L A M P I R A N

Lampiran 1 Determinasi tanaman bunga telang

UPT-LABORATORIUM

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Nomor : 308/DET/UPT-LAB/25.11/2021
Hal : Hasil determinasi tumbuhan
Lamp. : -

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Nama sampel : Kembang Telang / *Clitoria ternatea*, L

HASIL DETERMINASI TUMBUHAN

Klasifikasi

Kingdom : Plantae
Super Divisi : Spermatophyta
Divisi : Magnoliophyta
Kelas : Magnoliopsida
Ordo : Fabales
Famili : Fabaceae/Papilionaceae
Genus : Clitoria
Species : *Clitoria ternatea*, L

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 – 208b – 219b – 220b – 224b – 225b – 227b – 229b – 230a – 231b – 233a. familia 60. Papilionaceae. 1b - 5b - 16b - 19b - 20a -21a. *Clitoria ternatea,* L.

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Deskripsi:

Habitus : Perdu, tinggi 5-10 m.

Akar : Akar tunggang.

Batang : Batang bulat, permukaanya berambut, arah tumbuhnya membelit ke kiri.

Daun : Daun menyirip berdaun 3-9, anak daun bertangkai sangat pendek, ellips atau bulat telur, tumpul, kebanyakan agak melekuk ke dalam, ukuran 2-7 kali 1-4,5 cm. Daun penumpu bentuk garis.

Bunga : Bunga dengan bendera mengarah ke bawah, jarang berjumlah dua, tangkai karangan bunga sampai 1,5 cm; anak tangkai bunga lk 0,5 cm. Daun pelindung pada pangkal kelopak oval lebar sampai bentuk lingkaran, bergaris, Panjang 0,5-1 cm. Kelopak tinggi 1,5-2,5 cm, gundul, taju 5, runcing. Bidang bendera oval yang lebar atau bulat telur terbalik, warna biru tua, biru muda, violet atau putih, di tengah dengan noda kuning pucat dilingkupi tepi warna putih, Panjang 4-5 cm; lunas bergandengan dengan sayap yang lebih pendek.

Buah : Buah polong bertangkai sangat pendek dengan sisa kelopak, bentuk garis, membengkok lemah, pipih sekali, berparuh, dengan sekat antara, Panjang 5-12,5 cm, berkatup 2,

Biji : Biji 6-10, pipih sekali, bentuk ginjal.

Surakarta, 25 November 2021

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

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Lampiran 2 Perhitungan persentase bobot kering terhadap bobot basah bunga telang

Bobot basah (g)	Bobot kering (g)	Rendemen (%)
22.500	1500	6,67

Perhitungan persentase bobot basah terhadap bobot kering :

$$\frac{1500\ g}{22.500\ g} \times 100\% = 6{,}67\%$$

Lampiran 3 Perhitungan presentase rendemen serbuk bunga telang

Berat kering (g)	Berat serbuk (g)	Rendemen (%)
1500	1300	86,67

Pehitungan persentase rendemen serbuk :

$$\frac{1300g}{1500\ g} \times 100\% = 86{,}67\%$$

Lampiran 4 Perhitungan kadar air serbuk bunga telang

Sampel	Penimbangan	Volume terbaca (ml)	Kadar air (%v/b)
Serbuk	20 gram	1,8	9
	20 gram	1,9	9,5
	20 gram	1,8	9
Rata-rata ± SD			9,33 ± 0,29

1. Replikasi 1 = $\frac{1{,}8\ ml}{20\ g}\ x\ 100\% = 9\%$
2. Replikasi 2 = $\frac{1{,}9\ ml}{20\ g}\ x\ 100\% = 9{,}5\%$
3. Replikasi 3 = $\frac{1{,}8\ ml}{20\ g}\ x\ 100\% = 9\%$

Lampiran 5 Perhitungan susut pengeringan serbuk bunga telang

Krus	Bobot (g)	Replikasi			Kadar susut (%)
		1	2	3	
1	1,0158	0,9845	0,9822	0,9808	3,446
2	1,0099	0,9837	0,9814	0,9799	2,971
3	1,0081	0.9854	0,9842	0,9820	2,589
Rata-rata ± SD					3,002 ± 0,429

A.) Bobot krus kosong

-Krus 1 = 36,2413 g

- Krus 2 = 34,5376 g

- Krus 3 = 34,1824 g

B.) Bobot krus dan sampel

- Krus 1 =37,2571 g
- Krus 2 = 35,5475 g
- Krus 3 = 35,1905 g

C.) Bobot sampel

- Krus 1 = 1,0158 g
- Krus 2 = 1,0099 g
- Krus 3 = 1,0081 g

A.) Replikasi 1

1. Sampel 1 = 0,9254

% pengeringan = $\frac{Bobot\ awal - bobot\ setelah\ dikeringkan}{Bobot\ awal} x\ 100\%$

$= \frac{1,0158 - 0,9845}{1,0158} x\ 100\%$

= 3,081%

2. Sampel 2 = 0,9837 g

% pengeringan = $\frac{Bobot\ awal - bobot\ setelah\ dikeringkan}{Bobot\ awal} x\ 100\%$

$= \frac{1,0099 - 0,9837}{1,0099} x\ 100\%$

= 2,594%

3. Sampel 3 = 0,9854 g

% pengeringan $= \frac{Bobot\ awal - bobot\ setelah\ dikeringkan}{Bobot\ awal} x\ 100\%$

$= \frac{1,0081 - 0,9854}{1,0081} x\ 100\%$

= 2,252%

B.) Replikasi 2

1. Sampel 1 = 0,9822 g

% pengeringan $= \frac{Bobot\ awal - bobot\ setelah\ dikeringkan}{Bobot\ awal} x\ 100\%$

$= \frac{1,0158 - 0,9822}{1,0158} x\ 100\%$

= 3,308%

2. Sampel 2 = 0,9814 g

% pengeringan $= \frac{Bobot\ awal - bobot\ setelah\ dikeringkan}{Bobot\ awal} x\ 100\%$

$= \frac{1,0099 - 0,9814}{1,0099} x\ 100\%$

= 2,822%

3. Sampel 3 = 0,9842g

% pengeringan $= \frac{Bobot\ awal - bobot\ setelah\ dikeringkan}{Bobot\ awal} x\ 100\%$

$= \frac{1,0081 - 0,9842}{1,0081} x\ 100\%$

= 2,371%

C.) Replikasi 3

1. Sampel 1 = 0,9808g

% pengeringan $= \frac{Bobot\ awal - bobot\ setelah\ dikeringkan}{Bobot\ awal} x\ 100\%$

$= \frac{1,0158 - 0,9808}{1,0158} x\ 100\%$

= **3,446%**

2. Sampel 2 = 0,9799 g

% pengeringan $= \frac{Bobot\ awal - bobot\ setelah\ dikeringkan}{Bobot\ awal} x\ 100\%$

$= \frac{1,0099 - 0,9799}{1,0099} x\ 100\%$

= **2,971%**

3. Sampel 3 = 0,9820 g

% pengeringan $= \frac{Bobot\ awal - bobot\ setelah\ dikeringkan}{Bobot\ awal} x\ 100\%$

$= \frac{1,0081 - 0,9820}{1,0081} x\ 100\%$

= **2,589%**

Lampiran 6 Perhitungan presentase rendemen ekstrak etanol bunga telang

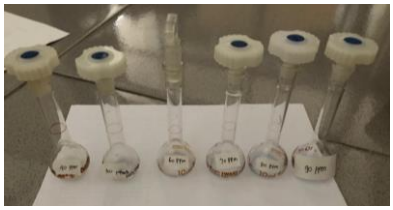
Serbuk (g)	Ekstrak (g)	Rendemen (%)
600	327	54,5

Perhitungan persentase rendemen ekstrak :

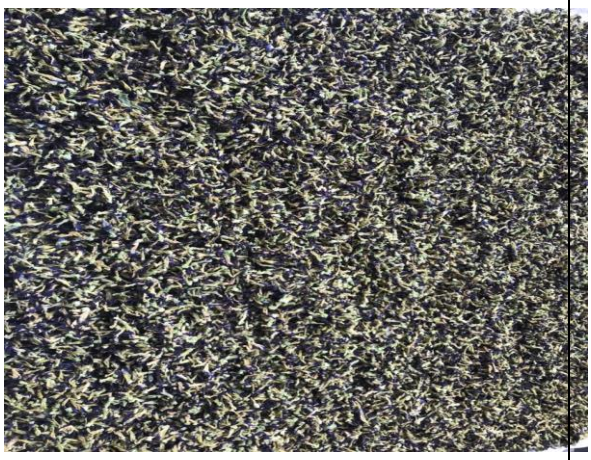
$\frac{327}{600}$x 100% =54,5%

Lampiran 7 Alat penelitian

Ayakan mesh 80 	***Rotary evaporator*** 
Oven 	***Moisture balance*** 
Sterling-Bidwell 	**Timbangan digital** 

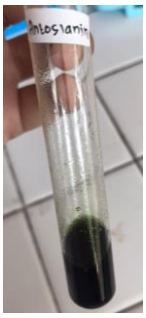
Desikator 	**Oven susut pengeringan** 
Labu takar  	**Spektrofotometri UV** 

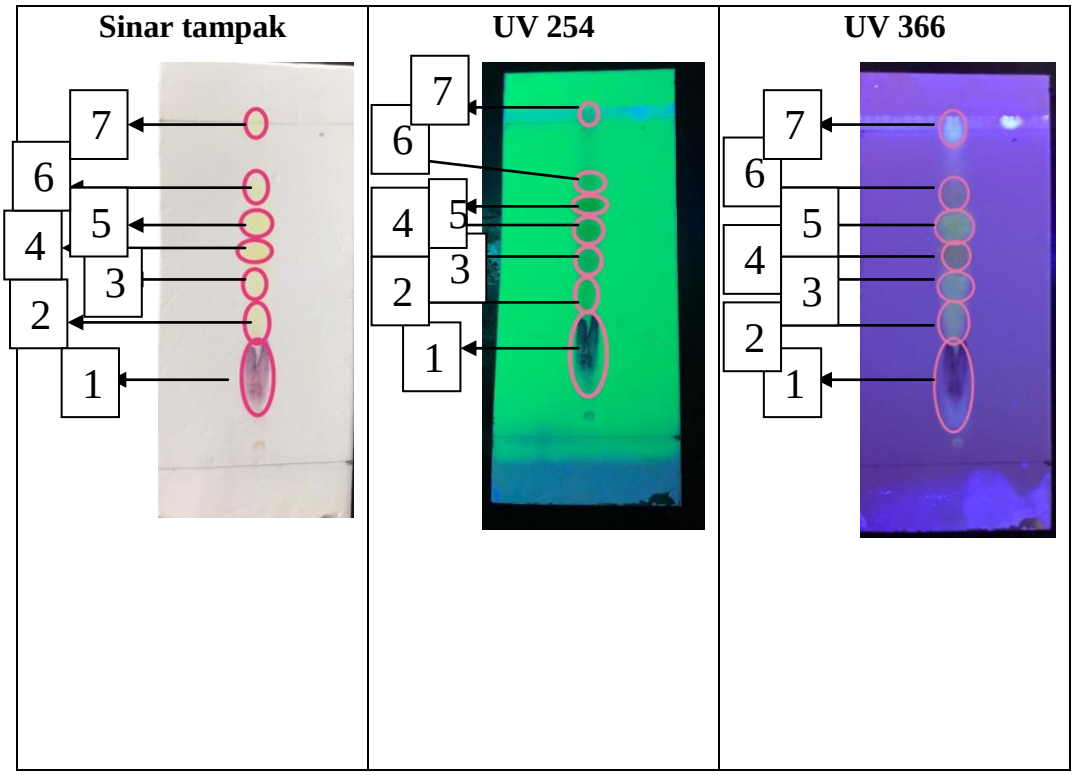
Lampiran 8 Gambar proses maserasi

Pengambilan bunga telang 	**Pengeringan bunga telang** 
Simplisia kering 	**Pembuatan serbuk** 
Pengayakan 	**Penimbangan** 

Proses maserasi	Penyaringan
	
Pengentalan ekstrak	**Ekstrak kental**
	

Lampiran 9 Gambar pengujian kandungan senyawa fitokimia dan KLT ekstrak etanol bunga telang

Uji antosianin  	**Uji flavonoid** 
Uji triterpenoid 	**Uji tanin** 



Hasil perhitungan Kromatografi Lapis Tipis (KLT)

$$\textbf{Rumus} = \frac{\textbf{Jarak tempuh senyawa}}{\textbf{Jarak tempuh fase gerak}}$$

1.) Bercak 1 = $\frac{1{,}5\ cm}{5{,}1\ cm}$ = 0,29 cm

2.) Bercak 2 = $\frac{2{,}3\ cm}{5{,}1\ cm}$ = 0,45 cm

3.) Bercak 3 = $\frac{2{,}7\ cm}{5{,}1\ cm}$ = 0,53 cm

4.) Bercak 4 = $\frac{3{,}3\ cm}{5{,}1\ cm}$ = 0,65 cm

5.) Bercak 5 = $\frac{3{,}7\ cm}{5{,}1\ cm}$ = 0,73 cm

6.) Bercak 6 = $\frac{4{,}3\ cm}{5{,}1\ cm}$ = 0,84 cm

7.) Bercak 7 = $\frac{5{,}1\ cm}{5{,}1\ cm}$ = 1 cm

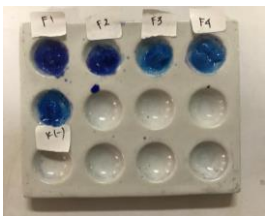
Lampiran 10 Gambar bahan yang digunakan dalam penetian

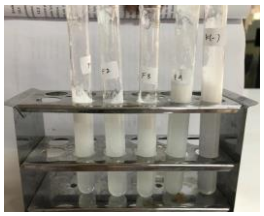
Asam stearat 	**TEA** 
Setil alkohol 	**Propilen glikol** 
Parafin cair 	**Propil Paraben** 
Metil paraben 	**Minyak lavender** 

Lampiran 11 Alur pembuatan formulasi *lotion* ekstrak etanol bunga telang

<table>
<tr><td>Penimbangan bahan
  </td><td>Penimbangan ekstrak
  </td></tr>
<tr><td>Pemanasan bahan
   </td><td>Pencampuran bahan
  </td></tr>
<tr><td colspan="2">Sediaan jadi
  </td></tr>
</table>

Lampiran 12 Hasil uji mutu fisik *lotion* ekstrak etanol bunga telang

<table>
<tr>
<td>Uji homogenitas
 
</td>
<td>Uji pH
 
</td>
</tr>
<tr>
<td>Uji viskositas
  </td>
<td>Uji daya sebar
  </td>
</tr>
<tr>
<td>Uji daya lekat
  </td>
<td>Uji tipe emulsi
 

Pewarnaan
 
Pengenceran</td>
</tr>
</table>

Lampiran 13 Hasil uji mutu fisik pH *lotion* ekstrak etanol bunga telang

Hari ke-1

FORMULA	F1	F2	F3	F4	K(-)
Replikasi 1	6,06	5,9	6,22	6,15	6,11
Replikasi 2	6,1	5,89	6,21	6,17	6,13
Replikasi 3	6,09	5,88	6,24	6,16	6,12
Rata-rata	6,08	5,89	6,22	6,16	6,12
SD	0,02	0,01	0,02	0,01	0,01
Rata-rata ± SD	6,08 ± 0,02	5,89 ± 0,01	6,21 ± 0,02	6,16 ± 0,01	6,12± 0,01

Hari ke-21

FORMULA	F1	F2	F3	F4	K(-)
Replikasi 1	6,11	6,01	6,36	6,22	6,14
Replikasi 2	6,10	6,05	6,35	6,24	6,16
Replikasi 3	6,12	6,04	6,33	6,25	6,14
Rata-rata	6,11	6,03	6,35	6,24	6,15
SD	0,01	0,02	0,02	0,02	0,01
Rata-rata ± SD	6,11 ± 0,01	6,03 ± 0,02	6,35 ± 0,02	6,24 ± 0,02	6,15 ± 0,01

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	pH	Statistic	Df	Sig.	Statistic	df	Sig.
Harike1	Formula 1	,292	3	.	,923	3	,463
	Formula 2	,175	3	.	1,000	3	1,000
	Formula 3	,253	3	.	,964	3	,637
	Formula 4	,385	3	.	,750	3	,000
	Kontrol negatif	,385	3	.	,750	3	,000
Harike21	Formula 1	,175	3	.	1,000	3	1,000
	Formula 2	,292	3	.	,923	3	,463
	Formula 3	,253	3	.	,964	3	,637
	Formula 4	,253	3	.	,964	3	,637
	Kontrol negatif	,385	3	.	,750	3	,000

a. Lilliefors Significance Correction

Kruskal-Wallis Test

Ranks			
	pH	N	Mean Rank
Harike1	Formula 1	3	7,33
	Formula 2	3	2,00
	Formula 3	3	14,00
	Formula 4	3	11,00
	Kontrol negatif	3	5,67
	Total	15	
Harike21	Formula 1	3	5,00
	Formula 2	3	2,00
	Formula 3	3	14,00
	Formula 4	3	11,00
	Kontrol negatif	3	8,00
	Total	15	

Test Statistics[a,b]		
	Harike1	Harike21
Kruskal-Wallis H	13,080	13,524
Df	4	4
Asymp. Sig.	,011	,009
a. Kruskal Wallis Test		
b. Grouping Variable: pH		

Wilcoxon Signed Ranks Test

Ranks				
		N	Mean Rank	Sum of Ranks
Harike21 - Harike1	Negative Ranks	0[a]	,00	,00
	Positive Ranks	11[b]	6,00	66,00
	Ties	4[c]		
	Total	15		
a. Harike21 < Harike1				
b. Harike21 > Harike1				
c. Harike21 = Harike1				

Test Statistics[a]	
	Harike21 - Harike1
Z	-2,938[b]
Asymp. Sig. (2-tailed)	,003
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

Lampiran 14 Hasil uji mutu fisik viskositas *lotion* ekstrak etanol bunga telang

Hari ke-1

FORMULA	F1	F2	F3	F4	K (-)
Replikasi 1	150	155	120	130	145
Replikasi 2	145	159	115	135	140
Replikasi 3	149	156	118	134	138
Rata-rata	148	157	118	133	141
SD	2,65	2,08	2,52	2,65	3,61
Rata-rata ± SD	148 ± 2,65	157 ± 2,08	118 ± 2,52	133± 2,65	141 ± 3,61

Hari ke-21

FORMULA	F1	F2	F3	F4	K (-)
Replikasi 1	135	145	98	130	130
Replikasi 2	138	145	100	130	135
Replikasi 3	140	148	100	135	135
Rata-rata	138	146	99	132	133
SD	2,52	1,73	1,15	2,89	2,89
Rata-rata ± SD	138 ± 2,25	146 ± 1,73	99 ± 1,15	132 ± 2,89	133 ± 2,89

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Viskositas	Statistic	Df	Sig.	Statistic	df	Sig.
Hari1	Formula 1	,314	3	.	,893	3	,363
	Formula 2	,292	3	.	,923	3	,463
	Formula 3	,219	3	.	,987	3	,780
	Formula 4	,314	3	.	,893	3	,363
	Kontrol negatif	,276	3	.	,942	3	,537
Hari21	Formula 1	,219	3	.	,987	3	,780
	Formula 2	,385	3	.	,750	3	,000
	Formula 3	,385	3	.	,750	3	,000
	Formula 4	,385	3	.	,750	3	,000
	Kontrol negatif	,385	3	.	,750	3	,000

a. Lilliefors Significance Correction

Kruskal-Wallis Test

Ranks			
	Viskositas	N	Mean Rank
Hari1	Formula 1	3	10,83
	Formula 2	3	14,00
	Formula 3	3	2,00
	Formula 4	3	5,00
	Kontrol negatif	3	8,17
	Total	15	
Hari21	Formula 1	3	10,67
	Formula 2	3	14,00
	Formula 3	3	2,00
	Formula 4	3	5,00
	Kontrol negatif	3	8,33
	Total	15	

Test Statistics[a,b]		
	Hari1	Hari21
Kruskal-Wallis H	13,382	13,401
Df	4	4
Asymp. Sig.	,010	,009
a. Kruskal Wallis Test		
b. Grouping Variable: Viskositas		

Wilcoxon Signed Ranks Test

Ranks				
		N	Mean Rank	Sum of Ranks
Hari21 - Hari1	Negative Ranks	15[a]	8,00	120,00
	Positive Ranks	0[b]	,00	,00
	Ties	0[c]		
	Total	15		
a. Hari21 < Hari1				
b. Hari21 > Hari1				
c. Hari21 = Hari1				

Test Statistics[a]	
	Hari21 - Hari1
Z	-3,413[b]
Asymp. Sig. (2-tailed)	,001
a. Wilcoxon Signed Ranks Test	
b. Based on positive ranks.	

Lampiran 15 Hasil uji mutu fisik daya sebar *lotion* ekstrak etanol bunga telang

Hari ke-1

Formula	Beban (g)	Replikasi 1	Replikasi 2	Replikasi 3	Rata-rata	SD
F1	Tanpa beban	3,3	3,5	3,1	3,30	0,20
	50	4,6	4,7	4,5	4,60	0,10
	150	4,9	5,2	5,1	5,07	0,15
F2	Tanpa beban	2,8	3	2,9	2,90	0,10
	50	3,6	3,3	3,6	3,50	0,17
	150	4,5	4,7	4,6	4,60	0,10
F3	Tanpa beban	4	4,2	4,4	4,20	0,20
	50	5,2	5,3	5,4	5,30	0,10
	150	6,2	5,7	6	5,97	0,25
F4	Tanpa beban	3	3,4	3,2	3,20	0,20
	50	4,3	4	4,2	4,17	0,15
	150	5,1	5	4,9	5,00	0,10
K (-)	Tanpa beban	3	3,3	3,2	3,17	0,15
	50	4,4	4,5	4,6	4,50	0,10
	150	5	5,3	5,1	5,13	0,15

Hari ke-21

Formula	Beban (g)	Replikasi 1	Replikasi 2	Replikasi 3	Rata-rata	SD
F1	Tanpa beban	4,6	4,2	4,4	4,35	0,06
	50	5,8	5,5	5,6	5,28	0,10
	150	7,2	7,2	7,1	6,40	0,12
F2	Tanpa beban	3,5	3,8	3,6	3,73	0,06
	50	4,9	5,2	5	5,03	0,15
	150	5,9	6	6,1	6,00	0,10
F3	Tanpa beban	4,6	4,4	4,3	4,43	0,15
	50	6	5,9	6,2	6,03	0,15
	150	7,4	7,2	7	7,20	0,20
F4	Tanpa beban	4	3,9	4,1	4,00	0,10

	50	5,6	5,7	5,5	5,60	0,10
	150	6,1	6	6,4	6,17	0,21
K (-)	Tanpa beban	4,2	4,1	4,3	4,20	0,10
	50	5,4	5,5	5,6	5,50	0,10
	150	6,2	6,3	6,1	6,20	0,10

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	DayaSebar	Statistic	df	Sig.	Statistic	df	Sig.
Hari1	F1"tanpa beban"	,175	3	.	1,000	3	1,000
	F1"beban 50"	,175	3	.	1,000	3	1,000
	F1"beban 150"	,253	3	.	,964	3	,637
	F2"tanpa beban"	,175	3	.	1,000	3	1,000
	F2"beban 50"	,253	3	.	,964	3	,637
	F2"beban 150"	,175	3	.	1,000	3	1,000
	F3"tanpa beban"	,175	3	.	1,000	3	1,000
	F3"beban 50"	,175	3	.	1,000	3	1,000
	F3"beban 150"	,219	3	.	,987	3	,780
	F4"tanpa beban"	,175	3	.	1,000	3	1,000
	F4"beban 50"	,253	3	.	,964	3	,637
	F4"beban 150"	,175	3	.	1,000	3	1,000
	Kontrolnegatif"tanpa beban"	,253	3	.	,964	3	,637
	Kontrolnegatif"beban 50"	,175	3	.	1,000	3	1,000
	Kontrolnegatif"beban 150"	,253	3	.	,964	3	,637
Hari21	F1"tanpa beban"	,175	3	.	1,000	3	1,000
	F1"beban 50"	,253	3	.	,964	3	,637
	F1"beban 150"	,292	3	.	,923	3	,463
	F2"tanpa beban"	,253	3	.	,964	3	,637
	F2"beban 50"	,253	3	.	,964	3	,637
	F2"beban 150"	,354	3	.	,821	3	,165
	F3"tanpa beban"	,253	3	.	,964	3	,637
	F3"beban 50"	,253	3	.	,964	3	,637
	F3"beban 150"	,175	3	.	1,000	3	1,000
	F4"tanpa beban"	,175	3	.	1,000	3	1,000
	F4"beban 50"	,175	3	.	1,000	3	1,000
	F4"beban 150"	,292	3	.	,923	3	,463
	Kontrolnegatif"tanpa beban"	,175	3	.	1,000	3	1,000
	Kontrolnegatif"beban 50"	,175	3	.	1,000	3	1,000

	Kontrolnegatif"beban 150"	,175	3	.	1,000	3	1,000
a. Lilliefors Significance Correction							

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Hari1	Based on Mean	,533	14	30	,893
	Based on Median	,346	14	30	,980
	Based on Median and with adjusted df	,346	14	21,622	,977
	Based on trimmed mean	,521	14	30	,901
Hari21	Based on Mean	7,889	14	30	,000
	Based on Median	,911	14	30	,557
	Based on Median and with adjusted df	,911	14	2,542	,626
	Based on trimmed mean	6,794	14	30	,000

Kruskal-Wallis Test

Ranks			
	DayaSebar	N	Mean Rank
Hari1	F1"tanpa beban"	3	9,83
	F1"beban 50"	3	26,83
	F1"beban 150"	3	35,33
	F2"tanpa beban"	3	2,33
	F2"beban 50"	3	12,83
	F2"beban 150"	3	26,83
	F3"tanpa beban"	3	18,83
	F3"beban 50"	3	40,33
	F3"beban 150"	3	44,00
	F4"tanpa beban"	3	7,83
	F4"beban 50"	3	18,33
	F4"beban 150"	3	33,67
	Kontrolnegatif"tanpa beban"	3	7,17
	Kontrolnegatif"beban 50"	3	24,17
	Kontrolnegatif"beban 150"	3	36,67
	Total	45	
Hari21	F1"tanpa beban"	3	11,83
	F1"beban 50"	3	24,00
	F1"beban 150"	3	41,33
	F2"tanpa beban"	3	2,00

	F2"beban 50"	3	17,00
	F2"beban 150"	3	35,50
	F3"tanpa beban"	3	12,50
	F3"beban 50"	3	31,50
	F3"beban 150"	3	41,67
	F4"tanpa beban"	3	5,17
	F4"beban 50"	3	23,67
	F4"beban 150"	3	33,83
	Kontrolnegatif"tanpa beban"	3	8,50
	Kontrolnegatif"beban 50"	3	21,33
	Kontrolnegatif"beban 150"	3	35,17
	Total	45	

Test Statistics[a,b]

	Hari1	Hari21
Kruskal-Wallis H	42,668	42,198
Df	14	14
Asymp. Sig.	,000	,000

a. Kruskal Wallis Test

b. Grouping Variable: DayaSebar

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
Hari21 - Hari1	Negative Ranks	1[a]	1,00	1,00
	Positive Ranks	44[b]	23,50	1034,00
	Ties	0[c]		
	Total	45		

a. Hari21 < Hari1

b. Hari21 > Hari1

c. Hari21 = Hari1

Test Statistics[a]	
	Hari21 - Hari1
Z	-5,838[b]
Asymp. Sig. (2-tailed)	,000
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

Lampiran 16 Hasil uji mutu fisik daya lekat *lotion* ekstrak etanol bunga telang

Hari ke-1

FORMULA	F1	F2	F3	F4	K (-)
Replikasi 1	1,50	1,60	1,27	1,33	1,44
Replikasi 2	1,47	1,58	1,32	1,34	1,45
Replikasi 3	1,46	1,57	1,28	1,31	1,43
Rata-rata	1,48	1,58	1,29	1,33	1,44
SD	0,02	0,02	0,03	0,02	0,01
Rata-rata ± SD	1,48 ± 0,02	1,58 ± 0,02	1,29 ± 0,03	1,33 ± 0,01	1,44 ± 0,01

Hari ke-21

FORMULA	F1	F2	F3	F4	K (-)
Replikasi 1	1,34	1,46	1,18	1,22	1,37
Replikasi 2	1,31	1,47	1,17	1,20	1,39
Replikasi 3	1,32	1,45	1,16	1,21	1,40
Rata-rata	1,32	1,46	1,17	1,21	1,39
SD	0,02	0,01	0,01	0,01	0,02
Rata-rata ± SD	1,32 ± 0,02	1,46 ± 0,01	1,17 ± 0,01	1,21 ± 0,01	1,39 ± 0,02

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	DayaLekat	Statistic	df	Sig.	Statistic	df	Sig.
Hari1	Formula 1	,292	3	.	,923	3	,463
	Formula 2	,253	3	.	,964	3	,637
	Formula 3	,314	3	.	,893	3	,363
	Formula 4	,253	3	.	,964	3	,637
	Kontrol negatif	,175	3	.	1,000	3	1,000
Hari21	Formula 1	,253	3	.	,964	3	,637
	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
	Kontrol negatif	,253	3	.	,964	3	,637

a. Lilliefors Significance Correction

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Hari1	Based on Mean	1,284	4	10	,339
	Based on Median	,241	4	10	,909
	Based on Median and with adjusted df	,241	4	6,152	,906
	Based on trimmed mean	1,164	4	10	,383
Hari21	Based on Mean	,453	4	10	,769
	Based on Median	,167	4	10	,951
	Based on Median and with adjusted df	,167	4	7,714	,949
	Based on trimmed mean	,431	4	10	,783

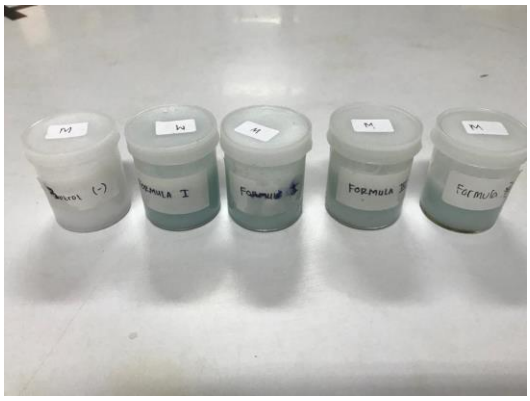
ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Hari1	Between Groups	,168	4	,042	123,186	,000
	Within Groups	,003	10	,000		
	Total	,171	14			
Hari21	Between Groups	,174	4	,044	284,457	,000
	Within Groups	,002	10	,000		
	Total	,176	14			

Multiple Comparisons							
Dunnett T3							
Dependent Variable	(I) DayaLekat	(J) DayaLekat	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Hari1	Formula 1	Formula 2	-,10667*	,01491	,016	-,1822	-,0312
		Formula 3	,18667*	,01944	,005	,0901	,2832
		Formula 4	,15000*	,01491	,005	,0745	,2255
		Kontrol negatif	,03667	,01333	,313	-,0434	,1167
	Formula 2	Formula 1	,10667*	,01491	,016	,0312	,1822
		Formula 3	,29333*	,01764	,002	,1956	,3911
		Formula 4	,25667*	,01247	,000	,1966	,3167
		Kontrol negatif	,14333*	,01054	,002	,0878	,1989
	Formula 3	Formula 1	-,18667*	,01944	,005	-,2832	-,0901
		Formula 2	-,29333*	,01764	,002	-,3911	-,1956
		Formula 4	-,03667	,01764	,495	-,1344	,0611

		Kontrol negative	-,15000*	,01633	,023	-,2583	-,0417
	Formula 4	Formula 1	-,15000*	,01491	,005	-,2255	-,0745
		Formula 2	-,25667*	,01247	,000	-,3167	-,1966
		Formula 3	,03667	,01764	,495	-,0611	,1344
		Kontrol negative	-,11333*	,01054	,005	-,1689	-,0578
	Kontrol negatif	Formula 1	-,03667	,01333	,313	-,1167	,0434
		Formula 2	-,14333*	,01054	,002	-,1989	-,0878
		Formula 3	,15000*	,01633	,023	,0417	,2583
		Formula 4	,11333*	,01054	,005	,0578	,1689
Hari21	Formula 1	Formula 2	-,13667*	,01054	,003	-,1922	-,0811
		Formula 3	,15333*	,01054	,002	,0978	,2089
		Formula 4	,11333*	,01054	,005	,0578	,1689
		Kontrol negative	-,06333*	,01247	,042	-,1234	-,0033
	Formula 2	Formula 1	,13667*	,01054	,003	,0811	,1922
		Formula 3	,29000*	,00816	,000	,2507	,3293
		Formula 4	,25000*	,00816	,000	,2107	,2893
		Kontrol negative	,07333*	,01054	,021	,0178	,1289
	Formula 3	Formula 1	-,15333*	,01054	,002	-,2089	-,0978
		Formula 2	-,29000*	,00816	,000	-,3293	-,2507
		Formula 4	-,04000*	,00816	,047	-,0793	-,0007
		Kontrol negative	-,21667*	,01054	,001	-,2722	-,1611
	Formula 4	Formula 1	-,11333*	,01054	,005	-,1689	-,0578
		Formula 2	-,25000*	,00816	,000	-,2893	-,2107
		Formula 3	,04000*	,00816	,047	,0007	,0793
		Kontrol negative	-,17667*	,01054	,001	-,2322	-,1211
	Kontrol negatif	Formula 1	,06333*	,01247	,042	,0033	,1234
		Formula 2	-,07333*	,01054	,021	-,1289	-,0178
		Formula 3	,21667*	,01054	,001	,1611	,2722
		Formula 4	,17667*	,01054	,001	,1211	,2322

*. The mean difference is significant at the 0.05 level.

Lampiran 17 Gambar uji hasil stabilitas formula *lotion*

Sediaan hasil stabilitas	**Uji homogenitas**
	
Uji viskositas	**Uji pH**
	

Lampiran 18 Hasil uji stabilitas pH lotion ekstrak etanol bunga telang

Sebelum metode *Cycling test*

FORMULA	F1	F2	F3	F4	K(-)
Replikasi 1	6,06	5,9	6,22	6,15	6,11
Replikasi 2	6,1	5,89	6,21	6,17	6,13
Replikasi 3	6,09	5,88	6,24	6,16	6,12
Rata-rata	6,08	5,89	6,22	6,16	6,12
SD	0,02	0,01	0,02	0,01	0,01
Rata-rata ± SD	6,08 ± 0,02	5,89 ± 0,01	6,21 ± 0,02	6,16 ± 0,01	6,12± 0,01

Setelah metode *Cycling test*

FORMULA	F1	F2	F3	F4	K(-)
Replikasi 1	6,13	5,99	6,35	6,45	6,16
Replikasi 2	6,10	5,98	6,39	6,43	6,15
Replikasi 3	6,12	5,96	6,38	6,47	6,14
Rata-rata	6,12	5,98	6,37	6,45	6,15
SD	0,02	0,02	0,02	0,02	0,01
Rata-rata ± SD	6,12 ± 0,02	5,98 ± 0,02	6,37 ± 0,02	6,45 ± 0,02	6,15 ± 0,1

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
F1SebelumCycling	,292	3	.	,923	3	,463
F2SebelumCycling	,175	3	.	1,000	3	1,000
F3SebelumCycling	,253	3	.	,964	3	,637
F4SebelumCycling	,175	3	.	1,000	3	1,000
KontrolSebelumCycling	,175	3	.	1,000	3	1,000
F1SetelahCycling	,253	3	.	,964	3	,637
F2SetelahCycling	,253	3	.	,964	3	,637
F3SetelahCycling	,292	3	.	,923	3	,463
F4SetelahCycling	,175	3	.	1,000	3	1,000
KontrolSetelahCycling	,175	3	.	1,000	3	1,000

a. Lilliefors Significance Correction

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	F1SebelumCycling	6,0833	3	,02082	,01202
	F1SetelahCycling	6,1167	3	,01528	,00882
Pair 2	F2SebelumCycling	5,8900	3	,01000	,00577
	F2SetelahCycling	5,9767	3	,01528	,00882
Pair 3	F3SebelumCycling	6,2233	3	,01528	,00882
	F3SetelahCycling	6,3733	3	,02082	,01202
Pair 4	F4SebelumCycling	6,1600	3	,01000	,00577
	F4SetelahCycling	6,4500	3	,02000	,01155
Pair 5	KontrolSebelumCycling	6,1200	3	,01000	,00577
	KontrolSetelahCycling	6,1500	3	,01000	,00577

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	F1SebelumCycling & F1SetelahCycling	3	-,891	,300
Pair 2	F2SebelumCycling & F2SetelahCycling	3	,982	,121
Pair 3	F3SebelumCycling & F3SetelahCycling	3	-,052	,967
Pair 4	F4SebelumCycling & F4SetelahCycling	3	-,500	,667
Pair 5	KontrolSebelumCycling & KontrolSetelahCycling	3	-,500	,667

Paired Samples Test

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	F1SebelumCycling - F1SetelahCycling	-,03333	,03512	,02028	-,12057	,05391	-1,644	2	,242
Pair 2	F2SebelumCycling - F2SetelahCycling	-,08667	,00577	,00333	-,10101	-,07232	-26,000	2	,001
Pair 3	F3SebelumCycling - F3SetelahCycling	-,15000	,02646	,01528	-,21572	-,08428	-9,820	2	,010
Pair 4	F4SebelumCycling - F4SetelahCycling	-,29000	,02646	,01528	-,35572	-,22428	-18,985	2	,003
Pair 5	KontrolSebelumCycling – KontrolSetelahCycling	-,03000	,01732	,01000	-,07303	,01303	-3,000	2	,095

Lampiran 19 Hasil uji stabilitas viskositas *lotion* antioksidan ekstrak etanol bunga telang

Sebelum metode *Cycling test*

FORMULA	F1	F2	F3	F4	K (-)
Replikasi 1	150	155	120	130	145
Replikasi 2	145	159	115	135	140
Replikasi 3	149	156	118	134	138
Rata-rata	148	156,67	117,67	133	141
SD	2,65	2,08	2,52	2,65	3,61
Rata-rata ± SD	148 ± 2,65	156,67 ± 2,08	117,67 ± 2,52	133,00± 2,65	141 ± 3,61

Setelah metode *Cycling test*

FORMULA	F1	F2	F3	F4	K (-)
Replikasi 1	142	149	118	130	135
Replikasi 2	144	145	115	129	138
Replikasi 3	139	148	114	127	134
Rata-rata	141,67	147	115,67	129	135,67
SD	2,52	2	2,08	2	2,08
Rata-rata ± SD	141,67 ± 2,52	147 ± 2	115,67 ± 2,08	129 ± 2	135,67 ± 2,08

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
F1SebelumCycling	,314	3	.	,893	3	,363
F2SebelumCycling	,292	3	.	,923	3	,463
F3SebelumCycling	,219	3	.	,987	3	,780
F4SebelumCycling	,314	3	.	,893	3	,363
KontrolSebelumCycling	,276	3	.	,942	3	,537
F1SetelahCycling	,219	3	.	,987	3	,780
F2SetelahCycling	,292	3	.	,923	3	,463
F3SetelahCycling	,292	3	.	,923	3	,463
F4SetelahCycling	,253	3	.	,964	3	,637
KontrolsetelahCycling	,292	3	.	,923	3	,463

a. Lilliefors Significance Correction

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	F1SebelumCycling	148,00	3	2,646	1,528
	F1SetelahCycling	141,67	3	2,517	1,453
Pair 2	F2SebelumCycling	156,67	3	2,082	1,202
	F2SetelahCycling	147,33	3	2,082	1,202
Pair 3	F3SebelumCycling	117,67	3	2,517	1,453
	F3SetelahCycling	115,67	3	2,082	1,202
Pair 4	F4SebelumCycling	133,00	3	2,646	1,528
	F4SetelahCycling	128,67	3	1,528	,882
Pair 5	KontrolSebelumCycling	141,00	3	3,606	2,082
	KontrolsetelahCycling	135,67	3	2,082	1,202

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	F1SebelumCycling & F1SetelahCycling	3	-,676	,528
Pair 2	F2SebelumCycling & F2SetelahCycling	3	-1,000	,000
Pair 3	F3SebelumCycling & F3SetelahCycling	3	,636	,561
Pair 4	F4SebelumCycling & F4SetelahCycling	3	-,619	,575
Pair 5	KontrolSebelumCycling & KontrolsetelahCycling	3	,000	1,000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	F1SebelumCycling - F1SetelahCycling	6,333	4,726	2,728	-5,406	18,073	2,321	2	,146
Pair 2	F2SebelumCycling - F2SetelahCycling	9,333	4,163	2,404	-1,009	19,676	3,883	2	,060
Pair 3	F3SebelumCycling - F3SetelahCycling	2,000	2,000	1,155	-2,968	6,968	1,732	2	,225
Pair 4	F4SebelumCycling - F4SetelahCycling	4,333	3,786	2,186	-5,071	13,738	1,982	2	,186
Pair 5	KontrolSebelumCycling – Kontrolsetelah Cycling	5,333	4,163	2,404	-5,009	15,676	2,219	2	,157

Lampiran 20 Certificate of Analysis (COA) DPPH

HiMedia Laboratories Pvt. Ltd.
Certified ISO 9001-2015 and WHO GMP

HIMEDIA

23, Vadhani Industrial Estate, L.B.S. Marg, Mumbai - 400086
Website : www.himedialabs.com, Email : info@himedialabs.com

Certificate of Analysis

Material Name: 2,2-Diphenyl-1-picrylhydrazyl
CAS Number : 1898-66-4
Material Code : MB263
Lot Number : 0000473772
Molecular Formula : $C_{18}H_{12}N_5O_6$
Report No : 10000464112

TEST	SPECIFICATIONS	RESULTS
Appearance	Green to dark violet to black-gold to black crystals or powder or solid	Dark violet crystals
Solubility	33.3 mg soluble in 1 mL of dimethylformamide	Complies
FTIR	Matches with the standard pattern	Complies
DNases	None detected	Complies
RNases	None detected	Complies
Assay (HPLC)	>= 85.00%	99.99%

STATUS : APPROVED

QC Release Date : 2021-03-15
Expiry Date : 2025-03-08

Quality Control Chemist
Chemical Division

Manager, Quality Control
Chemical Division

Manager, Quality Assurance
Chemical Divison

This is to certify that this lot passes and it confirms to the above mentioned tests and specifications . The information given here is believed to be correct and accurate, however, both the information and products are offered without warranty for any particulars use, other than that specified in the current technical data.
This document has been produced electronically and is valid with out signature.

Lampiran 21 Certificate of Analysis (COA) Kuersetin

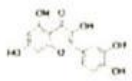
Sigma-Aldrich.

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Quercetin - ≥95% (HPLC), solid

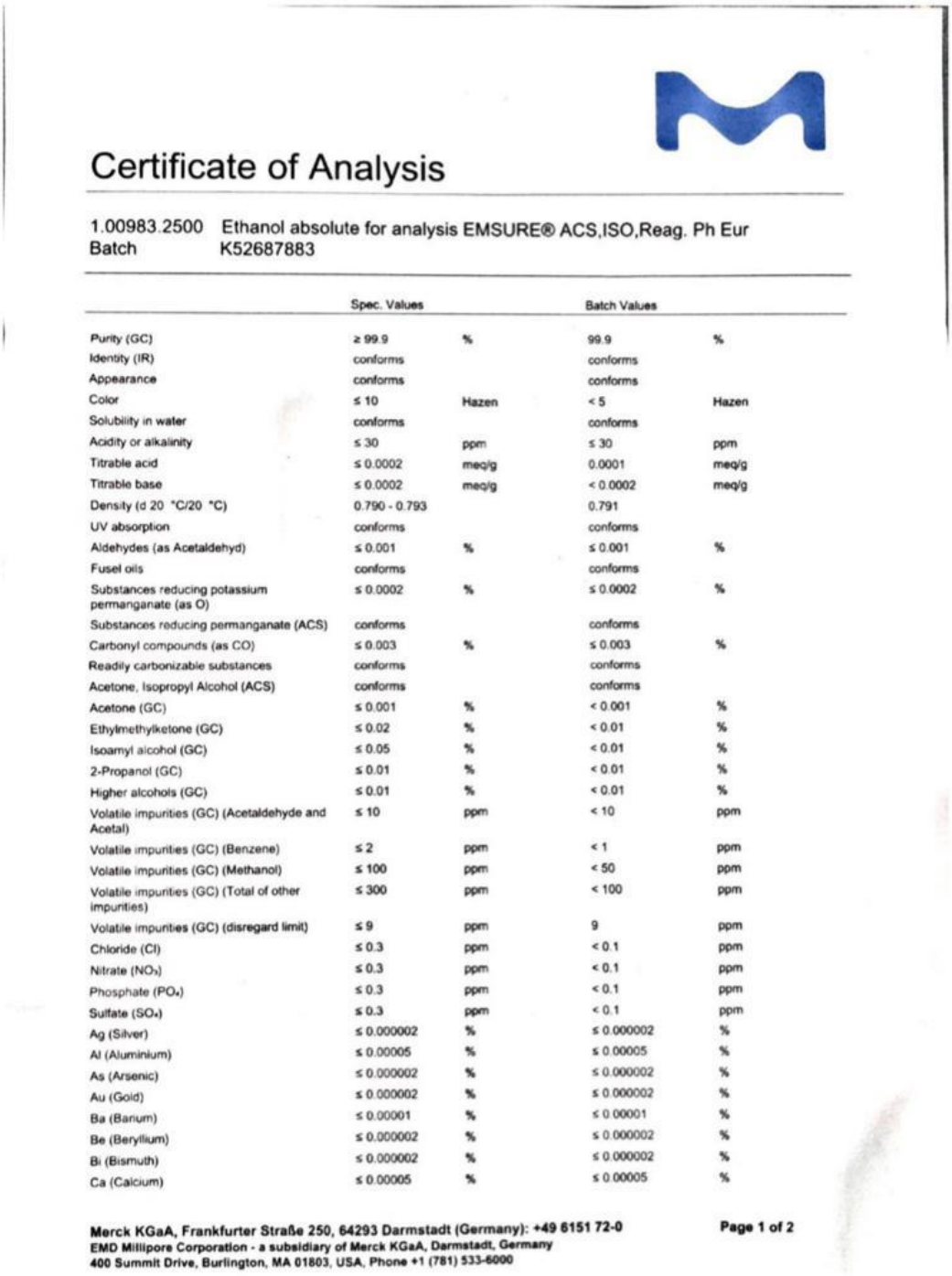
Product Number:	**Q4951**
Batch Number:	**SLCJ0103**
Brand:	SIGMA
CAS Number:	117-39-5
Formula:	C15H10O7
Formula Weight:	302.24 g/mol
Quality Release Date:	10 DEC 2020



Test	Specification	Result
Appearance (Color)	Conforms	Conforms
Yellow		
Appearance (Form)	Powder	Powder
1H NMR Spectrum	Conforms to Structure	Conforms
Loss on Drying	≤ 4 %	3 %
Purity (HPLC)	≥ 95 %	97 %

Brian Dulle, Supervisor
Quality Assurance
St. Louis, Missouri US

Lampiran 22 Certificate of Analysis (COA) etanol p.a



Certificate of Analysis

1.00983.2500 Ethanol absolute for analysis EMSURE® ACS,ISO,Reag. Ph Eur
Batch K52687883

	Spec. Values		Batch Values	
Purity (GC)	≥ 99.9	%	99.9	%
Identity (IR)	conforms		conforms	
Appearance	conforms		conforms	
Color	≤ 10	Hazen	< 5	Hazen
Solubility in water	conforms		conforms	
Acidity or alkalinity	≤ 30	ppm	≤ 30	ppm
Titrable acid	≤ 0.0002	meq/g	0.0001	meq/g
Titrable base	≤ 0.0002	meq/g	< 0.0002	meq/g
Density (d 20 °C/20 °C)	0.790 - 0.793		0.791	
UV absorption	conforms		conforms	
Aldehydes (as Acetaldehyd)	≤ 0.001	%	≤ 0.001	%
Fusel oils	conforms		conforms	
Substances reducing potassium permanganate (as O)	≤ 0.0002	%	≤ 0.0002	%
Substances reducing permanganate (ACS)	conforms		conforms	
Carbonyl compounds (as CO)	≤ 0.003	%	≤ 0.003	%
Readily carbonizable substances	conforms		conforms	
Acetone, Isopropyl Alcohol (ACS)	conforms		conforms	
Acetone (GC)	≤ 0.001	%	< 0.001	%
Ethylmethylketone (GC)	≤ 0.02	%	< 0.01	%
Isoamyl alcohol (GC)	≤ 0.05	%	< 0.01	%
2-Propanol (GC)	≤ 0.01	%	< 0.01	%
Higher alcohols (GC)	≤ 0.01	%	< 0.01	%
Volatile impurities (GC) (Acetaldehyde and Acetal)	≤ 10	ppm	< 10	ppm
Volatile impurities (GC) (Benzene)	≤ 2	ppm	< 1	ppm
Volatile impurities (GC) (Methanol)	≤ 100	ppm	< 50	ppm
Volatile impurities (GC) (Total of other impurities)	≤ 300	ppm	< 100	ppm
Volatile impurities (GC) (disregard limit)	≤ 9	ppm	9	ppm
Chloride (Cl)	≤ 0.3	ppm	< 0.1	ppm
Nitrate (NO_3)	≤ 0.3	ppm	< 0.1	ppm
Phosphate (PO_4)	≤ 0.3	ppm	< 0.1	ppm
Sulfate (SO_4)	≤ 0.3	ppm	< 0.1	ppm
Ag (Silver)	≤ 0.000002	%	≤ 0.000002	%
Al (Aluminium)	≤ 0.00005	%	≤ 0.00005	%
As (Arsenic)	≤ 0.000002	%	≤ 0.000002	%
Au (Gold)	≤ 0.000002	%	≤ 0.000002	%
Ba (Barium)	≤ 0.00001	%	≤ 0.00001	%
Be (Beryllium)	≤ 0.000002	%	≤ 0.000002	%
Bi (Bismuth)	≤ 0.000002	%	≤ 0.000002	%
Ca (Calcium)	≤ 0.00005	%	≤ 0.00005	%

Merck KGaA, Frankfurter Straße 250, 64293 Darmstadt (Germany): +49 6151 72-0
EMD Millipore Corporation - a subsidiary of Merck KGaA, Darmstadt, Germany
400 Summit Drive, Burlington, MA 01803, USA, Phone +1 (781) 533-6000

Certificate of Analysis

1.00983.2500 Ethanol absolute for analysis EMSURE® ACS,ISO,Reag. Ph Eur
Batch K52687883

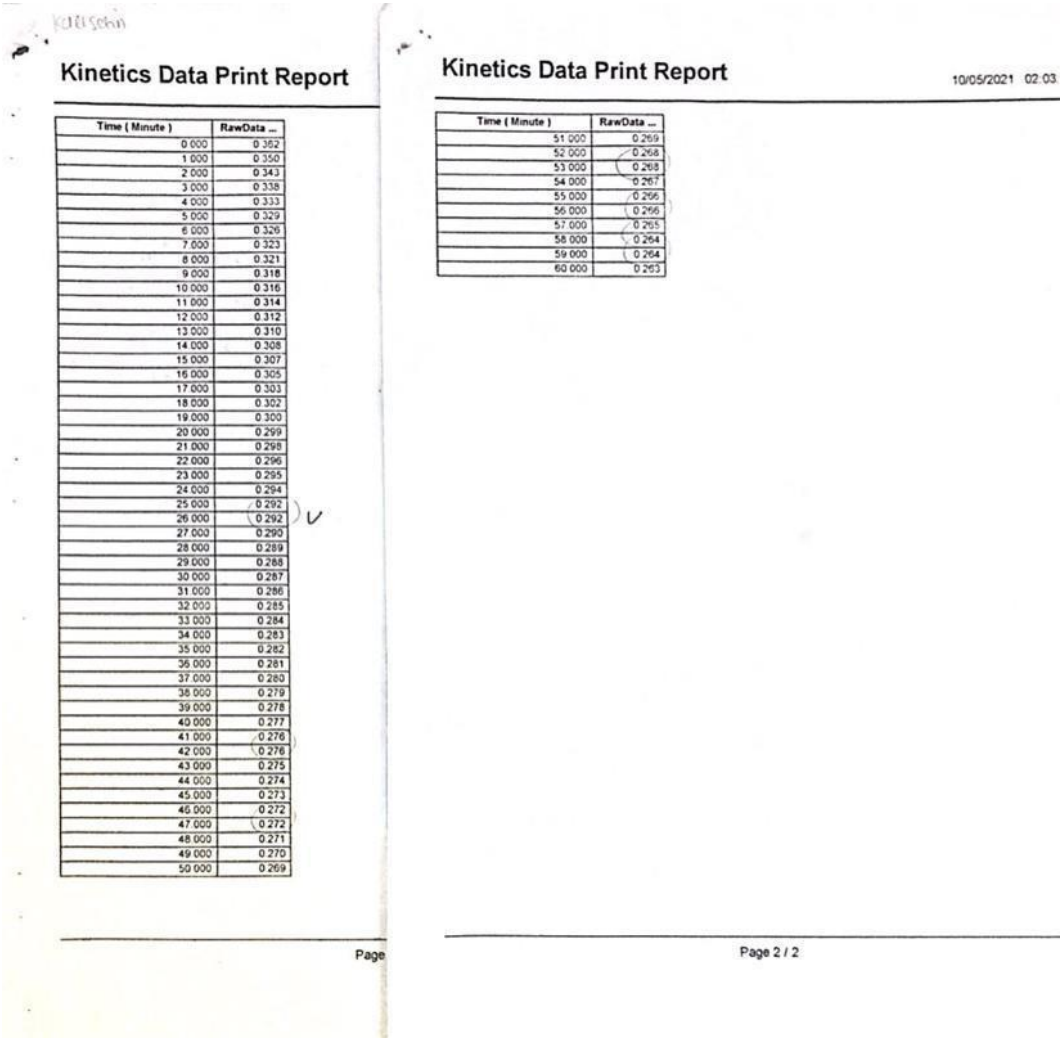
Cd (Cadmium)	≤ 0.000005	%	≤ 0.000005	%
Co (Cobalt)	≤ 0.000002	%	≤ 0.000002	%
Cr (Chromium)	≤ 0.000002	%	≤ 0.000002	%
Cu (Copper)	≤ 0.000002	%	≤ 0.000002	%
Fe (Iron)	≤ 0.00001	%	≤ 0.00001	%
Ga (Gallium)	≤ 0.000002	%	≤ 0.000002	%
In (Indium)	≤ 0.000002	%	≤ 0.000002	%
Li (Lithium)	≤ 0.000002	%	≤ 0.000002	%
Mg (Magnesium)	≤ 0.00001	%	≤ 0.00001	%
Mn (Manganese)	≤ 0.000002	%	≤ 0.000002	%
Mo (Molybdenum)	≤ 0.000002	%	≤ 0.000002	%
Ni (Nickel)	≤ 0.000002	%	≤ 0.000002	%
Pb (Lead)	≤ 0.00001	%	≤ 0.00001	%
Pt (Platinum)	≤ 0.000002	%	≤ 0.000002	%
Sb (Antimony)	≤ 0.000002	%	≤ 0.000002	%
Sn (Tin)	≤ 0.00001	%	≤ 0.00001	%
Ti (Titanium)	≤ 0.000002	%	≤ 0.000002	%
Tl (Thallium)	≤ 0.000002	%	≤ 0.000002	%
V (Vanadium)	≤ 0.000002	%	≤ 0.000002	%
Zn (Zinc)	≤ 0.00001	%	≤ 0.00001	%
Zr (Zirconium)	≤ 0.000002	%	≤ 0.000002	%
Evaporation residue	≤ 0.0005	%	0.0001	%
Water	≤ 0.1	%	< 0.1	%

Date of release (DD.MM.YYYY) 03.08.2020
Minimum shelf life (DD.MM.YYYY) 30.06.2025

Jeannette David
Responsible laboratory manager quality control

This document has been produced electronically and is valid without a signature.

Lampiran 23 *Operating Time* (OT) kuersetin



Kuersetin

Kinetics Data Print Report

Time (Minute)	RawData ...
0.000	0.362
1.000	0.350
2.000	0.343
3.000	0.338
4.000	0.333
5.000	0.329
6.000	0.326
7.000	0.323
8.000	0.321
9.000	0.318
10.000	0.316
11.000	0.314
12.000	0.312
13.000	0.310
14.000	0.308
15.000	0.307
16.000	0.305
17.000	0.303
18.000	0.302
19.000	0.300
20.000	0.299
21.000	0.298
22.000	0.296
23.000	0.295
24.000	0.294
25.000	0.292
26.000	0.292
27.000	0.290
28.000	0.289
29.000	0.288
30.000	0.287
31.000	0.286
32.000	0.285
33.000	0.284
34.000	0.283
35.000	0.282
36.000	0.281
37.000	0.280
38.000	0.279
39.000	0.278
40.000	0.277
41.000	0.276
42.000	0.276
43.000	0.275
44.000	0.274
45.000	0.273
46.000	0.272
47.000	0.272
48.000	0.271
49.000	0.270
50.000	0.269

Page

Kinetics Data Print Report 10/05/2021 02.03

Time (Minute)	RawData ...
51.000	0.269
52.000	0.268
53.000	0.268
54.000	0.267
55.000	0.266
56.000	0.266
57.000	0.265
58.000	0.264
59.000	0.264
60.000	0.263

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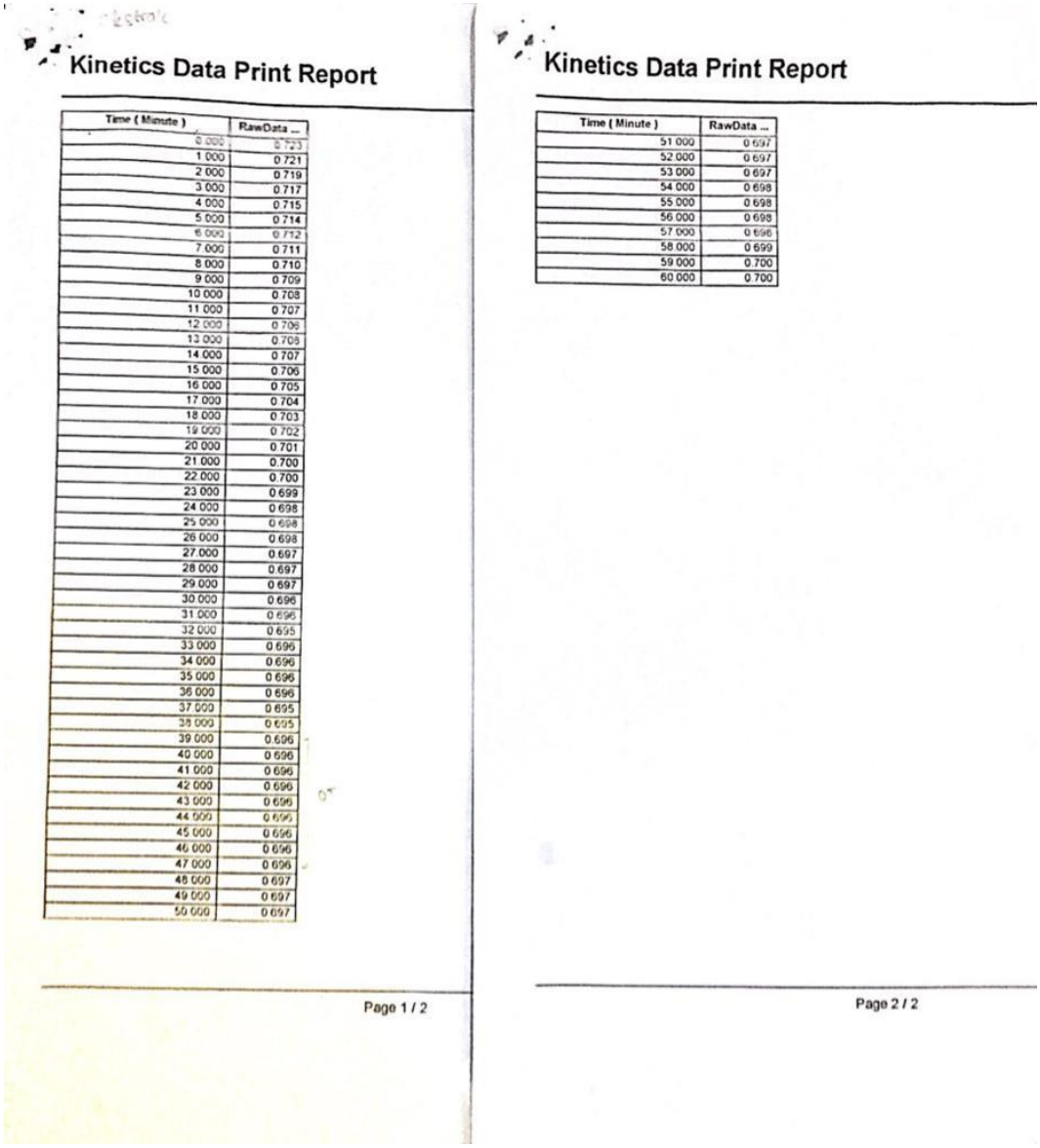
Lampiran 24 *Operating Time* (OT) ekstrak



Kinetics Data Print Report

Time (Minute)	RawData ...
0.000	0.723
1.000	0.721
2.000	0.719
3.000	0.717
4.000	0.715
5.000	0.714
6.000	0.712
7.000	0.711
8.000	0.710
9.000	0.709
10.000	0.708
11.000	0.707
12.000	0.706
13.000	0.705
14.000	0.707
15.000	0.706
16.000	0.705
17.000	0.704
18.000	0.703
19.000	0.702
20.000	0.701
21.000	0.700
22.000	0.700
23.000	0.699
24.000	0.698
25.000	0.698
26.000	0.698
27.000	0.697
28.000	0.697
29.000	0.697
30.000	0.696
31.000	0.696
32.000	0.695
33.000	0.696
34.000	0.696
35.000	0.696
36.000	0.696
37.000	0.695
38.000	0.695
39.000	0.696
40.000	0.696
41.000	0.696
42.000	0.696
43.000	0.696
44.000	0.696
45.000	0.696
46.000	0.696
47.000	0.696
48.000	0.697
49.000	0.697
50.000	0.697

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Kinetics Data Print Report

Time (Minute)	RawData ...
51.000	0.697
52.000	0.697
53.000	0.697
54.000	0.698
55.000	0.698
56.000	0.698
57.000	0.696
58.000	0.699
59.000	0.700
60.000	0.700

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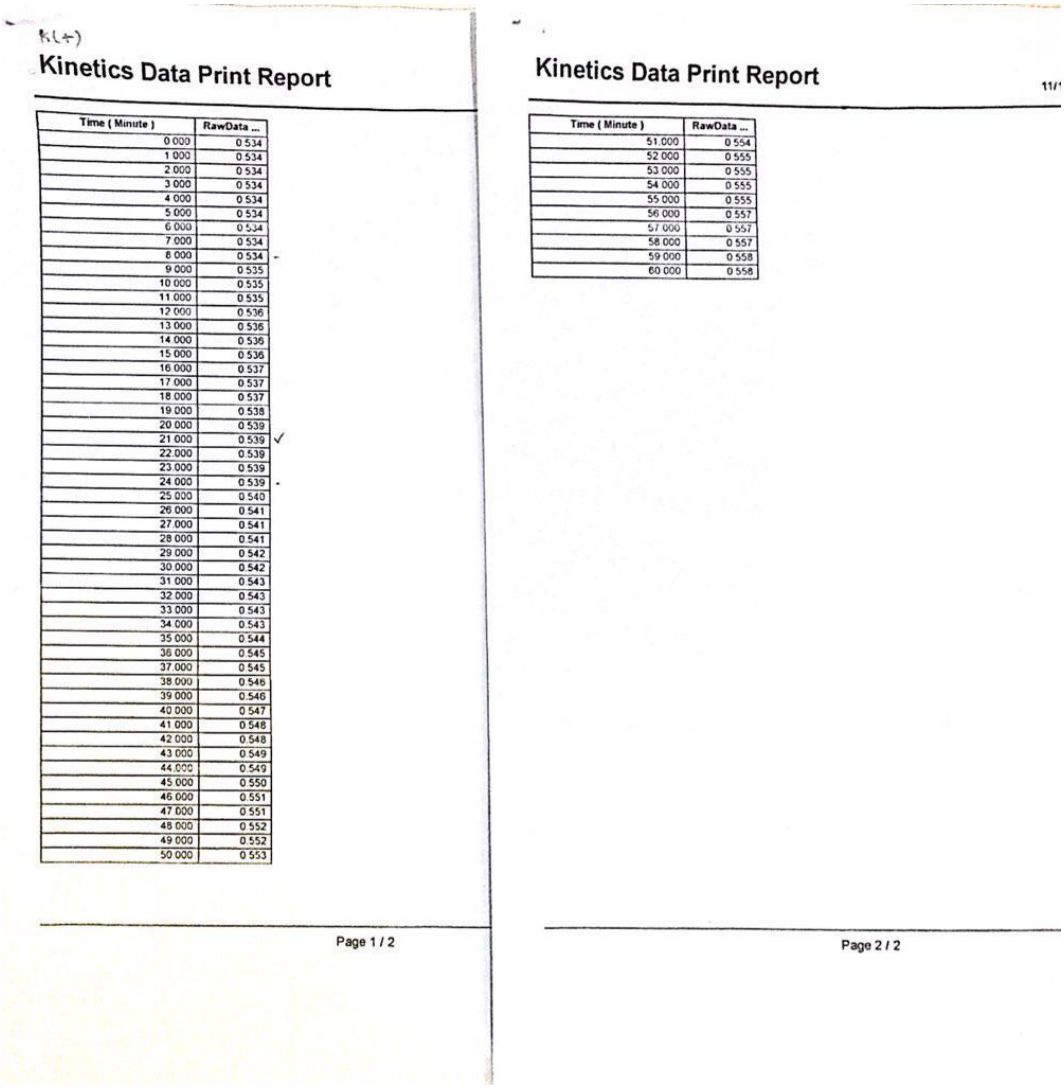
Lampiran 25 *Operating Time* (OT) kontrol (+)



K(+)

Kinetics Data Print Report

Time (Minute)	RawData ...
0.000	0.534
1.000	0.534
2.000	0.534
3.000	0.534
4.000	0.534
5.000	0.534
6.000	0.534
7.000	0.534
8.000	0.534
9.000	0.535
10.000	0.535
11.000	0.535
12.000	0.536
13.000	0.536
14.000	0.536
15.000	0.536
16.000	0.537
17.000	0.537
18.000	0.537
19.000	0.538
20.000	0.539
21.000	0.539
22.000	0.539
23.000	0.539
24.000	0.539
25.000	0.540
26.000	0.541
27.000	0.541
28.000	0.541
29.000	0.542
30.000	0.542
31.000	0.543
32.000	0.543
33.000	0.543
34.000	0.543
35.000	0.544
36.000	0.545
37.000	0.545
38.000	0.546
39.000	0.546
40.000	0.547
41.000	0.548
42.000	0.548
43.000	0.549
44.000	0.549
45.000	0.550
46.000	0.551
47.000	0.551
48.000	0.552
49.000	0.552
50.000	0.553

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Kinetics Data Print Report

Time (Minute)	RawData ...
51.000	0.554
52.000	0.555
53.000	0.555
54.000	0.555
55.000	0.555
56.000	0.557
57.000	0.557
58.000	0.557
59.000	0.558
60.000	0.558

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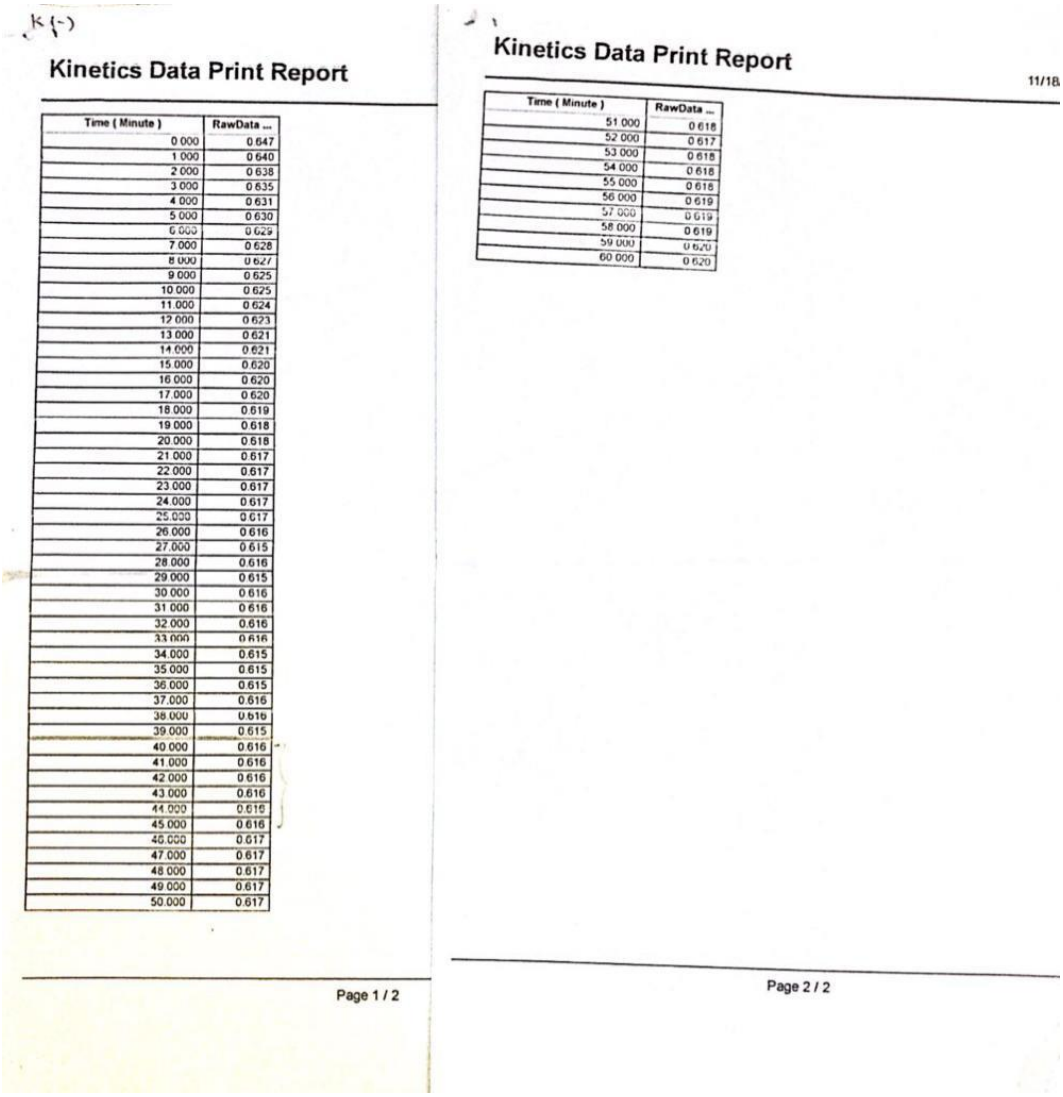
Lampiran 26 *Operating Time* (OT) kontrol (-)



K(-)

Kinetics Data Print Report

Time (Minute)	RawData ...
0.000	0.647
1.000	0.640
2.000	0.638
3.000	0.635
4.000	0.631
5.000	0.630
6.000	0.629
7.000	0.628
8.000	0.627
9.000	0.625
10.000	0.625
11.000	0.624
12.000	0.623
13.000	0.621
14.000	0.621
15.000	0.620
16.000	0.620
17.000	0.620
18.000	0.619
19.000	0.618
20.000	0.618
21.000	0.617
22.000	0.617
23.000	0.617
24.000	0.617
25.000	0.617
26.000	0.616
27.000	0.615
28.000	0.616
29.000	0.615
30.000	0.616
31.000	0.616
32.000	0.616
33.000	0.616
34.000	0.615
35.000	0.615
36.000	0.615
37.000	0.616
38.000	0.616
39.000	0.615
40.000	0.616
41.000	0.616
42.000	0.616
43.000	0.616
44.000	0.616
45.000	0.616
46.000	0.617
47.000	0.617
48.000	0.617
49.000	0.617
50.000	0.617

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Kinetics Data Print Report

11/18

Time (Minute)	RawData ...
51.000	0.618
52.000	0.617
53.000	0.618
54.000	0.618
55.000	0.618
56.000	0.619
57.000	0.619
58.000	0.619
59.000	0.620
60.000	0.620

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Lampiran 27 *Operating Time* (OT) formula terbaik (F1)

Formula terbaik (F1)

Kinetics Data Print Report

11/18/2021 02:34:14 PM

Time (Minute)	RawData ...
0.000	0.693
1.000	0.687
2.000	0.680
3.000	0.676
4.000	0.673
5.000	0.671
6.000	0.670
7.000	0.669
8.000	0.667
9.000	0.666
10.000	0.665
11.000	0.664
12.000	0.663
13.000	0.663
14.000	0.662
15.000	0.662
16.000	0.662
17.000	0.662
18.000	0.662
19.000	0.662
20.000	0.662
21.000	0.661
22.000	0.662
23.000	0.662
24.000	0.662
25.000	0.662
26.000	0.662
27.000	0.663
28.000	0.662
29.000	0.663
30.000	0.663
31.000	0.663
32.000	0.663
33.000	0.663
34.000	0.664
35.000	0.664
36.000	0.665
37.000	0.665
38.000	0.665
39.000	0.666
40.000	0.666
41.000	0.667
42.000	0.667
43.000	0.667
44.000	0.667
45.000	0.668
46.000	0.668
47.000	0.669
48.000	0.670
49.000	0.670
50.000	0.670

Lampiran 28 Hasil uji antioksidan *lotion* ekstrak etanol bunga telang

PENIMBANGAN SERBUK DPPH

Penimbangan Serbuk DPPH = BM DPPH x Volume Larutan x Molaritas DPPH

= 394,32 g/mol x 0,100 Liter x 0004 M

= 0,01578 g = 15,8 mg

Penimbangan ekstrak = 50 mg/50 ml = 1000 ppm

Penimbangan kuersetin = 25 mg/25 ml = 1000 ppm

Penimbangan kontrol positif = 50 mg/ 50 ml = 1000 ppm

Penimbangan kontrol negatif = 50 mg/ 50 ml = 1000 ppm

Penimbangan lotion formula terbaik = 50 mg/50 ml = 1000 ppm

SAMPEL	REPLIKASI	KONSENTRASI (PPM)	ABS SAMPEL	ABS DPPH
KUERSETIN	Replikasi 1	2	0,716	0,766
		4	0,671	
		6	0,618	
		8	0,572	
		10	0,505	
	Replikasi 2	2	0,650	
		4	0,608	
		6	0,579	
		8	0,524	
		10	0,469	
EKSTRAK	Replikasi 1	50	0,478	0,789
		60	0,400	
		70	0,364	
		80	0,322	
		90	0,297	
	Replikasi 2	50	0,505	
		60	0,468	
		70	0,407	
		80	0,316	
		90	0,278	
Kontrol (+)	Replikasi 1	50	0,599	0,84
		60	0,514	
		70	0,438	
		80	0,372	
		90	0,296	
	Replikasi 2	50	0,584	
		60	0,506	
		70	0,424	

		80	0,341
		90	0,283
Kontrol (-)	Replikasi 1	50	0,723
		60	0,709
		70	0,668
		80	0,631
		90	0,586
	Replikasi 2	50	0,719
		60	0,700
		70	0,655
		80	0,623
		90	0,580
Formula terbaik (F1)	Replikasi 1	50	0,620
		60	0,568
		70	0,517
		80	0,455
		90	0,365
	Replikasi 2	50	0,637
		60	0,543
		70	0,520
		80	0,482
		90	0,369

PERHITUNGAN SERI PENGENCERAN

$V_1.C_1=V_2.C_2$

A.) KUERSETIN

1. 2 ppm
   $V_1.C_1= V_2.C_2$

   $V_1.100 = 10.\ 2$

   $V_1 = \frac{20}{100} = 0{,}2$ ml

2. 4 ppm
   $V_1.C_1= V_2.C_2$

   $V_1.100 = 10.\ 4$

   $V_1 = \frac{40}{100} = 0{,}4$ ml

3. 6 ppm
   $V_1.C_1= V_2.C_2$

   $V_1.100 = 10.\ 6$

$V_1 = \frac{60}{100}$ = 0,6 ml

4. 8 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.100 = 10.\ 8$

   $V_1 = \frac{80}{100}$ = 0,8 ml

5. 10 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.100 = 10.\ 10$

   $V_1 = \frac{100}{100}$ = 1 ml

B.) EKSTRAK

1. 50 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 50$

   $V_1 = \frac{500}{1000}$ = 0,5 ml

2. 60 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 60$

   $V_1 = \frac{600}{1000}$ = 0,6 ml

3. 70 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 70$

   $V_1 = \frac{700}{1000}$ = 0,7 ml

4. 80 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 80$

   $V_1 = \frac{800}{1000}$ = 0,8 ml

5. 90 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 90$

   $V_1 = \frac{900}{1000}$ = 0,9 ml

C.) KONTROL (+)

1. 50 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 50$
   $V_1 = \frac{500}{1000} = 0{,}5$ ml

2. 60 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 60$
   $V_1 = \frac{600}{1000} = 0{,}6$ ml

3. 70 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 70$
   $V_1 = \frac{700}{1000} = 0{,}7$ ml

4. 80 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 80$
   $V_1 = \frac{800}{1000} = 0{,}8$ ml

5. 90 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 90$
   $V_1 = \frac{900}{1000} = 0{,}9$ ml

D.) KONTROL (-)

1. 50 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 50$
   $V_1 = \frac{500}{1000} = 0{,}5$ ml

2. 60 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 60$
   $V_1 = \frac{600}{1000} = 0{,}6$ ml

3. 70 ppm

$V_1.C_1 = V_2.C_2$

$V_1.1000 = 10.\ 70$

$V_1 = \frac{700}{1000} = 0{,}7$ ml

4. 80 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 80$

   $V_1 = \frac{800}{1000} = 0{,}8$ ml

5. 90 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 90$

   $V_1 = \frac{900}{1000} = 0{,}9$ ml

E.) FORMULA TERBAIK (F1)

1. 50 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 50$

   $V_1 = \frac{500}{1000} = 0{,}5$ ml

2. 60 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 60$

   $V_1 = \frac{600}{1000} = 0{,}6$ ml

3. 70 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 70$

   $V_1 = \frac{700}{1000} = 0{,}7$ ml

4. 80 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 80$

   $V_1 = \frac{800}{1000} = 0{,}8$ ml

5. 90 ppm
   $V_1.C_1 = V_2.C_2$

   $V_1.1000 = 10.\ 90$

$V_1 = \frac{900}{1000}$ = 0,9 ml

% INHIBISI

% inhibisi = $\frac{absorbansi\ blakon - absorbansi\ sampel}{absorbansi\ blanko}$ x 100%

IC_{50} KUERSETIN

A.) Replikasi 1

1. % inhibisi = $\frac{absorbansi\ blakon - absorbansi\ sampel}{absorbansi\ blanko}$ x 100%

   % inhibisi = $\frac{0,766 - 0,716}{0,766} x\ 100\%$

   % inhibisi = 6,527%

2. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,766 - 0,671}{0,766} x\ 100\%$

   % inhibisi = 12,402%

3. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,766 - 00,618}{0,766} x\ 100\%$

   % inhibisi = 19,321%

4. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,766 - 0,572}{0,766} x\ 100\%$

   % inhibisi = 25,326%

5. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,766 - 0,505}{0,766} x\ 100\%$

   % inhibisi = 34,073%

B.) Replikasi 2

1. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,766 - 0,650}{0,766} x\ 100\%$

   % inhibisi = 15,144%

2. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,766 - 0,608}{0,766} x\ 100\%$

% inhibisi = 20,627%

3. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,766 - 0,579}{0,766} x\ 100\%$

   % inhibisi = 24,413%

4. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,766 - 0,524}{0,766} x\ 100\%$

   % inhibisi = 31,593%

5. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,766 - 0,469}{0,766} x\ 100\%$

   % inhibisi = 38,773%

%INHIBISI EKSTRAK

A.) Replikasi 1

1. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,789 - 0,478}{0,789} x\ 100\%$

   % inhibisi = 39,417%

2. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,789 - 0,400}{0,789} x\ 100\%$

   % inhibisi = 49,303%

3. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,789 - 0,364}{0,789} x\ 100\%$

   % inhibisi = 53,866%

4. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,789 - 0,322}{0,789} x\ 100\%$

   % inhibisi = 59,189%

5. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,789 - 0,297}{0,789} x\ 100\%$

% inhibisi = 62,357%

B.) Replikasi 2

1. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,789 - 0,505}{0,789} x\ 100\%$

   % inhibisi = 35,995%

2. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,789 - 0,468}{0,789} x\ 100\%$

   % inhibisi = 40,684

3. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,789 - 0,407}{0,789} x\ 100\%$

   % inhibisi = 48,416%

4. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,789 - 0,316}{0,789} x\ 100\%$

   % inhibisi = 59,949%

5. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,789 - 0,278}{0,789} x\ 100\%$

   % inhibisi = 64,766%

% INHIBISI K(+)

A.) Replikasi 1

1. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,599}{0,840} x\ 100\%$

   % inhibisi = 28,691%

2. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,514}{0,840} x\ 100\%$

   % inhibisi =38,809%

3. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,438}{0,840} x\ 100\%$

% inhibisi = 47,857%

4. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,372}{0,840} x\ 100\%$

   % inhibisi = 55,714%

5. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,296}{0,840} x\ 100\%$

   % inhibisi = 64,762%

B.) Replikasi 2

1. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,584}{0,840} x\ 100\%$

   % inhibisi = 30,476%

2. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,506}{0,840} x\ 100\%$

   % inhibisi = 39,762%

3. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,424}{0,840} x\ 100\%$

   % inhibisi = 49,524%

4. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,341}{0,840} x\ 100\%$

   % inhibisi = 59,405%

5. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,283}{0,840} x\ 100\%$

   % inhibisi = 66,309%

%INHIBISI KONTROL (-)

A.) Replikasi 1

1. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,748}{0,840} x\ 100\%$

% inhibisi = 10,952%

2. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,719}{0,840} x\ 100\%$

   % inhibisi = 14,405%

3. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,709}{0,840} x\ 100\%$

   % inhibisi = 15,595%

4. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,668}{0,840} x\ 100\%$

   % inhibisi = 20,476%

5. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,631}{0,840} x\ 100\%$

   % inhibisi = 24,881%

B.) Replikasi 2

1. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,723}{0,840} x\ 100\%$

   % inhibisi = 13,929%

2. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,714}{0,840} x\ 100\%$

   % inhibisi = 15,476%

3. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,700}{0,840} x\ 100\%$

   % inhibisi = 16,667%

4. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,655}{0,840} x\ 100\%$

   % inhibisi = 22,024%

5. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,623}{0,840} x\ 100\%$

   % inhibisi = 25,833%

%INHIBISI FORMULA TERBAIK (F1)

A.) Replikasi 1

1. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,620}{0,840} x\ 100\%$

   % inhibisi = 26,191%

2. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,568}{0,840} x\ 100\%$

   % inhibisi = 32,381%

3. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,517}{0,840} x\ 100\%$

   % inhibisi = 38,452%

4. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,455}{0,840} x\ 100\%$

   % inhibisi = 45,833%

5. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,365}{0,840} x\ 100\%$

   % inhibisi = 56,548%

B.) Replikasi 2

1. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,637}{0,840} x\ 100\%$

   % inhibisi = 24,167%

2. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,543}{0,840} x\ 100\%$

% inhibisi = 35,357%

3. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,520}{0,840} x\ 100\%$

   % inhibisi = 38,095%

4. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,482}{0,840} x\ 100\%$

   % inhibisi = 42,619%

5. % inhibisi = $\frac{absorbansi\ blanko - absorbansi\ sampel}{absorbansi\ blanko} x\ 100\%$

   % inhibisi = $\frac{0,840 - 0,369}{0,840} x\ 100\%$

   % inhibisi = 56,071%

Sampel	**Replikasi**	**Hasil regresi linier**	**IC_{50} (ppm)**	**Rata-rata**
Kuersetin	Replikasi 1	a = -0,875 b = 3,4008 r = 0,9774	14,96	14,59
	Replikasi 2	a = 8,6428 b = 2,9112 r = 0,9933	14,21	
Ekstrak	Replikasi 1	a = 13,7902 b = 0,5577 r = 0,9788	64,93	67,49
	Replikasi 2	a = -3,8029 b = 0,7681 r = 0,9896	70,05	
Kontrol (+)	Replikasi 1	a = -15,1663 b = 0,8905 r = 0,9991	73,14	72,07

	Replikasi 2	a = -14,8211 b = 0,9131 r = 0,9983	70,99	
Kontrol (-)	Replikasi 1	a = -6,4879 b = 0,3393 r = 0,9829	166,48	169,65
	Replikasi 2	a = -14,8211 b = 0,9131 r = 0,9983	172,81	
Formula terbaik (F1)	Replikasi 1	a = -12,0352 b = 0,7417 r = 0,9920	83,61	84,40
	Replikasi 2	a = -10,4872 b = 0,7107 r = 0,9687	85,19	

PERHITUNGAN IC_{50}

Y = a+bx

x = nilai IC_{50}

A.) KUERSETIN

1. Replikasi 1

   Y = a+bx

   50 = -0,875 + 3,4008x

   $X = \frac{50-(-0,875)}{3,4008}$

   X = 14,96 ppm

2. Replikasi 2

   Y = a+bx

   50 = 8,6428 + 2,9112x

   $X = \frac{50-8,6428}{2,9112}$

   X = 14,21 ppm

B.) EKSTRAK

1. Replikasi 1

   Y = a+bx

   50 = 13,7902 + 0,5577x

$$X = \frac{50 - 13{,}7902}{0{,}5577}$$

X = 64,93ppm

2. Replikasi 2

Y = a+bx

50 = -3,8029 + 0,7681x

$$X = \frac{50 - (-3{,}8029)}{0{,}7681}$$

X = 70,05 ppm

C.) KONTROL (+)

1. Replikasi 1

Y = a+bx

50 = -15,1663 + 0,8905x

$$X = \frac{50 - (-15{,}1663)}{0{,}8905}$$

X = 73,14 ppm

2. Replikasi 2

Y = a+bx

50 = -14,8211 + 0,9131x

$$X = \frac{50 - (-14{,}8211)}{0{,}9131}$$

X = 70,99 ppm

D.) KONTROL (-)

1. Replikasi 1

Y = a+bx

50 = -6,4879 + 0,3393x

$$X = \frac{50 - (-6{,}4879)}{0{,}3393}$$

X = 166,48 ppm

2. Replikasi 2

Y = a+bx

50 = -2,4642 + 0,3036x

$$X = \frac{50 - (-2{,}4642)}{0{,}3036}$$

X = 172,81 ppm

E.) FORMULA TERBAIK (F1)

1. Replikasi 1

Y = a+bx

50 = -12,0352 + 0,7417x

$X = \frac{50-(-12,0352)}{0,7417}$

X = 83,61 ppm

2. Replikasi 2

Y = a+bx

50 = -10,4872 + 0,7107x

$X = \frac{50-(-10,4872)}{0,7107}$

X = 85,19 ppm

Tests of Normality

		Kolmogorov-Smirnov[a]		
	Formula	Statistic	df	Sig.
IC50	Kuersetin	,260	2	.
	Ekstrak	,260	2	.
	Kontrol Positif	,260	2	.
	Kontrol Negatif	,260	2	.
	Formula Terbaik (F1)	,260	2	.

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
IC50	Based on Mean	1135880135979890800000000000,000	4	5	,000
	Based on Median	1135880135979890800000000000,000	4	5	,000
	Based on Median and with adjusted df	1135880135979890800000000000,000	4	2,000	,000
	Based on trimmed mean	6772949879134752000000000000,000	4	5	,000

ANOVA

IC50					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15478,653	4	3869,663	922,196	,000
Within Groups	20,981	5	4,196		
Total	15499,634	9			

Multiple Comparisons

Dependent Variable: IC50

Dunnett T3

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kuersetin	Ekstrak	-52,90500	2,58732	,067	-122,6333	16,8233
	Kontrol Positif	-57,48000*	1,13853	,014	-78,2466	-36,7134
	Kontrol Negatif	-123,15500*	1,46868	,011	-155,3014	-91,0086
	Formula Terbaik (F1)	-69,81500*	,87449	,004	-82,0154	-57,6146
Ekstrak	Kuersetin	52,90500	2,58732	,067	-16,8233	122,6333
	Kontrol Positif	-4,57500	2,77655	,709	-47,9518	38,8018
	Kontrol Negatif	-70,25000*	2,92746	,017	-105,4853	-35,0147
	Formula Terbaik (F1)	-16,91000	2,67912	,192	-70,2755	36,4555
Kontrol Positif	Kuersetin	57,48000*	1,13853	,014	36,7134	78,2466
	Ekstrak	4,57500	2,77655	,709	-38,8018	47,9518
	Kontrol Negatif	-65,67500*	1,78102	,004	-82,3493	-49,0007
	Formula Terbaik (F1)	-12,33500	1,33406	,053	-25,0607	,3907
Kontrol Negatif	Kuersetin	123,15500*	1,46868	,011	91,0086	155,3014
	Ekstrak	70,25000*	2,92746	,017	35,0147	105,4853
	Kontrol Positif	65,67500*	1,78102	,004	49,0007	82,3493
	Formula Terbaik (F1)	53,34000*	1,62496	,010	33,8361	72,8439

Formula Terbaik (F1)	Kuersetin	69,81500*	,87449	,004	57,6146	82,0154
	Ekstrak	16,91000	2,67912	,192	-36,4555	70,2755
	Kontrol Positif	12,33500	1,33406	,053	-,3907	25,0607
	Kontrol Negatif	-53,34000*	1,62496	,010	-72,8439	-33,8361
*. The mean difference is significant at the 0.05 level.						