

LAMPIRAN

Lampiran 1. Hasil Uji Anova Pada Persentase Penurunan Fe di Air

Baris	Kolom			Total Baris	
	1	2	3	Y_i	$\sum_j Y_{ij}^2$
1	98,72 (B)	95,33 (A)	94,88 (C)	288,930	27835,662
2	95,93 (A)	93,60 (C)	95,85 (B)	285,380	27150,747
3	96,03 (C)	97,91 (B)	95,97 (A)	289,910	28018,370
Total	Y_j	290,680	286,840	286,700	864,220
Kolom	$\sum_t Y_{ij}^2$	28169,964	27435,137	27399,678	83004,779

Total dan rata-rata varitas

	A	B	C
Total (Y_t)	287,230	292,480	284,510
Rata-rata (\bar{Y}_t)	95,743	97,493	94,837

Analisis Ragam

Sumber Keragaman	db	JK	KT	Fhit	Ftabel
Baris	2	3,7871	1,893544		
Kolom	2	3,4006	1,700311		
Perlakuan	2	10,9424	5,471211	27,11951	19.00
Galat	2	0,4035	0,201744		
Total	8	18,5336			

$$\text{Faktor Koreksi (C)} = \frac{Y^2}{r^2} = \frac{864,220^2}{3^2} = 82986,2454$$

$$\text{JK Total} = \sum_{ji} Y_{ij}^2 - C = 83004,779 - 82986,2454 = 18,5336$$

$$\text{JK Baris} = \frac{\sum_i Y_i^2}{r} - C = \frac{290,680^2 + 286,840^2 + 286,700^2}{3} -$$

$$82986,2454 = 3,7871$$

$$\text{JK Kolom} = \frac{\sum_j Y_j^2}{r} - C = \frac{288,930^2 + 285,380^2 + 289,910^2}{3} -$$

$$82986,2454 = 3,4006$$

$$\text{JK Perlakuan} = \frac{\sum_t Y_t^2}{r} - C = \frac{287,230^2 + 292,480^2 + 284,510^2}{3} - 82986,2454$$

$$= 10,9424$$

$$\begin{aligned}
\text{JK Galat} &= \text{JK Total} - \text{JK Baris} - \text{JK Kolom} - \text{JK Perlakuan} \\
&= 18,5336 - (3,7871 + 3,4006 + 10,9424) \\
&= 0,4035
\end{aligned}$$

Uji Lanjut Beda Nyata Terkecil (BNT)

Perlakuan	Rata-rata		
	C 94,84	A 95,74	B 97,49
C 94,84 a	0		
A 95,74 a	0,90		0
B 97,49 b	2,65	1,75	0

Nilai t tabel 0,05 db galat = 2 adalah 2,92

$$\begin{aligned}
\text{LSD} &= t_{0,05/2; 2} \sqrt{\frac{2KTG}{r}} \\
&= 2,92 \times \sqrt{\frac{2(0,305078)}{3}} \\
&= 1,05
\end{aligned}$$

Ket : Notasi yang berbeda menyatakan nilai yang berbeda dengan selang kepercayaan 95%.

Lampiran 2. Hasil Uji Anova Pada Faktor Biokonsentrasi

Baris	Kolom			Total Baris	
	1	2	3	Y_i	$\sum_j Y_{ij}^2$
1	1711,58 (B)	2572,95 (A)	1495,61 (C)	5780,14	1178642 2,41
2	2272,29 (A)	1474,33 (C)	1656,69 (B)	5403,31	1008156 8,52
3	1592,84 (C)	1735,74 (B)	2311,30 (A)	5639,88	1089206 3,25
Total	Y_j	5576,71	5783,02	5463,60	16823,33
Kolom	\sum_i	10629947, 21	11806514,0 0	10323592, 97	3276005 4,18

Total dan rata-rata varitas

	A	B	C
Total (Y_t)	7156,54	5104,01	4562,78
Rata-rata (\bar{Y}_t)	2385,51	1701,34	1520,93

Analisis Ragam

Sumber Keragaman	db	JK	KT	Fhit	Ftabel
Baris	2	24182,21	12091,11		
Kolom	2	17487,21	8743,61		
Perlakuan	2	1248162,20	624081,10	54,14	19.00
Galat	2	23055,22	11527,61		
Total	8	1312886,85			

$$\text{Faktor Koreksi (C)} = \frac{Y^2}{r^2} = \frac{16823,33^2}{3^2} = 31447167,33$$

$$\text{JK Total} = \sum_{ji} Y_{ij}^2 - C = 32760054,18 - 31447167,33 = 1312886,85$$

$$\begin{aligned} \text{JK Baris} &= \frac{\sum_i Y_i^2}{r} - C = \frac{5780,14^2 + 5403,31^2 + 5639,88^2}{3} - 31447167,33 \\ &= 24182,21 \end{aligned}$$

$$\begin{aligned} \text{JK Kolom} &= \frac{\sum_j Y_j^2}{r} - C = \frac{5576,71^2 + 5783,02^2 + 5463,60^2}{3} - 31447167,33 \\ &= 17487,21 \end{aligned}$$

$$\text{JK Perlakuan} = \frac{\sum_t Y_t^2}{r} - C = \frac{7156,54^2 + 5104,01^2 + 4562,78^2}{3} - 31447167,33$$

$$= 1248162,20$$

$$\begin{aligned} \text{JK Galat} &= \text{JK Total} - \text{JK Baris} - \text{JK Kolom} - \text{JK Perlakuan} \\ &= 1312886,85 - (24182,21 + 17487,42 + 1248158,49) \\ &= 23054,85 \end{aligned}$$

Uji Lanjut Beda Nyata Terkecil (BNT)

Perlakuan	Rata-rata		
	C 1520,93	B 1701,34	A 2385,51
C 1520,93 a	0		
B 1701,34 a	180,41	0	
A 2385,51 b	864,59	684,18	0

Nilai t tabel 0,05 db galat = 2 adalah 2,92

$$\begin{aligned} \text{LSD} &= t_{0,05/2; 2} \sqrt{\frac{2KTG}{r}} \\ &= 2,92 \times \sqrt{\frac{2(11527,61)}{3}} \\ &= 255,98 \end{aligned}$$

Ket : Notasi yang berbeda menyatakan nilai yang berbeda dengan selang kepercayaan 95%.

Lampiran 3. Hasil Uji Anova Pada Faktor Translokasi Batang

Baris	Kolom			Total Baris	
	1	2	3	Y_i	$\sum_j Y_{ij}^2$
1	1,05 (B)	1,12 (A)	0,56 (C)	2,73	2,68
2	1,13 (A)	0,69 (C)	1,00 (B)	2,82	2,76
3	0,61 (C)	1,04 (B)	1,18 (A)	2,83	2,85
Total Kolom	Y_j	2,79	2,85	2,74	8,38
	$\sum_t Y_{ij}^2$	2,75	2,81	2,71	8,27

Total dan rata-rata varitas

	A	B	C
Total (Y_t)	3,43	3,09	1,86
Rata-rata (\bar{Y}_t)	1,14	1,03	0,62

Analisis Ragam

Sumber Keragaman	db	JK	KT	Fhit	Ftabel
Baris	2	0,0020	0,0009		
Kolom	2	0,0020	0,0009		
Perlakuan	2	0,4548	0,2311	56,6953	19,00
Galat	2	0,0080	0,0036		
Total	8	0,4669			

$$\text{Faktor Koreksi (C)} = \frac{Y^2}{r^2} = \frac{8,38^2}{3^2} = 7,8027$$

$$\text{JK Total} = \sum_{ji} Y_{ij}^2 - C = 8,27 - 7,8027 = 0,4669$$

$$\text{JK Baris} = \frac{\sum_i Y_i^2}{r} - C = \frac{2,73^2 + 2,82^2 + 2,83^2}{3} - 7,8027 = 0,0020$$

$$\text{JK Kolom} = \frac{\sum_j Y_j^2}{r} - C = \frac{2,79^2 + 2,85^2 + 2,74^2}{3} - 7,8027 = 0,0020$$

$$\text{JK Perlakuan} = \frac{\sum_t Y_t^2}{r} - C = \frac{3,43^2 + 3,09^2 + 1,86^2}{3} - 7,8027 = 0,4548$$

$$\begin{aligned} \text{JK Galat} &= \text{JK Total} - \text{JK Baris} - \text{JK Kolom} - \text{JK Perlakuan} \\ &= 0,4669 - (0,0020 + 0,0020 + 0,4548) \\ &= 0,0080 \end{aligned}$$

Uji Lanjut Beda Nyata Terkecil (BNT)

Perlakuan	Rata-rata		
	C 0,62	B 1,03	A 1,14
C 0,62 a	0		
B 1,03 b	0,41	0	
A 1,14 b	0,52	0,11	0

Nilai t tabel 0,05 db galat = 2 adalah 2,92

$$\begin{aligned}
 \text{LSD} &= t_{0,05/2; 2} \sqrt{\frac{2KTG}{r}} \\
 &= 2,92 \times \sqrt{\frac{2(0,0040)}{3}} \\
 &= 0,151
 \end{aligned}$$

Ket : Notasi yang berbeda menyatakan nilai yang berbeda dengan selang kepercayaan 95%.

Lampiran 4. Hasil Uji Anova Pada Faktor Translokasi Daun

Baris	Kolom			Total Baris	
	1	2	3	Y_i	$\sum_j Y_{ij}^2$
1	1,04 (B)	1,04 (A)	0,56 (C)	2,64	2,48
2	1,01 (A)	0,65 (C)	1,00 (B)	2,66	2,44
3	0,54 (C)	1,02 (B)	1,01 (A)	2,57	2,35
Total Kolom	Y_j	2,59	2,71	2,57	7,87
	$\sum_i Y_{ij}^2$	2,39	2,54	2,33	7,27

Total dan rata-rata varitas

	A	B	C
Total (Y_t)	3,06	3,06	1,75
Rata-rata (\bar{Y}_t)	1,02	1,02	0,58

Analisis Ragam

Sumber Keragaman	db	JK	KT	Fhit	Ftabel
Baris	2	0,0015	0,0007		
Kolom	2	0,0038	0,0019		
Perlakuan	2	0,3814	0,1907	129,0301	19,00
Galat	2	0,0030	0,0015		
Total	8	0,3896			

$$\text{Faktor Koreksi (C)} = \frac{Y^2}{r^2} = \frac{7,87^2}{3^2} = 6,8819$$

$$\text{JK Total} = \sum_{ji} Y_{ij}^2 - C = 7,29 - 6,8819 = 0,3896$$

$$\text{JK Baris} = \frac{\sum_i Y_i^2}{r} - C = \frac{2,64^2 + 2,66^2 + 2,57^2}{3} - 6,8819 = 0,0015$$

$$\text{JK Kolom} = \frac{\sum_j Y_j^2}{r} - C = \frac{2,59^2 + 2,71^2 + 2,57^2}{3} - 6,8819 = 0,0038$$

$$\text{JK Perlakuan} = \frac{\sum_t Y_t^2}{r} - C = \frac{3,06^2 + 3,06^2 + 1,75^2}{3} - 6,8819 = 0,3814$$

$$\begin{aligned} \text{JK Galat} &= \text{JK Total} - \text{JK Baris} - \text{JK Kolom} - \text{JK Perlakuan} \\ &= 0,3896 - (0,0015 + 0,0038 + 0,3814) \\ &= 0,0030 \end{aligned}$$

Uji Lanjut Beda Nyata Terkecil (BNT)

Perlakuan	Rata-rata		
	C 0,58	B 1,02	A 1,02
C 0,58 a	0		
B 1,02 b	0,44	0	
A 1,02 b	0,44	0,00	0

Nilai t tabel 0,05 db galat = 2 adalah 2,92

$$\begin{aligned}
 \text{LSD} &= t_{0,05/2; 2} \sqrt{\frac{2KTG}{r}} \\
 &= 2,92 \times \sqrt{\frac{2(0,0015)}{3}} \\
 &= 0,092
 \end{aligned}$$