Data dan analisa ragam kadar air udang vaname

Data kadar air udang vaname

Perlakuan	Ulangan			Jumlah	Rerata
	1	2	3		
P1	75,72	78,56	77,08	231,36	77,12
P2	77,66	77,78	77,72	233,16	77,72
P3	78,39	76,40	77,39	232,18	77,39
P4	79,24	77,62	78,43	235,29	78,43
P5	77,38	75,92	76,65	229,95	76,65
P6	76,75	78,75	77,70	233,2	77,73
P7	76,95	78,09	77,52	232,56	77,52
Jumlah	542,09	543,12	542,49	1627,7	542,57

Analisa Ragam

- Faktor Koreksi (FK) = $\sum \frac{Yij^2}{t.r}$

  $= \frac{1627,7^2}{7.3}$

  = 126162,3

- JKT = $\sum$ Yij^2 - ($\sum \frac{Yij^2}{t.r}$)

  = (75,72^2 + 78,56^2 + 77,08^2+ ... + 77,52^2) - 126162,3

  = 16,5893

- JKP = $\sum \frac{Yi^2}{ri}$ - ($\sum \frac{Yij^2}{t.r}$)

  = ((231,36^2 + 233,16^2 + 232,18^2 + ... 232,56^2)/3) - 126162,3

  = 5,537362

- JKG = JKT – JKP

  = 16,5893 - 5,537362

  = 11,05193

- db Perlakuan = t -1
  = 7-1
  = 6
- db Total = t.n – 1
  = 7.3 – 1
  = 20
- db Galat = db total - db perlakuan
  = 20 -6
  = 14
- KTP = JKP – db Perlakuan
  = 5,537362 – 6
  = 0,922894
- KTG = JKG – db Galat

= 11,05193 – 14
= 0,789424

- F. Hitung = KTP / KTG
= 0,922894 / 0,789424
= 1,169072

Tabel Anova

Sumber Keragaman	d.b	J.K	K.T	F.Hitung	F 5%	notasi
Perlakuan	6	5,537362	0,922894	1,169072	2,847726	tn
Galat	14	11,05193	0,789424			
Total	20	16,5893				

Keteranga : tn (tidak nyata)

Data dan analisa ragam kadar abu udang vaname

Data kadar abu udang vaname

Perlakuan	Ulangan			Jumlah	Rerata
	1	2	3		
P1	1,33	1,70	1,23	4,26	1,42
P2	1,40	1,41	1,40	4,21	1,40
P3	1,46	1,37	1,41	4,24	1,41
P4	1,45	1,29	1,37	4,11	1,37
P5	1,59	1,26	1,43	4,28	1,43
P6	1,26	1,72	1,49	4,47	1,49
P7	1,41	1,30	1,36	4,07	1,36
Jumlah	9,9	10,05	9,69	29,64	9,88

Analisa Ragam

- FK (Faktor Koreksi) $= \sum \frac{Yij^2}{t.r}$
  $= \frac{29{,}64^2}{7.3}$
  = 41,83474
- JKT $= \sum Yij^2 - (\sum \frac{Yij^2}{t.r})$
  $= (1{,}33^2 + 1{,}70^2 + 1{,}23^2 + ... + 1{,}36^2) - 41{,}83474$
  = 0,339657
- JKP $= \sum \frac{Yi^2}{ri} - (\sum \frac{Yij^2}{t.r})$
  $= ((4{,}26^2 + 4{,}21^2 + 4{,}24^2 + ... + 4{,}07^2) / 3) - 41{,}83474$
  = 0,03379
- JKG = JKT – JKP
  = 0,339657 - 0,03379
  = 0,305867
- db Perlakuan = t -1
  = 7-1
  = 6
- db Total = t.n – 1
  = 7.3 – 1
  = 20
- db Galat = db total - db perlakuan
  = 20 -6
  = 14
- KTP = JKP – db Perlakuan
  = 0,03379 – 6
  = 0,00563175
- KTG = JKG – db Galat
  = 0,305867 – 14
  = 0,02184762
- F. Hitung = KTP / KTG
  = 0,00563175 / 0,02184762
  = 0,257774

Tabel Anova

Sumber Keragaman	d.b	J.K	K.T	F.Hitung	F 5%	notasi
Perlakuan	6	0,03379	0,00563175	0,257774	2,847726	tn
Galat	14	0,305867	0,02184762			
Total	20	0,339657				

Keterangan : tn (tidak nyata)

Data dan analisa ragam kadar protein udang vaname

Data kadar protein udang vaname

Perlakuan	Ulangan			Jumlah	Rerata
	1	2	3		
P1	15,03	15,43	14,91	45,37	15,12
P2	12,20	11,68	11,94	35,82	11,94
P3	14,67	13,03	13,85	41,55	13,85
P4	12,07	17,88	14,98	44,93	14,98
P5	15,02	13,74	14,39	43,15	14,38
P6	12,68	12,50	12,59	37,77	12,59
P7	10,38	13,31	11,85	35,54	11,85
Jumlah	92,05	97,57	94,51	284,13	94,71

Analisa Ragam

- FK (Faktor Koreksi) $= \sum \frac{Yij^2}{t.r}$
  $= \frac{284,13^2}{7.3}$
  = 3844,2789
- JKT $= \sum Yij^2 - (\sum \frac{Yij^2}{t.r})$
  $= (15,03^2 + 15,43^2 + 14,91^2 + ... + 11,85^2) - 3844,2789$
  = 58,7566
- JKP $= \sum \frac{Yi^2}{ri} - (\sum \frac{Yij^2}{t.r})$
  $= ((45,37^2 + 35,82^2 + 41,55^2 + ... + 35,54^2) / 3) - 3844,2789$
  = 35,122333
- JKG = JKT – JKP
  = 58,7566 - 35,122333
  = 23,634267
- db Perlakuan = t -1
  = 7-1
  = 6
- db Total = t.n – 1
  = 7.3 – 1
  = 20
- db Galat = db total - db perlakuan
  = 20 -6
  = 14
- KTP = JKP – db Perlakuan
  = 35,122333– 6
  = 5,8537222
- KTG = JKG – db Galat
  = 23,634267– 14
  = 1,6881619
- F. Hitung = KTP / KTG
  = 5,8537222 / 1,6881619
  = 3,467512

Tabel Anova

Sumber Keragaman	d.b	J.K	K.T	F.Hitung	F 5%	notasi
Perlakuan	6	35,12233	5,8537222	3,467512	2,847726	*
Galat	14	23,63427	1,6881619			
Total	20	58,7566				

Keterangan : * (berbeda nyata)

Uji BNJ

$BNJ_5 = Q_{5(\text{ p : db galat})} \times \sqrt{\frac{KTG}{r}}$

$= 4{,}83 \times \sqrt{\frac{1{,}688}{3}}$

$= 3{,}6232104$

Data dan analisa ragam kadar lemak udang vaname

Data kadar lemak udang vaname

Perlakuan	Ulangan			Jumlah	Rerata
	1	2	3		
P1	0,46	3,31	2,90	6,67	2,22
P2	4,94	3,42	4,18	12,54	4,18
P3	0,71	1,65	1,18	3,54	1,18
P4	1,02	1,29	1,16	3,47	1,16
P5	1,59	1,72	1,66	4,97	1,66
P6	3,08	2,73	2,90	8,71	2,90
P7	4,87	2,27	3,57	10,71	3,57
Jumlah	16,67	16,39	17,55	50,61	16,87

Analisa ragam

- FK (Faktor Koreksi) $= \sum \frac{Yij^2}{t.r}$
  $= \frac{50,61^2}{7.3}$
  = 121,9701
- JKT $= \sum Yij^2 - (\sum \frac{Yij^2}{t.r})$
  $= (0,46^2 + 3,31^2 + 2,90^2 + ... + 3,57^2) – 121,9701$
  = 35,0552
- JKP $= \sum \frac{Yi^2}{ri} - (\sum \frac{Yij^2}{t.r})$
  $= ((6,67^2 + 12,54^2 + 3,54^2 + ... + 10,71^2) / 3) - 121,9701$
  = 25,22393
- JKG = JKT – JKP
  = 35,0552 - 25,22393
  = 9,831267
- db Perlakuan = t -1
  = 7-1
  = 6
- db Total = t.n – 1
  = 7.3 – 1
  = 20
- db Galat = db total - db perlakuan
  = 20 -6
  = 14
- KTP = JKP – db Perlakuan
  = 25,22393– 6
  = 4,203988889
- KTG = JKG – db Galat
  = 9,831267 – 14
  = 0,702233333
- F. Hitung = KTP / KTG
  = 4,203988889/ 0,702233333
  = 5,986598

Tabel Anova

Sumber Keragaman	d.b	J.K	K.T	F.Hitung	F 5%	notasi
Perlakuan	6	25,22393	4,203988889	5,986598	2,847726	*
Galat	14	9,831267	0,702233333			
Total	20	35,0552				

Keterangan : * (berbeda nyata)

Uji BNJ

$BNJ_5 = Q_{5(\text{ p : db galat})} \times \sqrt{\frac{KTG}{r}}$

$= 4{,}83 \times \sqrt{\frac{0{,}702233333}{3}}$

$= 0{,}483816$

Data dan analisa ragam karbohidrat *by diffrence* udang vaname

Data Karbohidrat by diffrence udang vaname

Perlakuan	Ulangan			Jumlah	Rerata
	1	2	3		
P1	7,46	1,00	3,88	12,34	4,11
P2	3,8	5,71	4,76	14,27	4,76
P3	4,77	7,55	6,17	18,49	6,16
P4	6,22	1,92	4,06	12,2	4,07
P5	4,42	7,35	5,87	17,64	5,88
P6	6,23	4,4	5,31	15,94	5,31
P7	6,39	5,03	5,70	17,12	5,71
Jumlah	39,29	32,96	35,75	108	36

Analisa ragam

- FK (Faktor Koreksi) $= \sum \frac{Yij^2}{t.r}$
  $= \frac{108^2}{7.3}$
  = 0,047619
- JKT $= \sum Yij^2 - (\sum \frac{Yij^2}{t.r})$
  $= (7{,}46^2 + 1{,}00^2 + 3{,}88^2 + ... + 5{,}70^2) - 0{,}047619$
  = 611,0506
- JKP $= \sum \frac{Yi^2}{ri} - (\sum \frac{Yij^2}{t.r})$
  $= ((12{,}34^2 + 14{,}27^2 + 18{,}49^2 + ... + 17{,}12^2) / 3) - 0{,}047619$
  = 568,2778
- JKG = JKT – JKP
  = 611,0506- 568,2778
  = 42,7728
- db Perlakuan = t -1
  = 7-1
  = 6
- db Total = t.n – 1
  = 7.3 – 1
  = 20
- db Galat = db total - db perlakuan
  = 20 -6
  = 14
- KTP = JKP – db Perlakuan
  = 568,2778 - 6
  = 94,712963
- KTG = JKG – db Galat
  = 42,7728– 14
  = 3,0552
- F. Hitung = KTP / KTG

= 94,712963/ 3,0552
= 31,00058

Sumber Keragaman	db	J.K	K.T	F.Hitung	F 5%	notasi
Perlakuan	6	568,2778	94,712963	31,00058	2,847726	tn
Galat	14	42,7728	3,0552			
Total	20	611,0506				

Keterangan : tn (tidak nyata)