L A M P I R A N

Lampiran 1. Hasil determinasi tanaman kelor (*Moringa oleifera* Lamk.)

UPT-LABORATORIUM

UNIVERSITAS SETIA BUDI

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Nomor : 037/DET/UPT-LAB/20.02.2023
Hal : Hasil determinasi tumbuhan
Lamp. : -

Nama Pemesan : Eka Indah R
NIM : 25195685A
Alamat : S1 Farmasi, Universitas Setia Budi Surakarta
Nama sampel : Kelor/ *Moringa oleifera* Lamk.

HASIL DETERMINASI TUMBUHAN

Klasifikasi

Kingdom : Plantae
Super Divisi : Spermatophyta
Divisi : Magnoliophyta
Kelas : Magnoliopsida
Ordo : Brassicales
Famili : Moringaceae
Genus : Moringa
Species : *Moringa oleifera* Lamk.

Hasil Determinasi menurut Steenis, C.G.G.J.V, Bloembergen, H, Eyma, P.J. 1992 :
1b – 2b – 3b – 4b – 6b – 7b – 9b – 10b – 11b – 12b – 13b – 15b. golongan 9. 197b – 208a – 209b – 210b – 211b – 214a. familia 55. Moringaceae. *Moringa oleifera* Lamk.

Deskripsi :
Habitus : Pohon bengkok, menggugurkan daun, tinggi 3 – 10 m.
Akar : Sistem akar tunggang.
Batang : Batang berkayu, percabangan monopodial, ranting dengan tanda bekas daun yang besar.

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Daun : Daun tersebar, menyirip ganjil rangkap 2 – 4. Anak daun bertangkai, bulat telur terbalik, tepi rata, sisi bawah hijau pucat, panjang 1,6 – 2,1 cm, tulang daun menyirip.

Bunga : Bunga malai, panjang 11,4 – 14,1 cm. Piala kelopak hijau, taju kelopak melengkung membalik, putih, panjang 1 cm. Daun mahkota putih kuning, yang terdepan terbesar, panjang lk 1,5 cm, yang lain membalik. Benang sari dan staminodia dengan ujung yang melengkung kembali.

Buah : Buah kotak, menggantung, bersudut 3, panjang 33,2 – 46,5 cm. Katup tebal, di tengah ada bekas cetakan yang dalam berisi 1 baris biji.

Biji : Biji bentuk bola, bersayap 3.

Surakarta, 20 Februari 2023

Kepala UPT-LAB	Penanggung jawab
Universitas Setia Budi	Determinasi Tumbuhan
Asik Gunawan, Amdk	Dra. Dewi Sulistyawati. M.Sc.

Lampiran 2. Pembuatan serbuk daun kelor (*Moringa oleifera* Lamk.)

Pemanenan daun kelor

Sortasi basah daun kelor

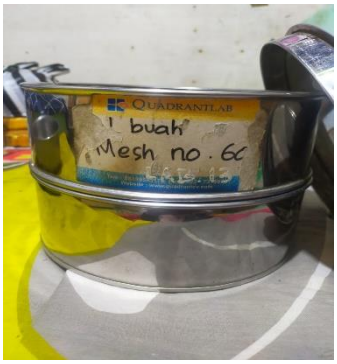
Pencucian daun kelor

Penjemuran daun kelor

Daun kelor yang sudah kering

Daun kelor yang sudah digiling

- **Pengayakan daun kelor**



Ayakan mesh no 60

serbuk halus daun kelor yang sudah diayak

Lampiran 3. Pembuatan ekstrak daun kelor

Persiapan maserasi

Serbuk yang digunakan untuk maserasi

Penyaringan maserasi ke-1

Penyaringan maserasi ke-2

Filtrat yang dihasilkan

Rotary evaporator filtrat

Ekstrak daun kelor yang dihasilkan

Berat jar kosong

Lampiran 4. Hasil uji susut pengeringan serbuk daun kelor (*Moringa oleifera* Lamk.)

Replikasi 1

Replikasi 2

Replikasi 3

Lampiran 5. Perhitungan rendemen serbuk dan ekstrak daun kelor (*Moringa oleifera* Lamk.)

Perhitungan rendemen serbuk daun kelor

Berat daun segar yang digunakan : 8.856 gram

Berat serbuk kering yang dihasilkan : 1.550 gram

Rendemen :

$\frac{berat\ serbuk\ yang\ dihasilkan}{berat\ daun\ segar\ yang\ digunakan}$ X 100%

(%) $:\frac{1.550\ gram}{8.856\ gram}$ X 100%

: 17,50% b/b

- **Perhitungan rendemen ekstrak daun kelor**

Berat serbuk yang digunakan : 1,500 gram

Berat ekstrak yang dihasilkan : 287 gram

Rendemen $:\frac{berat\ ekstrak\ yang\ dihasilkan}{berat\ serbuk\ yang\ digunakan}$ X 100%

(%) $:\frac{287\ gram}{1{,}500\ gram}$ X 100%

: 19,13% b/b

Lampiran 6. Uji kadar air ekstrak daun kelor (*Moringa oleifera* Lamk.)



- **Perhitungan replikasi 1**


Bobot kurs kosong


Bobot kurs + sampel


Oven 5 jam


Oven 1 jam


Oven 1 jam

Bobot kurs kosong : 65,7704 gram

Bobot kurs + ekstrak : 75,7704 gram

Bobot ekstrak : 10,000 gram

Bobot akhir : 75,1212 gram – 65,7704 gram

: 9,3508 gram

% kadar air : $\frac{bobot\ sampel\ sebelum\ dioven - bobot\ sampel\ setelah\ dioven}{bobot\ sampel\ sebelum\ dioven}$ X 100%

: $\frac{10{,}000\ gram - 9{,}3508\ gram}{10{,}000\ gram}$ X 100%

: 6,492%

- **Perhitungan replikasi 2**


Bobot kurs kosong


Bobot kurs + sampel


Oven 5 jam


Oven 1 jam


Oven 1 jam

Bobot kurs kosong : 61.9366 gram

Bobot kurs + ekstrak : 71.9366 gram

Bobot ekstrak : 10.000 gram

Bobot akhir : 71.2924 gram – 61.9366 gram

: 9.3558 gram

% kadar air : $\frac{bobot\ sampel\ sebelum\ dioven - bobot\ sampel\ setelah\ dioven}{bobot\ sampel\ sebelum\ dioven}$ X 100%

: $\frac{10.000\ gram - 9.3558\ gram}{10.000\ gram}$ X 100%

: 6,442%

- **Perhitungan replikasi 3**

Bobot kurs kosong

Bobot kurs + sampel

Oven 5 jam

Oven 1 jam

Oven 1 jam

Bobot kurs kosong : 69,0143 gram

Bobot kurs + ekstrak : 79,0143 gram

Bobot ekstrak : 10,000 gram

Bobot akhir : 78,3592 gram – 69,0143 gram

: 9,3449 gram

% kadar air : $\frac{bobot\ sampel\ sebelum\ dioven - bobot\ sampel\ setelah\ dioven}{bobot\ sampel\ sebelum\ dioven}$ X 100%

: $\frac{10{,}000\ gram - 9{,}3449\ gram}{10{,}000\ gram}$ X 100%

: 6.551%

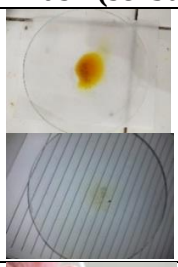
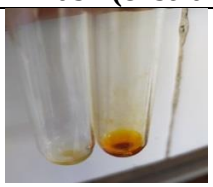
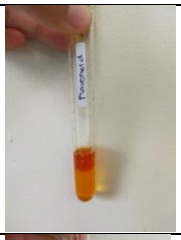
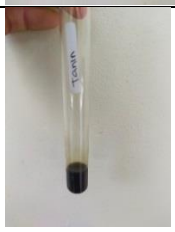
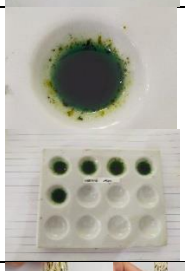
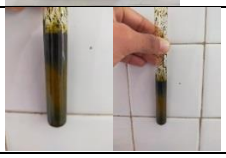
Rata – rata

$= \frac{replikasi\ 1 + replikasi\ 2 + replikasi\ 3}{3}$

$= \frac{6{,}492 + 6{,}442 + 6{,}551}{3} = \frac{19{,}485}{3} = 6{,}495\%$

Lampiran 7. Hasil skrining fitokimia serbuk dan ekstrak daun kelor (*Moringa oleifera* Lamk.)

- **Skrining fitokimia serbuk dan ekstrak daun kelor**

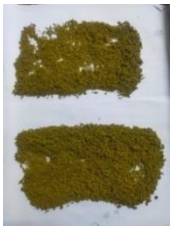
Senyawa	Hasil (serbuk)	Hasil (ekstrak)	Keterangan
Alkaloid			(+) mengandung alkaloid
Flavonoid			(+) mengandung flavonoid
Tanin dan polifenol			(+) mengandung tanin dan polifenol
Saponin			(-) mengandung saponin
Steroid / triterpenoid			(+) mengandung steroid
Vitamin C	-		(+) mengandung vitamin C

Lampiran 8. Hasil pemeriksaan sifat fisik granul ekstrak daun kelor

1. Uji organoleptik granul

Formula 1 **Formula 2** **Formula 3** **Formula 4**






2. Uji waktu alir granul

3. Uji sudut diam granul

Formula	Replikasi			Keterangan
	1	2	3	
1	Tg $\alpha = \frac{h}{r}$ = $\frac{2,6\ mm}{5,6\ mm}$ = 0,46 Tg 0,46 = $24,7^0$	Tg $\alpha = \frac{h}{r}$ = $\frac{2,46\ mm}{5,5\ mm}$ = 0,44 Tg 0,44 = $23,7^0$	Tg $\alpha = \frac{h}{r}$ = $\frac{2,11\ mm}{5,55\ mm}$ = 0,38 Tg 0,38 = $20,8^0$	Sangat baik
2	Tg $\alpha = \frac{h}{r}$ = $\frac{2,53\ mm}{5,8\ mm}$ = 0,43 Tg 0,43 = $23,2^0$	Tg $\alpha = \frac{h}{r}$ =s $\frac{2,63\ mm}{5,8\ mm}$ = 0,45 Tg 0,45 = $24,2^0$	Tg $\alpha = \frac{h}{r}$ = $\frac{2,74\ mm}{5,66\ mm}$ = 0,48 Tg 0,48 = $25,6^0$	Sangat baik
3	Tg $\alpha = \frac{h}{r}$ = $\frac{2,6\ mm}{5,66\ mm}$ = 0,45 Tg 0,45 = $24,2^0$	Tg $\alpha = \frac{h}{r}$ = $\frac{2,64\ mm}{5,7\ mm}$ = 0,46 Tg 0,46 = $24,7^0$	Tg $\alpha = \frac{h}{r}$ = $\frac{2,51\ mm}{5,8\ mm}$ = 0,43 Tg 0,43 = $23,27^0$	Sangat baik
4	Tg $\alpha = \frac{h}{r}$ = $\frac{2,1\ mm}{6,35\ mm}$ = 0,33 Tg 0,33 = $18,26^0$	Tg $\alpha = \frac{h}{r}$ = $\frac{2,4\ mm}{5,92\ mm}$ = 0,40 Tg 0,40 = $21,8^0$	Tg $\alpha = \frac{h}{r}$ = $\frac{2,9\ mm}{5,92\ mm}$ = 0,48 Tg 0,48 = $25,64^0$	Sangat baik


4. Uji indeks pengetapan granul

Perhitungan indeks pengetapan granul

- **Formula 1**

Replikasi 1

V1 = 100 ml V2 = 94 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

$= \frac{100\ ml\ -94\ ml}{100\ ml}$ X 100%

= 6%

Replikasi 2

V1 = 100 ml V2 = 95 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

$= \frac{100\ ml\ -95\ ml}{100\ ml}$ X 100%

= 5%

Replikasi 3

V1 = 100 ml V2 = 93 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

$= \frac{100\ ml\ -93\ ml}{100\ ml}$ X 100%

= 7%

- **Formula 2**

Replikasi 1

V1 = 100 ml V2 = 94 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

= $\frac{100\ ml\ -94\ ml}{100\ ml}$ X 100%

= 6%

Replikasi 2

V1 = 100 ml V2 = 95 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

= $\frac{100\ ml\ -95\ ml}{100\ ml}$ X 100%

= 5%

Replikasi 3

V1 = 100 ml V2 = 93 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

= $\frac{100\ ml\ -93\ ml}{100\ ml}$ X 100%

= 7%

- **Formula 3**

Replikasi 1

V1 = 100 ml V2 = 95 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

= $\frac{100\ ml\ -95\ ml}{100\ ml}$ X 100%

= 5%

Replikasi 2

V1 = 100 ml V2 = 94 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

= $\frac{100\ ml\ -94\ ml}{100\ ml}$ X 100%

= 6%

Replikasi 3

V1 = 100 ml V2 = 93 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

= $\frac{100\ ml\ -93\ ml}{100\ ml}$ X 100%

= 7%

- **Formula 4**

Replikasi 1

V1 = 100 ml V2 = 95 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

$= \frac{100\ ml\ -95\ ml}{100\ ml}$ X 100%

= 5%

Replikasi 2

V1 = 100 ml V2 = 94 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

$= \frac{100\ ml\ -94\ ml}{100\ ml}$ X 100%

= 6%

Replikasi 3

V1 = 100 ml V2 = 96 ml

$T\% = \frac{V1-V2}{V1}$ X 100%

$= \frac{100\ ml\ -96\ ml}{100\ ml}$ X 100%

= 4%

5. Uji susut pengeringan granul

Formula	Susut Pengeringan (%)			Rata-rata	SD
1	4	4,5	5	4.5	0.40
2	3,5	4	5	4.17	0.62
3	4.5	4	5	4.5	0.40
4	4,5	4	5	4.5	0.40

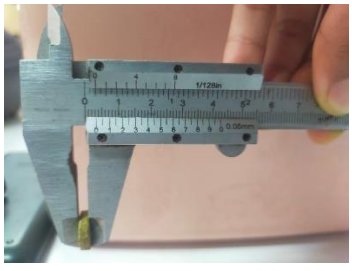
Lampiran 9. Hasil sediaan tablet hisap ekstrak daun kelor dan uji sifat fisik tablet (*Moringa oleifera* Lamk.)

1. Uji organoleptik tablet hisap ekstrak daun kelor

2. Uji keragam an bobot tablet hisap ekstrak daun kelor

Replikasi pengujian	Formula 1 (mg)	Formula 2 (mg)	Formula 3 (mg)	Formula 4 (mg)
1	621	624	618	615
2	613	630	616	609
3	622	620	620	609
4	618	621	620	611
5	623	625	620	609
6	602	630	625	614
7	618	618	620	621
8	619	622	620	608
9	620	613	619	613
10	610	609	619	607
11	613	614	617	598
12	625	622	622	604
13	625	616	618	600
14	618	629	622	615
15	600	616	625	609
16	625	618	617	610
17	610	621	619	615
18	615	622	624	609
19	611	617	630	610
20	622	615	620	614
Rata-rata	616.5	620.1	620.5	610
SD	7.032069	5.548874	3.263051	5.176872

3. Uji keseragaman ukuran tablet hisap ekstrak daun kelor



4. Uji kekerasan tablet hisap ekstrak daun kelor

Alat uji kekerasan tablet

No	FORMULA				Persyaratan
	F1(kg)	F2(kg)	F3(kg)	F4(kg)	
1	3,42	3,47	4,47	6,60	6-12 kg
2	1,99	2,33	5,59	6,10	
3	2,01	3,53	4,13	6,25	
4	2,58	3,67	4,76	7,15	
5	3,38	3,36	4,08	6,75	
6	3,56	2,63	4,42	8,16	
7	2,25	2,52	4,36	6,17	
8	2,99	3,03	6,11	6,75	
9	2,37	2,48	5,34	7,65	
10	3,63	2,67	4,55	6,71	
Rata- rata	2,818	2,969	4,781	6,829	
SD	0,619367	0,47614	0,640819007	0,626793	

5. Uji kerapuhan tablet hisap ekstrak daun kelor

Alat uji kerapuhan tablet

Perhitungan uji kerapuhan

- **Formula 1**

Replikasi 1

W1 = 12.3580 mg W2 = 12.188 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.3580\ mg - 12.188\ mg}{12.3580\ mg}$ X 100%

= 1,3%

Replikasi 2

W1 = 12.6828 mg W2 = 12.5328 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.6828\ mg - 12.5328\ mg}{12.6828\ mg}$ X 100%

= 1,1%

Replikasi 3

W1 = 12.6878 mg W2 = 12.5028 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.6878\ mg - 12.5028\ mg}{12.6878\ mg}$ X 100%

= 1,4%

- **Formula 2**

Replikasi 1

W1 = 12.6395 mg W2 = 12.5622 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.6395\ mg - 12.5622\ mg}{12.6395\ mg}$ X 100%

= 0,61%

Replikasi 2

W1 = 12.6397 mg W2 = 12.5605 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.6397\ mg - 12.5605\ mg}{12.6397\ mg}$ X 100%

= 0,62%

Replikasi 3

W1 = 12.6400 mg W2 = 12.5639 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.6400\ mg - 12.5639\ mg}{12.6400\ mg}$ X 100%

= 0,60%

- **Formula 3**

Replikasi 1

W1 = 12.8517 mg W2 = 12.8009 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.8517\ mg - 12.8009\ mg}{12.8517\ mg}$ X 100%

= 0,44%

Replikasi 2

W1 = 12.8498 mg W2 = 12.7945 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.8398\ mg - 12.7945\ mg}{12.8498\ mg}$ X 100%

= 0,43%

Replikasi 3

W1 = 12.8517 mg W2 = 12.7978 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.8517\ mg - 12.7978\ mg}{12.8517\ mg}$ X 100%

= 0,41%

- **Formula 4**

Replikasi 1

W1 = 12.4757 mg W2 = 12.4478 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.4757\ mg - 12.4478\ mg}{12.4757\ mg}$ X 100%

= 0,22%

Replikasi 2

W1 = 12.4650 mg W2 = 12.4382 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.4650\ mg - 12.4382\ mg}{12.4650\ mg}$ X 100%

= 0,21%

Replikasi 3

W1 = 12.4757 mg W2 = 12.4504 mg

$F = \frac{W1-W2}{W1}$ X 100%

$= \frac{12.4747\ mg - 12.4504\ mg}{12.4757\ mg}$ X 100%

= 0,20%

6. Uji waktu melarut dan tanggap rasa tablet hisap ekstrak daun kelor

No	F1	F2	F3	F4
1	Zara			
2	Dika			
3				Dewi
4			Siti Fatimah	
5			Novi	
6			Nindita	
7	Novita			
8	Vania			
9	Achmad			
10	Annisa			
11	Kristina			
12	Aulia			
13	Sarah			
14	Dena			
15	Elin			
16	Naila			
17	Sasa			
18	Wawa			
19	Galuh			
20	Laura			

Lampiran 10. Hasil dan perhitungan pembuatan tablet hisap ekstrak daun kelor (*Moringa oleifera* Lamk.)

Ekstrak yang digunakan pada setiap formula	= 200 mg X 100 tablet = 20.000 mg = 20 gram Aerosil yang dibutuhkan untuk pengering 10.000 mg => 10 gram
Kebutuhan ekstrak + aerosil untuk setiap formula	20.000 mg + 10.000 mg = 30.000mg/100 = 300 mg

Formula 1

Ekstrak + aerosil	300 mg X 100 tablet	= 30.000 mg => 30 gram
Manitol	83,2 mg X 100 tablet	= 8.320 mg
Laktosa	124,8 mg X 100 tablet	= 12.480 mg
PVP	-	-
Aspartam	50 mg X 100 tablet	= 5.000 mg
Talk	12 mg X 100 tablet	= 1.200 mg
Magnesium Stearat	6 mg X 100 tablet	= 600 mg
Explotab	24 mg X 100 tablet	= 2.400 mg

Formula 2

Ekstrak + aerosil	300 mg X 100 tablet	= 30.000 mg => 30 gram
Manitol	79,2 mg X 100 tablet	= 7.920 mg
Laktosa	118,8 mg X 100 tablet	= 11.880 mg
PVP	18 mg X 100 tablet	= 1.800 mg
Aspartam	50 mg X 100 tablet	= 5.000 mg
Talk	12 mg X 100 tablet	= 1.200 mg
Magnesium Stearat	6 mg X 100 tablet	= 600 mg
Explotab	24 mg X 100 tablet	= 2.400 mg

Formula 3

Ekstrak + aerosil	300 mg X 100 tablet	= 30.000 mg => 30 gram
Manitol	73,6 mg X 100 tablet	= 7.360 mg
Laktosa	110,4 mg X 100 tablet	= 11.040 mg
PVP	24 mg X 100 tablet	= 2.400 mg
Aspartam	50 mg X 100 tablet	= 5.000 mg
Talk	12 mg X 100 tablet	= 1.200 mg
Magnesium Stearat	6 mg X 100 tablet	= 600 mg
Explotab	24 mg X 100 tablet	= 2.400 mg

Formula 4

Ekstrak + aerosil	300 mg X 100 tablet	= 30.000 mg => 30 gram
Manitol	71,2 mg X 100 tablet	= 7.120 mg
Laktosa	106,8 mg X 100 tablet	= 10.800 mg
PVP	30 mg X 100 tablet	= 3.000 mg
Aspartam	50 mg X 100 tablet	= 5.000 mg
Talk	12 mg X 100 tablet	= 1.200 mg
Magnesium Stearat	6 mg X 100 tablet	= 600 mg
Explotab	24 mg X 100 tablet	= 2.400 mg

Lampiran 11. Ethical clearance untuk pengujian waktu larut dan tanggap rasa tablet hisap ekstrak daun kelor

HEALTH RESEARCH ETHICS COMITTE
KOMISI ETIK PENELITIAN KESEHATAN

Dr. Moewardi General Hospital
RSUD Dr. Moewardi

ETHICAL CLEARANCE
KELAIKAN ETIK

Nomor : 404 / III / HREC / 2023

The Health Research Ethics Committee Dr. Moewardi
Komisi Etik Penelitian Kesehatan RSUD Dr. Moewardi

after reviewing the proposal design, herewith to certify
setelah menilai rancangan penelitian yang diusulkan, dengan ini menyatakan

That the research proposal with topic :
Bahwa usulan penelitian dengan judul

FORMULASI DAN UJI AKTIVITAS ANTIOKSIDAN TABLET HISAP EKSTRAK DAUN KELOR (Moringa oleifera L.) DENGAN VARIASI KONSENTRASI PVP SEBAGAI BAHAN PENGIKAT

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Location of research : Laboratorium Universitas Setia Budi Surakarta
Lokasi Tempat Penelitian

Is ethically approved
Dinyatakan layak etik

Issued on : 26 Maret 2023
Chairman
Ketua

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BUKTI PENGAJUAN KELAIKAN ETIK

Yang Bertanda tangan dibawah ini menyatakan bahwa data yang saya isiskan adalah benar.

Peneliti	:	EKA INDAH RAHMASARI
Judul Penelitian	:	FORMULASI DAN UJI AKTIVITAS ANTIOKSIDAN TABLET HISAP EKSTRAK DAUN KELOR (Moringa oleifera L.) DENGAN VARIASI KONSENTRASI PVP SEBAGAI BAHAN PENGIKAT
Lokasi Tempat Penelitian	:	Laboratorium Universitas Setia Budi Surakarta

25195685A-0757

Mengetahui
Petugas

Surakarta, 17 Maret 2023
Peneliti

(EKA INDAH RAHMASARI)
25195685A

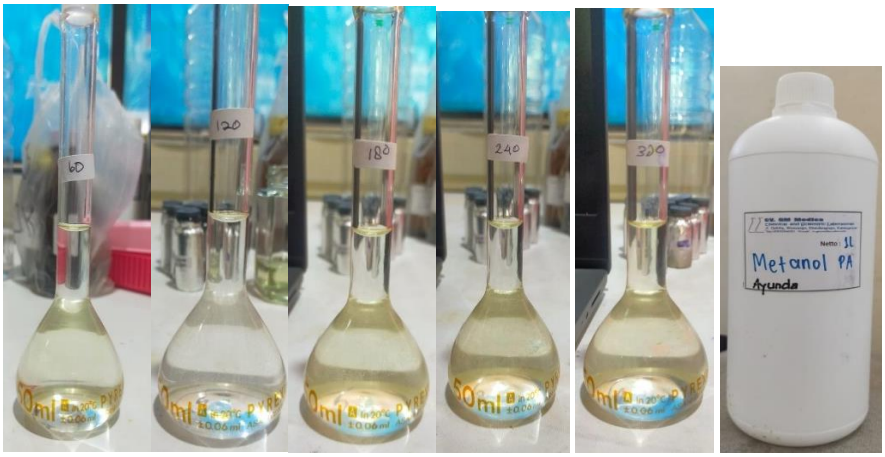
30/3

Lampiran 12. Alat dan bahan yang digunakan untuk uji aktivitas antioksidan tablet hisap ekstrak daun kelor

Penimbangan reagen DPPH

Larutan DPPH

Larutan induk formula dan kontrol positif



Larutan seri pengenceran formula

Metanol p.a

Larutan yang akan di cek abs nya

Larutan seri pengenceran tablet hisap vit C

Lampiran 13. Perhitungan larutan induk DPPH, Larutan Induk Tablet hisap ekstrak daun kelor formula 1 dan formula 4, dan kontrol positif sediaan pasaran tablet hisap vitamin C.

a. Perhitungan larutan induk DPPH.
   Reagen DPPH ditimbang 15,8 mg dan dilarutkan menggunakan metanol *pro analisis* sampai 100 mL sehingga didapatkan konsentrasi DPPH 158 ppm.

b. Larutan Induk Tablet hisap ekstrak daun kelor formula 1 dan formula 4.
   Larutan induk dibuat dengan cara menimbang tablet yang sudah digerus sebanyak 600 mg lalu dilarutkan dengan metanol *pro analisis* sebanyak 100 mL sehingga didapatkan konsentrasi larutan induk sebesar 6.000 ppm. Larutan induk akan dibuat seri pengenceran dengan konsentrasi 60 ppm, 120 ppm, 180 ppm, 240 ppm, dan 300 ppm, perhitungan seri pengenceran seperti dibawah ini :

   - **Konsentrasi 60 ppm**

   V1 x C1 = V2 x C2
   0,5 mL x 6.000 ppm = 50 mL x C2
   = 60 ppm

   - **Konsentrasi 120 ppm**

   V1 x C1 = V2 x C2
   1 mL x 6.000 ppm = 50 mL x C2
   = 120 ppm

   - **Konsentrasi 180 ppm**

   V1 x C1 = V2 x C2
   1,5 mL x 6.000 ppm = 50 mL x C2
   = 180 ppm

   - **Konsentrasi 240 ppm**

   V1 x C1 = V2 x C2
   2 mL x 6.000 ppm = 50 mL x C2
   = 240 ppm

   - **Konsentrasi 300 ppm**

   V1 x C1 = V2 x C2
   2,5 mL x 6.000 ppm = 50 mL x C2
   = 300 ppm

c. Kontrol positif sediaan pasaran tablet hisap vitamin C.
Larutan induk dibuat dengan cara menimbang tablet yang sudah digerus sebanyak 10 mg lalu dilarutkan dengan metanol *pro analisis* sebanyak 100 mL sehingga didapatkan konsentrasi larutan induk sebesar 100 ppm. Larutan induk akan dibuat seri pengenceran dengan konsentrasi 5 ppm, 10 ppm, 15 ppm, 20 ppm, dan 25 ppm, perhitungan seri pengenceran seperti dibawah ini :

- **Konsentrasi 5 ppm**

V1 x C1 = V2 x C2
0,5 mL x 100 ppm = 10 mL x C2
= 5 ppm

- **Konsentrasi 10 ppm**

V1 x C1 = V2 x C2
1 mL x 100 ppm = 10 mL x C2
= 10 ppm

- **Konsentrasi 15 ppm**

V1 x C1 = V2 x C2
1,5 mL x 100 ppm = 10 mL x C2
= 15 ppm

- **Konsentrasi 20 ppm**

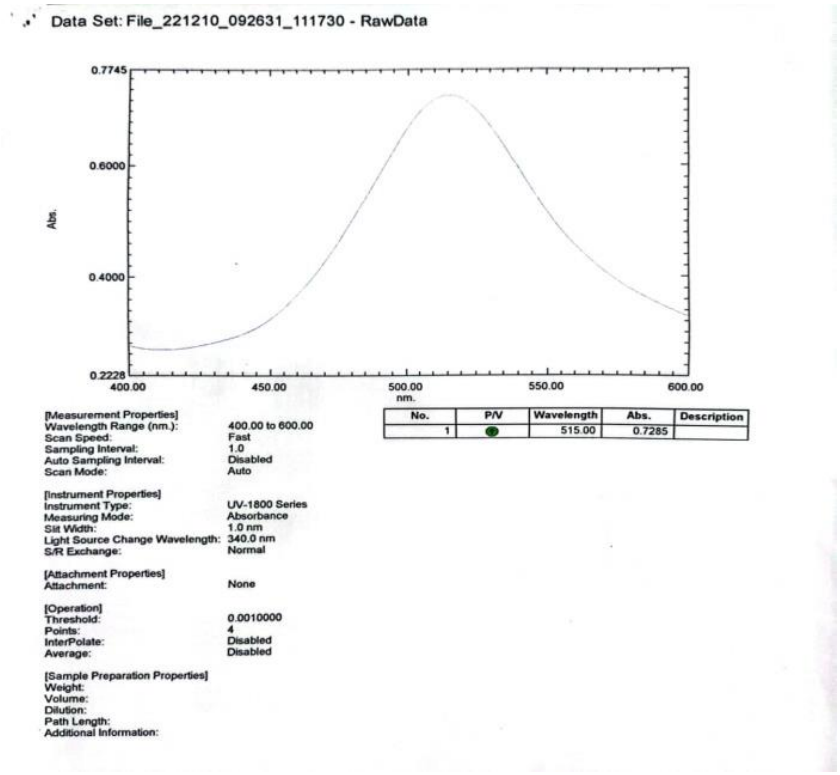
V1 x C1 = V2 x C2
2 mL x 100 ppm = 10 mL x C2
= 20 ppm

- **Konsentrasi 25 ppm**

V1 x C1 = V2 x C2
2,5 mL x 100 ppm = 10 mL x C2
= 25 ppm

Lampiran 14. Hasil pengujian aktivitas antioksidan tablet hisap ekstrak daun kelor formula 1 dan formula 4, hasil lamda max DPPH serta kontrol positif sediaan pasaran tablet hisap vitamin C .

a. Lamda max DPPH



No.	P/V	Wavelength	Abs.	Description
1		515.00	0.7285	

[Measurement Properties]
Wavelength Range (nm.): 400.00 to 600.00
Scan Speed: Fast
Sampling Interval: 1.0
Auto Sampling Interval: Disabled
Scan Mode: Auto

[Instrument Properties]
Instrument Type: UV-1800 Series
Measuring Mode: Absorbance
Slit Width: 1.0 nm
Light Source Change Wavelength: 340.0 nm
S/R Exchange: Normal

[Attachment Properties]
Attachment: None

[Operation]
Threshold: 0.0010000
Points: 4
InterPolate: Disabled
Average: Disabled

[Sample Preparation Properties]
Weight:
Volume:
Dilution:
Path Length:
Additional Information:

b. Uji aktivitas antioksidan dan *operating time* tablet hisap ekstrak daun kelor formula 1

- ***Operating time***

Time (Minute)	RawData ...
0.000	0.552
1.000	0.548
2.000	0.546
3.000	0.544
4.000	0.542
5.000	0.540
6.000	0.539
7.000	0.537
8.000	0.536
9.000	0.535
10.000	0.534
11.000	0.533
12.000	0.532
13.000	0.531
14.000	0.530
15.000	0.529
16.000	0.529
17.000	0.528
18.000	0.527
19.000	0.527
20.000	0.526
21.000	0.525
22.000	0.526
23.000	0.524
24.000	0.524
25.000	0.524
26.000	0.523
27.000	0.523
28.000	0.523
29.000	0.522
30.000	0.522
31.000	0.522
32.000	0.521
33.000	0.521
34.000	0.521
35.000	0.521
36.000	0.521
37.000	0.520
38.000	0.520
39.000	0.521
40.000	0.520
41.000	0.520
42.000	0.520
43.000	0.520
44.000	0.521
45.000	0.521
46.000	0.521
47.000	0.521
48.000	0.521
49.000	0.521
50.000	0.522

6

Time (Minute)	RawData ...
51.000	0.522
52.000	0.522
53.000	0.523
54.000	0.523
55.000	0.523
56.000	0.523
57.000	0.524
58.000	0.524
59.000	0.525
60.000	0.524

- ***Uji aktivitas antioksidan***

Absorbansi DPPH : 0,785

FORMULA 1 (FORMULA YANG DISUKAI)			
Replikasi 1			
Konsentrasi (ppm)	**Abs DPPH**	**Abs**	**% Inhibisi**
60	0.785	0.424	45.98726
120	0.785	0.388	50.57325
180	0.785	0.342	56.43312
240	0.785	0.311	60.38217
300	0.785	0.268	65.85987

a = 40.9809
b = 0.08259
R = 0.99871

FORMULA 1 (FORMULA YANG DISUKAI)			
Replikasi 2			
Konsentrasi (ppm)	**Abs DPPH**	**Abs**	**% Inhibisi**
60	0.785	0.427	45.6050955
120	0.785	0.383	51.2101911
180	0.785	0.343	56.3057325
240	0.785	0.305	61.1464968
300	0.785	0.265	66.2420382

A = 40.7389
B = 0.08535
R = 0.99967

FORMULA 1 (FORMULA YANG DISUKAI)			
Replikasi 3			
Konsentrasi (ppm)	**Abs DPPH**	**Abs**	**% Inhibisi**
60	0.785	0.423	46.1146497
120	0.785	0.389	50.4458599
180	0.785	0.339	56.8152866
240	0.785	0.299	61.910828
300	0.785	0.259	67.0063694

a = 40.4841
b = 0.08875
r = 0.99873

Hasil perhitungan regresi linier :

a = 40.7346
b = 0.08556
r = 0.99956
Y = a + bx
50 = 40.7346+ 0.08556x
X = (50 - 40.7346) / 0.08556 = 108, 288 ppm

c. Uji aktivitas antioksidan dan *operating* time tablet hisap ekstrak daun kelor formula 4

- ***Operating time***

Time (Minute)	RawData ...
0.000	0.617
1.000	0.615
2.000	0.615
3.000	0.613
4.000	0.612
5.000	0.611
6.000	0.610
7.000	0.609
8.000	0.608
9.000	0.607
10.000	0.606
11.000	0.606
12.000	0.605
13.000	0.604
14.000	0.604
15.000	0.603
16.000	0.602
17.000	0.603
18.000	0.602
19.000	0.601
20.000	0.601
21.000	0.600
22.000	0.599
23.000	0.599
24.000	0.599
25.000	0.598
26.000	0.598
27.000	0.598
28.000	0.597
29.000	0.597
30.000	0.597
31.000	0.597
32.000	0.596
33.000	0.596
34.000	0.596
35.000	0.596
36.000	0.595
37.000	0.595
38.000	0.595
39.000	0.595
40.000	0.595
41.000	0.595
42.000	0.595
43.000	0.594
44.000	0.594
45.000	0.595
46.000	0.595
47.000	0.595
48.000	0.595
49.000	0.594
50.000	0.597

Time (Minute)	RawData ...
51.000	0.668
52.000	0.667
53.000	0.667
54.000	0.667
55.000	0.669
56.000	0.668
57.000	0.669
58.000	0.670
59.000	0.669
60.000	0.669

- **Uji aktivitas antioksidan**

Absorbansi DPPH : 0,759

FORMULA 4 (FORMULA YANG TERBAIK)			
Replikasi 1			
Konsentrasi (ppm)	**Abs DPPH**	**Abs**	**% Inhibisi**
60	0.759	0.428	43.61001
120	0.759	0.354	53.35968
180	0.759	0.326	57.04875
240	0.759	0.282	62.84585
300	0.759	0.219	71.14625

a = 38.2345
b = 0.1076
r = 0.99026

FORMULA 4 (FORMULA YANG TERBAIK)			
Replikasi 2			
Konsentrasi (ppm)	**Abs DPPH**	**Abs**	**% Inhibisi**
60	0.759	0.426	43.8735178
120	0.759	0.36	52.56917
180	0.759	0.326	57.0487484
240	0.759	0.274	63.8998682
300	0.759	0.217	71.4097497

a = 37.8393
b = 0.11067
r = 0.99621

FORMULA 4 (FORMULA YANG TERBAIK)			
Replikasi 3			
Konsentrasi (ppm)	**Abs DPPH**	**Abs**	**% Inhibisi**
60	0.759	0.423	44.2687747
120	0.759	0.355	53.2279315
180	0.759	0.33	56.5217391
240	0.759	0.279	63.2411067
300	0.759	0.229	69.828722

a = 39.0777
b = 0.10189
r = 0.99276

Hasil perhitungan regresi linier :

a = 38.3838
b = 0.10672
r = 0.99355

Y = a + bx
50 = 38.3838+ 0.10672x
X = (50 - 38.3838) / 0.10672= 108, 848 ppm

d. Uji aktivitas antioksidan dan *operating time* tablet hisap pasaran vitamin C

- ***Operating time***

Time (Minute)	RawData ...
0.000	0.682
1.000	0.678
2.000	0.676
3.000	0.676
4.000	0.674
5.000	0.674
6.000	0.673
7.000	0.672
8.000	0.671
9.000	0.671
10.000	0.671
11.000	0.670
12.000	0.669
13.000	0.669
14.000	0.668
15.000	0.668
16.000	0.668
17.000	0.667
18.000	0.667
19.000	0.667
20.000	0.666
21.000	0.668
22.000	0.667
23.000	0.667
24.000	0.666
25.000	0.666
26.000	0.666
27.000	0.665
28.000	0.666
29.000	0.665
30.000	0.665
31.000	0.665
32.000	0.665
33.000	0.664
34.000	0.665
35.000	0.666
36.000	0.666
37.000	0.666
38.000	0.667
39.000	0.666
40.000	0.666
41.000	0.666
42.000	0.666
43.000	0.666
44.000	0.667
45.000	0.666
46.000	0.666
47.000	0.666
48.000	0.666
49.000	0.667
50.000	0.667

Time (Minute)	RawData ...
51.000	0.668
52.000	0.667
53.000	0.667
54.000	0.667
55.000	0.669
56.000	0.668
57.000	0.669
58.000	0.670
59.000	0.669
60.000	0.669

- **Uji aktivitas antioksidan**
  - Absorbansi DPPH : 0,740

TABLET HISAP VITAMIN C (KONTROL POSITIF)			
Replikasi 1			
Konsentrasi (ppm)	**Abs DPPH**	**Abs**	**% Inhibisi**
5	0.740	0.545	26.35135
10	0.740	0.491	33.64865
15	0.740	0.449	39.32432
20	0.740	0.398	46.21622
25	0.740	0.353	52.2973

a = 20.2297
b = 1.28919
r = 0.99939

TABLET HISAP VITAMIN C (KONTROL POSITIF)			
Replikasi 2			
Konsentrasi (ppm)	**Abs DPPH**	**Abs**	**% Inhibisi**
5	0.740	0.55	25.6756757
10	0.740	0.494	33.2432432
15	0.740	0.45	39.1891892
20	0.740	0.408	44.8648649
25	0.740	0.366	50.5405405

a = 20.2973
b = 1.22703
r = 0.99807

TABLET HISAP VITAMIN C (KONTROL POSITIF)			
Replikasi 3			
Konsentrasi (ppm)	**Abs DPPH**	**Abs**	**% Inhibisi**
5	0.740	0.54	27.027027
10	0.740	0.488	34.0540541
15	0.740	0.446	39.7297297
20	0.740	0.403	45.5405405
25	0.740	0.357	51.7567568

a = 21.3378
b = 1.21892
r = 0.99934

Hasil perhitungan regresi linier :
a = 20.6216
b = 1.24505
r = 0.99918

Y = a + bx
50 = 20.6216+ 1.24505x
X = (50 - 20.6216) / 1.24505= 23.5962 ppm

Lampiran 15. Hasil uji SPSS

1. GRANUL

a) Uji Waktu Alir Granul

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	FORMULA	Statistic	df	Sig.	Statistic	df	Sig.
UJI_WAKTU_ALIR_GRANUL	FORMULA 1	.175	3	.	1.000	3	1.000
	FORMULA 2	.175	3	.	1.000	3	1.000
	FORMULA 3	.175	3	.	1.000	3	1.000
	FORMULA 4	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
UJI_WAKTU_ALIR_GRANUL	Based on Mean	.000	3	8	1.000
	Based on Median	.000	3	8	1.000
	Based on Median and with adjusted df	.000	3	8.000	1.000
	Based on trimmed mean	.000	3	8	1.000

Descriptives

UJI_WAKTU_ALIR_GRANUL

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
FORMULA 1	3	5.0000	1.00000	.57735	2.5159	7.4841	4.00	6.00
FORMULA 2	3	5.0000	1.00000	.57735	2.5159	7.4841	4.00	6.00
FORMULA 3	3	5.0000	1.00000	.57735	2.5159	7.4841	4.00	6.00
FORMULA 4	3	7.0000	1.00000	.57735	4.5159	9.4841	6.00	8.00
Total	12	5.5000	1.24316	.35887	4.7101	6.2899	4.00	8.00

ANOVA

UJI_WAKTU_ALIR_GRANUL

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	9.000	3	3.000	3.000	.095
Within Groups	8.000	8	1.000		
Total	17.000	11			

Post Hoc Tests

Homogeneous Subsets

UJI_WAKTU_ALIR_GRANUL

Tukey B[a]

FORMULA	N	Subset for alpha = 0.05 1
FORMULA 1	3	5.0000
FORMULA 2	3	5.0000
FORMULA 3	3	5.0000
FORMULA 4	3	7.0000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

b) Uji Sudut Diam Granul

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	FORMULA	Statistic	Df	Sig.	Statistic	df	Sig.
UJI_SUDUT_DIAM_GRANUL	FORMULA 1	.289	3	.	.927	3	.476
	FORMULA 2	.211	3	.	.991	3	.817
	FORMULA 3	.245	3	.	.971	3	.672
	FORMULA 4	.178	3	.	.999	3	.955

a. Lilliefors Significance Correction

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
UJI_SUDUT_DIAM_GRANUL	Based on Mean	1.659	3	8	.252
	Based on Median	1.214	3	8	.366
	Based on Median and with adjusted df	1.214	3	4.318	.406
	Based on trimmed mean	1.634	3	8	.257

Descriptives

UJI_SUDUT_DIAM_GRANUL

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Minimum	Maximum
FORMULA 1	3	23.0667	2.02567	1.16952	18.0346	28.0987	20.80	24.70
FORMULA 2	3	24.3333	1.20554	.69602	21.3386	27.3281	23.20	25.60
FORMULA 3	3	24.0567	.72570	.41898	22.2539	25.8594	23.27	24.70
FORMULA 4	3	21.9000	3.69102	2.13101	12.7310	31.0690	18.26	25.64
Total	12	23.3392	2.13966	.61767	21.9797	24.6986	18.26	25.64

ANOVA

UJI_SUDUT_DIAM_GRANUL

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	10.946	3	3.649	.741	.557
Within Groups	39.414	8	4.927		
Total	50.360	11			

Post Hoc Tests
Homogeneous Subsets

UJI_SUDUT_DIAM_GRANUL

Tukey B[a]

FORMULA	N	Subset for alpha = 0.05 1
FORMULA 4	3	21.9000
FORMULA 1	3	23.0667
FORMULA 3	3	24.0567
FORMULA 2	3	24.3333

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

c) Uji Indeks Pengetapan Granul

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	FORMULA	Statistic	Df	Sig.	Statistic	df	Sig.
UJI_INDEKS_PENGETAPAN_GRANUL	FORMULA 1	.175	3	.	1.000	3	1.000
	FORMULA 2	.175	3	.	1.000	3	1.000
	FORMULA 3	.175	3	.	1.000	3	1.000
	FORMULA 4	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
UJI_INDEKS_PENGETAPAN_GRANUL	Based on Mean	.000	3	8	1.000
	Based on Median	.000	3	8	1.000
	Based on Median and with adjusted df	.000	3	8.000	1.000
	Based on trimmed mean	.000	3	8	1.000

Descriptives

UJI_INDEKS_PENGETAPAN_GRANUL

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Minimum	Maximum
FORMULA 1	3	6.0000	1.00000	.57735	3.5159	8.4841	5.00	7.00
FORMULA 2	3	6.0000	1.00000	.57735	3.5159	8.4841	5.00	7.00
FORMULA 3	3	6.0000	1.00000	.57735	3.5159	8.4841	5.00	7.00
FORMULA 4	3	5.0000	1.00000	.57735	2.5159	7.4841	4.00	6.00
Total	12	5.7500	.96531	.27866	5.1367	6.3633	4.00	7.00

ANOVA

UJI_INDEKS_PENGETAPAN_GRANUL

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.250	3	.750	.750	.552
Within Groups	8.000	8	1.000		
Total	10.250	11			

Post Hoc Tests
Homogeneous Subsets

UJI_INDEKS_PENGETAPAN_GRANUL

Tukey B[a]

FORMULA	N	Subset for alpha = 0.05 1
FORMULA 4	3	5.0000
FORMULA 1	3	6.0000
FORMULA 2	3	6.0000
FORMULA 3	3	6.0000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

d) Uji Susut Pengeringan Granul

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	FORMULA	Statistic	Df	Sig.	Statistic	df	Sig.
UJI_SUSUT_PENGERINGAN_GRANUL	FORMULA 1	.175	3	.	1.000	3	1.000
	FORMULA 2	.253	3	.	.964	3	.637
	FORMULA 3	.175	3	.	1.000	3	1.000
	FORMULA 4	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
UJI_SUSUT_PENGERINGAN_GRANUL	Based on Mean	.400	3	8	.757
	Based on Median	.167	3	8	.916
	Based on Median and with adjusted df	.167	3	6.000	.915
	Based on trimmed mean	.384	3	8	.768

Descriptives

UJI_SUSUT_PENGERINGAN_GRANUL

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Minimum	Maximum
FORMULA 1	3	4.5000	.50000	.28868	3.2579	5.7421	4.00	5.00
FORMULA 2	3	4.1667	.76376	.44096	2.2694	6.0640	3.50	5.00
FORMULA 3	3	4.5000	.50000	.28868	3.2579	5.7421	4.00	5.00
FORMULA 4	3	4.5000	.50000	.28868	3.2579	5.7421	4.00	5.00
Total	12	4.4167	.51493	.14865	4.0895	4.7438	3.50	5.00

ANOVA

UJI_SUSUT_PENGERINGAN_GRANUL

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.250	3	.083	.250	.859
Within Groups	2.667	8	.333		
Total	2.917	11			

Post Hoc Tests

Homogeneous Subsets

UJI_SUSUT_PENGERINGAN_GRANUL

Tukey B[a]

FORMULA	N	Subset for alpha = 0.05 1
FORMULA 2	3	4.1667
FORMULA 1	3	4.5000
FORMULA 3	3	4.5000
FORMULA 4	3	4.5000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

2. SPSS TABLET HISAP

a) Uji Keragaman Bobot Tablet Hisap

Tests of Normality

	FORMULA	Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
UJI_KERAGAMAN_BOBOT_TABLET_HISAP	FORMULA 1	.182	20	.080	.913	20	.072
	FORMULA 2	.119	20	.200*	.968	20	.708
	FORMULA 3	.265	20	.001	.887	20	.024
	FORMULA 4	.175	20	.108	.943	20	.268

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
uji_keragaman_bobot_tablet_hisap	Based on Mean	2.885	3	36	.049
	Based on Median	1.936	3	36	.141
	Based on Median and with adjusted df	1.936	3	26.770	.148
	Based on trimmed mean	2.559	3	36	.070

Descriptives

UJI_KERAGAMAN_BOBOT_TABLET_HISAP

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Minimum	Maximum
FORMULA 1	20	616.5000	7.21475	1.61327	613.1234	619.8766	600.00	625.00
FORMULA 2	20	620.1000	5.69302	1.27300	617.4356	622.7644	609.00	630.00
FORMULA 3	20	620.5500	3.34782	.74860	618.9832	622.1168	616.00	630.00
FORMULA 4	20	610.0000	5.31136	1.18766	607.5142	612.4858	598.00	621.00
Total	80	616.7875	6.91667	.77331	615.2483	618.3267	598.00	630.00

ANOVA

UJI_KERAGAMAN_BOBOT_TABLET_HISAP

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1425.637	3	475.212	15.344	.000
Within Groups	2353.750	76	30.970		
Total	3779.387	79			

Post Hoc Tests

Homogeneous Subsets

UJI_KERAGAMAN_BOBOT_TABLET_HISAP

Tukey B[a]

FORMULA	N	Subset for alpha = 0.05	
		1	2
FORMULA 4	20	610.0000	
FORMULA 1	20		616.5000
FORMULA 2	20		620.1000
FORMULA 3	20		620.5500

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 20.000.

b) Uji kekerasan tablet hisap.

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	FORMULA	Statistic	df	Sig.	Statistic	df	Sig.
UJI_KEKERASAN_TABLET_HISAP	FORMULA 1	.220	10	.184	.879	10	.127
	FORMULA 2	.210	10	.200*	.874	10	.112
	FORMULA 3	.234	10	.129	.879	10	.127
	FORMULA 4	.248	10	.083	.901	10	.226

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
UJI_KEKERASAN_TABLET_HISAP	Based on Mean	.173	3	36	.914
	Based on Median	.118	3	36	.949
	Based on Median and with adjusted df	.118	3	24.984	.949
	Based on trimmed mean	.160	3	36	.922

Descriptives

UJI_KEKERASAN_TABLET_HISAP

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
FORMULA 1	10	2.7910	.62033	.19617	2.3472	3.2348	1.99	3.56
FORMULA 2	10	3.0690	.52590	.16630	2.6928	3.4452	2.33	3.67
FORMULA 3	10	4.7810	.67548	.21361	4.2978	5.2642	4.08	6.11
FORMULA 4	10	6.8290	.66070	.20893	6.3564	7.3016	6.10	8.16
Total	40	4.3675	1.73945	.27503	3.8112	4.9238	1.99	8.16

ANOVA

UJI_KEKERASAN_TABLET_HISAP

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	104.014	3	34.671	89.234	.000
Within Groups	13.988	36	.389		
Total	118.002	39			

Post Hoc Tests

Homogeneous Subsets

UJI_KEKERASAN_TABLET_HISAP

Tukey B[a]

FORMULA	N	Subset for alpha = 0.05 1	2	3
FORMULA 1	10	2.7910		
FORMULA 2	10	3.0690		
FORMULA 3	10		4.7810	
FORMULA 4	10			6.8290

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 10.000.

c) Uji Kerapuhan Tablet Hisap

Tests of Normality

	FORMULA	Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
UJI_KERAPUHAN_TABLET_HISAP	FORMULA 1	.253	3	.	.964	3	.637
	FORMULA 2	.175	3	.	1.000	3	1.000
	FORMULA 3	.253	3	.	.964	3	.637
	FORMULA 4	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
UJI_KERAPUHAN_TABLET_HISAP	Based on Mean	6.462	3	8	.016
	Based on Median	2.513	3	8	.132
	Based on Median and with adjusted df	2.513	3	2.067	.292
	Based on trimmed mean	6.124	3	8	.018

Descriptives

UJI_KERAPUHAN_TABLET_HISAP

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
FORMULA 1	3	1.2667	.15275	.08819	.8872	1.6461	1.10	1.40
FORMULA 2	3	.6100	.01000	.00577	.5852	.6348	.60	.62
FORMULA 3	3	.4267	.01528	.00882	.3887	.4646	.41	.44
FORMULA 4	3	.2100	.01000	.00577	.1852	.2348	.20	.22
Total	12	.6283	.41757	.12054	.3630	.8936	.20	1.40

ANOVA

UJI_KERAPUHAN_TABLET_HISAP

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.870	3	.623	104.933	.000
Within Groups	.048	8	.006		
Total	1.918	11			

Post Hoc Tests

Homogeneous Subsets

UJI_KERAPUHAN_TABLET_HISAP

Tukey B[a]

FORMULA	N	Subset for alpha = 0.05			
		1	2	3	4
FORMULA 4	3	.2100			
FORMULA 3	3		.4267		
FORMULA 2	3			.6100	
FORMULA 1	3				1.2667

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

3. HASIL UJI SPSS UJI AKTIVITAS ANTIOKSIDAN

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	Df	Sig.	Statistic	df	Sig.
Uji_Aktivitas_Antioksidan_Tablet	Formula 1	.244	3	.	.972	3	.676
	Formula 4	.314	3	.	.892	3	.361
	kontrol positif	.234	3	.	.979	3	.720

a. Lilliefors Significance Correction

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Uji_Aktivitas_Antioksidan_Tablet	Based on Mean	1.759	2	6	.250
	Based on Median	.349	2	6	.719
	Based on Median and with adjusted df	.349	2	3.642	.727
	Based on trimmed mean	1.597	2	6	.278

Descriptives

Uji_Aktivitas_Antioksidan_Tablet

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Formula 1	3	108.3117	1.00336	.57929	105.8192	110.8042	107.23	109.20
Formula 4	3	108.8087	1.42020	.81995	105.2807	112.3366	107.20	109.88
kontrol positif	3	23.6059	.55991	.32326	22.2150	24.9968	23.10	24.21
Total	9	80.2421	42.48751	14.16250	47.5833	112.9009	23.10	109.88

ANOVA

Uji_Aktivitas_Antioksidan_Tablet

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	14434.837	2	7217.418	6488.131	.000
Within Groups	6.674	6	1.112		
Total	14441.511	8			