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## LAMPIRAN

Tabel Lampiran 1. Populasi *Tribolium castaneum*

Perlakuan	Pengamatan ke-														Total	Rata-rata
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
A1B1	2	0	0	1	1	1	0	0	0	1	2	0	1	0	9	0,642857
A1B2	2	2	2	1	3	1	0	0	0	0	3	2	2	0	18	1,285714
A1B3	2	1	2	1	3	0	2	1	1	0	0	0	0	0	13	0,928571
A1B4	2	0	0	4	4	0	0	0	1	1	2	0	2	0	16	1,142857
A2B1	6	3	3	2	0	0	1	1	0	1	1	3	1	2	24	1,714286
A2B2	3	3	2	3	3	0	3	2	6	1	1	2	1	2	32	2,285714
A2B3	4	4	2	2	3	1	5	1	1	0	3	2	1	0	29	2,071429
A2B4	3	5	2	2	1	3	1	2	1	2	3	2	1	2	30	2,142857

Tabel Lampiran 2. Populasi *Sitophilus sp.*

Perlakuan	Pengamatan ke-														Total	Rata-rata
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
A1B1	5	5	2	3	0	0	2	2	2	2	3	2	0	1	29	2,071429
A1B2	11	5	2	1	2	3	3	2	2	1	3	2	1	1	39	2,785714
A1B3	8	4	2	2	2	1	1	3	1	1	3	3	4	1	36	2,571429
A1B4	6	3	2	1	1	2	2	1	2	0	5	4	0	1	30	2,142857
A2B1	4	4	2	2	1	4	2	3	1	0	2	4	2	2	33	2,357143
A2B2	5	4	3	3	1	1	1	1	2	1	1	2	1	1	27	1,928571
A2B3	6	3	4	2	1	3	2	2	1	1	1	1	3	3	33	2,357143
A2B4	4	4	2	1	1	3	3	2	3	0	3	3	0	0	29	2,071429

**Tabel Lampiran 3. Sidik Ragam *Tribolium castaneum*****Tests of Between-Subjects Effects**

Dependent Variable: P1

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4.667 <sup>a</sup>	7	.667	1.143	.386
Intercept	24.000	1	24.000	41.143	.000
Perlakuan	4.667	7	.667	1.143	.386
Error	9.333	16	.583		
Total	38.000	24			
Corrected Total	14.000	23			

a. R Squared = .333 (Adjusted R Squared = .042)

**Tests of Between-Subjects Effects**

Dependent Variable: P2

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	7.833 <sup>a</sup>	7	1.119	.959	.492
Intercept	13.500	1	13.500	11.571	.004
Perlakuan	7.833	7	1.119	.959	.492
Error	18.667	16	1.167		
Total	40.000	24			
Corrected Total	26.500	23			

a. R Squared = .296 (Adjusted R Squared = -.013)

**Tests of Between-Subjects Effects**

Dependent Variable: P3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.625 <sup>a</sup>	7	.375	.450	.856
Intercept	7.042	1	7.042	8.450	.010
Perlakuan	2.625	7	.375	.450	.856
Error	13.333	16	.833		



Total	23.000	24			
Corrected Total	15.958	23			

a. R Squared = .164 (Adjusted R Squared = -.201)

### Tests of Between-Subjects Effects

Dependent Variable: P4

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.667 <sup>a</sup>	7	.381	.481	.834
Intercept	10.667	1	10.667	13.474	.002
Perlakuan	2.667	7	.381	.481	.834
Error	12.667	16	.792		
Total	26.000	24			
Corrected Total	15.333	23			

a. R Squared = .174 (Adjusted R Squared = -.188)

### Tests of Between-Subjects Effects

Dependent Variable: P5

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4.500 <sup>a</sup>	7	.643	1.286	.318
Intercept	13.500	1	13.500	27.000	.000
Perlakuan	4.500	7	.643	1.286	.318
Error	8.000	16	.500		
Total	26.000	24			
Corrected Total	12.500	23			

a. R Squared = .360 (Adjusted R Squared = .080)

### Tests of Between-Subjects Effects

Dependent Variable: P6

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.500 <sup>a</sup>	7	.357	2.857	.039
Intercept	1.500	1	1.500	12.000	.003
Perlakuan	2.500	7	.357	2.857	.039
Error	2.000	16	.125		
Total	6.000	24			
Corrected Total	4.500	23			

a. R Squared = .556 (Adjusted R Squared = .361)

### Tests of Between-Subjects Effects

Dependent Variable: P7

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	7.333 <sup>a</sup>	7	1.048	6.286	.001
Intercept	6.000	1	6.000	36.000	.000
Perlakuan	7.333	7	1.048	6.286	.001
Error	2.667	16	.167		
Total	16.000	24			
Corrected Total	10.000	23			

a. R Squared = .733 (Adjusted R Squared = .617)

### Tests of Between-Subjects Effects

Dependent Variable: P8

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.625 <sup>a</sup>	7	.232	.696	.675
Intercept	2.042	1	2.042	6.125	.025
Perlakuan	1.625	7	.232	.696	.675
Error	5.333	16	.333		
Total	9.000	24			
Corrected Total	6.958	23			

a. R Squared = .234 (Adjusted R Squared = -.102)

### Tests of Between-Subjects Effects

Dependent Variable: P9

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9.167 <sup>a</sup>	7	1.310	1.257	.331
Intercept	4.167	1	4.167	4.000	.063
Perlakuan	9.167	7	1.310	1.257	.331
Error	16.667	16	1.042		
Total	30.000	24			
Corrected Total	25.833	23			

a. R Squared = .355 (Adjusted R Squared = .073)

### Tests of Between-Subjects Effects

Dependent Variable: P10

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.167 <sup>a</sup>	7	.167	.500	.821
Intercept	1.500	1	1.500	4.500	.050
Perlakuan	1.167	7	.167	.500	.821
Error	5.333	16	.333		
Total	8.000	24			
Corrected Total	6.500	23			

a. R Squared = .179 (Adjusted R Squared = -.179)

### Tests of Between-Subjects Effects

Dependent Variable: P11

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.958 <sup>a</sup>	7	.423	.780	.613
Intercept	9.375	1	9.375	17.308	.001
Perlakuan	2.958	7	.423	.780	.613
Error	8.667	16	.542		
Total	21.000	24			
Corrected Total	11.625	23			

a. R Squared = .254 (Adjusted R Squared = -.072)

### Tests of Between-Subjects Effects

Dependent Variable: P12

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3.292 <sup>a</sup>	7	.470	.705	.668
Intercept	5.042	1	5.042	7.562	.014
Perlakuan	3.292	7	.470	.705	.668
Error	10.667	16	.667		
Total	19.000	24			
Corrected Total	13.958	23			

a. R Squared = .236 (Adjusted R Squared = -.099)

### Tests of Between-Subjects Effects

Dependent Variable: P13

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.958 <sup>a</sup>	7	.137	.329	.930
Intercept	3.375	1	3.375	8.100	.012
Perlakuan	.958	7	.137	.329	.930
Error	6.667	16	.417		
Total	11.000	24			
Corrected Total	7.625	23			

a. R Squared = .126 (Adjusted R Squared = -.257)

#### Tests of Between-Subjects Effects

Dependent Variable: P14

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.500 <sup>a</sup>	7	.357	.952	.496
Intercept	1.500	1	1.500	4.000	.063
Perlakuan	2.500	7	.357	.952	.496
Error	6.000	16	.375		
Total	10.000	24			
Corrected Total	8.500	23			

a. R Squared = .294 (Adjusted R Squared = -.015)

#### Tabel Lampiran 4. Sidik Ragam *Sitophilus* sp.

#### Tests of Between-Subjects Effects

Dependent Variable: P1

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	12.958 <sup>a</sup>	7	1.851	3.702	.014
Intercept	100.042	1	100.042	200.083	.000
Perlakuan	12.958	7	1.851	3.702	.014
Error	8.000	16	.500		
Total	121.000	24			
Corrected Total	20.958	23			

a. R Squared = .618 (Adjusted R Squared = .451)

### Tests of Between-Subjects Effects

Dependent Variable: P2

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.333 <sup>a</sup>	7	.190	.254	.963
Intercept	42.667	1	42.667	56.889	.000
Perlakuan	1.333	7	.190	.254	.963
Error	12.000	16	.750		
Total	56.000	24			
Corrected Total	13.333	23			

a. R Squared = .100 (Adjusted R Squared = -.294)

### Tests of Between-Subjects Effects

Dependent Variable: P3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.292 <sup>a</sup>	7	.185	.277	.954
Intercept	15.042	1	15.042	22.563	.000
Perlakuan	1.292	7	.185	.277	.954
Error	10.667	16	.667		
Total	27.000	24			
Corrected Total	11.958	23			

a. R Squared = .108 (Adjusted R Squared = -.282)

### Tests of Between-Subjects Effects

Dependent Variable: P4

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.167 <sup>a</sup>	7	.167	.308	.940
Intercept	8.167	1	8.167	15.077	.001
Perlakuan	1.167	7	.167	.308	.940
Error	8.667	16	.542		
Total	18.000	24			
Corrected Total	9.833	23			

a. R Squared = .119 (Adjusted R Squared = -.267)

### Tests of Between-Subjects Effects

Dependent Variable: P5

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.958 <sup>a</sup>	7	.137	.253	.964
Intercept	3.375	1	3.375	6.231	.024
Perlakuan	.958	7	.137	.253	.964
Error	8.667	16	.542		
Total	13.000	24			
Corrected Total	9.625	23			

a. R Squared = .100 (Adjusted R Squared = -.294)

### Tests of Between-Subjects Effects

Dependent Variable: P6

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4.292 <sup>a</sup>	7	.613	.920	.517
Intercept	12.042	1	12.042	18.062	.001
Perlakuan	4.292	7	.613	.920	.517
Error	10.667	16	.667		
Total	27.000	24			
Corrected Total	14.958	23			

a. R Squared = .287 (Adjusted R Squared = -.025)

### Tests of Between-Subjects Effects

Dependent Variable: P7

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.333 <sup>a</sup>	7	.190	.305	.941
Intercept	10.667	1	10.667	17.067	.001
Perlakuan	1.333	7	.190	.305	.941
Error	10.000	16	.625		

Total	22.000	24			
Corrected Total	11.333	23			

a. R Squared = .118 (Adjusted R Squared = -.268)

### Tests of Between-Subjects Effects

Dependent Variable: P8

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.333 <sup>a</sup>	7	.190	.381	.900
Intercept	10.667	1	10.667	21.333	.000
Perlakuan	1.333	7	.190	.381	.900
Error	8.000	16	.500		
Total	20.000	24			
Corrected Total	9.333	23			

a. R Squared = .143 (Adjusted R Squared = -.232)

### Tests of Between-Subjects Effects

Dependent Variable: P9

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.167 <sup>a</sup>	7	.167	.250	.965
Intercept	8.167	1	8.167	12.250	.003
Perlakuan	1.167	7	.167	.250	.965
Error	10.667	16	.667		
Total	20.000	24			
Corrected Total	11.833	23			

a. R Squared = .099 (Adjusted R Squared = -.296)



### Tests of Between-Subjects Effects

Dependent Variable: P10

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.167 <sup>a</sup>	7	.167	.500	.821
Intercept	1.500	1	1.500	4.500	.050
Perlakuan	1.167	7	.167	.500	.821
Error	5.333	16	.333		
Total	8.000	24			
Corrected Total	6.500	23			

a. R Squared = .179 (Adjusted R Squared = -.179)

### Tests of Between-Subjects Effects

Dependent Variable: P11

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3.958 <sup>a</sup>	7	.565	.714	.661
Intercept	18.375	1	18.375	23.211	.000
Perlakuan	3.958	7	.565	.714	.661
Error	12.667	16	.792		
Total	35.000	24			
Corrected Total	16.625	23			

a. R Squared = .238 (Adjusted R Squared = -.095)

### Tests of Between-Subjects Effects

Dependent Variable: P12

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.625 <sup>a</sup>	7	.375	1.000	.466
Intercept	18.375	1	18.375	49.000	.000
Perlakuan	2.625	7	.375	1.000	.466
Error	6.000	16	.375		
Total	27.000	24			
Corrected Total	8.625	23			

a. R Squared = .304 (Adjusted R Squared = .000)

### Tests of Between-Subjects Effects

Dependent Variable: P13

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5.292 <sup>a</sup>	7	.756	4.536	.006
Intercept	5.042	1	5.042	30.250	.000
Perlakuan	5.292	7	.756	4.536	.006
Error	2.667	16	.167		
Total	13.000	24			
Corrected Total	7.958	23			

a. R Squared = .665 (Adjusted R Squared = .518)

### Tests of Between-Subjects Effects

Dependent Variable: P14

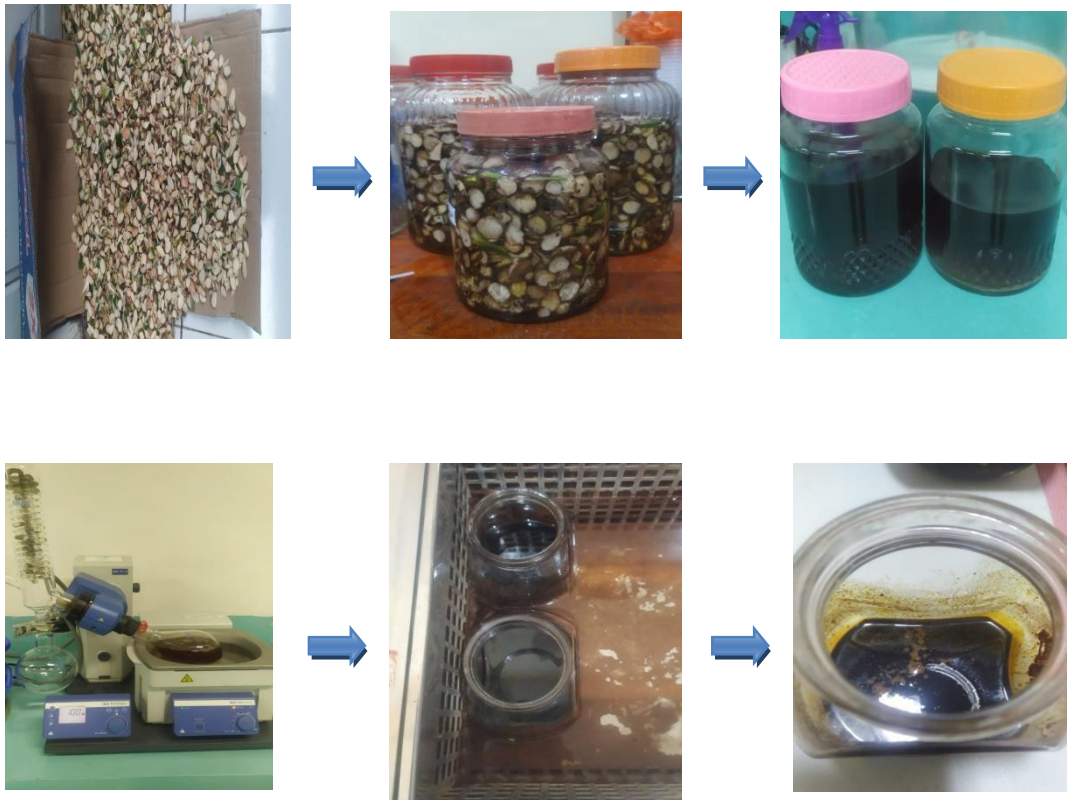
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.833 <sup>a</sup>	7	.262	.698	.673
Intercept	4.167	1	4.167	11.111	.004
Perlakuan	1.833	7	.262	.698	.673
Error	6.000	16	.375		
Total	12.000	24			
Corrected Total	7.833	23			

a. R Squared = .234 (Adjusted R Squared = -.101)

**Gambar Lampiran 1. Pemiakan Massal Hama Uji**



**Gambar Lampiran 2. Pembuatan Ekstrak Jeringau**



**Gambar Lampiran 3. Pembuatan Perangkat Berperekat**

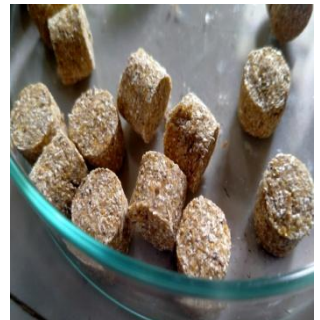
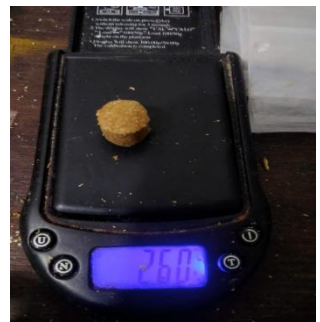


**Gambar Lampiran 4. Bahan Untuk Membuat Butiran Atraktan**



**Gambar Lampiran 5. Pembuatan Butiran Atraktan**





**Gambar Lampiran 6. Pencampuran Butiran Atraktan**



**Gambar Lampiran 7. Perlakuan Kombinasi Umpan Jagung + *A. calamus***



**Gambar Lampiran 8. Perlakuan Kombinasi Umpan Jagung + Minyak Wijen**



**Gambar Lampiran 9.** Perlakuan Kombinasi Umpan Jagung + *A. calamus* + Minyak Wijen



**Gambar Lampiran 10.** Perlakuan Kombinasi Umpan Jagung + *A. calamus* Minyak Wijen + Minyak Kemiri



**Gambar Lampiran 11.** Perlakuan Kombinasi Umpan Dedak + *A. calamus*



**Gambar Lampiran 12.** Perlakuan Kombinasi Umpan Dedak + Minyak Wijen



**Gambar Lampiran 13.** Perlakuan Kombinasi Umpan Dedak + *A. calamus* + Minyak Wijen



**Gambar Lampiran 14.** Perlakuan Kombinasi Umpan Dedak + *A. calamus* + Minyak Wijen + Minyak Kemiri + Minyak Kanola





**Gambar Lampiran 15. Dokumentasi Saat Pengamatan**



