L A M P I R A N

Lampiran 1. Determinasi tanaman pegagan

KEMENTERIAN KESEHATAN REPUBLIK INDONESIA
BADAN KEBIJAKAN PEMBANGUNAN KESEHATAN
BALAI BESAR PENELITIAN DAN PENGEMBANGAN
TANAMAN OBAT DAN OBAT TRADISIONAL
Jalan Lawu No.11 Tawamangu, Karanganyar, Jawa Tengah 57792
Telepon (0271) 697 010 Faksimile (0271) 697 451
Laman b2p2toot.litbang.kemkes.go.id Surat Elektronik b2p2toot@litbang.kemkes.go.id

Nomor : KM.04.02/2/1574/2022 01 September 2022
Hal : Keterangan Determinasi

Yth. Dekan Fakultas Farmasi Universitas Setia Budi
Jalan Let. Jend. Sutoyo, Solo 57127

Merujuk surat Saudara nomor: 868/H6-04/22.08.2022 tanggal 22 Agustus 2022 hal permohonan determinasi, dengan ini kami sampaikan bahwa hasil determinasi sampel tanaman sebagai berikut:

Nama Pemohon	: Maudy Agustina
Nama Sampel	: Pegagan
Sampel	: Tanaman Segar
Spesies	: *Centella asiatica* (L.) Urb.
Sinonim	: *Hydrocotyle asiatica* L.
Familia	: Apiaceae
Penanggung Jawab	: Isna Jati Asiyah, M.Sc.

Hasil determinasi tersebut hanya mencakup sampel tanaman yang telah dikirimkan ke dan/atau berasal dari B2P2TOOT.

Atas perhatian Saudara, kami sampaikan terima kasih.

Kepala Balai Besar Penelitian
dan Pengembangan Tanaman Obat
dan Obat Tradisional

Akhmad Saikhu, S.K.M., M.Sc.PH.

Dokumen ini ditandatangani secara elektronik melalui Aplikasi TNDE menggunakan sertifikat elektronik yang diterbitkan oleh BSrE. (1/1)

Lampiran 2. Perhitungan persentase bobot kering terhadap bobot basah pegagan

Bobot basah (g)	Bobot kering (g)	Rendemen (%)
12.000	1.250	10,41

Perhitungan persentase bobot basah terhadap bobot kering :

$$\frac{1.250\ g}{12.00}\ x\ 100\% = 10{,}41\%$$

Lampiran 3. Perhitungan peresentase rendemen serbuk pegagan

Berat kering (g)	Berat serbuk (g)	Rendemen (%)
1.250	1.000	80%

Pehitungan persentase rendemen serbuk :

$$\frac{1.000\ g}{1.250}\ x\ 100\% = 80\%$$

Lampiran 4. Perhitungan peresentase rendemen ekstrak pegagan

Serbuk (g)	Ekstrak (g)	Rendemen (%)
1.000	178	17,8%

Perhitungan persentase rendemen ekstrak :

$$\frac{178\ g}{1.000}\ x\ 100\% = 17{,}8\%$$

Lampiran 5. Perhitungan susut pengeringan ekstrak pegagan

Krus	Bobot (g)	Replikasi			Kadar susut (%)
		1	2	3	
1	2,0158	1,8767	1,8730	1,8712	7,173
2	2,0099	1,8742	1,8728	1,8685	7,035
3	2,0081	1,8726	1,8705	1,8678	6,986
Rata-rata ± SD					7,064 ± 0,096

A.) Bobot krus kosong

-Krus 1 = 36,2536 g

- Krus 2 = 34,5357 g

- Krus 3 = 34,1832 g

B.) Bobot krus dan sampel

- Krus 1 =38,2694 g
- Krus 2 = 36,5456 g
- Krus 3 = 36,1913 g

C.) Bobot sampel

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

A.) Replikasi 1

1. Sampel 1 = 1,8767g

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

= $\frac{2,0158-1,8767}{2,0158}\ x\ 100\%$

= 6,900%

2. Sampel 2 = 1,8742g

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

= $\frac{2,0099-1,8742}{2,0099}\ x\ 100\%$

= 6,751%

3. Sampel 3 = 1,8726g

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

$$= \frac{2{,}0081 - 1{,}8726}{2{,}0081}\ x\ 100\%$$

$$= 6{,}732\%$$

B.) Replikasi 2

1. Sampel 1 = 1,8730g

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

$$= \frac{2{,}0158 - 1{,}8730}{2{,}0158}\ x\ 100\%$$

$$= 7{,}08\%$$

2. Sampel 2 = 1,8728g

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

$$= \frac{2{,}0099 - 1{,}8728}{2{,}0099}\ x\ 100\%$$

$$= 6{,}821\%$$

3. Sampel 3 = 1,8705g

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

$$= \frac{2{,}0081 - 1{,}8705}{2{,}0081}\ x\ 100\%$$

$$= 6{,}852\%$$

C.) Replikasi 3

1. Sampel 1 = 1,8712g

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

$$= \frac{2{,}0158 - 1{,}8712}{2{,}0158}\ x\ 100\%$$

$$\mathbf{= 7{,}173\%}$$

2. Sampel 2 = 1,8685g

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

$$= \frac{2{,}0099 - 1{,}8685}{2{,}0099}\ x\ 100\%$$

$$\mathbf{= 7{,}035\%}$$

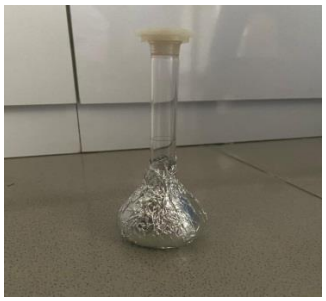
3. Sampel 3 = 1,8768g

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

$$= \frac{2{,}0081 - 1{,}8678}{2{,}0081}\ x\ 100\%$$

$$= \mathbf{6{,}986\%}$$

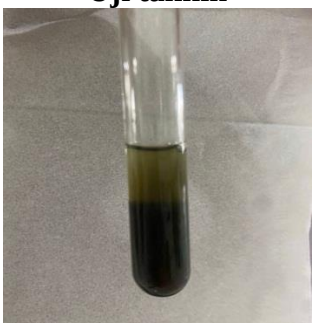
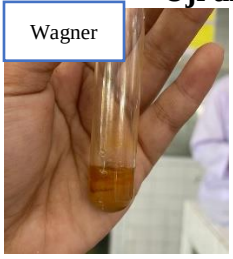
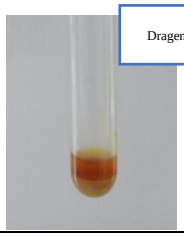
Lampiran 6 alat penelitian

Ayakan mesh 40 	***Rotary evaporator*** 
Timbangan digital 	***Moisture balance*** 
Desikator 	**Oven susut pengeringan** 
Labu ukur 	**Spektrofotometri UV** 

Lampiran 7 Gambar proses maserasi

Pengambilan pegagan 	**Pengeringan pegagan** 
Simplisia kering 	**Serbuk pegagan** 
Proses maserasi 	**Penyaringan** 
Pengentalan ekstrak 	**Ekstrak kental** 

Lampiran 8. Gambar pengujian kandungan senyawa fitokimia pegagan

<table>
<tr>
<td>Uji flavonoid
  </td>
<td>Uji Saponin
  </td>
</tr>
<tr>
<td>Uji tannin
  </td>
<td>Uji alkaloid
Wagner
 
Mayer
 
Dragendroff
  </td>
</tr>
</table>

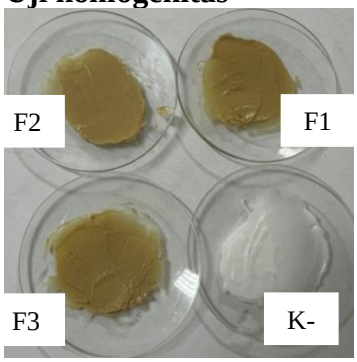
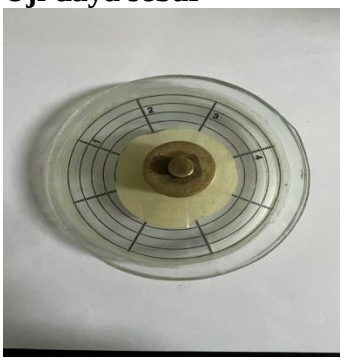
Lampiran 9 Gambar bahan yang digunakan dalam penelitian

Asam stearat 	**TEA** 
Cera alba 	**Propilen glikol** 
Vaslin alba 	**Metil paraben** 
Propil paraben 	**Aquadest** 

Lampiran 10. Alur pembuatan formulasi krim ekstrak pegagan

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

Lampiran 11 Hasil uji mutu fisik krim ekstrak etanol pegagan

<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 12 Hasil uji mutu fisik pH krim ekstrak etanol pegagan

Formula	pH hari ke 1			Rata-rata	± SD
	Replikasi 1	Replikasi 2	Replikasi 3		
1	6.21	6.19	6.25	6.22	0.03
2	6.01	6.07	6.03	6.04	0.03
3	5.91	5.94	5.9	5.92	0.02
K-	6.38	6.39	6.43	6.40	0.03

Formula	pH hari ke 21			Rata-rata	± SD
	Replikasi 1	Replikasi 2	Replikasi 3		
1	6.3	6.34	6.36	6.33	0.03
2	6.13	6.07	6.14	6.11	0.04
3	6.03	6.09	6.04	6.05	0.03
K-	6.51	6.55	6.49	6.52	0.03

Hasil uji pH hari ke-1
Normality

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Uji_pH	Statistic	df	Sig.	Statistic	df	Sig.
Uji_pH_Krim	Formula1	.253	3	.	.964	3	.637
	Formula 2	.253	3	.	.964	3	.637
	Formula 3	.292	3	.	.923	3	.463
	Kontrol -	.314	3	.	.893	3	.363

a. Lilliefors Significance Correction

Homogenity

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Uji_pH_Krim	Based on Mean	.213	3	8	.884
	Based on Median	.083	3	8	.967
	Based on Median and with adjusted df	.083	3	7.652	.967
	Based on trimmed mean	.201	3	8	.893

One-way Anova

ANOVA

Uji_pH_Krim

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.402	3	.134	178.678	.000
Within Groups	.006	8	.001		
Total	.408	11			

Hasil uji pH hari ke-21
Normality

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Uji_pH	Statistic	df	Sig.	Statistic	df	Sig.
Uji_pH_Krim	Formula1	.253	3	.	.964	3	.637
	Formula 2	.337	3	.	.855	3	.253
	Formula 3	.328	3	.	.871	3	.298
	Kontrol -	.253	3	.	.964	3	.637

a. Lilliefors Significance Correction

Homogenity

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Uji_pH_Krim	Based on Mean	.168	3	8	.915
	Based on Median	.013	3	8	.998
	Based on Median and with adjusted df	.013	3	6.836	.998
	Based on trimmed mean	.146	3	8	.929

One-way Anova

ANOVA

Uji_pH_Krim

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.406	3	.135	124.931	.000
Within Groups	.009	8	.001		
Total	.415	11			

Lampiran 13. Hasil uji mutu fisik viskositas krim ekstrak etanol pegagan

Hasil uji viskositas hari ke-1

Formula	Viskositas hari ke 1			Rata-rata	± SD
	Replikasi 1	Replikasi 2	Replikasi 3		
1	17.663	17.475	17.879	17.672	0.20
2	21.450	21.895	21.421	21.588	0.27
3	24.387	24.578	24.889	24.618	0.25
K-	15.364	15.178	15.878	15.473	0.36

Hasil uji viskositas hari ke-21

Formula	Viskositas hari ke 21			Rata-rata	± SD
	Replikasi 1	Replikasi 2	Replikasi 3		
1	19.367	19.723	19.148	19.412	0.29
2	23.498	23.153	23.768	23.473	0.31
3	28.782	28.324	28.679	28.595	0.24
K-	17.387	17.8677	17.261	17.505	0.32

Hasil uji viskositas hari ke-1

Normality

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Uji_Viskositas	Statistic	df	Sig.	Statistic	df	Sig.
Uji_Viskositas_Krim	Formula 1	.185	3	.	.998	3	.924
	Formula 2	.366	3	.	.796	3	.104
	Formula 3	.229	3	.	.981	3	.738
	Kontrol -	.285	3	.	.932	3	.495

a. Lilliefors Significance Correction

Homogenity

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Uji_Viskositas_Krim	Based on Mean	.629	3	8	.616
	Based on Median	.128	3	8	.941
	Based on Median and with adjusted df	.128	3	6.127	.940
	Based on trimmed mean	.573	3	8	.649

One-way Anova

ANOVA

Uji_Viskositas_Krim

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	148.961	3	49.654	646.688	.000
Within Groups	.614	8	.077		
Total	149.575	11			

Hasil uji viskositas hari ke-21

Normality

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Uji_Viskositas	Statistic	df	Sig.	Statistic	df	Sig.
Uji_Viskositas_Krim	Foemula 1	.229	3	.	.981	3	.739
	Formula 2	.197	3	.	.996	3	.874
	Foemula 3	.303	3	.	.908	3	.413
	Kontrol -	.311	3	.	.898	3	.379

a. Lilliefors Significance Correction

Homogenity

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Uji_Viskositas_Krim	Based on Mean	.106	3	8	.955
	Based on Median	.042	3	8	.988
	Based on Median and with adjusted df	.042	3	7.265	.987
	Based on trimmed mean	.099	3	8	.959

One-way Anova

ANOVA

Uji_Viskositas_Krim

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	216.973	3	72.324	856.825	.000
Within Groups	.675	8	.084		
Total	217.648	11			

Lampiran 14. Hasil uji mutu fisik daya sebar krim ekstrak etanol pegagan

Hari ke-1

Formula	Beban (g)	Luas daya sebar (cm)			Rata-rata	± SD
		Replikasi 1	Replikasi 2	Replikasi 3		
F1	Tanpa beban	5.8	5.9	5.7	5.8	0.1
	50	5.9	6	5.8	5.9	0.1
	150	6.1	6.3	6	6.1	0.1
F2	Tanpa beban	5.4	5.7	5.8	5.6	0.2
	50	5.9	5.8	5.9	5.8	0.05
	150	6.2	6	6.1	6.1	0.1
F3	Tanpa beban	4.4	4.3	4.5	4.4	0.1
	50	4.6	4.4	4.7	4.5	0.1
	150	4.75	4.7	4.85	4.7	0.07
K(-)	Tanpa beban	5.15	6	5.9	5.6	0.4
	50	5.5	6.2	6.1	5.9	0.3
	150	5.7	6.5	6.3	6.1	0.4

Hari ke-21

Formula	Beban (g)	Luas daya sebar (cm)			Rata-rata	± SD
		Replikasi 1	Replikasi 2	Replikasi 3		
F1	Tanpa beban	5.5	5.7	5.6	5.6	0.1
	50	5.65	5.9	5.8	5.7	0.1
	150	5.8	6	5.9	5.9	0.1
F2	Tanpa beban	5.45	5.2	5.3	5.3	0.1
	50	5.7	5.5	5.4	5.5	0.1
	150	6	5.8	5.6	5.8	0.2
F3	Tanpa beban	4.25	4.1	4.3	4.2	0.1
	50	4.4	4.2	4.4	4.3	0.1
	150	4.5	4.4	4.55	4.4	0.07
K(-)	Tanpa beban	5.8	5.7	5.5	5.6	0.1
	50	6.4	6.1	5.9	6.1	0.2
	150	6.6	6.3	6.4	6.4	0.1

Hasil uji daya sebar hari ke-1
Normality

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Uji_dayasebar	Statistic	df	Sig.	Statistic	df	Sig.
Uji_dayasebar_krim_harike1	Formula 1	.157	9	.200*	.952	9	.712
	Formula 2	.166	9	.200*	.960	9	.794
	Formula 3	.187	9	.200*	.948	9	.669
	Kontrol negatif	.140	9	.200*	.971	9	.901

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Homogenity

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Uji_dayasebar_krim_harike1	Based on Mean	2.666	3	32	.064
	Based on Median	2.123	3	32	.117
	Based on Median and with adjusted df	2.123	3	19.268	.131
	Based on trimmed mean	2.598	3	32	.069

One-way Anova

ANOVA

Uji_dayasebar_krim_harike1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.064	3	4.021	53.653	.000
Within Groups	2.398	32	.075		
Total	14.462	35			

Hasil uji daya sebar hari ke-21
Normality

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Uji_dayasebar	Statistic	df	Sig.	Statistic	df	Sig.
Uji_dayasebar_krim_harike21	Formula 1	.151	9	.200*	.972	9	.914
	Formula 2	.134	9	.200*	.980	9	.962
	Formula 3	.205	9	.200*	.964	9	.835
	Kontrol negatif	.169	9	.200*	.954	9	.731

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Homogenity

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Uji_dayasebar_krim_harike21	Based on Mean	4.844	3	32	.007
	Based on Median	3.952	3	32	.017
	Based on Median and with adjusted df	3.952	3	25.845	.019
	Based on trimmed mean	4.781	3	32	.007

One-way Anova

ANOVA

Uji_dayasebar_krim_harike21

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.498	3	5.166	82.589	.000
Within Groups	2.002	32	.063		
Total	17.500	35			

Lampiran 15. Hasil uji mutu fisik daya lekat krim ekstrak etanol pegagan

Formula	Daya lekat (detik) hari ke 1			Rata-rata	± SD
	Replikasi 1	Replikasi 2	Replikasi 3		
1	2.78	2.72	2.75	2.75	0.03
2	3.2	3.22	3.26	3.23	0.03
3	3.97	3.96	3.94	3.95	0.02
K-	2.75	2.74	2.72	2.73	0.01

Formula	Daya lekat (detik) hari ke 21			Rata-rata	± SD
	Replikasi 1	Replikasi 2	Replikasi 3		
1	2.94	2.89	2.93	2.92	0.03
2	3.68	3.65	3.71	3.68	0.03
3	3.99	3.98	4.06	4.01	0.04
K-	3.02	2.93	2.97	2.97	0.04

Hasil uji daya lekat hari ke-1

Normality

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	DayaLekat_	Statistic	df	Sig.	Statistic	df	Sig.
Lekat	Formula 1	.175	3	.	1.000	3	1.000
	Formula 2	.253	3	.	.964	3	.637
	Formula 3	.253	3	.	.964	3	.637
	Kontrol -	.382	3	.	.758	3	.017

a. Lilliefors Significance Correction

Homogenity

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Lekat	Based on Mean	14.489	3	8	.956
	Based on Median	.927	3	8	.471
	Based on Median and with adjusted df	.927	3	2.010	.556
	Based on trimmed mean	11.474	3	8	.007

One-way Anova

ANOVA

Lekat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.347	3	.782	9.811	.000
Within Groups	.638	8	.080		
Total	2.985	11			

Hasil uji daya lekat hari ke-21
Normality

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	DayaLekat_	Statistic	df	Sig.	Statistic	df	Sig.
Lekat	Formula 1	.314	3	.	.893	3	.363
	Formula 2	.175	3	.	1.000	3	1.000
	Formula 3	.343	3	.	.842	3	.220
	Kontrol -	.314	3	.	.893	3	.363

a. Lilliefors Significance Correction

Homogenity

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Lekat	Based on Mean	.727	3	8	.564
	Based on Median	.103	3	8	.956
	Based on Median and with adjusted df	.103	3	5.365	.955
	Based on trimmed mean	.646	3	8	.607

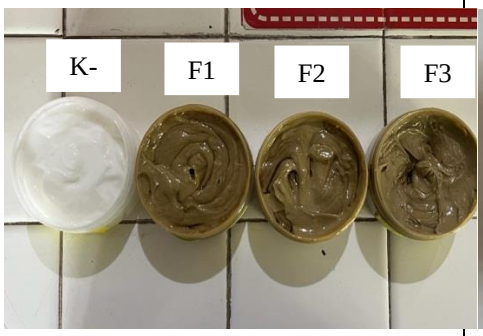
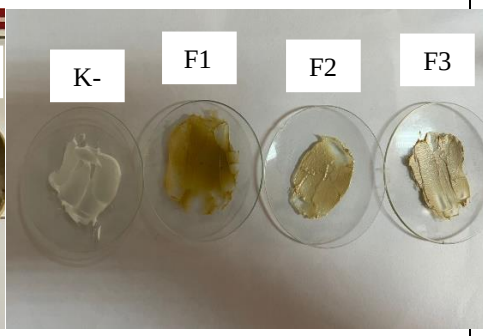
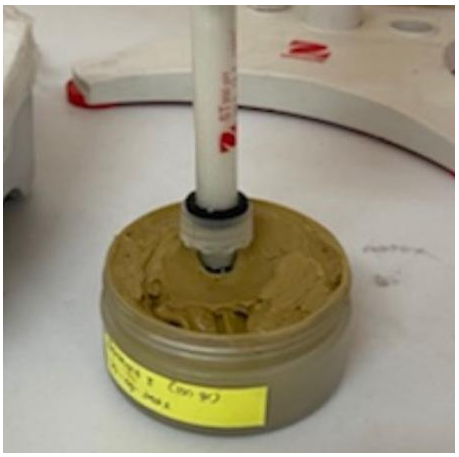
One-way Anova

ANOVA

Lekat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.547	3	.849	808.571	.000
Within Groups	.008	8	.001		
Total	2.555	11			

Lampiran 16. Gambar uji hasil *cycling test* formula krim ekstrak etanol pegagan

<table>
<tr><td>Sediaan hasil cycling test
 
</td><td>Uji homogenitas cycling test
 
</td></tr>
<tr><td>Uji viskositas cycling test
 
</td><td>Uji pH cycling test
  </td></tr>
</table>

Lampiran 17 Hasil uji stabilitas pH krim ekstrak etanol pegagan

Formula	pH sebelum *cycling Test*			Rata-rata ± SD	
	Replikasi 1	Replikasi 2	Replikasi 3		
1	6.23	6.24	6.22	6.23	0.01
2	6.01	6.06	6.03	6.03	0.03
3	5.78	5.76	5.73	5.76	0.03
K-	6.49	6.45	6.48	6.47	0.02

Formula	pH sesudah *cycling Test*			Rata-rata ± SD	
	Replikasi 1	Replikasi 2	Replikasi 3		
1	6.32	6.30	6.29	6.30	0.02
2	6.14	6.11	6.13	6.13	0.02
3	5.86	5.83	5.85	5.85	0.02
K-	6.57	6.55	6.54	6.55	0.02

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	F1_Sebelumcyling	6.2300	3	.01000	.00577
	F1_Sesudahcyling	6.3033	3	.01528	.00882
Pair 2	F2_Sebelumcyling	6.0333	3	.02517	.01453
	F2_Sesudahcyling	6.1267	3	.01528	.00882
Pair 3	F3_Sebelumcyling	5.7567	3	.02517	.01453
	F3_Sesudahcyling	5.8467	3	.01528	.00882
Pair 4	F4_Sebelumcyling	6.4733	3	.02082	.01202
	F4_Sesudahcyling	6.5533	3	.01528	.00882

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	F1_Sebelumcyling & F1_Sesudahcyling	3	.327	.788
Pair 2	F2_Sebelumcyling & F2_Sesudahcyling	3	-.997	.048
Pair 3	F3_Sebelumcyling & F3_Sesudahcyling	3	.217	.861
Pair 4	F4_Sebelumcyling & F4_Sesudahcyling	3	.419	.725

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	F1_Sebelumcyling - F1_Sesudahcyling	-.07333	.01528	.00882	-.11128	-.03539	-8.315	2	.014
Pair 2	F2_Sebelumcyling - F2_Sesudahcyling	-.09333	.04041	.02333	-.19373	.00706	-4.000	2	.057
Pair 3	F3_Sebelumcyling - F3_Sesudahcyling	-.09000	.02646	.01528	-.15572	-.02428	-5.892	2	.028
Pair 4	F4_Sebelumcyling - F4_Sesudahcyling	-.08000	.02000	.01155	-.12968	-.03032	-6.928	2	.020

Lampiran 18. Hasil uji stabilitas viskositas krim ekstrak etanol pegagan

Hasil uji viskositas hari ke-1

Formula	Viskositas sebelum *cycling Test*			Rata-rata ± SD	
	Replikasi 1	Replikasi 2	Replikasi 3		
1	17.663	17.475	17.879	17.672	0.20
2	21.450	21.895	21.421	21.588	0.27
3	24.387	24.578	24.889	24.618	0.25
K-	15.364	15.178	15.878	15.473	0.36

Hasil uji viskositas hari ke-21

Formula	Viskositas sesudah *cycling Test*			Rata-rata ± SD sesudah	
	Replikasi 1	Replikasi 2	Replikasi 3		
1	18.779	18.589	18.648	18.672	0.10
2	21.689	21.959	21.821	21.823	0.14
3	26.578	26.562	26.798	26.642	0.13
K-	16.364	16.178	16.478	16.340	0.15

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	F1_Sebelumcyling	17.6723	3	.20216	.11672
	F1_Sesudahcyling	18.6720	3	.09725	.05615
Pair 2	F2_Sebelumcyling	21.5887	3	.26569	.15340
	F2_Sesudahcyling	21.8230	3	.13501	.07795
Pair 3	F3_Sebelumcyling	24.6180	3	.25338	.14629
	F3_Sesudahcyling	26.6460	3	.13188	.07614
Pair 4	F4_Sebelumcyling	15.4733	3	.36258	.20934
	F4_Sesudahcyling	16.3400	3	.15143	.08743

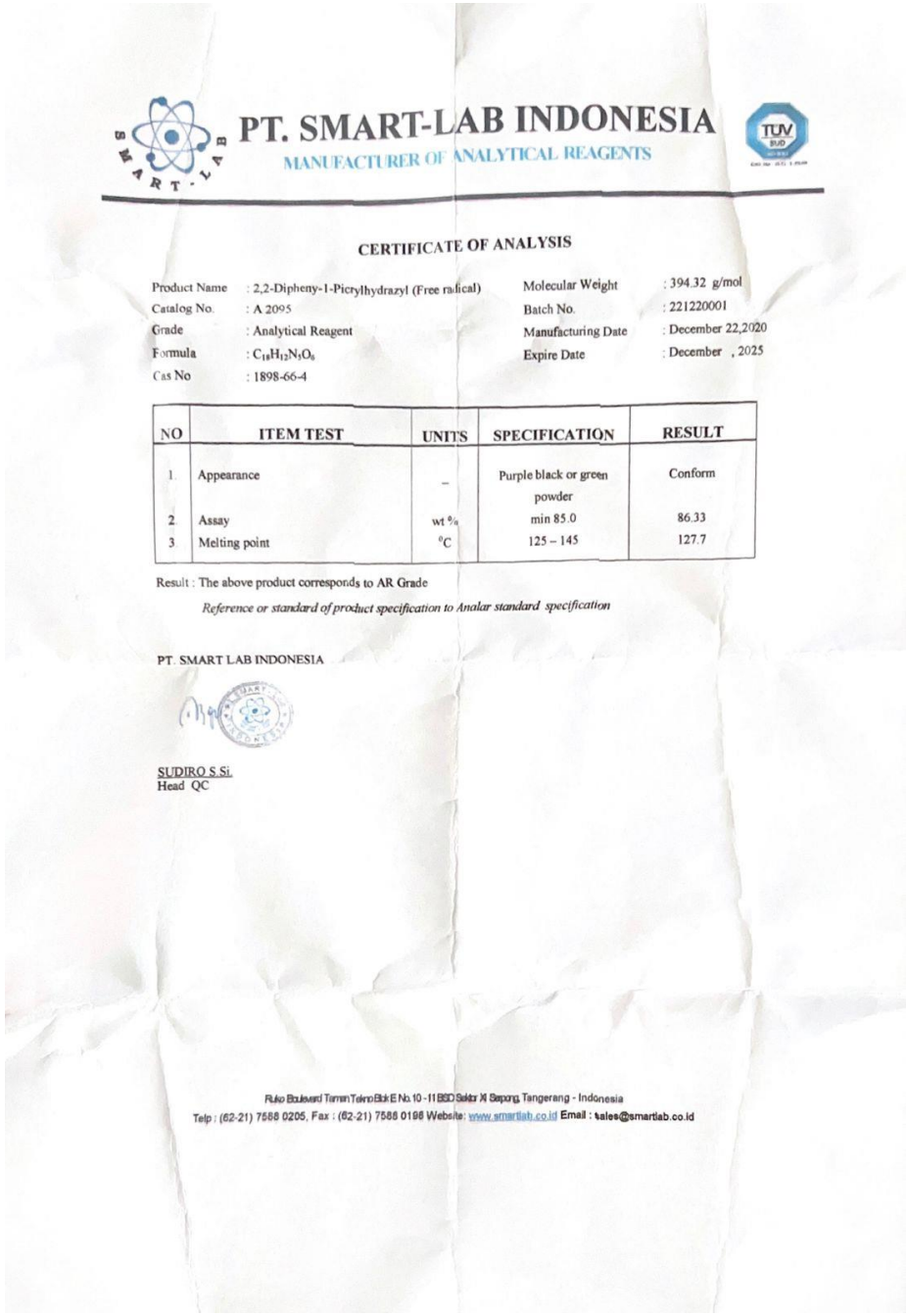
Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	F1_Sebelumcyling & F1_Sesudahcyling	3	.265	.829
Pair 2	F2_Sebelumcyling & F2_Sesudahcyling	3	.844	.360
Pair 3	F3_Sebelumcyling & F3_Sesudahcyling	3	.902	.285
Pair 4	F4_Sebelumcyling & F4_Sesudahcyling	3	.920	.256

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	F1_Sebelumcyling - F1_Sesudahcyling	-.99967	.19977	.11533	-1.49591	-.50342	-8.668	2	.013
Pair 2	F2_Sebelumcyling - F2_Sesudahcyling	-.23433	.16805	.09702	-.65179	.18312	-2.415	2	.137
Pair 3	F3_Sebelumcyling - F3_Sesudahcyling	-2.02800	.14606	.08433	-2.39083	-1.66517	-24.049	2	.002
Pair 4	F4_Sebelumcyling - F4_Sesudahcyling	-.86667	.23094	.13333	-1.44035	-.29298	-6.500	2	.023

Lampiran 19. Certificate of Analysis (COA) DPPH



PT. SMART-LAB INDONESIA
MANUFACTURER OF ANALYTICAL REAGENTS

CERTIFICATE OF ANALYSIS

Product Name	: 2,2-Dipheny-1-Picrylhydrazyl (Free radical)	Molecular Weight	: 394.32 g/mol
Catalog No.	: A 2095	Batch No.	: 221220001
Grade	: Analytical Reagent	Manufacturing Date	: December 22,2020
Formula	: $C_{18}H_{12}N_5O_6$	Expire Date	: December , 2025
Cas No	: 1898-66-4		

NO	ITEM TEST	UNITS	SPECIFICATION	RESULT
1	Appearance	–	Purple black or green powder	Conform
2	Assay	wt %	min 85.0	86.33
3	Melting point	°C	125 – 145	127.7

Result : The above product corresponds to AR Grade

Reference or standard of product specification to Analar standard specification

PT. SMART LAB INDONESIA

SUDIRO S.Si.
Head QC

Ruko Boulevard Taman Tekno Blok E No.10 - 11 BSD Sektor XI Serpong, Tangerang - Indonesia
Telp : (62-21) 7588 0205, Fax : (62-21) 7588 0198 Website: www.smartlab.co.id Email : sales@smartlab.co.id

Lampiran 20. ***Operating Time*** **(OT) kuersetin**

Kinetics Data Print Rep

Time (Minute)	RawData ...
0.000	0.652
1.000	0.660
2.000	0.658
3.000	0.656
4.000	0.654
5.000	0.654
6.000	0.653
7.000	0.652
8.000	0.652
9.000	0.651
10.000	0.650
11.000	0.649
12.000	0.649
13.000	0.648
14.000	0.647
15.000	0.647
16.000	0.647
17.000	0.646
18.000	0.646
19.000	0.645
20.000	0.645
21.000	0.644
22.000	0.644
23.000	0.643
24.000	0.643
25.000	0.643
26.000	0.643
27.000	0.642
28.000	0.641
29.000	0.641
30.000	0.641
31.000	0.641
32.000	0.640
33.000	0.640
34.000	0.640
35.000	0.640
36.000	0.640
37.000	0.639
38.000	0.639
39.000	0.639
40.000	0.638
41.000	0.638
42.000	0.638
43.000	0.638
44.000	0.637
45.000	0.637
46.000	0.637
47.000	0.637
48.000	0.636
49.000	0.636
50.000	0.636

Kinetics Data Print Report

Time (Minute)	RawData ...
51.000	0.636
52.000	0.636
53.000	0.636
54.000	0.635
55.000	0.635
56.000	0.635
57.000	0.635
58.000	0.635
59.000	0.635
60.000	0.634

Page

Lampiran 21. ***Operating Time*** **(OT) ekstrak**

Kinetics Data Print Rep

Time (Minute)	RawData ...
0.000	0.725
1.000	0.726
2.000	0.725
3.000	0.725
4.000	0.725
5.000	0.724
6.000	0.724
7.000	0.723
8.000	0.722
9.000	0.722
10.000	0.722
11.000	0.722
12.000	0.722
13.000	0.721
14.000	0.721
15.000	0.721
16.000	0.721
17.000	0.721
18.000	0.720
19.000	0.720
20.000	0.720
21.000	0.719
22.000	0.719
23.000	0.719
24.000	0.719
25.000	0.718
26.000	0.718
27.000	0.717
28.000	0.717
29.000	0.717
30.000	0.716
31.000	0.716
32.000	0.716
33.000	0.715
34.000	0.715
35.000	0.715
36.000	0.715
37.000	0.715
38.000	0.715
39.000	0.715
40.000	0.715
41.000	0.715
42.000	0.715
43.000	0.715
44.000	0.715
45.000	0.715
46.000	0.714
47.000	0.714
48.000	0.714
49.000	0.714
50.000	0.714

Kinetics Data Print Report

Time (Minute)	RawData ...
51.000	0.713
52.000	0.713
53.000	0.713
54.000	0.713
55.000	0.713
56.000	0.713
57.000	0.714
58.000	0.714
59.000	0.714
60.000	0.714

Page 2 / 2

Lampiran 22. *Operating Time* (OT) kontrol (-)

Kinetics Data Print Repo

Time (Minute)	RawData ...
0.000	1.016
1.000	1.019
2.000	1.021
3.000	1.021
4.000	1.021
5.000	1.021
6.000	1.021
7.000	1.021
8.000	1.022
9.000	1.022
10.000	1.022
11.000	1.022
12.000	1.022
13.000	1.022
14.000	1.022
15.000	1.022
16.000	1.023
17.000	1.022
18.000	1.022
19.000	1.023
20.000	1.023
21.000	1.023
22.000	1.023
23.000	1.023
24.000	1.024
25.000	1.023
26.000	1.024
27.000	1.024
28.000	1.024
29.000	1.024
30.000	1.025
31.000	1.025
32.000	1.025
33.000	1.025
34.000	1.026
35.000	1.026
36.000	1.026
37.000	1.026
38.000	1.026
39.000	1.026
40.000	1.027
41.000	1.027
42.000	1.027
43.000	1.028
44.000	1.028
45.000	1.028
46.000	1.028
47.000	1.028
48.000	1.029
49.000	1.029
50.000	1.029

Kinetics Data Print Report

Time (Minute)	RawData ...
51.000	1.029
52.000	1.030
53.000	1.030
54.000	1.031
55.000	1.031
56.000	1.031
57.000	1.031
58.000	1.032
59.000	1.032
60.000	1.032

Lampiran 23. *Operating Time* (OT) formula terbaik

Kinetics Data Print Repo

Time (Minute)	RawData ...
0.000	0.948
1.000	0.946
2.000	0.944
3.000	0.946
4.000	0.947
5.000	0.946
6.000	0.944
7.000	0.943
8.000	0.944
9.000	0.943
10.000	0.943
11.000	0.942
12.000	0.941
13.000	0.941
14.000	0.940
15.000	0.940
16.000	0.940
17.000	0.939
18.000	0.939
19.000	0.939
20.000	0.938
21.000	0.938
22.000	0.938
23.000	0.938
24.000	0.937
25.000	0.937
26.000	0.937
27.000	0.937
28.000	0.937
29.000	0.937
30.000	0.937
31.000	0.936
32.000	0.936
33.000	0.936
34.000	0.936
35.000	0.936
36.000	0.936
37.000	0.936
38.000	0.936
39.000	0.936
40.000	0.935
41.000	0.936
42.000	0.936
43.000	0.936
44.000	0.936
45.000	0.936
46.000	0.936
47.000	0.936
48.000	0.936
49.000	0.936
50.000	0.936

Kinetics Data Print Report

Time (Minute)	RawData ...
51.000	0.936
52.000	0.936
53.000	0.936
54.000	0.935
55.000	0.935
56.000	0.935
57.000	0.934
58.000	0.934
59.000	0.934
60.000	0.934

Lampiran 24. Hasil uji antioksidan krim ekstrak etanol pegagan

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 = 10 mg/100 ml = 100 ppm

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

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

SAMPEL	REPLIKASI	KONSENTRASI (PPM)	ABS SAMPEL	ABS DPPH
KUERSETIN	Replikasi 1	4	0,823	1,067
		8	0,725	
		12	0,630	
		16	0,545	
		20	0,382	
	Replikasi 2	4	0,831	
		8	0,725	
		12	0,585	
		16	0,576	
		20	0,359	
	Replikasi 3	4	0,814	
		8	0,716	
		12	0,636	
		16	0,536	
		20	0,372	
EKSTRAK	Replikasi 1	50	0.705	1,068
		60	0.611	
		70	0.536	
		80	0.412	
		90	0.322	
	Replikasi 2	50	0.712	
		60	0.621	
		70	0.507	
		80	0.412	
		90	0.304	
	Replikasi 2	50	0.726	
		60	0.624	
		70	0.535	
		80	0.425	
		90	0.312	

SAMPEL	REPLIKASI	KONSENTRASI (PPM)	ABS SAMPEL	ABS DPPH
Kontrol (-)	Replikasi 1	50	1.011	1,051
		60	0.994	
		70	0.978	
		80	0.957	
		90	0.935	
	Replikasi 2	50	1.027	
		60	1.002	
		70	0.982	
		80	0.965	
		90	0.954	
	Replikasi 3	50	1.014	
		60	0.996	
		70	0.982	
		80	0.953	
		90	0.942	
Formula terbaik (F1)	Replikasi 1	50	0.969	1,027
		60	0.878	
		70	0.804	
		80	0.748	
		90	0.688	
	Replikasi 2	50	0.985	
		60	0.913	
		70	0.862	
		80	0.787	
		90	0.702	
	Replikasi 3	50	0.987	
		60	0.893	
		70	0.796	
		80	0.715	
		90	0.659	

PERHITUNGAN SERI PENGENCERAN

$V_1.C_1=V_2.C_2$

A.) KUERSETIN

1. 4 ppm

   $V_1.C_1= V_2.C_2$

   $V_1.100 = 5.4$

   $V_1 = \frac{20}{100} = 0{,}2$ ml
2. 8 ppm

   $V_1.C_1= V_2.C_2$

   $V_1.100 = 5 . 8$

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

3. 12 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.100 = 5 . 12$
   $V_1 = \frac{60}{100}$ = 0,6 ml
4. 16 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.100 = 5 . 16$
   $V_1 = \frac{80}{100}$ = 0,8 ml
5. 20 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.100 = 5 . 20$
   $V_1 = \frac{100}{100}$ = 1 ml

B.) EKSTRAK

1. 50 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10. 50$
   $V_1 = \frac{100}{1000}$ = 0,5 ml
2. 60 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10. 60$
   $V_1 = \frac{120}{1000}$ = 0,6 ml
3. 70 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10. 70$
   $V_1 = \frac{140}{1000}$ = 0,7 ml
4. 80 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10. 80$
   $V_1 = \frac{160}{1000}$ = 0,8 ml
5. 90 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10. 90$
   $V_1 = \frac{180}{1000}$ = 0,9 ml

C.) KONTROL NEGATIF

1. 50 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 50$
   $V_1 = \frac{100}{1000} = 0{,}5$ ml
2. 60 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 60$
   $V_1 = \frac{120}{1000} = 0{,}6$ ml
3. 70 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 70$
   $V_1 = \frac{140}{1000} = 0{,}7$ ml
4. 80 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 80$
   $V_1 = \frac{160}{1000} = 0{,}8$ ml
5. 90 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 90$
   $V_1 = \frac{180}{1000} = 0{,}9$ ml

D.) FORMULA TERBAIK

1. 50 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 50$
   $V_1 = \frac{100}{1000} = 0{,}5$ ml
2. 60 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 60$
   $V_1 = \frac{120}{1000} = 0{,}6$ ml
3. 70 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 70$
   $V_1 = \frac{140}{1000} = 0{,}7$ ml

4. 80 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 80$
   $V_1 = \frac{160}{1000} = 0{,}8$ ml
5. 90 ppm
   $V_1.C_1 = V_2.C_2$
   $V_1.1000 = 10.\ 90$
   $V_1 = \frac{180}{1000} = 0{,}9$ ml

% INHIBISI

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

%INHIBISI KUERSETIN

A.) Replikasi 1

1. $\% \text{ inhibisi} = \frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$
   $\% \text{ inhibisi} = \frac{1{,}067 - 0{,}823}{1{,}067}\ x\ 100\%$
   $\% \text{ inhibisi} = 22{,}8679\%$
2. $\% \text{ inhibisi} = \frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$
   $\% \text{ inhibisi} = \frac{1{,}067 - 0{,}725}{1{,}067}\ x\ 100\%$
   $\% \text{ inhibisi} = 32{,}0525\%$
3. $\% \text{ inhibisi} = \frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$
   $\% \text{ inhibisi} = \frac{1{,}067 - 0{,}630}{1{,}067}\ x\ 100\%$
   $\% \text{ inhibisi} = 40{,}9560\%$
4. $\% \text{ inhibisi} = \frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$
   $\% \text{ inhibisi} = \frac{1{,}067 - 0{,}545}{1{,}067}\ x\ 100\%$
   $\% \text{ inhibisi} = 48{,}9222\%$
5. $\% \text{ inhibisi} = \frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$
   $\% \text{ inhibisi} = \frac{1{,}067 - 0{,}382}{1{,}067}\ x\ 100\%$
   $\% \text{ inhibisi} = 64{,}1987\%$

B.) Replikasi 2

1. $\% \text{ inhibisi} = \frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$
   $\% \text{ inhibisi} = \frac{1{,}067 - 0{,}831}{1{,}067}\ x\ 100\%$

% inhibisi = 22,1181%

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

   % inhibisi = $\frac{1{,}067-0{,}725}{1{,}067}\ x\ 100\%$

   % inhibisi = 32,0525%

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

   % inhibisi = $\frac{1{,}067-0{,}585}{1{,}067}\ x\ 100\%$

   % inhibisi = 45, 1734%

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

   % inhibisi = $\frac{1{,}067-0{,}576}{1{,}067}\ x\ 100\%$

   % inhibisi = 46,0169%

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

   % inhibisi = $\frac{1{,}067-0{,}359}{1{,}067}\ x\ 100\%$

   % inhibisi = 66,3543%

C.) Replikasi 3

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

   % inhibisi = $\frac{1{,}067-0{,}814}{1{,}067}\ x\ 100\%$

   % inhibisi = 23,7113%

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

   % inhibisi = $\frac{1{,}067-0{,}716}{1{,}067}\ x\ 100\%$

   % inhibisi = 32,8960%

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

   % inhibisi = $\frac{1{,}067-0{,}636}{1{,}067}\ x\ 100\%$

   % inhibisi = 40,3936%

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

   % inhibisi = $\frac{1{,}067-0{,}536}{1{,}067}\ x\ 100\%$

   % inhibisi = 49,7657%

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

   % inhibisi = $\frac{1{,}067-0{,}372}{1{,}067}\ x\ 100\%$

   % inhibisi = 65,1359%

%INHIBISI EKSTRAK

A.) Replikasi 1

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

   % inhibisi = $\frac{1{,}0685 - 0{,}705}{1{,}0685}\ x\ 100\%$

   % inhibisi = 34,0197%
2. % inhibisi = $\frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$

   % inhibisi = $\frac{1{,}0685 - 0{,}611}{1{,}0685}\ x\ 100\%$

   % inhibisi = 42,8170%
3. % inhibisi = $\frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$

   % inhibisi = $\frac{1{,}0685 - 0{,}536}{1{,}0685}\ x\ 100\%$

   % inhibisi = 49,8362%
4. % inhibisi = $\frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$

   % inhibisi = $\frac{1{,}0685 - 0{,}412}{1{,}0685}\ x\ 100\%$

   % inhibisi = 61,4413%
5. % inhibisi = $\frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$

   % inhibisi = $\frac{1{,}0685 - 0{,}322}{1{,}0685}\ x\ 100\%$

   % inhibisi = 69,8643%

B.) Replikasi 2

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

   % inhibisi = $\frac{1{,}0685 - 0{,}712}{1{,}0685}\ x\ 100\%$

   % inhibisi = 33,3645%
2. % inhibisi = $\frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$

   % inhibisi = $\frac{1{,}0685 - 0{,}621}{1{,}0685}\ x\ 100\%$

   % inhibisi = 41,8811%
3. % inhibisi = $\frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$

   % inhibisi = $\frac{1{,}0685 - 0{,}507}{1{,}0685}\ x\ 100\%$

   % inhibisi = 52,5503%
4. % inhibisi = $\frac{Absorbansi\ blakon - absorbansi\ sampel}{Absorbansi\ blakon}\ x\ 100\%$

   % inhibisi = $\frac{1{,}0685 - 0{,}412}{1{,}0685}\ x\ 100\%$

   % inhibisi = 61,4413%

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

   % inhibisi = $\frac{1{,}0685 - 0{,}304}{1{,}0685}\ x\ 100\%$

   % inhibisi = 71,5489%

C.) Replikasi 3

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

   % inhibisi = $\frac{1{,}0685 - 0{,}712}{1{,}0685}\ x\ 100\%$

   % inhibisi = 32,0543%

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

   % inhibisi = $\frac{1{,}0685 - 0{,}624}{1{,}0685}\ x\ 100\%$

   % inhibisi = 41,6004%

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

   % inhibisi = $\frac{1{,}0685 - 0{,}535}{1{,}0685}\ x\ 100\%$

   % inhibisi = 8,8160%

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

   % inhibisi = $\frac{1{,}0685 - 0{,}425}{1{,}0685}\ x\ 100\%$

   % inhibisi = 10,6114%

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

   % inhibisi = $\frac{1{,}0685 - 0{,}312}{1{,}0685}\ x\ 100\%$

   % inhibisi = 70,8002%

%INHIBISI KONTROL NEGATIF

A.) Replikasi 1

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

   % inhibisi = $\frac{1{,}051 - 1.027}{1{,}051}\ x\ 100\%$

   % inhibisi = 2,2835%

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

   % inhibisi = $\frac{1{,}051 - 1{,}002}{1{,}051}\ x\ 100\%$

   % inhibisi = 4,6622%

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

   % inhibisi = $\frac{1{,}051 - 0.982}{1{,}051}\ x\ 100\%$

% inhibisi = 6.5652%

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

   % inhibisi = $\frac{1,051-0,965}{1,051}\ x\ 100\%$

   % inhibisi = 8,1827%

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

   % inhibisi = $\frac{1,051-0,954}{1,051}\ x\ 100\%$

   % inhibisi = 9,2293%

B.) Replikasi 2

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

   % inhibisi = $\frac{1,051-1,014}{1,051}\ x\ 100\%$

   % inhibisi = 3,5205%

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

   % inhibisi = $\frac{1,051-0,996}{1,051}\ x\ 100\%$

   % inhibisi = 5,2331%

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

   % inhibisi = $\frac{1,051-0,982}{1,051}\ x\ 100\%$

   % inhibisi = 6,5652%

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

   % inhibisi = $\frac{1,051-0,953}{1,051}\ x\ 100\%$

   % inhibisi = 9,3245%

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

   % inhibisi = $\frac{1,051-0,942}{1,051}\ x\ 100\%$

   % inhibisi = 10,3711%

C.) Replikasi 3

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

   % inhibisi = $\frac{1,051-1,011}{1,051}\ x\ 100\%$

   % inhibisi = 3,8059%

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

   % inhibisi = $\frac{1,051-0,994}{1,051}\ x\ 100\%$

   % inhibisi = 5,4234%

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

   % inhibisi = $\frac{1{,}051-0{,}978}{1{,}051}\ x\ 100\%$

   % inhibisi = 6,9458%

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

   % inhibisi = $\frac{1{,}051-0{,}957}{1{,}051}\ x\ 100\%$

   % inhibisi = 8,9439%

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

   % inhibisi = $\frac{1{,}051-0{,}935}{1{,}051}\ x\ 100\%$

   % inhibisi = 11.0371%

%INHIBISI FORMULA TERBAIK

A.) Replikasi 1

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

   % inhibisi = $\frac{1{,}027-0.969}{1{,}027}\ x\ 100\%$

   % inhibisi = 5,6475%

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

   % inhibisi = $\frac{1{,}027-0{,}878}{1{,}027}\ x\ 100\%$

   % inhibisi = 14,5083%

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

   % inhibisi = $\frac{1{,}027-0{,}804}{1{,}027}\ x\ 100\%$

   % inhibisi = 21,7137%

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

   % inhibisi = $\frac{1{,}027-0{,}748}{1{,}027}\ x\ 100\%$

   % inhibisi = 27,1665%

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

   % inhibisi = $\frac{1{,}027-0{,}688}{1{,}027}\ x\ 100\%$

   % inhibisi = 33,0088%

B.) Replikasi 2

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

   % inhibisi = $\frac{1{,}027-0{,}987}{1{,}027}\ x\ 100\%$

% inhibisi = 3,8948%

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

   % inhibisi = $\frac{1,027-0,913}{1,027}\ x\ 100\%$

   % inhibisi = 11,1003%

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

   % inhibisi = $\frac{1,027-0,862}{1,027}\ x\ 100\%$

   % inhibisi = 16,0662%

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

   % inhibisi = $\frac{1,027-0,787}{1,027}\ x\ 100\%$

   % inhibisi = 23,3690%

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

   % inhibisi = $\frac{1,027-0,702}{1,027}\ x\ 100\%$

   % inhibisi = 31,6456%

C.) Replikasi 3

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

   % inhibisi = $\frac{1,027-0,987}{1,027}\ x\ 100\%$

   % inhibisi = 3,8948%

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

   % inhibisi = $\frac{1,027-0,893}{1,027}\ x\ 100\%$

   % inhibisi = 13,0477%

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

   % inhibisi = $\frac{1,027-0,796}{1,027}\ x\ 100\%$

   % inhibisi = 22,4927%

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

   % inhibisi = $\frac{1,027-0,715}{1,027}\ x\ 100\%$

   % inhibisi = 30,3797%

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

   % inhibisi = $\frac{1,027-0,659}{1,027}\ x\ 100\%$

   % inhibisi = 35,8325%

Sampel	Replikasi	Hasil regresi linier	IC_{50} (ppm)	Rata-rata
Kuersetin	Replikasi 1	a = 11,9400 b = 2,4882 r = 0,9920	15,30	15,11
	Replikasi 2	a = 11,6119 b = 2,5609 r = 0,9933	14,99	
	Replikasi 3	a = 12,4685 b = 2,4929 r = 0,9898	15,06	
Ekstrak	Replikasi 1	a = -11,6237 b = 0,9031 r = 0,9974	68,23	68,34
	Replikasi 2	a = -14,9929 b = 0,9592 r = 0,9995	67,75	
	Replikasi 3	a = -16,3593 b = 0,9611 r = 0,9990	69,04	
Kontrol (-)	Replikasi 1	a = -5,3568 b = 0,1798 r = 0,9975	307,83	313,72
	Replikasi 2	a = -6,0038 b = 0,1741 r = 0,9898	321,64	
	Replikasi 3	a = -5,4519 b = 0,1779 r = 0,9917	311,66	
Formula terbaik (F1)	Replikasi 1	a = -26,7575 b = 0,6738 r = 0,9947	113,92	112,69
	Replikasi 2	a = -29,9123 b = 0,6738 r = 0,9966	118,60	
	Replikasi 3	a = -35,7156 b = 0,8120 r = 0,9951	105,55	

PERHITUNGAN IC_{50}

Y = a+bx

x = nilai IC_{50}

A.) KUERSETIN

1. Replikasi 1

   Y = a+bx

50 = 11,9400 + 2,4882x

$X = \frac{50-11,9400}{2,4882}$

X = 15,30 ppm

2. Replikasi 1

Y = a+bx

50 = 11,6119 + 2,5609x

$X = \frac{50-11,6119}{2,5609}$

X = 14,99 ppm

3. Replikasi 1

Y = a+bx

50 = 12,4648+ 2,4929x

$X = \frac{50-12,4648}{2,4929}$

X = 15,06 ppm

B.) EKSTRAK

1. Replikasi 1

Y = a+bx

50 = -11,6237 + 0,5905x

$X = \frac{50-(-11,6237)}{0,9031}$

X = 68,23 ppm

2. Replikasi 2

Y = a+bx

50 = -14,9929 + 0,6519x

$X = \frac{50-(-14,9929\ )}{0,9559}$

X = 67,75 ppm

3. Replikasi 3

Y = a+bx

50 = -16,3593+ 0,7606x

$X = \frac{50-(-16,3593)}{0,9611}$

X = 69,04 ppm

C.) KONTROL NEGATIF

1. Replikasi 1

Y = a+bx

50 = -5,3568 + 0,1617x

$X = \frac{50-(-5,3568\ )}{0,1798}$

X = 307,83 ppm

2. Replikasi 2

   Y = a+bx

   50 = -6,0038 + 0,1736x

   $X = \frac{50-(-6,0038\ )}{0,1741}$

   X = 294.33 ppm

3. Replikasi 3

   Y = a+bx

   50 = -5,4519 + 0,1474x

   $X = \frac{50-(5,4519}{0,1779}$

   X = 311,66 ppm

D.) FORMULA TERBAIK

1. Replikasi 1

   Y = a+bx

   50 = -26,7575 + 0,4673x

   $X = \frac{50-(-26,7575\ )}{0,6738}$

   X = 113,92 ppm

2. Replikasi 2

   Y = a+bx

   50 = -35,7156+ 0,4040x

   $X = \frac{50-(-29,9123)}{0,6738}$

   X = 118,60 ppm

3. Replikasi 3

   Y = a+bx

   50 = -35,7156+ 0,4040x

   $X = \frac{50-(-35,7156)}{0,8120}$

   X = 112,69 ppm

Hasil uji IC50

Normality

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Uji_IC50	Statistic	df	Sig.	Statistic	df	Sig.
Data_Uji_IC50	Kuersetin	.303	3	.	.909	3	.414
	Ekstrak	.234	3	.	.979	3	.720
	Kontrol Negatif	.280	3	.	.938	3	.519
	Formula Terbaik	.240	3	.	.974	3	.691

a. Lilliefors Significance Correction

Homogenity

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Data_Uji_IC50	Based on Mean	4.817	3	8	.034
	Based on Median	1.652	3	8	.253
	Based on Median and with adjusted df	1.652	3	3.906	.315
	Based on trimmed mean	4.527	3	8	.039

One-way Anova

ANOVA

Data_Uji_IC50

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	153070.243	3	51023.414	2148.519	.000
Within Groups	189.985	8	23.748		
Total	153260.228	11			