245825600000000}{19} = 223464505300000$$

$$\begin{aligned} JKT &= \{(3500000)^2 + \dots + (3220000)^2\} - FK \\ &= \{(12250000000000) + \dots + (10368400000000)\} - 223464505300000 \\ &= 228174450000000 - 223464505300000 \\ &= 47099447000000 \end{aligned}$$

$$\begin{aligned} JKP &= \left\{ \frac{(7035000)^2}{2} + \dots + \frac{(6220000)^2}{2} \right\} - FK \\ &= \{24745612500000 + \dots + 19344200000000\} - 223464505300000 \\ &= 228042775000000 - 223464505300000 \\ &= 4578269690000 \end{aligned}$$

$$\begin{aligned} JKG &= JKT - JKP \\ &= 47099447000000 - 4578269690000 \\ &= 131675010000 \end{aligned}$$

Tabel Anova

Sumber Varians	db	JK	KT	Fh	Ft(5%)
Perlakuan	7	4578269690000	654038527100	54.64	3.01
Galat	11	131675010000	11970455450		
total	18	29583.79			

Dari tabel anova diatas $F_h > F_t$ maka ada perbedaan yang signifikan antar perlakuan, sehingga dilakukan uji lanjut. Uji lanjut yang digunakan adalah Uji Beda Jarak Nyata Duncan.

Uji Beda Jarak Nyata Duncan

$$D_{(p,\alpha)} = R(\text{dbG};p;\alpha) \sqrt{\frac{KTG}{n}}$$

jika ulangan tidak sama digunakan rumus:

$$D_{\alpha} = R(\text{dbG};p;\alpha) \sqrt{\frac{KTG}{2} \times \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}$$

dengan:

R = nilai tabel Duncan pada derajat bebas galat, jarak rata-rata p dan α tertentu

KTG = kuadrat tengah galat

n = jumlah ulangan

H₀: perlakuan tidak mempengaruhi jumlah eritrosit

H₁: perlakuan mempengaruhi jumlah eritrosit

Kaidah pengujiannya :

$(\bar{y}_1 - \bar{y}_2) \geq \omega_{\alpha}$: H₁ diterima

$(\bar{y}_1 - \bar{y}_2) < \omega_{\alpha}$: H₁ ditolak

Rata-rata hasil pengamatan diurutkan dari terkecil sampai terbesar.

P3	P4	P7	P0	P5	P6	P1	P2
2690000	2753333	3110000	3517500	3573333	3863333	3922500	4055000

p=jarak rata-rata antar perlakuan

$\alpha=0,05, \text{dbG}=11$

$$\begin{aligned}
 & p=2(\text{P3-P4, P4-P7, P0-P5, P6-P1}) \\
 D_{\alpha} &= R(11;2;0,05)\sqrt{\frac{11970455450}{2}} \cdot x\left(\frac{1}{2} + \frac{1}{3}\right) \\
 &= 3.11 \times 64212.33 \\
 &= 199700.35 \\
 \\
 & p=2(\text{P0-P7, P1-P2}) \\
 D_{\alpha} &= R(11;2;0,05)\sqrt{\frac{11970455450}{2}} \\
 &= 3.11 \times 77364.25 \\
 &= 240602.83 \\
 \\
 & p=2(\text{P5-P6}) \\
 D_{\alpha} &= R(11;2;0,05)\sqrt{\frac{11970455450}{3}} \\
 &= 3.11 \times 63167.65 \\
 &= 196451.39 \\
 \\
 & p=3(\text{P3-P7}) \\
 D_{\alpha} &= R(11;3;0,05)\sqrt{\frac{11970455450}{2}} \\
 &= 3.27 \times 77364.25 \\
 &= 252981.10 \\
 \\
 & p=3(\text{P0-P4, P0-P6, P1-P5, P2-P6, P5-P7}) \\
 D_{\alpha} &= R(11;3;0,05)\sqrt{\frac{11970455450}{2}} \cdot x\left(\frac{1}{2} + \frac{1}{3}\right) \\
 &= 3.27 \times 64212.33 \\
 &= 209974.32 \\
 \\
 & p=4(\text{P0-P3, P0-P1}) \\
 D_{\alpha} &= R(11;4;0,05)\sqrt{\frac{11970455450}{2}} \\
 &= 3.35 \times 77364.25 \\
 &= 259170.24 \\
 \\
 & p=4(\text{P2-P5, P6-P7}) \\
 D_{\alpha} &= R(11;4;0,05)\sqrt{\frac{11970455450}{2}} \cdot x\left(\frac{1}{2} + \frac{1}{3}\right) \\
 &= 3.35 \times 64212.33 \\
 &= 215111.31 \\
 \\
 & p=4(\text{P4-P5}) \\
 D_{\alpha} &= R(11;4;0,05)\sqrt{\frac{11970455450}{3}} \\
 &= 3.35 \times 63167.65 \\
 &= 211611.62
 \end{aligned}$$



$$\begin{aligned}
 p=6 \text{ (P1-P4, P3-P6)} \\
 D_{\alpha} &= R(11;6;0,05) \sqrt{\frac{11970455450}{2} x \left(\frac{1}{2} + \frac{1}{3}\right)} \\
 &= 3.43 \times 64212.33 \\
 &= 220248.29
 \end{aligned}$$

$$\begin{aligned}
 p=7 \text{ (P1-P3)} \\
 D_{\alpha} &= R(11;7;0,05) \sqrt{\frac{11970455450}{2}} \\
 &= 3.44 \times 77364.25 \\
 &= 266133.02
 \end{aligned}$$

$$\begin{aligned}
 p=7 \text{ (P2-P4)} \\
 D_{\alpha} &= R(11;7;0,05) \sqrt{\frac{11970455450}{2} x \left(\frac{1}{2} + \frac{1}{3}\right)} \\
 &= 3.44 \times 64212.33 \\
 &= 220890.42
 \end{aligned}$$

$$\begin{aligned}
 p=8 \text{ (P2-P3)} \\
 D_{\alpha} &= R(11;8;0,05) \sqrt{\frac{11970455450}{2}} \\
 &= 3.45 \times 77364.25 \\
 &= 266906.66
 \end{aligned}$$

$$\begin{aligned}
 p=5 \text{ (P0-P2, P1-P7)} \\
 D_{\alpha} &= R(11;5;0,05) \sqrt{\frac{11970455450}{2}} \\
 &= 3.39 \times 77364.25 \\
 &= 262264.81
 \end{aligned}$$

$$\begin{aligned}
 p=5 \text{ (P3-P5)} \\
 D_{\alpha} &= R(11;5;0,05) \sqrt{\frac{11970455450}{2} x \left(\frac{1}{2} + \frac{1}{3}\right)} \\
 &= 3.39 \times 64212.33 \\
 &= 217679.80
 \end{aligned}$$

$$\begin{aligned}
 p=5 \text{ (P4-P6)} \\
 D_{\alpha} &= R(11;5;0,05) \sqrt{\frac{11970455450}{3}} \\
 &= 3.39 \times 63167.65 \\
 &= 214138.33
 \end{aligned}$$

$$\begin{aligned}
 p=6 \text{ (P2-P7)} \\
 D_{\alpha} &= R(11;6;0,05) \sqrt{\frac{11970455450}{2}} \\
 &= 3.43 \times 77364.25 \\
 &= 265359.38
 \end{aligned}$$

Dihitung selisih rata-rata antar perlakuan.

1.	P0-P1	= 405000 > 259170.24, beda nyata	P2-P4	= 1301667 > 220890.42, beda nyata
2.	P0-P2	= 537500 > 262264.81, beda nyata	P2-P5	= 481667 > 215111.31, beda nyata
3.	P0-P3	= 827500 > 259170.24, beda nyata	P2-P6	= 191667 < 209974.32, tidak beda nyata
4.	P0-P4	= 764167 > 209974.32, beda nyata	P2-P7	= 945000 > 265359.38, beda nyata
5.	P0-P5	= 55833 < 199700.35, tidak beda nyata	P3-P4	= 63333 < 199700.35, Tidak beda nyata
6.	P0-P6	= 345833 > 209974.32, beda nyata	P3-P5	= 883333 > 217679.80, beda nyata
7.	P0-P7	= 407500 > 240602.83, beda nyata	P3-P6	= 1173333 > 220248.29, beda nyata
8.	P1-P2	= 132500 < 240602.83, tidak beda nyata	P3-P7	= 420000 > 252981.10, beda nyata
9.	P1-P3	= 1232500 > 266133.02, beda nyata	P4-P5	= 820000 > 211611.62, beda nyata
10.	P1-P4	= 1169167 > 220248.29, beda nyata	P4-P6	= 1110000 > 214138.33, beda nyata
11.	P1-P5	= 349167 > 209974.32, beda nyata	P4-P7	= 356667 > 199700.35, beda nyata
12.	P1-P6	= 59167 < 199700.35, tidak beda nyata	P5-P6	= 290000 > 196451.39, beda nyata
13.	P1-P7	= 812500 > 262264.81, beda nyata	P5-P7	= 4633333 > 209974.32, beda nyata
14.	P2-P3	= 1365000 > 266906.66, beda nyata	P6-P7	= 7533333 > 215111.31, beda nyata



Lampiran 05. Analisis Data Kadar Hemoglobin dengan menggunakan RAL

Tabel 08. Data kadar hemoglobin

	P ₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	ΣX
U ₁	-		9.6	-	9.4	9	7.5	-	35.5
U ₂	9.4	9.8	9.2	9	7.4	9	8	6	67.8
U ₃	8.2	9.2	-	7	8	7.8	6.6	7.8	54.6
ΣY	17.6	19	18.8	16	24.8	25.8	22.1	13.8	157.9
Y	8.8	9.5	9.4	8	8.27	8.6	7.37	6.9	8.3

Sumber : Setyowati : 2004

Perhitungan :

$$FK = \frac{(157.9)^2}{19} = \frac{24932.410}{19} = 1312.23$$

$$\begin{aligned} JKT &= \{(9.4)^2 + \dots + (7.8)^2\} - FK \\ &= \{(88.36) + \dots + (60.84)\} - 1312.23 \\ &= 1333.69 - 1312.23 \\ &= 21.46 \end{aligned}$$

$$\begin{aligned} JKP &= \left\{ \frac{(17.6)^2}{2} + \dots + \frac{(13.8)^2}{2} \right\} - FK \\ &= \{154.88 + \dots + 195.22\} - 1312.23 \\ &= 1325.01 - 1312.23 \\ &= 12.78 \end{aligned}$$

$$\begin{aligned} JKG &= JKT - JKP \\ &= 21.46 - 12.78 \\ &= 8.68 \end{aligned}$$

Tabel Anova

Sumber Varians	db	JK	KT	Fh	Ft(5%)
Perlakuan	7	12.78	1.83	2.32	3.01
Galat	11	8.68	0.79		
total	18	29583.79			

Dari tabel anova diatas $F_h < F_t$ maka tidak ada perbedaan yang signifikan antar perlakuan

Lampiran 06. Data Suhu dan Kelembaban Harian

Tabel 09. Data suhu dan kelembaban harian

Hari. ke-	07.00		12.00		18.00	
	Suhu	Kelembaban	Suhu	Kelembaban	Suhu	Kelembaban
1	26	65	29	61	28	-
2	26	65	29.5	62	28	-
3	26	64	28	64	28	-
4	26	64	29	-	29	62
5	26	65	29	66	28.5	62.5
6	26	61	29	66	27	62
7	27	62	29	58	29	47
8	26	60.5	29	58.5	29	49
9	26	64	29	61	29	55
10	26	64	29	59	26	60
11	26	65	27	66	26	64
12	25	66	28	61	27	64
13	26	65	28	62	26	64
14	25	66	27	62	26	64
15	24	50	28	48	33	62
16	24	-	26	47	26.5	53
17	24	-	27	-	26	52
18	24	56	26.5	52	26	56
19	23.5	58	27.5	55	28	56
20	25	62	28	55	27	58
21	25	62	29	54	29	53
Rerat a	532.5/21 = 25.35	1184.5/19 = 62.34	591.5/21 =28.16	1117.5/19 =58.81	582/21 =27.71	1043.5/18 =57.97