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LAMPIRAN

1. Lampiran Analisis

A. aktivitas antioksidan (Yen & Cheng, 1995)

- Ditimbang sampel 1 g, larutkan menggunakan methanol pada konsentrasi tertentu
- Diambil 1 ml larutan induk, masukan pada tabung reaksi
- Ditambahkan 1 ml larutan 1,1 ,2 ,2- Diphenyl Picryl Hydrazyl (DPPH), 200 Mikro molar
- Inkubasi pada ruang gelap selama 30 menit
- Encerkan hingga 5 ml menggunakan methanol
- Buat blanko (1 ml larutan DPPH + 4 ml methanol)
- Tera pada panjang gelombang 517 Nm

$$\text{Aktivitas antioksidan \%} = \frac{OD \text{ Blangko} - OD \text{ Samoel}}{OD \text{ Blangko}} \times 100 \%$$

B. Penentuan oksidasi lemak , metode spektrofotemetry (Masuda & Jitou, 1994)

- Ditimbang sampel 2 g
- Dilarutkan menggunakan petroleum eter hingga 5 ml
- Diambil 1 ml larutan induk, panaskan dalam *waterbath* hingga tersisa minyak
- Ditambahkan 0,1 ml Amonium Thiocyanat
- Ditambahkan 0,1 ml FeCl₂ 0,02 M
(500 Mgr + 400 Mgr BaCl₂ encerkan dengan 100 ml aquadest lalu centrifuge)
- Encerkan menjadi 10 ml menggunakan merhanol
- Tera pada panjang gelombang 520 nM

$$\text{Angka peroksida (ml.eg/kg)} = \frac{X \times Fp \text{ (Faktor pengencer)}}{\text{Berat sampel (g)}} / \text{Berat atom Fe}$$

(55,85)

C. Analisis kadar air (Anonim, 1995)

Uji Kadar Air Berdasarkan SNI-1-3816-1995 tentang cara uji makanan dan minuman, dilakukan sebagai berikut:

- a. Sample ditimbang seberat 0,2 gram dan dimasukkan pada tempat aluminium foil yang digunakan.
- b. Nyalakan power supply, tekan tombol power pada alat moisture analisis.
- c. kemudian sampel dimasukkan ke dalam alat moisture analisis pada chamber cover dengan membuka pintu lalu menutupnya kembali.
- d. Lalu klik start untuk memulai pengujian Pada saat memindai sampel, lampu warna kuning menyala berarti sedang menjalankan radiasi sinar X. Mesin akan berbunyi setelah pemindai sampel selesai dan lampu tanda aktivasi sinar X mati.
- e. Keluarkan sampel pelan-pelan dari chamber cover.
- f. Kadar air dapat dihitung dengan persamaan berikut

$$\text{Kadar Air} = \left(\frac{a-b}{a} \times 100 \right)$$

a = berat bubuk santan mula-mula (gram)

b = berat bubuk santan setelah dikeringkan (gram).

D. Analisis kadar abu (SNI 01-2979-1992)

Ditimbang dengan teliti 2 gram contoh dalam cawan porselen yang telah diketahui bobotnya, kemudian diabukan lalu dipijarkan hingga bobot tetap

$$\text{Kadar abu} = \frac{\text{gram abu}}{\text{gram contoh}} \times 100 \%$$

E. Lampiran Analisis asam lemak bebas metode titrasi (Mehnenbacher, 1960)

- a. Ditimbang sampel sebanyak 5 gram didalam Erlenmeyer 250 ml , tambahkan 50 ml alcohol netral yang panas dan 2 ml indicator phenolphthalein
- b. Dititrasi dengan larutan 0,1 N NaOH yang telah di standarisasi sampai warna merah jambu tercapai dan tidak hilang selama 30 detik, catat volume.

$$\text{Titration \% ALB} = \frac{\text{ml NaOH} \times \text{BM asam lemak}}{\text{Berat contoh} \times 1000} \times 100 \%$$

F. Uji kesukaan, metode hedonic skale defferent test (Kartika dkk, 1988).

Nama panelis :

Tanggal :

Bahan : selai coklat

Instruksi :

Dihadapan saudara disajikan 9 sampel selai coklat. Saudara diminta untuk menilai selai coklat tersebut sesuai dengan tingkat kesukaan saudara (skala penilaian 1- 9)

1= amat sangat tidak senang 4 = agak tidak senang 7 = senang
atau tidak dapat diterima
2 = sangat tidak senang 5 = netral 8 = sangat senang
3 = tidak senang 6 = agak senang 9 = amat sangat
senang

Kode	Warna	Aroma	Rasa	Dayaoles
198				
817				
432				
325				
965				
637				
536				
127				
715				

Komentar:.....

.....
.....

2. Dokumentasi Penelitian

A. Pembuatan tepung daun kelor



Pencucian daun kelor



Pengovenan daun kelor



Pengecilan ukuran daun kelor



Pengayakan daun kelor

B. Pembuatan selai coklat

Pencampuran bahan

Pencampuran bahan menggunakan mixer di atas *waterbath*

C. Analisis kadar air dan kadar abu



Analisis kadar air



Analisis kadar abu

3. Lampiran Analisis Statistik

A. Aktivitas antioksidan

Table 1 Analisis aktivitas antioksidan

Perlakuan	Blok		Jumlah %	Rerata %
	I	II		
	B1			
A1	59,4527	59,7015	119,1542	59,5771
A2	72,6368	72,1393	144,7761	72,38805
A3	82,9602	83,209	166,1692	83,0846
	B2			
A1	55,8458	55,9701	111,8159	55,90795
A2	74,6269	74,5025	149,1294	74,5647
A3	82,4627	82,5871	165,0498	82,5249
	B3			
A1	59,3284	59,4527	118,7811	59,39055
A2	74,1294	74,3781	148,5075	74,25375
A3	83,9552	83,8308	167,786	83,893
Jumlah	645,3981	645,7711		

$$GT = 1291,169$$

$$FK = \frac{GT^2}{r.a.b} = \frac{1291,169^2}{2.3.3} = 92617,66$$

$$\begin{aligned}
 JK \text{ Total} &= \sum \{(A1B1)^2 + (A1B2)^2 + (A1B3)^2 \dots + (A3B3)^2\} - FK \text{ Perlakuan} \\
 &= (59,4527^2 + 55,8458^2 + \dots + 83,8308^2) - 92617,66 \\
 &= 1917,306
 \end{aligned}$$

Tabel 2. A x B

	B1	B2	B3	JUMLAH A
A1	119,1542	111,8159	118,7811	349,7512
A2	144,7761	149,1294	148,5075	442,413
A3	166,1692	165,0498	167,786	499,005
JUMLAH B	430,0995	425,9951	435,0746	2582,338

$$\begin{aligned}
 \text{JK Perlakuan} &= \frac{(\sum A_1 B_1)^2 + (\sum A_1 B_2)^2 + (\sum A_1 B_3)^2 + \dots + (\sum A_3 B_3)^2}{r} - FK \\
 &= \frac{119,1542 + 111,8159^2 + 118,7811^2 + \dots + 167,786^2}{2} - 92617,66 \\
 &= 94534,71 - 92617,66 \\
 &= 1917,051
 \end{aligned}$$

$$\begin{aligned}
 \text{JKA} &= \frac{\sum (A_1^2 + A_2^2 + \dots + A_3^2)}{r, b} - FK \\
 &= \frac{\sum (349,7512^2 + 442,413^2 + 499,005^2)}{2,3} - 92617,66 \\
 &= 1892,531
 \end{aligned}$$

$$\begin{aligned}
 \text{JKB} &= \frac{\sum (B_1^2 + B_2^2 + \dots + B_3^2)}{r, a} - FK \\
 &= \frac{\sum (430,0995^2 + 425,9951^2 + 435,0746^2)}{2,3} - 92617,66 \\
 &= 6,890836
 \end{aligned}$$

$$\begin{aligned}
 \text{JK Ax B} &= \text{JK Perlakuan} - \text{JK A} - \text{JK B} \\
 &= 1917,051 - 1892,531 - 6,890836 \\
 &= 17,62901
 \end{aligned}$$

$$\begin{aligned}
 \text{JK Blok} &= \frac{(\sum I^2 + \sum II^2)}{a.b} - FK \\
 &= \frac{(645,3981^2 + 645,7711^2)}{3.3} - 92617,66 \\
 &= 0,007729
 \end{aligned}$$

$$\begin{aligned}
 \text{JK Error} &= \text{JK Total} - \text{JK Perlakuan} - \text{Jk Blok} \\
 &= 1917,306 - 1917,051 - 1917,051 \\
 &= 0,247515
 \end{aligned}$$

Tabel 3 Analisis keragaman aktivitas antioksidan

	Sumber Keragaman	db	jk	rk	Fhitung	Ftabel	
						5%	1%
	Blok	1	0,007729	0,007729			
	A	2	1892,531	946,2656	30584,56**	4,46	8,65
	B	2	6,890836	3,445418	111,3605**	4,46	8,65
	A x B	4	17,62901	4,407253	142,4483**	3,84	7,01
	Error	8	0,247515	0,030939			
	Total	17	1917,306	954,1569			

Keterangan : tn) tidak berpengaruh nyata,*) berpengaruh nyata,**)berpengaruh sangat nyata.

Untuk mengetahui perbedaan aktivitas antioksidan antar perlakuan, dilakukan uji jarak Duncan pada jenjang nyata 5%

Peringkat uji jarak berganda duncan (JBD) B

$$A3 = 83,1675$$

$$A2 = 73,7355$$

$$A1 = 58,29187$$

$$SD = \sqrt{\frac{2 \times RK \text{ Error}}{r,b}} = \sqrt{\frac{2 \times 0,030}{6}} = 0,1$$

$$\begin{aligned} P2 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,26 \times 0,1}{\sqrt{2}} \\ &= 0,2305 \end{aligned}$$

$$\begin{aligned} P3 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,39 \times 0,1}{\sqrt{2}} \\ &= 0,2397 \end{aligned}$$

Tabel 4. Hasil Jarak Berganda Duncan aktivitas antioksidan

Urutan Rerata	P	RP	JBD	Selisish	
A3				24,8756	>JBD
A2	2	3,26	0,2305	9,432	>JBD
A1	3	3,39	0,2397	15,44363	> JBD

Uji Duncan $A \times B$

$$A3B3 = 83,893$$

$$A3B1 = 83,084$$

$$A3B2 = 82,524$$

$$A2B2 = 74,564$$

$$A2B3 = 74,253$$

$$A2B1 = 72,388$$

$$A1B1 = 59,577$$

$$A1B3 = 59,390$$

$$A1B2 = 55,979$$

$$SD_{A \times B} = \sqrt{\frac{2 \times RK \text{ Error}}{r}} = \sqrt{\frac{2 \times 0,030}{2}} = 0,1732$$

$$\begin{aligned} P2 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,26 \times 0,1732}{\sqrt{2}} \\ &= 0,399 \end{aligned}$$

$$\begin{aligned} P3 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,39 \times 0,1732}{\sqrt{2}} \\ &= 0,415 \end{aligned}$$

$$\begin{aligned}
 P4 &= \frac{RP \times SD}{\sqrt{2}} \\
 &= \frac{3,47 \times 0,1732}{\sqrt{2}} \\
 &= 0,429 \\
 P5 &= \frac{RP \times SD}{\sqrt{2}} \\
 &= \frac{3,52 \times 0,1732}{\sqrt{2}} \\
 &= 0,4310 \\
 P6 &= \frac{RP \times SD}{\sqrt{2}} \\
 &= \frac{3,55 \times 0,1732}{\sqrt{2}} \\
 &= 0,434 \\
 P7 &= \frac{RP \times SD}{\sqrt{2}} \\
 &= \frac{3,56 \times 0,1732}{\sqrt{2}} \\
 &= 0,4359 \\
 P8 &= \frac{RP \times SD}{\sqrt{2}} \\
 &= \frac{3,56 \times 0,1732}{\sqrt{2}} \\
 &= 0,4359 \\
 P9 &= \frac{RP \times SD}{\sqrt{2}} \\
 &= \frac{3,56 \times 0,1732}{\sqrt{2}} \\
 &= 0,4359
 \end{aligned}$$

Tabel 5. Hasil uji Duncan aktifitas antioksidan

CBS: RPO	Prosentase tepung daun kelor			Rerata A
	B1 (0%)	B2 (1,5%)	B3 (3%)	
A1 (4:1)	59,5771 ^e	55,90795 ^g	59,39055 ^f	58,29187
A2 (3:2)	72,38805 ^d	74,5647 ^b	74,25375 ^c	73,7355
A3 (2:3)	83,0846 ^a	82,5249 ^a	83,893 ^a	83,1675
Rerata B	71,68325	70,99918	72,51243	

Keterangan :Rerata yang diikuti huruf yang berbeda dengan kolom maupun baris menunjukkan adanya perbedaan berdasarkan uji jarak berganda *Duncan* pada jenjang nyata 5%.

B. Angka peroksida

Tabel . Hasil data primer angka peroksida (%)

Perlakuan	Blok		Jumlah ml.eq/kg	Rerata ml.eq/kg
	I	II		
	B1			
A1	4,002	4,557	8,559	4,279
A2	4,444	4,231	8,675	4,3375
A3	4,729	3,292	8,021	4,0105
	B2			
A1	2,712	3,043	5,755	2,8775
A2	2,467	2,215	4,682	2,341
A3	2,227	2,677	4,904	2,452
	B3			
A1	1,257	1,855	3,142	1,572
A2	1,124	1,439	3,563	1,2815
A3	1,977	1,352	3,9232	1,9616
Jumlah	24,939	25,2852	50,2242	

$$GT = 50,2242$$

$$FK = \frac{GT^2}{r.a.b} = \frac{50,2242^2}{2.3.3} = 140,1372$$

$$\begin{aligned} JK \text{ Total} &= \sum \{(A1B1)^2 + (A1B2)^2 + (A1B3)^2 \dots + (A3B3)^2\} - FK \text{ Perlakuan} \\ &= 163,530014 - 140,1372 \\ &= 23,392775 \end{aligned}$$

Tabel 2. A x B

	B1	B2	B3	JUMLAH A
A1	8,559	5,755	3,142	17,456
A2	8,675	4,682	2,563	15,92
A3	8,021	4,904	3,9232	16,8482
JUMLAH B	25,255	15,341	9,6282	100,4484

$$JK \text{ Perlakuan} = \frac{(\sum A1B1)^2 + (\sum A1B2)^2 + (\sum A1B3)^2 \dots + (\sum A3B3)^2}{r} - FK$$

$$= \frac{8,559^2 + 5,755^2 + 164,36^2 + \dots + 3,9232^2}{2} - 140,1372$$

$$= 161,8858 - 140,1372$$

$$= 21,74853$$

$$\text{JK A} = \frac{\sum(A_1^2 + A_2^2 + \dots + A_3^2)}{r, b} - FK$$

$$= \frac{\sum(17,456^2 + 15,92^2 + 16,8482^2)}{2,3} - 140,1372$$

$$= 0,19946$$

$$\text{JK B} = \frac{\sum(B_1^2 + B_2^2 + \dots + B_3^2)}{r, a} - FK$$

$$= \frac{\sum(25,255^2 + 15,341^2 + 9,6282^2)}{2,3} - 140,1372$$

$$= 20,84002$$

$$\text{JK AxB} = \text{JK Perlakuan} - \text{JK A} - \text{JK B}$$

$$= 21,74853 - 0,19946 - 20,84002$$

$$= 0,709055$$

$$\text{JK Blok} = \frac{(\sum I^2 + \sum II^2)}{a.b} - FK$$

$$= \frac{(24,939^2 + 25,2852^2)}{3.3} - 140,1372$$

$$= 0,006659$$

$$\text{JK Error} = \text{JK Total} - \text{JK Perlakuan} - \text{JK Blok}$$

$$= 23,3927775 - 21,74853 - 0,006659$$

$$= 1,637584$$

Tabel 3. Analisis Keragaman angka peroksida

No	Sumber Keragaman	db	JK	RK	Fh	Ft	
						5%	1%
1.	A	2	0,19946	0,09973	0,4872 ^{Tn}	4,46	8,65
2.	B	2	20,8400	10,4200	50,9043 ^{**}	4,46	8,65
3.	A x B	4	0,709	0,1772	0,8659 ^{Tn}	3,84	7,01
4.	Blok	1	0,0066	0,0066			
5.	Error	8	1,6375	0,2046			
6.	Total	17	23,3927	10,9017			

Keterangan : tn) tidak berpengaruh nyata,*) berpengaruh nyata,**)berpengaruh sangat nyata.

Untuk mengetahui perbedaan angka peroksida antar perlakuan, dilakukan uji jarak Duncan pada jenjang nyata 5%

Peringkat uji jarak berganda duncan (JBD) B

$$B1 = 25,255$$

$$B2 = 15,341$$

$$B3 = 9,6282$$

$$SD = \sqrt{\frac{2 \times RK \text{ Error}}{r,b}} = \sqrt{\frac{2 \times 0,2046}{6}} = 0,0825$$

$$\begin{aligned} P2 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,26 \times 0,0825}{\sqrt{2}} \\ &= 0,190178 \end{aligned}$$

$$\begin{aligned} P3 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,39 \times 0,0825}{\sqrt{2}} \\ &= 0,197761 \end{aligned}$$

Tabel 4. Hasil jarak berganda duncan angka peroksida

Urutan Rerata	P	RP	JBD	Selisish	
B3				9,914	>JBD
B2	2	3,26	0,190178	15,6268	>JBD
B1	3	3,39	0,197761	5,7128	> JBD

Uji Duncan A × B

$$A2B1 = 4,3375$$

$$A1B1 = 4,2795$$

$$A3B1 = 4,0105$$

$$A1B2 = 2,8775$$

$$A3B2 = 2,452$$

$$A2B2 = 2,341$$

$$A3B3 = 1,9616$$

$$A1B3 = 1,572$$

$$A2B3 = 1,2815$$

$$SD_{A \times B} = \sqrt{\frac{2 \times RK \text{ Error}}{r}} = \sqrt{\frac{2 \times 0,2046}{2}} = 0,452$$

$$\begin{aligned} P2 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,26 \times 0,452}{\sqrt{2}} \\ &= 1,045 \end{aligned}$$

$$\begin{aligned} P3 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,39 \times 0,452}{\sqrt{2}} \\ &= 1,086 \end{aligned}$$

$$\begin{aligned} P4 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,47 \times 0,452}{\sqrt{2}} \\ &= 1,112 \end{aligned}$$

$$\begin{aligned} P5 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,52 \times 0,452}{\sqrt{2}} \\ &= 1,12 \end{aligned}$$

$$\begin{aligned} P6 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,55 \times 0,452}{\sqrt{2}} \\ &= 1,13 \end{aligned}$$

$$\begin{aligned} P7 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,56 \times 0,452}{\sqrt{2}} \\ &= 1,14 \end{aligned}$$

$$\begin{aligned}
 P8 &= \frac{RP \times SD}{\sqrt{2}} \\
 &= \frac{3.56 \times 0,452}{\sqrt{2}} \\
 &= 1,14
 \end{aligned}$$

$$\begin{aligned}
 P9 &= \frac{RP \times SD}{\sqrt{2}} \\
 &= \frac{3.56 \times 0,452}{\sqrt{2}} \\
 &= 1,14
 \end{aligned}$$

Tabel 5. Hasil uji Duncan angka peroksida

CBS:RPO	Prosentase tepung daun kelor			Rerata
	B1	B2	B3	
A1	8,559 ^a	5,755 ^b	3,14 ^e	5,818
A2	8,675 ^a	4,682 ^d	2,563 ^f	5,306
A3	8,021 ^a	4,904 ^c	3,923 ^d	5,616
Rerata	8,418	5,113	3,208	

C. Asam lemak bebas

Tabel 1. Hasil data primer analisis asam lemak bebas (%)

Perlakuan	Blok		jumlah	Rerata
	I	II		
	B1			
A1	0,874	1,843	2,717	1,3585
A2	1,703	1,31	3,013	1,5065
A3	2,94	1,768	4,708	2,354
	B2			
A1	0,984	1,31	2,294	1,147
A2	1,543	2,337	3,88	1,94
A3	1,542	1,979	3,521	1,7605
	B3			
A1	2,945	1,905	4,85	2,425
A2	1,662	3,057	4,719	2,3595
A3	2,57	1,276	3,846	1,923
Jumlah	16.763	16.785	33,548	

$$GT = 33,548$$

$$FK = \frac{GT^2}{r.a.b} = \frac{33,548^2}{2.3.3} = 62,52602$$

$$\begin{aligned}
 JK \text{ Total} &= \sum \{ (A_1B_1)^2 + (A_1B_2)^2 + (A_1B_3)^2 + \dots + (A_3B_3)^2 \} - FK \text{ Perlakuan} \\
 &= (0,874^2 + 0,984^2 + \dots + 1,276^2) - 62,52602 \\
 &= 7,483839
 \end{aligned}$$

Tabel 2. A $\times$ B

	B1	B2	B3	JUMLAH A
A1	2,717	2,294	4,85	9,861
A2	3,013	3,88	4,719	11,612
A3	4,708	3,521	3,846	12,075
JUMLAH B	10,438	9,695	13,415	33,548

$$\begin{aligned}
 JK \text{ Perlakuan} &= \frac{(\sum A_1B_1)^2 + (\sum A_1B_2)^2 + (\sum A_1B_3)^2 + \dots + (\sum A_3B_3)^2}{r} - FK \\
 &= \frac{82,717^2 + 2,294^2 + 4,85^2 + \dots + 3,846^2}{2} - 62,52602 \\
 &= 65,96149 - 62,52602 \\
 &= 3,435471
 \end{aligned}$$

$$\begin{aligned}
 JKA &= \frac{\sum (A_1^2 + A_2^2 + \dots + A_3^2)}{r, b} - FK \\
 &= \frac{\sum (9,861^2 + 11,612^2 + 12,075^2)}{2, 3} - 62,52602 \\
 &= 0,454565
 \end{aligned}$$

$$\begin{aligned}
 JKB &= \frac{\sum (B_1^2 + B_2^2 + \dots + B_3^2)}{r, a} - FK \\
 &= \frac{\sum (10,438^2 + 9,695^2 + 13,415^2)}{2, 3} - 62,52602 \\
 &= 1,291832
 \end{aligned}$$

$$\begin{aligned}
 JK \text{ AxB} &= JK \text{ Perlakuan} - JKA - JKB \\
 &= 3,435471 - 0,454565 - 1,291832 \\
 &= 1,689074
 \end{aligned}$$

$$\begin{aligned}
 JK \text{ Blok} &= \frac{(\sum I^2 + \sum II^2)}{a.b} - FK \\
 &= \frac{(16,763^2 + 16,785^2)}{3.3} - 62,52602
 \end{aligned}$$

$$\begin{aligned}
 &= 0,0002377 \\
 \text{JK Error} &= \text{JK Total} - \text{JK Perlakuan} - \text{Jk Blok} \\
 &= 7,483839 - 3,435471 - 0,0002377 \\
 &= 4,048341
 \end{aligned}$$

Tabel 3. Analisis Keragaman asam lemak bebas

Sumber Keragaman	db	jk	rk	Fhitung	Ftabel	
					5%	1%
Blok	1	0,00023	0,00023			
B	2	0,454565	0,227282	0,449137 ^{Tn}	4,46	8,65
A	2	1,291832	0,645916	1,276406 ^{Tn}	4,46	8,65
A x S	4	1,689074	0,422269	0,834453 ^{Tn}	3,84	7,01
Error	8	4,048341	0,506043			
Total	17	7,483839	1,801537			

Keterangan : tn (Tidak berpengaruh nyata)

D. Kadar air

Tabel 1. Hasil data primer analisis kadar air (%)

Perlakuan	Blok		Jumlah (%)	Rerata (%)
	I	II		
	B1			
A1	0,24	0,765	1,005	0,502
A2	0,62	0,97	1,59	0,557
A3	0,445	0,445	0,89	0,4925
	B2			
A1	0,26	0,855	1,115	0,795
A2	0,475	0,775	1,25	0,625
A3	0,39	0,855	1,245	0,867
	B3			
A1	0,445	0,54	0,985	0,445
A2	0,97	0,765	1,735	0,62
A3	0,255	0,695	0,95	0,475
Jumlah	4,1	6,665		

$$GT = 10,765$$

$$FK = \frac{GT^2}{r.a.b} = \frac{10,765^2}{2.3.3} = 6,438068$$

$$\begin{aligned}
 \text{JK Total} &= \sum \{ (A1B1)^2 + (A1B2)^2 + (A1B3)^2 + \dots + (A3B3)^2 \} - FK \text{ Perlakuan} \\
 &= (0,240,984^2 + 0,26 + \dots + 0,695^2) - 6,438068 \\
 &= 0,997907
 \end{aligned}$$

Tabel 2. $A \times B$

CBS : RPO	Prosentase tepung daun kelor			Jumlah B
	A ₁ (4:1)	A ₂ (3:2)	A ₃ (2:3)	
B1 (0%)	1,005	1,59	0,89	3,485
B2(1,5%)	1,115	1,25	1,245	3,61
B3 (3%)	0,985	1,735	0,95	3,67
Jumlah A	3,105	4,575	3,085	

$$JK \text{ Perlakuan} = \frac{(\sum A_1 B_1)^2 + (\sum A_1 B_2)^2 + (\sum A_1 B_3)^2 + \dots + (\sum A_3 B_3)^2}{r} - FK$$

$$= \frac{1,005^2 + 1,59^2 + 0,89^2 + \dots + 0,95^2}{2} - 6,438068$$

$$= 6,784463 - 6,438068$$

$$= 0,346394$$

$$JKA = \frac{\sum (A_1^2 + A_2^2 + \dots + A_3^2)}{r, b} - FK$$

$$= \frac{\sum (3,105^2 + 4,575^2 + 3,085^2)}{2,3} - 6,438068$$

$$= 0,243411$$

$$JKB = \frac{\sum (B_1^2 + B_2^2 + \dots + B_3^2)}{r, a} - FK$$

$$= \frac{\sum (3,485^2 + 3,61^2 + 3,67^2)}{2,3} - 6,438068$$

$$= 0,003$$

$$JK \text{ AxB} = JK \text{ Perlakuan} - JK \text{ A} - JK \text{ B}$$

$$= 0,346394 - 0,243411 - 0,003$$

$$= 0,1$$

$$JK \text{ Blok} = \frac{(\sum I^2 + \sum II^2)}{a.b} - FK$$

$$= \frac{(4,1^2 + 16,785)}{3.3} - 6,438068$$

$$= 0,365512$$

$$JK \text{ Error} = JK \text{ Total} - JK \text{ Perlakuan} - JK \text{ Blok}$$

$$= 0,997907 - 0,346394 - 0,365512$$

$$= 0,286$$

Tabel 3. Analisis Keragaman kadar air

No	Sumber Keragaman	db	JK	RK	Fh	Ft	
						5%	1%
1.	A	2	0,2434	0,1216	3,4013 ^{Tn}	4,46	8,65
2.	B	2	0,003	0,0015	0,0419 ^{Tn}	4,46	8,65
3.	A x B	4	0,1	0,025	0,6993 ^{Tn}	3,84	7,01
4.	Blok	1	0,3655	0,3655			
5.	Error	8	0,286	0,0357			
6.	Total	17	0,9979	0,5494			

Keterangan : tn (Tidak berpengaruh nyata)

E. Kadar Abu

Tabel 1. Hasil data primer analisis kadar abu (%)

Perlakuan	Blok		Jumlah (%)	Rerata (%)
	I	II		
	B1			
A1	2,70	2,12	4,82	2,41
A2	2,52	2,34	4,86	2,43
A3	2,45	2,31	4,76	2,38
	B2			
A1	2,71	2,37	5,08	2,54
A2	2,92	2,16	5,08	2,54
A3	2,25	2,23	4,48	2,24
	B3			
A1	2,82	2,08	4,9	2,45
A2	2,23	2,09	4,32	2,16
A3	2,66	2,43	5,09	2,545
Jumlah	23,26	20,13		

$$GT = 43,42511$$

$$FK = \frac{GT^2}{r.a.b} = \frac{43,42511^2}{2.3.3} = 104,7633$$

$$\begin{aligned}
 JK \text{ Total} &= \sum \{ (A1B1)^2 + (A1B2)^2 + (A1B3)^2 \dots + (A3B3)^2 \} - FK \text{ Perlakuan} \\
 &= 105,9685 - 104,7633 \\
 &= 1,1894
 \end{aligned}$$

Tabel 2 A x B

CBS : RPO	Prosentase tepung daun kelor			Jumlah A
	B1 (0%)	B2 (1,5%)	B3 (3%)	

A ₁ (4:1)	4,82	4,86	4,76	14,44
A ₂ (3:2)	5,07	5,12	4,48	14,68
A ₃ (2:3)	4,90	4,32	5,09	14,31
Jumlah B	14,79	14,30	14,33	

$$JK \text{ Perlakuan} = \frac{(\sum A_1 B_1)^2 + (\sum A_1 B_2)^2 + (\sum A_1 B_3)^2 + \dots + (\sum A_3 B_3)^2}{r} - FK$$

$$= \frac{4,82^2 + 4,86^2 + 4,76^2 + \dots + 5,09^2}{2} - 104,7633$$

$$= 105,0679 - 104,7633$$

$$= 0,3029$$

$$JKA = \frac{\sum (A_1^2 + A_2^2 + \dots + A_3^2)}{r, b} - FK$$

$$= \frac{\sum (14,44^2 + 14,68^2 + 14,31^2)}{2,3} - 104,7633$$

$$= 0,011879$$

$$JKB = \frac{\sum (B_1^2 + B_2^2 + \dots + B_3^2)}{r, a} - FK$$

$$= \frac{\sum (14,79^2 + 14,30^2 + 14,33^2)}{2,3} - 104,7633$$

$$= 0,026128$$

$$JK \text{ AxB} = JK \text{ Perlakuan} - JK \text{ A} - JK \text{ B}$$

$$= 0,3029 - 0,011879 - 0,026128$$

$$= 0,264951$$

$$JK \text{ Blok} = \frac{(\sum I^2 + \sum II^2)}{a.b} - FK$$

$$= \frac{(23,29^2 + 20,13^2)}{3.3} - 104,7633$$

$$= 0,557955$$

$$JK \text{ Error} = JK \text{ Total} - JK \text{ Perlakuan} - JK \text{ Blok}$$

$$= 1,1894 - 0,3029 - 0,557955$$

$$= 0,3259$$

Tabel 3 Analisis Keragaman kadar abu

Sumber Keragaman	db	jk	rk	Fhitung	Ftabel	
					5%	1%
A	2	0,011879	0,0059	0,1458 ^{tn}	4,46	8,65
B	2	0,0261	0,0131	0,3206 ^{tn}	4,46	8,65
A x B	4	0,2650	0,0662	1,6255 ^{tn}	3,84	7,01
Blok	1	0,5579	0,5580			
Error	8	0,3259	0,0407			
Total	17	1,29369	0,6839			

Keterangan : tn (Tidak berpengaruh nyata)

F. Uji kesukaan warna

Tabel 1 Hasil data primer uji kesukaan warna

Perlakuan	Blok		Jumlah (%)	Rerata (%)
	I	II		
	B1			
A1	5,85	6,75	12,6	6,3
A2	6,2	6,75	12,95	6,475
A3	6,25	6,7	12,95	6,475
	B2			
A1	6,35	6,35	12,7	6,35
A2	6,4	6,15	12,55	6,275
A3	6	6,45	12,45	6,225
	B3			
A1	6,35	6,3	12,65	6,325
A2	6,1	6,95	13,05	6,525
A3	6,05	6,55	12,6	6,3
Jumlah	55,5	58,95		

$$GT = 114,5$$

$$FK = \frac{GT^2}{r.a.b} = \frac{114,5^2}{2.3.3} = 728,3472$$

$$\begin{aligned}
 JK \text{ Total} &= \sum \{ (A1B1)^2 + (A1B2)^2 + (A1B3)^2 \dots + (A3B3)^2 \} - FK \text{ Perlakuan} \\
 &= 729,8 - 728,3472 \\
 &= 1,452778
 \end{aligned}$$

Tabel 2. A × B

	B1	B2	B3	JUMLAH A
A1	12,6	12,7	12,65	37,95
A2	12,95	12,55	13,05	38,55
A3	12,95	12,45	12,6	38
JUMLAH B	38,5	37,7	38,3	229

$$\begin{aligned}
 \text{JK Perlakuan} &= \frac{(\sum A_1 B_1)^2 + (\sum A_1 B_2)^2 + (\sum A_1 B_3)^2 + \dots + (\sum A_3 B_3)^2}{r} - FK \\
 &= \frac{12,6^2 + 12,7^2 + 12,65^2 + \dots + 12,6^2}{2} - 728,3472 \\
 &= 728,5225 - 728,3472 \\
 &= 0,175278
 \end{aligned}$$

$$\begin{aligned}
 \text{JKA} &= \frac{\sum (A_1^2 + A_2^2 + \dots + A_3^2)}{r, b} - FK \\
 &= \frac{\sum (38,5^2 + 37,7^2 + 38,3^2)}{2,3} - 728,3472 \\
 &= 0,057778
 \end{aligned}$$

$$\begin{aligned}
 \text{JKB} &= \frac{\sum (B_1^2 + B_2^2 + \dots + B_3^2)}{r, a} - FK \\
 &= \frac{\sum (37,95^2 + 38,55^2 + 38^2)}{2,3} - 728,3472 \\
 &= 0,036944
 \end{aligned}$$

$$\begin{aligned}
 \text{JK AxB} &= \text{JK Perlakuan} - \text{JK A} - \text{JK B} \\
 &= 0,175278 - 0,057778 - 0,036944 \\
 &= 0,080556
 \end{aligned}$$

$$\begin{aligned}
 \text{JK Blok} &= \frac{(\sum I^2 + \sum II^2)}{a.b} - FK \\
 &= \frac{(55,5^2 + 58,95^2)}{3.3} - 728,3472 \\
 &= 0,6422
 \end{aligned}$$

$$\begin{aligned}
 \text{JK Error} &= \text{JK Total} - \text{JK Perlakuan} - \text{Jk Blok} \\
 &= 1,452778 - 0,175278 - 0,6422 \\
 &= 0,635278
 \end{aligned}$$

Tabel 3. Analisis Keragaman uji kesukaan warna

No	Sumber Keragaman	db	JK	RK	Fh	Ft	
						5%	1%
1.	A	2	0,0577	0,0288	0,3638 ^{Tn}	4,46	8,65
2.	B	2	0,0364	0,0184	0,2326 ^{Tn}	4,46	8,65
3.	A x B	4	0,0805	0,0201	0,2536 ^{Tn}	3,84	7,01
4.	Blok	1	0,6422	0,6422			
5.	Error	8	0,6357	0,0794			
6.	Total	17	1,4532	0,6857			

Keterangan : tn (Tidak berpengaruh nyata)

G. Uji organoleptic aroma

Tabel 1. Hasil data primer uji kesukaan aroma

Perlakuan	Blok		Jumlah (%)	Rerata (%)
	I	II		
	B1			
A1	6,05	5,85	11,9	5,95
A2	6,65	6,1	12,75	6,375
A3	6,2	6,65	12,85	6,425
	B2			
A1	6,1	6,45	12,55	6,275
A2	57,5	6,55	12,3	6,15
A3	6,05	5,75	11,8	5,9
	B3			
A1	5,9	6,2	12,1	6,05
A2	6,2	6,35	12,55	6,275
A3	6,95	5,9	12,85	6,425
Jumlah	55,85	55,8	111,65	

$$GT = 111,65$$

$$FK = \frac{GT^2}{r.a.b} = \frac{111,65^2}{2.3.3} = 692,5401$$

$$\begin{aligned}
 \text{JK Total} &= \sum \{ (A1B1)^2 + (A1B2)^2 + (A1B3)^2 \dots + (A3B3)^2 \} - \text{FK Perlakuan} \\
 &= 694,4875 - 692,5401 \\
 &= 1,947361
 \end{aligned}$$

Tabel 2. A x B

	B1	B2	B3	JUMLAH A
A1	11,9	12,55	12,1	36,55
A2	12,75	12,3	12,55	37,6

A3	12,85	11,8	12,85	37,5
JUMLAH B	37,5	36,65	37,5	223,3

$$JK \text{ Perlakuan} = \frac{(\sum A_1 B_1)^2 + (\sum A_1 B_2)^2 + (\sum A_1 B_3)^2 + \dots + (\sum A_3 B_3)^2}{r} - FK$$

$$= \frac{11,9^2 + 12,55^2 + 12,1^2 + \dots + 12,85^2}{2} - 692,5401$$

$$= 693,1813 - 692,5401$$

$$= 0,64111$$

$$JK A = \frac{\sum (A_1^2 + A_2^2 + \dots + A_3^2)}{r, b} - FK$$

$$= \frac{\sum (36,55^2 + 37,6^2 + 37,5^2)}{2,3} - 692,5401$$

$$= 0,111944$$

$$JK B = \frac{\sum (B_1^2 + B_2^2 + \dots + B_3^2)}{r, a} - FK$$

$$= \frac{\sum (37,5^2 + 36,65^2 + 37,5^2)}{2,3} - 692,5401$$

$$= 0,080278$$

$$JK A \times B = JK \text{ Perlakuan} - JK A - JK B$$

$$= 0,64111 - 0,111944 - 0,080278$$

$$= 0,448889$$

$$JK \text{ Blok} = \frac{(\sum I^2 + \sum II^2)}{a.b} - FK$$

$$= \frac{(55,85^2 + 55,8^2)}{3.3} - 692,5401$$

$$= 0,000139$$

$$JK \text{ Error} = JK \text{ Total} - JK \text{ Perlakuan} - JK \text{ Blok}$$

$$= 1,947361 - 0,64111 - 0,000139$$

$$= 1,306111$$

Tabel 3. Analisis keragaman uji kesukaan aroma

No	Sumber Keragaman	db	JK	RK	Fh	Ft	
						5%	1%
1.	A	2	0,1119	0,0559	0,3428 ^{Tn}	4,46	8,65
2.	B	2	0,0802	0,0401	0,2458 ^{Tn}	4,46	8,65
3.	A x B	4	0,4488	0,1122	0,6873 ^{Tn}	3,84	7,01

4.	Blok	1	0,0001	0,0001			
5.	Error	8	1,3061	0,1632			
6.	Total	17	1,9473	0,3717			

Keterangan : tn (Tidak berpengaruh nyata)

H. Uji organoleptic rasa

Tabel 1 Hasil data primer uji kesukaan rasa

Perlakuan	Blok		Jumlah (%)	Rerata (%)
	I	II		
	B1			
A1	6,55	6,45	13	6,5
A2	6,45	6,45	12,9	6,45
A3	5,8	6,2	12	6
	B2			
A1	7,25	6,15	13,4	6,7
A2	6	6,45	12,45	6,225
A3	5,82	5,8	11,62	5,81
	B3			
A1	6,45	6,25	12,7	6,35
A2	6,4	5,95	12,35	6,175
A3	5,6	5,5	11,5	5,55
Jumlah	56,32	55,2	111,52	

$$GT = 111,52$$

$$FK = \frac{GT^2}{r.a.b} = \frac{111,52^2}{2.3.3} = 690,9284$$

$$JK \text{ Total} = \sum \{(A1B1)^2 + (A1B2)^2 + (A1B3)^2 \dots + (A3B3)^2\} - FK \text{ Perlakuan}$$

$$= 693,9274 - 690,9284$$

$$= 2,999044$$

Tabel 2. A × B

	B1	B2	B3	JUMLAH A
A1	13	13,4	12,7	39,1
A2	12,9	12,45	12,35	37,7
A3	12	11,62	11,1	34,72
JUMLAH B	37,9	37,47	36,15	111,52

$$JK \text{ Perlakuan} = \frac{(\sum A1B1)^2 + (\sum A1B2)^2 + (\sum A1B3)^2 \dots + (\sum A3B3)^2}{r} - FK$$

$$= \frac{13^2 + 13,4^2 + 12,7^2 + \dots + 11,1^2}{2} - 690,9284$$

$$= 693,1813 - 690,9284$$

$$= 2,081344$$

$$\begin{aligned}
 JKA &= \frac{\sum(A_1^2 + A_2^2 + \dots + A_3^2)}{r,b} - FK \\
 &= \frac{\sum(39,1^2 + 37,7^2 + 34,72^2)}{2,3} - 690,9284 \\
 &= 1,668044
 \end{aligned}$$

$$\begin{aligned}
 JKB &= \frac{\sum(B_1^2 + B_2^2 + \dots + B_3^2)}{r,a} - FK \\
 &= \frac{\sum(37,9^2 + 37,47^2 + 36,15^2)}{2,3} - 690,9284 \\
 &= 0,277211
 \end{aligned}$$

$$\begin{aligned}
 JK \text{ AxB} &= JK \text{ Perlakuan} - JK \text{ A} - JK \text{ B} \\
 &= 2,081344 - 1,668044 - 0,277211 \\
 &= 0,136089
 \end{aligned}$$

$$\begin{aligned}
 JK \text{ Blok} &= \frac{(\sum I^2 + \sum II^2)}{a.b} - FK \\
 &= \frac{(56,32^2 + 55,2^2)}{3.3} - 690,9284 \\
 &= 0,069689
 \end{aligned}$$

$$\begin{aligned}
 JK \text{ Error} &= JK \text{ Total} - JK \text{ Perlakuan} - Jk \text{ Blok} \\
 &= 2,999044 - 2,081344 - 0,069689 \\
 &= 0,84011
 \end{aligned}$$

Tabel 3 Analisis keragaman uji kesukaan rasa

No	Sumber Keragaman	db	JK	RK	Fh	Ft	
						5%	1%
1.	A	2	1,6680	0,8340	7,8680*	4,46	8,65
2.	B	2	0,2772	0,1386	1,3075 ^{Tn}	4,46	8,65
3.	A x B	4	0,1360	0,0340	0,3209 ^{Tn}	3,84	7,01
4.	Blok	1	0,0696	0,0696			
5.	Error	8	0,8480	0,1060			
6.	Total	17	2,9990	1,1823			

Keterangan : * (Berpengaruh nyata)

tn (Tidak berpengaruh nyata)

Untuk mengetahui perbedaan uji kesukaan rasa antar perlakuan, dilakukan uji jarak

Duncan pada jenjang nyata 5%

Peringkat uji jarak berganda duncan (JBD) A

$$A1 = 39,1$$

$$A2 = 37,7$$

$$A3 = 34,72$$

$$SD = \sqrt{\frac{2 \times RK \text{ Error}}{r,b}} = \sqrt{\frac{2 \times 0,1060}{6}} = 0,18788$$

$$\begin{aligned} P2 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,26 \times 0,18788}{\sqrt{2}} \\ &= 0,4343 \end{aligned}$$

$$\begin{aligned} P3 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,39 \times 0,18788}{\sqrt{2}} \\ &= 0,4517 \end{aligned}$$

Tabel 4. Hasil jarak berganda duncan angka peroksida

Urutan Rerata	P	RP	JBD	Selisish	
B3				1,2	>JBD
B2	2	3,26	0,4343	4,38	>JBD
B1	3	3,39	0,4517	2,98	> JBD

Uji Duncan A $\times$ B

$$A2B1 = 6,7$$

$$A1B1 = 6,5$$

$$A2B1 = 6,45$$

$$A1B3 = 6,35$$

$$A2B2 = 6,225$$

$$A2B3 = 6,175$$

$$A3B1 = 6$$

$$A3B2 = 5,81$$

$$A3B3 = 5,5$$

$$SD_{A \times B} = \sqrt{\frac{2 \times RK \text{ Error}}{r}} = \sqrt{\frac{2 \times 0,1060}{2}} = 0,3255$$

$$\begin{aligned} P2 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,26 \times 0,3255}{\sqrt{2}} \\ &= 0,752 \end{aligned}$$

$$\begin{aligned} P3 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,39 \times 0,3255}{\sqrt{2}} \\ &= 0,782 \end{aligned}$$

$$\begin{aligned} P4 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,47 \times 0,3255}{\sqrt{2}} \\ &= 0,801 \end{aligned}$$

$$\begin{aligned} P5 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,52 \times 0,3255}{\sqrt{2}} \\ &= 0,750 \end{aligned}$$

$$\begin{aligned} P6 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,55 \times 0,3255}{\sqrt{2}} \\ &= 0,819 \end{aligned}$$

$$\begin{aligned} P7 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,56 \times 0,3255}{\sqrt{2}} \\ &= 0,821 \end{aligned}$$

$$\begin{aligned} P8 &= \frac{RP \times SD}{\sqrt{2}} \\ &= \frac{3,56 \times 0,3255}{\sqrt{2}} \\ &= 0,821 \end{aligned}$$

$$\begin{aligned}
 p_9 &= \frac{RP \times SD}{\sqrt{2}} \\
 &= \frac{3.56 \times 0,3255}{\sqrt{2}} \\
 &= 0,821
 \end{aligned}$$

Tabel 5 Hasil uji Duncan kesukaan rasa selai coklat

CBS:RPO	Prosentase tepung daun kelor			Rerata
	B1	B2	B3	
A1	13 ^a	13,4 ^a	12,7 ^a	13,03
A2	12,9 ^a	12,45 ^a	12,35 ^a	12,56
A3	12 ^a	11,62 ^a	11,5 ^b	11,57
Rerata	12,63	12,49	12,05	111,52

I. Uji organoleptic daya oles

Tabel 1. Hasil data primer uji kesukaan daya oles

Perlakuan	Blok		Jumlah (%)	Rerata (%)
	I	II		
	B1			
A1	5,55	6,1	11,65	5,825
A2	6,35	6,2	12,55	6,275
A3	5,8	6,05	11,4	5,7
	B2			
A1	5,95	6,65	12,6	6,3
A2	5,15	6,3	11,45	5,725
A3	5,35	5,9	11,25	5,625
	B3			
A1	5,3	6,2	11,5	5,75
A2	5,15	6,25	11,4	5,7
A3	5,15	5,75	10,9	5,45
Jumlah	49,3	55,4	104,7	52,35

$$GT = 104,7$$

$$FK = \frac{GT^2}{r.a.b} = \frac{104,7^2}{2.3.3} = 609,005$$

$$\begin{aligned}
 JK \text{ Total} &= \sum \{ (A1B1)^2 + (A1B2)^2 + (A1B3)^2 + \dots + (A3B3)^2 \} - FK \text{ Perlakuan} \\
 &= 612,97 - 609,005 \\
 &= 3,965
 \end{aligned}$$

Tabel 2. A×B

	B1	B2	B3	JUMLAH A
A1	11,65	12,6	11,5	35,75
A2	12,55	11,45	11,4	35,4
A3	11,4	11,25	10,9	33,55
JUMLAH B	35,6	35,3	33,8	104,7

$$\begin{aligned}
 \text{JK Perlakuan} &= \frac{(\sum A_1 B_1)^2 + (\sum A_1 B_2)^2 + (\sum A_1 B_3)^2 + \dots + (\sum A_3 B_3)^2}{r} - FK \\
 &= \frac{11,65^2 + 12,6^2 + 11,5^2 + \dots + 10,9^2}{2} - 609,005 \\
 &= 610,315 - 609,005 \\
 &= 1,31
 \end{aligned}$$

$$\begin{aligned}
 \text{JKA} &= \frac{\sum (A_1^2 + A_2^2 + \dots + A_3^2)}{r, b} - FK \\
 &= \frac{\sum (35,75^2 + 35,4^2 + 35,55^2)}{2, 3} - 609,005 \\
 &= 0,465833
 \end{aligned}$$

$$\begin{aligned}
 \text{JKB} &= \frac{\sum (B_1^2 + B_2^2 + \dots + B_3^2)}{r, a} - FK \\
 &= \frac{\sum (35,6^2 + 35,3^2 + 33,8^2)}{2, 3} - 609,005 \\
 &= 0,31
 \end{aligned}$$

$$\begin{aligned}
 \text{JK AxB} &= \text{JK Perlakuan} - \text{JK A} - \text{JK B} \\
 &= 1,31 - 0,465833 - 0,31 \\
 &= 0,534167
 \end{aligned}$$

$$\begin{aligned}
 \text{JK Blok} &= \frac{(\sum I^2 + \sum II^2)}{a.b} - FK \\
 &= \frac{(49,3^2 + 55,4^2)}{3.3} - 609,005 \\
 &= 2,06722
 \end{aligned}$$

$$\begin{aligned}
 \text{JK Error} &= \text{JK Total} - \text{JK Perlakuan} - \text{Jk Blok} \\
 &= 3,965 - 1,31 - 2,06722 \\
 &= 0,58778
 \end{aligned}$$

Tabel 3. Analisis keragaman uji kesukaan daya oles

No	Sumber Keragaman	db	JK	RK	Fh	Ft	
						5%	1%
1.	A	2	0,4658	0,2329	3,1701 ^{Tn}	4,46	8,65
2.	B	2	0,31	0,155	2,1096 ^{Tn}	4,46	8,65
3.	A x B	4	0,5341	0,1335	1,8175 ^{Tn}	3,84	7,01
4.	Blok	1	2,0672	2,0672			
5.	Error	8	0,5877	0,0734			
6.	Total	17	2,9990	1,1823			

Keterangan : * (Berpengaruh nyata)

tn (Tidak berpengaruh nyata)