BAB V
KESIMPULAN DAN SARAN

A. Kesimpulan

Berdasarkan hasil penelitian yang telah dilakukan maka dapat disimpulkan sebagai berikut :

Pertama, ekstrak daun binahong dapat diformulasikan menjadi sediaan masker gel *peel-off* dengan sifat fisik dan stabilitas yang baik.

Kedua, semua sediaan masker gel *peel-off* ekstrak daun binahong memiliki aktivitas antibakteri terhadap *Staphylococcus epidermidis* ATCC 12228.

Ketiga, formula sediaan masker gel *peel-off* ekstrak daun binahong yang memiliki sifat fisik, stabilitas dan tetap memberikan aktivitas antibakteri yang terbaik adalah formula IV.

B. Saran

Dari penelitian yang telah dilakukan, disarankan pada peneliti selanjutnya agar didapatkan hasil yang lebih maksimal sebagai berikut :

1. Perlu dilakukan percobaan variasi gelatin dan HPMC untuk mendapatkan konsentrasi basis yang lebih optimal dalam membantu aktivitas antibakteri.
2. Perlu dilakukan uji aktivitas antibakteri masker gel peel-off ekstrak daun binahong menggunakan spesies bakteri patogen yang berbeda.

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L A M P I R A N

Lampiran 1. Hasil determinasi

KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
UNIVERSITAS SEBELAS MARET
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
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Nomor : 050/UN27.9.6.4/Lab/2019
H a l : Hasil Determinasi Tumbuhan
Lampiran : -

Nama Pemesan : Aprilia Dwi Kartika Sari
NIM : 21154439A
Alamat : Program Studi S1 Farmasi Fakultas Farmasi Universitas Setia Budi Surakarta

HASIL DETERMINASI TUMBUHAN

Nama Sampel : ***Anredera cordifolia*** **(Ten.) Steenis**
Familia : **Basellaceae**

Hasil Determinasi menurut C.A. Backer & R.C. Bakhuizen van den Brink, Jr. (1963) :
1b-2b-3b-4b-12b-13b-14b-17b-18b-19b-20b-21b-22b-23b-24b-25b-26b-27a-28b-29b-30b-31b-403b-404b-405b-414a-415b-451b-466b-467b-468b-469b-470e-541a_____ **49. Basellaceae**
1b_____ **2.*Anredera***
1_____ ***Anredera cordifolia*** **(Ten.) Steenis**

Deskripsi Tumbuhan :
Habitus : terna, menahun, merambat, tinggi 1-3 m. Akar : tunggang, bercabang, berdaging lunak, putih kotor atau putih kekuningan atau coklat muda. Batang : bentuk bulat, lunak berair, membelit, kulit batang berwarna merah, permukaan licin dan gundul, panjang bisa mencapai 20-30 m, diameter 3.5 cm. Umbi : muncul di ketiak daun, berbentuk bulat, permukaan kasar, kulit umbi berwarna hijau kecoklatan, daging umbi berwarna putih, panjang 5-7 cm, diameter 1-4 cm. Daun : tunggal, letak berseling, bentuk bulat telur atau jantung, panjang 1-11 cm, lebar 0.75–8 cm, pangkal berlekuk, tepi daun rata, ujung runcing atau tumpul, permukaan licin dan gundul, tulang daun menyirip, permukaan atas hijau tua, permukaan bawah hijau muda; tangkai daun bulat, licin dan gundul, panjang tangkai daun 1-3 cm. Bunga : majemuk tipe tandan yang, bercabang atau tidak di ketiak daun, terdiri atas banyak kuntum bunga, bunga kecil-kecil, berbau harum, berkelamin banci (biseksual) atau berkelamin satu (uniseksual), bagian-bagian bunga berbilangan 5; panjang tangkai bunga 1.5-2 mm; brakteola paling bawah bulat telur segitiga, kemerah-merahan; brakteola paling atas putih kehijauan, lebih pendek daripada perhiasan bunga; perhiasan bunga dalam bentuk tepala (tidak bisa dibedakan kelopak bunga dan mahkota bunga), berjumlah 5, bulat telur, diameter 5.5-8 mm, ujungnya tumpul, berlepasan, berwarna krem keputih-putihan; tangkai sari putih, tangkai putik putih.

Surakarta, 1 Maret 2019

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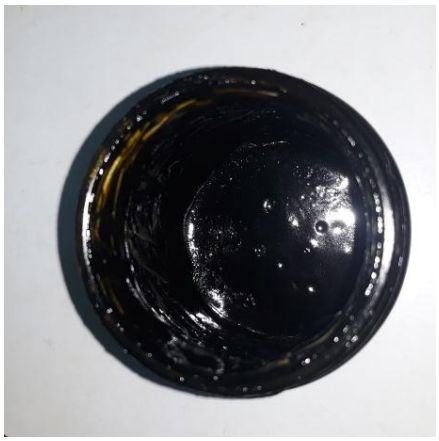
Lampiran 2. Bahan penelitian

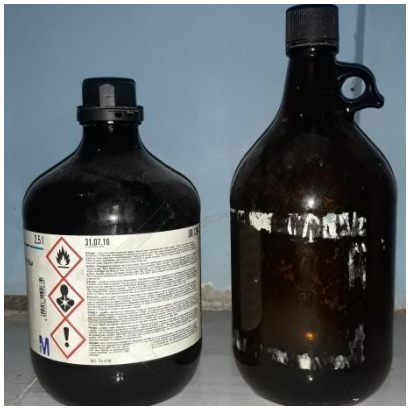
Daun binahong

Serbuk daun binahong



Ekstrak daun binahong

Lampiran 3. Alat penelitian



Botol maserasi

Neraca analitik

Moisture balance

Evaporator

Inkubator

Oven

Oven

Lampiran 4. Hasil penetapan susut pengeringan serbuk dan ekstrak daun binahong

- **Susut pengeringan serbuk daun binahong**

Replikasi I

Replikasi II

Replikasi III

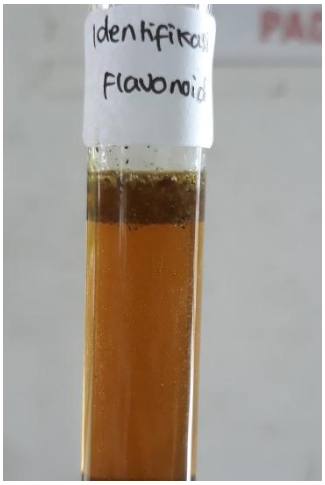
- **Susust pengeringan ekstrak daun binahong**

Replikasi I

Replikasi II

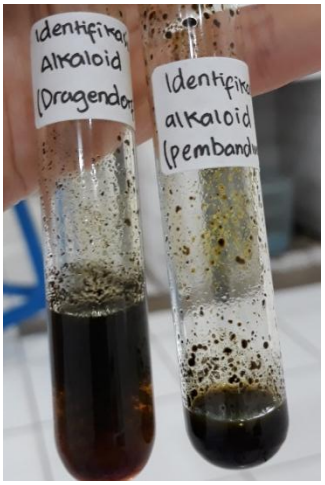
Replikasi III

Lampiran 5. Identifikasi kandungan kimia ekstrak daun binahong



Flavonoid

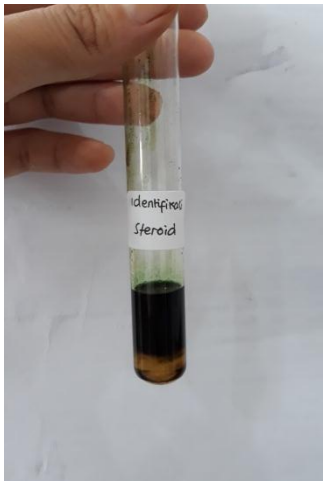
Saponin



Alkaloid (Dragendorff)

Alkaloid (Mayer)

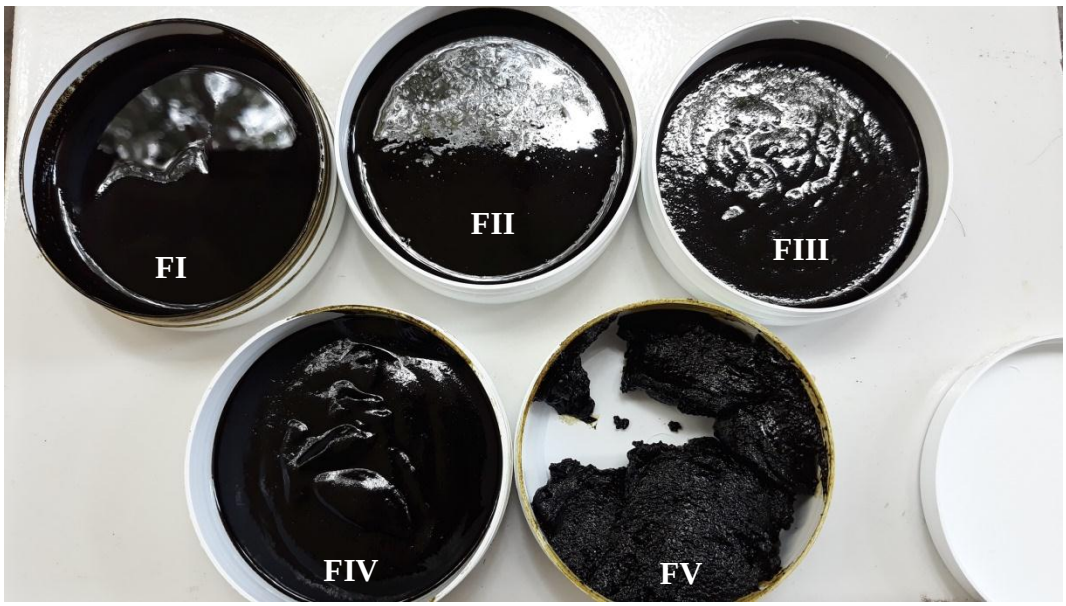
Tanin



Steroid

Bebas alkohol

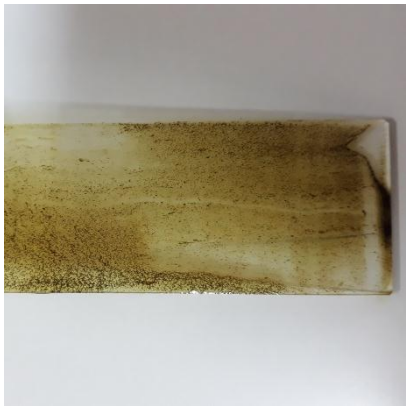
Lampiran 6. Sediaan masker gel *peel-off* ekstrak daun binahong



Keteragan :

FI : Masker gel *peel-off* dengan konsentrasi Gelatin 7,5% dan HPMC 0%
FII : Masker gel *peel-off* dengan konsentrasi Gelatin 5% dan HPMC 2,5%
FIII : Masker gel *peel-off* dengan konsentrasi Gelatin 3,75% dan HPMC 3,75%
FIV : Masker gel *peel-off* dengan konsentrasi Gelatin 2,5% dan HPMC 55 %
FV : Masker gel *peel-off* dengan konsentrasi Gelatin 0% dan HPMC 7,5%

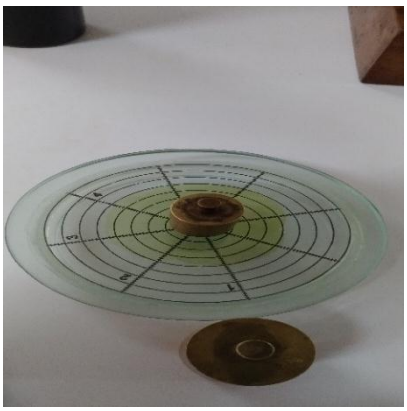
Lampiran 7. Alat pengujian sifat fisik sediaan



Uji homogenitas

Uji pH

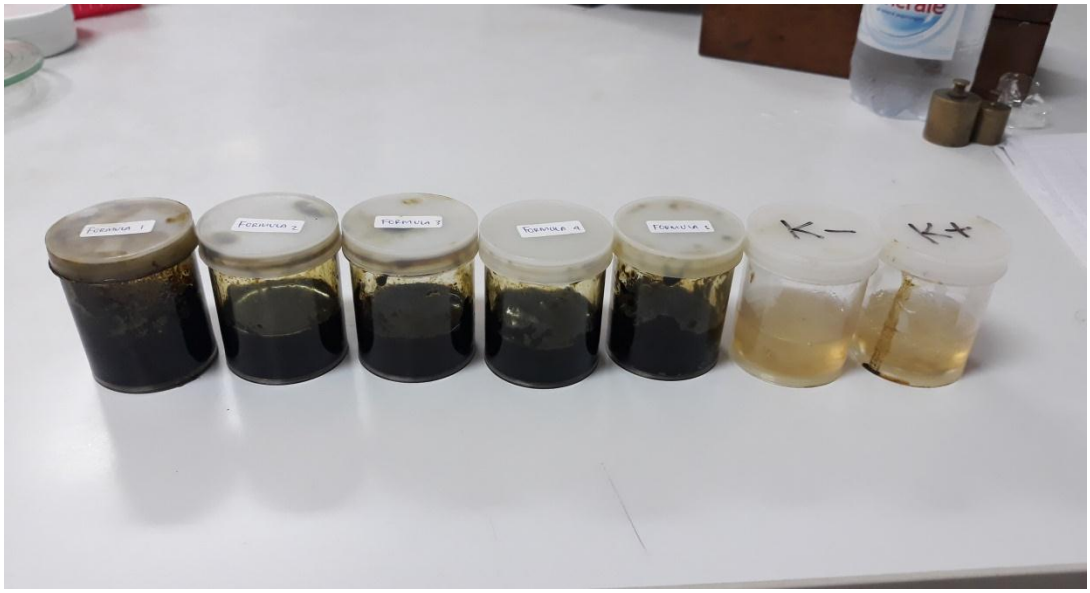
Uji viskositas



Uji daya sebar

Uji daya lekat

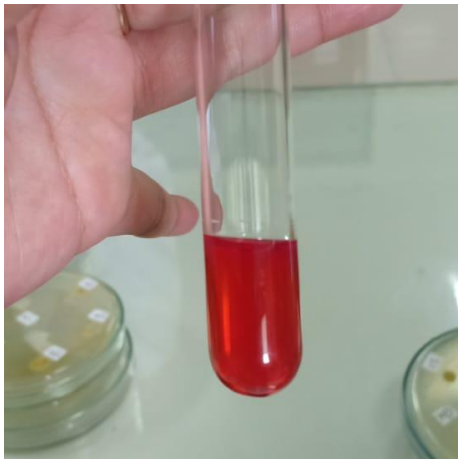
Lampiran 8. Uji stabilitas sediaan dengan menggunakan metode *Freeze thaw*



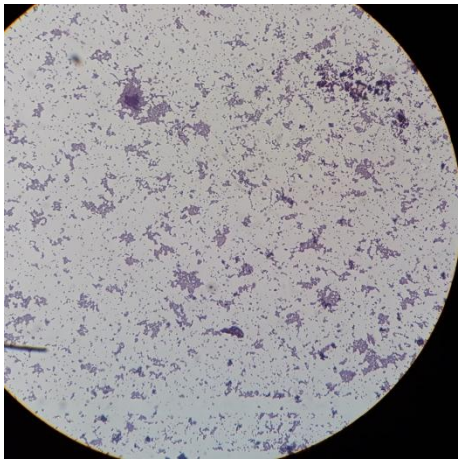
Keteragan :

FI : Masker gel *peel-off* dengan konsentrasi Gelatin 7,5% dan HPMC 0%
FII : Masker gel *peel-off* dengan konsentrasi Gelatin 5% dan HPMC 2,5%
FIII : Masker gel *peel-off* dengan konsentrasi Gelatin 3,75% dan HPMC 3,75%
FIV : Masker gel *peel-off* dengan konsentrasi Gelatin 2,5% dan HPMC 5,5 %
FV : Masker gel *peel-off* dengan konsentrasi Gelatin 0% dan HPMC 7,5%

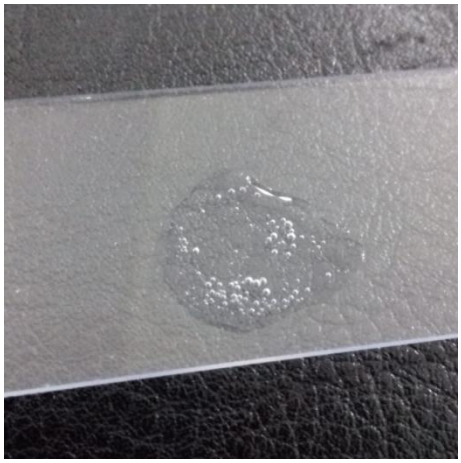
Lampiran 9. Identifikasi bakteri *Staphylococcus epidermidis* ATCC 12228



Uji Manitol (media MSA)

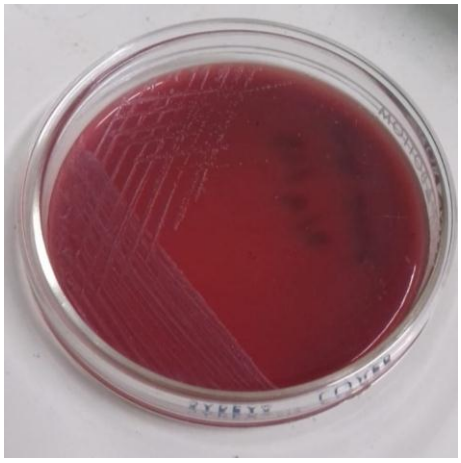


Uji pewarnaan Gram



Uji katalase

Uji koagulase



Identifikasi media agar darah

Suspensi bakteri

Lampiran 10. Pembuatan konsentrasi larutan uji

Seri konsentrasi ekstrak daun binahong dengan pelarut DMSO 5%

Pembuatan seri konsentrasi ekstrak daun binahong

- Konsentrasi 30% = 30% b/v
  = 30 gram/100ml
  = 3 gram/10ml
  Menimbang 3 gram ekstrak, kemudian dilarutkan dengan DMSO 5% sebanyak 10 ml

- Konsentrasi 25%
  V1 x N1 = V2 x N2
  V1 x 30 = 10 x 25
  V1 = 250/30
  V1 = 8,33 ml
  Dipipet seri konsentrasi 30% ekstrak sebanyak 8,33 ml, kemudian ditambahkan dengan DMSO sebanyak 10 ml

- Konsentrasi 20%
  V1 x N1 = V2 x N2
  V1 x 25 = 10 x 20
  V1 = 200/25
  V1 = 8 ml
  Dipipet seri konsentrasi 25% ekstrak sebanyak 8 ml, kemudian ditambahkan dengan DMSO sebanyak 10 ml

- Konsentrasi 15%

  V1 x N1 = V2 x N2

  V1 x 20 = 10 x 15

  V1 = 150/20

  V1 = 7,5 ml

  Dipipet seri konsentrasi 20% ekstrak sebanyak 7,5 ml, kemudian ditambahkan dengan DMSO sebanyak 10 ml

- Konsentrasi 10%

  V1 x N1 = V2 x N2

  V1 x 15 = 10 x 10

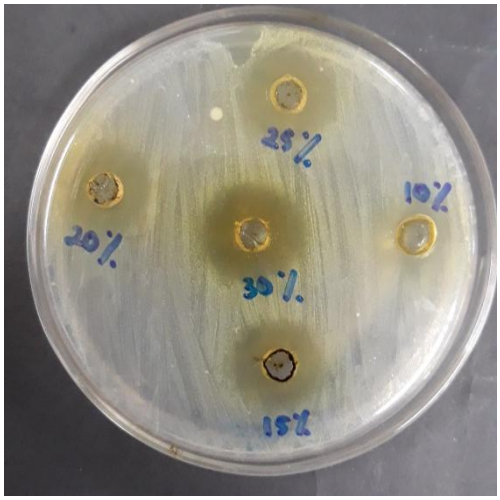
  V1 = 100/15

  V1 = 6,7 ml

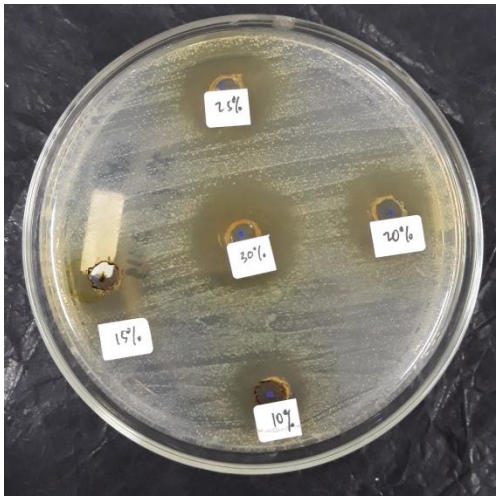
  Dipipet seri konsentrasi 15% ekstrak sebanyak 76,7 ml, kemudian ditambahkan dengan DMSO sebanyak 10 ml

Lampiran 11. Uji aktivitas antibakteri terhadap *Staphylococcus epidermidis* ATCC 12228 dengan metode difusi

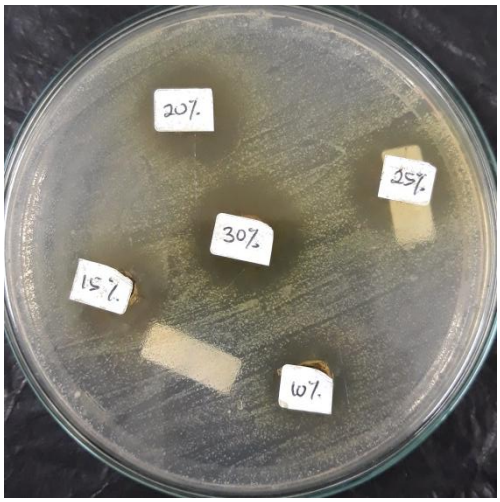
- Uji aktivitas antibakteri ekstrak daun binahong (Orientasi konsentrasi ekstrak)



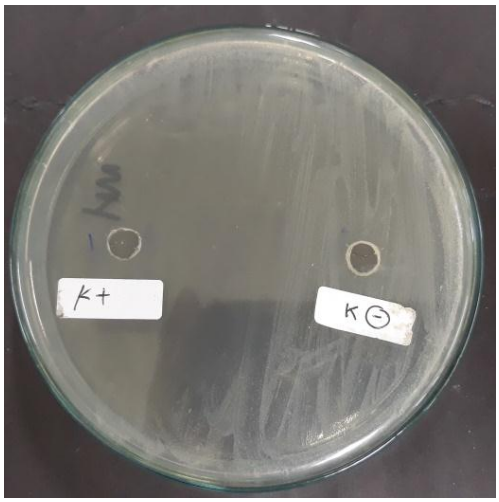
Replikasi I



Replikasi II

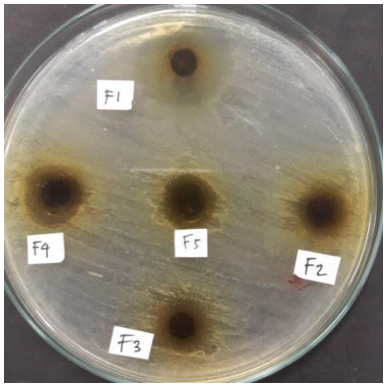


Replikasi III

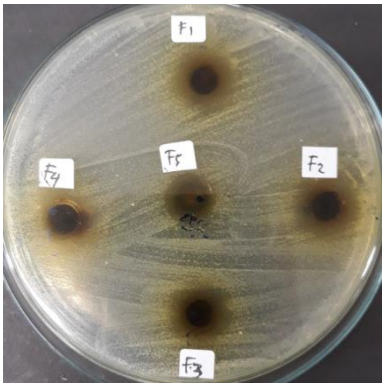


Kontrol

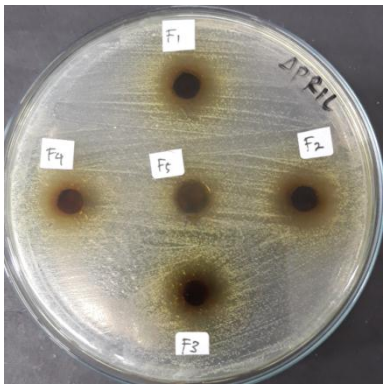
- Uji aktivitas antibakteri formula masker gel *peel-off* ekstrak daun binahong



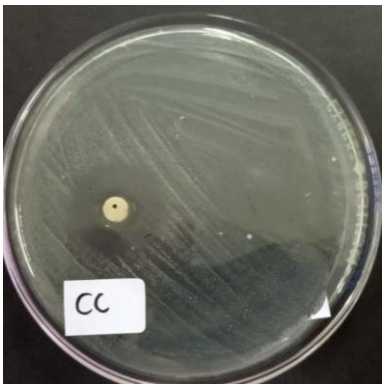
Replikasi I



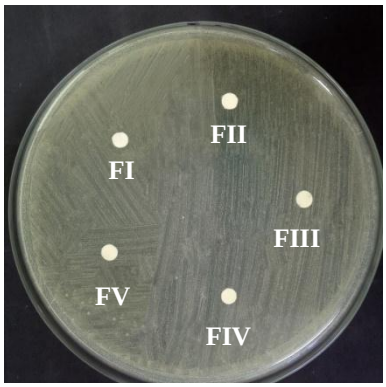
Replikasi II



Replikasi III



Kontrol positif (+)



Kontrol negatif (-)

Keterangan :
FI: Basis dengan konsentrasi gelatin 7,5% dan HPMC 0%
FII: Basis dengan konsentrasi gelatin 5% dan HPMC 2,5%
FIII: Basis dengan konsentrasi gelatin 3,75% dan HPMC 3,75%
FIV: Basis dengan konsentrasi gelatin 2,5% dan HPMC 5,5%
FV: Basis dengan konsentrasi gelatin 0% dan HPMC 7,5%

Lampiran 12. Hasil perhitungan rendemen simplisia dan ekstrak daun binahong

- Perhitungan rendemen simplisia daun binahong

$$\text{Rendemen} = \frac{Bobot\ kering\ (gram)}{Bobot\ basah\ (\ gram)} \times\ 100\ \%$$

$$= \frac{910}{10200} \times 100\%$$

$$= 8{,}92\ \%$$

- Perhitungan rendemen ekstrak daun binahong

$$\text{Rendemen} = \frac{Bobot\ ekstrak\ (gram)}{Bobot\ serbuk\ (\ gram)} \times\ 100\ \%$$

$$= \frac{86{,}24}{700} \times 100\%$$

$$= 12{,}32\ \%$$

Lampiran 13. Hasil perhitungan susut pengeringan serbuk dan ekstrak daun binahong

- Serbuk

Susut pengeringan I = 7,2 %

Susut pengeringan II = 6,5 %

Susut pengeringan III = 7,5 %

Rata-rata prosentase kadar air = $\frac{7,2+6,5+7,5}{3}$

= 7,07%

- Ekstrak

Susut pengeringan I = 1 %

Susut pengeringan II = 1 %

Susut pengeringan III = 1 %

Rata-rata prosentase kadar air = $\frac{1+1+1}{3}$

= 1 %

Lampiran 14. Data hasil uji mutu fisik pH sediaan masker gel peel-off ekstrak daun binahong

UJI PH					
Replikasi	**F I**	**F II**	**F III**	**FIV**	**FV**
1	**5,43**	**5,95**	**6,31**	**6,53**	**6,60**
2	**5,43**	**5,89**	**6,28**	**6,56**	**6,62**
3	**5,41**	**5,92**	**6,33**	**6,49**	**6,61**
Rata-rata	**5,42**	**5,92**	**6,31**	**6,53**	**6,61**
SD	**0,01**	**0,03**	**0,03**	**0,03**	**0,01**

One-Sample Kolmogorov-Smirnov Test

		Uji_pH
N		15
Normal Parameters[a,,b]	Mean	6.1573
	Std. Deviation	.45372
Most Extreme Differences	Absolute	.207
	Positive	.154
	Negative	-.207
Kolmogorov-Smirnov Z		.800
Asymp. Sig. (2-tailed)		.544

a. Test distribution is Normal.

b. Calculated from data.

Test of Homogeneity of Variances

Uji_pH

Levene Statistic	df1	df2	Sig.
1.009	4	10	.448

ANOVA

Uji_pH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.876	4	.719	1198.372	.000
Within Groups	.006	10	.001		
Total	2.882	14			

Uji_pH

			Subset for alpha = 0.05				
	Formula	N	1	2	3	4	5
Tukey HSD[a]	formulasi 1	3	5.4233				
	formulasi 2	3		5.9200			
	formulasi 3	3			6.3067		
	formulasi 4	3				6.5267	
	formulasi 5	3					6.6100
	Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 15. Data hasil uji mutu fisik viskositas sediaan masker gel peel-off ekstrak daun binahong

UJI VISKOSITAS					
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**
1	**20,32**	**50,44**	**100,33**	**150,77**	**500,54**
2	**20,34**	**50,45**	**100,31**	**150,76**	**500,57**
3	**20,31**	**50,48**	**100,32**	**150,75**	**500,53**
Rata-rata	**20,32**	**50,46**	**100,32**	**150,76**	**500,55**
SD	**0,02**	**0,02**	**0,01**	**0,01**	**0,02**

One-Sample Kolmogorov-Smirnov Test

		Uji_Viskositas
N		15
Normal Parameters[a,,b]	Mean	164.4813
	Std. Deviation	179.89760
Most Extreme Differences	Absolute	.330
	Positive	.330
	Negative	-.211
Kolmogorov-Smirnov Z		1.280
Asymp. Sig. (2-tailed)		.076

a. Test distribution is Normal.

b. Calculated from data.

Test of Homogeneity of Variances

Uji_Viskositas

Levene Statistic	df1	df2	Sig.
1.159	4	10	.385

ANOVA

Uji_Viskositas

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	453084.041	4	113271.010	4.357E8	.000
Within Groups	.003	10	.000		
Total	453084.043	14			

Uji_Viskositas

			Subset for alpha = 0.05				
	Formula	N	1	2	3	4	5
Tukey HSD[a]	formula 1	3	20.3233				
	formula 2	3		50.4567			
	formula 3	3			100.3200		
	formula 4	3				150.7600	
	formula 5	3					500.5467
	Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 16. Data hasil uji mutu fisik daya sebar sediaan masker gel *peel-off* ekstrak daun binahong

UJI DAYA SEBAR					
Beban 44,6 g					
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**
1	**8,18**	**6,3**	**5,58**	**5,7**	**4,5**
2	**8,18**	**6,25**	**5,5**	**5,68**	**4,5**
3	**8,18**	**6,2**	**5,53**	**5,69**	**4,49**
Rata-rata	**8,18**	**6,26**	**5,54**	**5,69**	**4,49**
SD	**0,00**	**0,07**	**0,04**	**0,01**	**0,01**
Beban 94.6 g					
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**
1	**8,28**	**7,27**	**6,13**	**6,02**	**5,05**
2	**8,28**	**7,29**	**6,16**	**6,01**	**5,04**
3	**8,28**	**7,28**	**6,14**	**6,02**	**5,08**
Rata-rata	**8,28**	**7,28**	**6,14**	**6,02**	**5,06**
SD	**0,00**	**0,01**	**0,02**	**0,01**	**0,02**
Beban 144.6 g					
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**
1	**8,41**	**7,66**	**6,87**	**6,59**	**5,58**
2	**8,38**	**7,60**	**6,77**	**6,68**	**5,68**
3	**8,36**	**7,55**	**6,86**	**6,65**	**5,64**
Rata-rata	**8,38**	**7,60**	**6,83**	**6,64**	**5,63**
SD	**0,03**	**0,06**	**0,06**	**0,05**	**0,05**
Beban 194.6 g					
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**
1	**8,53**	**8,16**	**7,12**	**7,64**	**6,37**
2	**8,50**	**8,15**	**7,11**	**7,56**	**6,36**
3	**8,56**	**8,18**	**7,12**	**7,71**	**6,37**
Rata-rata	**8,53**	**8,16**	**7,12**	**7,64**	**6,37**
SD	**0,03**	**0,01**	**0,01**	**0,08**	**0,01**

One-Sample Kolmogorov-Smirnov Test

		Uji_daya_sebar
N		60
Normal Parameters[a,,b]	Mean	6.7918
	Std. Deviation	1.17688
Most Extreme Differences	Absolute	.126
	Positive	.090
	Negative	-.126
Kolmogorov-Smirnov Z		.974
Asymp. Sig. (2-tailed)		.299

a. Test distribution is Normal.

b. Calculated from data.

Between-Subjects Factors

		Value Label	N
Formula	1.00	formula 1	12
	2.00	formula 2	12
	3.00	formula 3	12
	4.00	formula 4	12
	5.00	formula 5	12
Beban	1.00	Beban 44,6 g	15
	2.00	Beban 94,6 g	15
	3.00	Beban 144,6 g	15
	4.00	Beban 194,6 g	15

Levene's Test of Equality of Error Variances[a]

Dependent Variable:Uji_daya_sebar

F	df1	df2	Sig.
2.497	19	40	.07

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Formula + Beban + Formula * Beban

Uji_daya_sebar

	Formula	N	Subset 1	2	3	4	5
Tukey HSD[a,,b]	formula 5	12	5.3883				
	formula 3	12		6.4075			
	formula 4	12			6.4958		
	formula 2	12				7.3242	
	formula 1	12					8.3433
	Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square(Error) = ,001.

a. Uses Harmonic Mean Sample Size = 12,000.

b. Alpha = ,05.

Lampiran 17. Data hasil uji mutu fisik daya lekat sediaan masker gel *peel-off* ekstrak daun binahong

UJI DAYA LEKAT					
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**
1	**1,46**	**1,77**	**3**	**4,49**	**6,21**
2	**1,45**	**1,78**	**2,95**	**4,56**	**6,25**
3	**1,47**	**1,77**	**2,92**	**4,55**	**6,22**
Rata-rata	**1,46**	**1,77**	**2,96**	**4,53**	**6,23**
SD	**0,01**	**0,01**	**0,04**	**0,04**	**0,02**

One-Sample Kolmogorov-Smirnov Test

		Uji_daya_lekat
N		15
Normal Parameters[a,,b]	Mean	3.3900
	Std. Deviation	1.84483
Most Extreme Differences	Absolute	.209
	Positive	.209
	Negative	-.146
Kolmogorov-Smirnov Z		.808
Asymp. Sig. (2-tailed)		.531

a. Test distribution is Normal.

b. Calculated from data.

Test of Homogeneity of Variances

Uji_daya_lekat

Levene Statistic	df1	df2	Sig.
3.072	4	10	.068

ANOVA

Uji_daya_lekat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	47.641	4	11.910	16390.092	.000
Within Groups	.007	10	.001		
Total	47.648	14			

Uji_daya_lekat

			Subset for alpha = 0.05				
	Formula	N	1	2	3	4	5
Tukey HSD[a]	formula 1	3	1.4600				
	formula 2	3		1.7733			
	formula 3	3			2.9567		
	formula 4	3				4.5333	
	formula 5	3					6.2267
	Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 18. Data hasil uji mutu fisik waktu mengering pada tangan sediaan masker gel *peel-off*

UJI WAKTU MENGERING PADA TANGAN					
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**
1	**18,16**	**20,21**	**25,14**	**30,16**	**35,28**
2	**18,21**	**20,19**	**25,18**	**30,21**	**35,25**
3	**18,20**	**20,18**	**25,20**	**30,14**	**35,30**
Rata-rata	**18,19**	**20,19**	**25,17**	**30,17**	**35,28**
SD	**0,03**	**0,02**	**0,03**	**0,04**	**0,03**

One-Sample Kolmogorov-Smirnov Test

		Uji_wkt_mngrng_pdtangan
N		15
Normal Parameters[a,,b]	Mean	25.8007
	Std. Deviation	6.52434
Most Extreme Differences	Absolute	.204
	Positive	.204
	Negative	-.147
Kolmogorov-Smirnov Z		.791
Asymp. Sig. (2-tailed)		.559

a. Test distribution is Normal.

b. Calculated from data.

Test of Homogeneity of Variances

Uji_wkt_mngrng_pdtangan

Levene Statistic	df1	df2	Sig.
.677	4	10	.623

ANOVA

Uji_wkt_mngrng_pdtangan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	595.931	4	148.983	196029.899	.000
Within Groups	.008	10	.001		
Total	595.938	14			

Uji_wkt_mngrng_pdtangan

			Subset for alpha = 0.05				
	Formulasi	N	1	2	3	4	5
Tukey HSD[a]	formulasi 1	3	18.1900				
	formulasi 2	3		20.1933			
	formulasi 3	3			25.1733		
	formulasi 4	3				30.1700	
	formulasi 5	3					35.2767
	Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 19. Data hasil uji mutu fisik waktu mengering pada kaca sediaan masker gel *peel-off*

UJI WAKTU MENGERING PADA KACA					
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**
1	**10,11**	**10,29**	**15,44**	**25,03**	**30,58**
2	**10,12**	**10,28**	**15,45**	**25,04**	**30,52**
3	**10,13**	**10,27**	**15,44**	**25,06**	**30,55**
Rata-rata	**10,12**	**10,28**	**15,44**	**25,04**	**30,55**
SD	**0,01**	**0,01**	**0,01**	**0,02**	**0,03**

One-Sample Kolmogorov-Smirnov Test

		Uji_wkt_mngrng_padakaca
N		15
Normal Parameters[a,,b]	Mean	18.2876
	Std. Deviation	8.47197
Most Extreme Differences	Absolute	.231
	Positive	.231
	Negative	-.187
Kolmogorov-Smirnov Z		.895
Asymp. Sig. (2-tailed)		.399

a. Test distribution is Normal.

b. Calculated from data.

Test of Homogeneity of Variances

Uji_wkt_mngrng_padakaca

Levene Statistic	df1	df2	Sig.
1.432	4	10	.293

ANOVA

Uji_wkt_mngrng_padakaca

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1004.837	4	251.209	952512.145	.000
Within Groups	.003	10	.000		
Total	1004.839	14			

Uji_wkt_mngrng_padakaca

			Subset for alpha = 0.05				
	Formula	N	1	2	3	4	5
Tukey HSD[a]	formula 1	3	10.1200				
	formula 2	3		10.2800			
	formula 3	3			15.4433		
	formula 4	3				25.0447	
	formula 5	3					30.5500
	Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 20. Data hasil uji stabilitas pH sediaan masker gel *peel-off* dengan metode *Freeze thaw*

UJI STABILITAS PH											
T0						T20					
Replikasi	**F I**	**F II**	**F III**	**FIV**	**FV**	**Replikasi**	**F I**	**F II**	**F III**	**FIV**	**FV**
1	**5,43**	**5,95**	**6,31**	**6,53**	**6,60**	**1**	**5,18**	**5,52**	**6,01**	**6,12**	**6,01**
2	**5,43**	**5,89**	**6,28**	**6,56**	**6,62**	**2**	**5,15**	**5,55**	**6,03**	**6,11**	**6,00**
3	**5,41**	**5,92**	**6,33**	**6,49**	**6,61**	**3**	**5,11**	**5,56**	**6,04**	**6,15**	**6,02**
Rata-rata	**5,42**	**5,92**	**6,31**	**6,53**	**6,61**	**Rata-rata**	**5,15**	**5,54**	**6,03**	**6,13**	**6,01**
SD	**0,01**	**0,03**	**0,03**	**0,03**	**0,01**	**SD**	**0,04**	**0,02**	**0,02**	**0,02**	**0,01**

- **FORMULA I**

One-Sample Kolmogorov-Smirnov Test

		Uji_pH_F1
N		6
Normal Parameters[a,,b]	Mean	5.2850
	Std. Deviation	.15333
Most Extreme Differences	Absolute	.293
	Positive	.253
	Negative	-.293
Kolmogorov-Smirnov Z		.717
Asymp. Sig. (2-tailed)		.684

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_pH_F1	Equal variances assumed	2.063	.224	12.962	4	.000	.27667	.02134	.21741	.33593
	Equal variances not assumed			12.962	2.427	.003	.27667	.02134	.19871	.35462

- **FORMULA II**

One-Sample Kolmogorov-Smirnov Test

		Uji_pH_F2
N		6
Normal Parameters[a,,b]	Mean	5.7317
	Std. Deviation	.20760
Most Extreme Differences	Absolute	.296
	Positive	.296
	Negative	-.277
Kolmogorov-Smirnov Z		.725
Asymp. Sig. (2-tailed)		.670

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_pH_F2	Equal variances assumed	.160	.710	17.867	4	.000	.37667	.02108	.31813	.43520
	Equal variances not assumed			17.867	3.563	.000	.37667	.02108	.31519	.43814

- **FORMULA III**

One-Sample Kolmogorov-Smirnov Test

		Uji_pH_F3
N		6
Normal Parameters[a,,b]	Mean	6.1667
	Std. Deviation	.15449
Most Extreme Differences	Absolute	.294
	Positive	.294
	Negative	-.268
Kolmogorov-Smirnov Z		.720
Asymp. Sig. (2-tailed)		.678

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_pH_F3	Equal variances assumed	.643	.468	16.474	4	.000	.28000	.01700	.23281	.32719
	Equal variances not assumed			16.474	3.298	.000	.28000	.01700	.22857	.33143

- **FORMULA IV**

One-Sample Kolmogorov-Smirnov Test

		Uji_pH_F4
N		6
Normal Parameters[a,,b]	Mean	6.3267
	Std. Deviation	.22061
Most Extreme Differences	Absolute	.288
	Positive	.288
	Negative	-.270
Kolmogorov-Smirnov Z		.706
Asymp. Sig. (2-tailed)		.701

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_pH_F4	Equal variances assumed	.582	.488	16.971	4	.000	.40000	.02357	.33456	.46544
	Equal variances not assumed			16.971	3.251	.000	.40000	.02357	.32816	.47184

- **FORMULA V**

One-Sample Kolmogorov-Smirnov Test

		Uji_pH_F4
N		6
Normal Parameters[a,,b]	Mean	6.3100
	Std. Deviation	.32876
Most Extreme Differences	Absolute	.311
	Positive	.311
	Negative	-.311
Kolmogorov-Smirnov Z		.762
Asymp. Sig. (2-tailed)		.607

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_pH_F5	Equal variances assumed	.000	1.000	73.485	4	.000	.60000	.00816	.57733	.62267
	Equal variances not assumed			73.485	4.000	.000	.60000	.00816	.57733	.62267

Lampiran 21. Data hasil uji stabilitas viskositas sediaan masker gel *peel-off* dengan metode *Freeze thaw*

UJI STABILITAS VISKOSITAS											
T0						T20					
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**	**Replikasi**	**FI**	**FII**	**FIII**	**FIV**	**FV**
1	**20,32**	**50,44**	**100,33**	**150,77**	**500,54**	**1**	**10,45**	**40,76**	**70,34**	**100,12**	**200,56**
2	**20,34**	**50,45**	**100,31**	**150,76**	**500,57**	**2**	**10,46**	**40,74**	**70,35**	**100,14**	**200,57**
3	**20,31**	**50,48**	**100,32**	**150,75**	**500,53**	**3**	**10,48**	**40,78**	**70,37**	**100,11**	**200,54**
Rata-rata	**20,32**	**50,46**	**100,32**	**150,76**	**500,55**	**Rata-rata**	**10,46**	**40,76**	**70,35**	**100,12**	**200,56**
SD	**0,02**	**0,02**	**0,01**	**0,01**	**0,02**	**SD**	**0,02**	**0,02**	**0,02**	**0,02**	**0,02**

- **FORMULA I**

One-Sample Kolmogorov-Smirnov Test

		Uji_viskositas_F1
N		6
Normal Parameters[a,,b]	Mean	15.3933
	Std. Deviation	5.40056
Most Extreme Differences	Absolute	.319
	Positive	.319
	Negative	-.319
Kolmogorov-Smirnov Z		.781
Asymp. Sig. (2-tailed)		.576

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_viskositas_F1	Equal variances assumed	.000	1.000	790.559	4	.000	9.86000	.01247	9.82537	9.89463
	Equal variances not assumed			790.559	4.000	.000	9.86000	.01247	9.82537	9.89463

- **FORMULA II**

One-Sample Kolmogorov-Smirnov Test

		Uji_viskositas_F2
N		6
Normal Parameters[a,,b]	Mean	45.6083
	Std. Deviation	5.31111
Most Extreme Differences	Absolute	.319
	Positive	.318
	Negative	-.319
Kolmogorov-Smirnov Z		.780
Asymp. Sig. (2-tailed)		.577

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_viskositas_F2	Equal variances assumed	.073	.801	581.800	4	.000	9.69667	.01667	9.65039	9.74294
	Equal variances not assumed			581.800	3.994	.000	9.69667	.01667	9.65036	9.74297

- **FORMULA III**

One-Sample Kolmogorov-Smirnov Test

		Uji_viskositas_F3
N		6
Normal Parameters[a,,b]	Mean	85.3367
	Std. Deviation	16.41342
Most Extreme Differences	Absolute	.319
	Positive	.319
	Negative	-.319
Kolmogorov-Smirnov Z		.782
Asymp. Sig. (2-tailed)		.574

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_viskositas_F3	Equal variances assumed	.727	.442	2842.888	4	.000	29.96667	.01054	29.93740	29.99593
	Equal variances not assumed			2842.888	3.448	.000	29.96667	.01054	29.93546	29.99788

- **FORMULA IV**

One-Sample Kolmogorov-Smirnov Test

		Uji_viskositas_F4
N		6
Normal Parameters[a,,b]	Mean	125.4417
	Std. Deviation	27.73485
Most Extreme Differences	Absolute	.319
	Positive	.319
	Negative	-.319
Kolmogorov-Smirnov Z		.782
Asymp. Sig. (2-tailed)		.574

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_viskositas_F4	Equal variances assumed	.727	.442	4803.816	4	.000	50.63667	.01054	50.60740	50.66593
	Equal variances not assumed			4803.816	3.448	.000	50.63667	.01054	50.60546	50.66788

- **FORMULA V**

One-Sample Kolmogorov-Smirnov Test

		Uji_viskositas_F5
N		6
Normal Parameters[a,,b]	Mean	350.5517
	Std. Deviation	164.31129
Most Extreme Differences	Absolute	.319
	Positive	.319
	Negative	-.319
Kolmogorov-Smirnov Z		.782
Asymp. Sig. (2-tailed)		.573

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_viskositas_F5	Equal variances assumed	.500	.519	20123.941	4	.000	299.99000	.01491	299.94861	300.03139
	Equal variances not assumed			20123.941	3.670	.000	299.99000	.01491	299.94710	300.03290

Lampiran 21. Data hasil uji stabilitas daya sebar sediaan masker gel *peel-off* dengan metode *Freeze thaw*

DAYA SEBAR											
T0						T20					
Beban 44,6 g						Beban 44,6 g					
Replikasi	FI	FII	FIII	FIV	FV	Replikasi	FI	FII	FIII	FIV	FV
1	8,18	6,3	5,58	5,7	4,5	1	8,3	7,18	6,25	5,97	5,07
2	8,18	6,25	5,5	5,68	4,5	2	8,3	7,18	6,28	5,98	5,02
3	8,18	6,2	5,53	5,69	4,49	3	8,33	7,15	6,25	5,95	5,05
Rata-rata	8,18	6,26	5,54	5,69	4,49	Rata-rata	8,31	7,17	6,26	5,97	5,05
SD	0,00	0,07	0,04	0,01	0,01	SD	0,02	0,02	0,02	0,02	0,03
Beban 94.6 g						Beban 94.6 g					
Replikasi	FI	FII	FIII	FIV	FV	Replikasi	FI	FII	FIII	FIV	FV
1	8,28	7,27	6,13	6,02	5,05	1	8,5	7,45	6,6	6,12	5,29
2	8,28	7,29	6,16	6,01	5,04	2	8,5	7,43	6,65	6,1	5,25
3	8,28	7,28	6,14	6,02	5,08	3	8,48	7,48	6,61	6,13	5,23
Rata-rata	8,28	7,28	6,14	6,02	5,06	Rata-rata	8,49	7,45	6,62	6,12	5,26
SD	0,00	0,01	0,02	0,01	0,02	SD	0,01	0,03	0,03	0,02	0,03
Beban 144.6 g						Beban 144.6 g					
Replikasi	FI	FII	FIII	FIV	FV	Replikasi	FI	FII	FIII	FIV	FV
1	8,41	7,66	6,87	6,59	5,58	1	8,6	7,60	7,13	6,46	5,72
2	8,38	7,60	6,77	6,68	5,68	2	8,65	7,60	7,18	6,46	5,76
3	8,36	7,55	6,86	6,65	5,64	3	8,68	7,60	7,15	6,43	5,77
Rata-rata	8,38	7,60	6,83	6,64	5,63	Rata-rata	8,64	7,60	7,15	6,45	5,75
SD	0,03	0,06	0,06	0,05	0,05	SD	0,04	0,00	0,03	0,02	0,03
Beban 194.6 g						Beban 194.6 g					
Replikasi	FI	FII	FIII	FIV	FV	Replikasi	FI	FII	FIII	FIV	FV
1	8,53	8,16	7,12	7,64	6,37	1	8,8	8,26	7,22	7,75	6,56
2	8,50	8,15	7,11	7,56	6,36	2	8,83	8,30	7,25	7,73	6,58
3	8,56	8,18	7,12	7,71	6,37	3	8,81	8,28	7,26	7,76	6,55
Rata-rata	8,53	8,16	7,12	7,64	6,37	Rata-rata	8,81	8,28	7,24	7,75	6,56
SD	0,03	0,01	0,01	0,08	0,01	SD	0,02	0,02	0,02	0,02	0,02

- **FORMULA I**

One-Sample Kolmogorov-Smirnov Test

		Beban1_F1	Beban2_F1	beban3_F1	beban4_F1
N		6	6	6	6
Normal Parameters[a,,b]	Mean	8.2450	8.3867	8.5133	8.6717
	Std. Deviation	.07204	.11708	.14556	.15664
Most Extreme Differences	Absolute	.317	.319	.261	.294
	Positive	.317	.319	.261	.262
	Negative	-.277	-.287	-.224	-.294
Kolmogorov-Smirnov Z		.775	.781	.640	.719
Asymp. Sig. (2-tailed)		.585	.575	.808	.679

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Beban1_F1	Equal variances assumed	16.000	.056	-13.000	4	.000	-.13000	.01000	-.15776	-.10224
	Equal variances not assumed			-13.000	2.000	.006	-.13000	.01000	-.17303	-.08697
Beban2_F1	Equal variances assumed	16.000	.056	-32.000	4	.000	-.21333	.00667	-.23184	-.19482
	Equal variances not assumed			-32.000	2.000	.001	-.21333	.00667	-.24202	-.18465
beban3_F1	Equal variances assumed	.685	.454	-9.459	4	.001	-.26000	.02749	-.33632	-.18368
	Equal variances not assumed			-9.459	3.348	.002	-.26000	.02749	-.34255	-.17745
beban4_F1	Equal variances assumed	.681	.456	-14.577	4	.000	-.28333	.01944	-.33730	-.22937
	Equal variances not assumed			-14.577	2.972	.001	-.28333	.01944	-.34552	-.22114

- **FORMULA II**

One-Sample Kolmogorov-Smirnov Test

		Beban1_F2	Beban2_F2	beban3_F2	beban4_F2
N		6	6	6	6
Normal Parameters[a,,b]	Mean	7.2800	7.3667	7.6017	8.2217
	Std. Deviation	1.12880	.09647	.03488	.06585
Most Extreme Differences	Absolute	.317	.287	.352	.237
	Positive	.307	.287	.352	.237
	Negative	-.317	-.244	-.314	-.220
Kolmogorov-Smirnov Z		.776	.702	.863	.579
Asymp. Sig. (2-tailed)		.583	.708	.446	.890

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Beban1_F2	Equal variances assumed	1.385	.305	-67.429	4	.000	-2.06000	.03055	-2.14482	-1.97518
	Equal variances not assumed			-67.429	2.473	.000	-2.06000	.03055	-2.17006	-1.94994
Beban2_F2	Equal variances assumed	1.923	.238	-11.086	4	.000	-.17333	.01563	-.21674	-.12992
	Equal variances not assumed			-11.086	2.616	.003	-.17333	.01563	-.22749	-.11918
beban3_F2	Equal variances assumed	4.797	.094	.105	4	.922	.00333	.03180	-.08495	.09162
	Equal variances not assumed			.105	2.000	.926	.00333	.03180	-.13348	.14015
beban4_F2	Equal variances assumed	.082	.789	-8.030	4	.001	-.11667	.01453	-.15701	-.07633
	Equal variances not assumed			-8.030	3.741	.002	-.11667	.01453	-.15813	-.07520

- **FORMULA III**

One-Sample Kolmogorov-Smirnov Test

		Beban1_F3	Beban2_F3	beban3_F3	beban4_F3
N		6	6	6	6
Normal Parameters[a,,b]	Mean	5.8983	6.3817	6.9933	7.1800
	Std. Deviation	.39716	.26180	.17941	.07071
Most Extreme Differences	Absolute	.312	.301	.277	.302
	Positive	.289	.301	.254	.302
	Negative	-.312	-.298	-.277	-.214
Kolmogorov-Smirnov Z		.764	.738	.678	.740
Asymp. Sig. (2-tailed)		.603	.647	.747	.645

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Beban1_F3	Equal variances assumed	1.750	.256	-28.493	4	.000	-.72333	.02539	-.79382	-.65285
	Equal variances not assumed			-28.493	2.711	.000	-.72333	.02539	-.80923	-.63744
Beban2_F3	Equal variances assumed	1.600	.275	-27.024	4	.000	-.47667	.01764	-.52564	-.42769
	Equal variances not assumed			-27.024	3.200	.000	-.47667	.01764	-.53087	-.42247
beban3_F3	Equal variances assumed	3.457	.137	-9.153	4	.001	-.32000	.03496	-.41707	-.22293
	Equal variances not assumed			-9.153	2.800	.004	-.32000	.03496	-.43589	-.20411
beban4_F3	Equal variances assumed	5.000	.089	-10.156	4	.001	-.12667	.01247	-.16130	-.09204
	Equal variances not assumed			-10.156	2.306	.006	-.12667	.01247	-.17405	-.07928

- **FORMULA IV**

One-Sample Kolmogorov-Smirnov Test

		Beban1_F4	Beban2_F4	beban3_F4	beban4_F4
N		6	6	6	6
Normal Parameters[a,,b]	Mean	5.8283	6.0667	6.5450	7.6917
	Std. Deviation	.15198	.05574	.10858	.07731
Most Extreme Differences	Absolute	.301	.299	.283	.260
	Positive	.301	.299	.283	.188
	Negative	-.288	-.225	-.167	-.260
Kolmogorov-Smirnov Z		.737	.732	.694	.638
Asymp. Sig. (2-tailed)		.649	.658	.722	.811

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Beban1_F4	Equal variances assumed	.727	.442	-26.247	4	.000	-.27667	.01054	-.30593	-.24740
	Equal variances not assumed			-26.247	3.448	.000	-.27667	.01054	-.30788	-.24546
Beban2_F4	Equal variances assumed	2.571	.184	-10.607	4	.000	-.10000	.00943	-.12618	-.07382
	Equal variances not assumed			-10.607	2.560	.003	-.10000	.00943	-.13314	-.06686
beban3_F4	Equal variances assumed	2.571	.184	6.718	4	.003	.19000	.02828	.11147	.26853
	Equal variances not assumed			6.718	2.560	.011	.19000	.02828	.09057	.28943
beban4_F4	Equal variances assumed	2.723	.174	-2.487	4	.068	-.11000	.04422	-.23278	.01278
	Equal variances not assumed			-2.487	2.165	.121	-.11000	.04422	-.28700	.06700

- **FORMULA V**

One-Sample Kolmogorov-Smirnov Test

		Beban1_F5	Beban2_F5	beban3_F5	beban4_F5
N		6	6	6	6
Normal Parameters[a,,b]	Mean	4.7717	5.1567	5.6917	6.4650
	Std. Deviation	.30169	.11201	.07333	.10821
Most Extreme Differences	Absolute	.316	.253	.158	.310
	Positive	.316	.253	.143	.310
	Negative	-.295	-.244	-.158	-.284
Kolmogorov-Smirnov Z		.774	.620	.386	.759
Asymp. Sig. (2-tailed)		.587	.837	.998	.611

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Beban1_F5	Equal variances assumed	3.273	.145	-36.895	4	.000	-.55000	.01491	-.59139	-.50861
	Equal variances not assumed			-36.895	2.210	.000	-.55000	.01491	-.60864	-.49136
Beban2_F5	Equal variances assumed	.507	.516	-9.370	4	.001	-.20000	.02134	-.25926	-.14074
	Equal variances not assumed			-9.370	3.528	.001	-.20000	.02134	-.26252	-.13748
beban3_F5	Equal variances assumed	.985	.377	-3.554	4	.024	-.11667	.03283	-.20782	-.02552
	Equal variances not assumed			-3.554	3.027	.037	-.11667	.03283	-.22062	-.01271
beban4_F5	Equal variances assumed	2.571	.184	-20.860	4	.000	-.19667	.00943	-.22284	-.17049
	Equal variances not assumed			-20.860	2.560	.001	-.19667	.00943	-.22981	-.16352

Lampiran 22. Data hasil uji stabilitas daya lekat sediaan masker gel *peel-off* dengan metode *Freeze thaw*

UJI STABILITAS DAYA LEKAT											
T0						T20					
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**	**Replikasi**	**FI**	**FII**	**FIII**	**FIV**	**FV**
1	**1,46**	**1,77**	**3**	**4,49**	**6,21**	**1**	**1,55**	**1,89**	**3**	**6,01**	**8,04**
2	**1,45**	**1,78**	**2,95**	**4,56**	**6,25**	**2**	**1,56**	**1,88**	**3,01**	**6,02**	**8,06**
3	**1,47**	**1,77**	**2,92**	**4,55**	**6,22**	**3**	**1,58**	**1,88**	**2,98**	**6,05**	**8,02**
Rata-rata	**1,46**	**1,77**	**2,96**	**4,53**	**6,23**	**Rata-rata**	**1,56**	**1,88**	**3,00**	**6,03**	**8,04**
SD	**0,01**	**0,01**	**0,04**	**0,04**	**0,02**	**SD**	**0,02**	**0,01**	**0,02**	**0,02**	**0,02**

- **FORMULA I**

One-Sample Kolmogorov-Smirnov Test

		Uji_daya_lekat_F1
N		6
Normal Parameters[a,,b]	Mean	1.5117
	Std. Deviation	.05776
Most Extreme Differences	Absolute	.265
	Positive	.265
	Negative	-.247
Kolmogorov-Smirnov Z		.648
Asymp. Sig. (2-tailed)		.795

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_daya_lekat_F1	Equal variances assumed	.727	.442	-9.803	4	.001	-.10333	.01054	-.13260	-.07407
	Equal variances not assumed			-9.803	3.448	.001	-.10333	.01054	-.13454	-.07212

- **FORMULA II**

One-Sample Kolmogorov-Smirnov Test

		Uji_daya_lekat_F2
N		6
Normal Parameters[a,,b]	Mean	1.8283
	Std. Deviation	.06047
Most Extreme Differences	Absolute	.304
	Positive	.288
	Negative	-.304
Kolmogorov-Smirnov Z		.744
Asymp. Sig. (2-tailed)		.638

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_daya_lekat_F2	Equal variances assumed	.000	1.000	-23.335	4	.000	-.11000	.00471	-.12309	-.09691
	Equal variances not assumed			-23.335	4.000	.000	-.11000	.00471	-.12309	-.09691

- **FORMULA III**

One-Sample Kolmogorov-Smirnov Test

		Uji_daya_lekat_F3
N		6
Normal Parameters[a,,b]	Mean	2.9767
	Std. Deviation	.03502
Most Extreme Differences	Absolute	.247
	Positive	.171
	Negative	-.247
Kolmogorov-Smirnov Z		.606
Asymp. Sig. (2-tailed)		.856

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_daya_lekat_F3	Equal variances assumed	2.207	.212	-1.604	4	.184	-.04000	.02494	-.10926	.02926
	Equal variances not assumed			-1.604	2.560	.222	-.04000	.02494	-.12769	.04769

- **FORMULASI IV**

One-Sample Kolmogorov-Smirnov Test

		Uji_daya_lekat_F4
N		6
Normal Parameters[a,,b]	Mean	5.2800
	Std. Deviation	.81839
Most Extreme Differences	Absolute	.314
	Positive	.311
	Negative	-.314
Kolmogorov-Smirnov Z		.769
Asymp. Sig. (2-tailed)		.596

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_daya_lekat_F4	Equal variances assumed	2.118	.219	-59.867	4	.000	-1.49333	.02494	-1.56259	-1.42408
	Equal variances not assumed			-59.867	3.108	.000	-1.49333	.02494	-1.57118	-1.41549

- **FORMULA V**

One-Sample Kolmogorov-Smirnov Test

		Uji_daya_lekat_F5
N		6
Normal Parameters[a,,b]	Mean	7.1333
	Std. Deviation	.99337
Most Extreme Differences	Absolute	.314
	Positive	.313
	Negative	-.314
Kolmogorov-Smirnov Z		.769
Asymp. Sig. (2-tailed)		.595

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_daya_lekat_F5	Equal variances assumed	.073	.801	-108.800	4	.000	-1.81333	.01667	-1.85961	-1.76706
	Equal variances not assumed			-108.800	3.994	.000	-1.81333	.01667	-1.85964	-1.76703

Lampiran 23. Data hasil uji stabilitas waktu mengering pada tangan sediaan masker gel *peel-off* dengan metode *Freeze thaw*

UJI STABILITAS WAKTU MENGERING PADA KULIT											
T0						T20					
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**	**Replikasi**	**FI**	**FII**	**FIII**	**FIV**	**FV**
1	**18,16**	**20,21**	**25,14**	**30,16**	**25,28**	**1**	**16,19**	**19,21**	**20,21**	**25,17**	**23,17**
2	**18,21**	**20,19**	**25,18**	**30,21**	**25,25**	**2**	**16,21**	**19,14**	**20,16**	**25,21**	**23,21**
3	**18,20**	**20,18**	**25,20**	**30,14**	**25,30**	**3**	**16,22**	**19,17**	**20,17**	**25,16**	**23,19**
Rata-rata	**18,19**	**20,19**	**25,17**	**30,17**	**25,28**	**Rata-rata**	**16,21**	**19,17**	**20,18**	**25,18**	**23,19**
SD	**0,03**	**0,02**	**0,03**	**0,04**	**0,03**	**SD**	**0,02**	**0,04**	**0,03**	**0,03**	**0,02**

- **FORMULA I**

One-Sample Kolmogorov-Smirnov Test

		Uji_WktMngrngPdTngn_F1
N		6
Normal Parameters[a,,b]	Mean	17.1983
	Std. Deviation	1.08649
Most Extreme Differences	Absolute	.316
	Positive	.316
	Negative	-.312
Kolmogorov-Smirnov Z		.774
Asymp. Sig. (2-tailed)		.587

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_WktMngrngPdTngn_F1	Equal variances assumed	1.600	.275	112.444	4	.000	1.98333	.01764	1.93436	2.03231
	Equal variances not assumed			112.444	3.200	.000	1.98333	.01764	1.92913	2.03753

- **FORMULA II**

One-Sample Kolmogorov-Smirnov Test

		Uji_WkMngrngPdTngn_F2
N		6
Normal Parameters[a,,b]	Mean	19.6833
	Std. Deviation	.55920
Most Extreme Differences	Absolute	.313
	Positive	.301
	Negative	-.313
Kolmogorov-Smirnov Z		.766
Asymp. Sig. (2-tailed)		.600

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_WkMngrngPdTngn_F2	Equal variances assumed	1.385	.305	46.131	4	.000	1.02000	.02211	.95861	1.08139
	Equal variances not assumed			46.131	2.731	.000	1.02000	.02211	.94554	1.09446

- **FORMULA III**

One-Sample Kolmogorov-Smirnov Test

		Uji_WkMngrngPdTngn_F3
N		6
Normal Parameters[a,,b]	Mean	22.6767
	Std. Deviation	2.73508
Most Extreme Differences	Absolute	.316
	Positive	.316
	Negative	-.316
Kolmogorov-Smirnov Z		.775
Asymp. Sig. (2-tailed)		.585

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_WkMngrng PdTngn_F3	Equal variances assumed	.051	.833	214.000	4	.000	4.99333	.02333	4.92855	5.05812
	Equal variances not assumed			214.000	3.920	.000	4.99333	.02333	4.92802	5.05864

- **FORMULA IV**

One-Sample Kolmogorov-Smirnov Test

		Uji_WkMngrngPdTngn_F4
N		6
Normal Parameters[a,,b]	Mean	27.6750
	Std. Deviation	2.73328
Most Extreme Differences	Absolute	.316
	Positive	.316
	Negative	-.316
Kolmogorov-Smirnov Z		.775
Asymp. Sig. (2-tailed)		.585

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_WkMngrng PdTngn_F4	Equal variances assumed	.400	.561	193.262	4	.000	4.99000	.02582	4.91831	5.06169
	Equal variances not assumed			193.262	3.670	.000	4.99000	.02582	4.91569	5.06431

- **FORMULA V**

One-Sample Kolmogorov-Smirnov Test

		Uji_WkMngrngPdTngn_F5
N		6
Normal Parameters[a,,b]	Mean	24.2333
	Std. Deviation	1.14310
Most Extreme Differences	Absolute	.315
	Positive	.315
	Negative	-.313
Kolmogorov-Smirnov Z		.771
Asymp. Sig. (2-tailed)		.592

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_WkMngrngPdTngn_F5	Equal variances assumed	.203	.676	112.433	4	.000	2.08667	.01856	2.03514	2.13820
	Equal variances not assumed			112.433	3.806	.000	2.08667	.01856	2.03409	2.13925

Lampiran 24. Data hasil uji stabilitas waktu mengering pada kaca sediaan masker gel *peel-off* dengan metode *Freeze thaw*

UJI STABILITAS WAKTU MENGERING PADA KACA											
T0						T20					
Replikasi	FI	FII	FIII	FIV	FV	Replikasi	FI	FII	FIII	FIV	FV
1	10,11	10,29	15,44	25,03	30,58	1	10,01	10,12	15,21	15,67	15,98
2	10,12	10,28	15,45	25,04	30,52	2	10,02	10,15	15,21	15,65	15,96
3	10,13	10,27	15,44	25,06	30,55	3	10,03	10,14	15,23	15,68	15,98
Rata-rata	10,12	10,28	15,44	25,04	30,55	Rata-rata	10,02	10,14	15,22	15,67	15,97
SD	0,01	0,01	0,01	0,02	0,03	SD	0,01	0,02	0,01	0,02	0,01

- **FORMULA I**

One-Sample Kolmogorov-Smirnov Test

		Uji_WkMngrngPdkaca_F1
N		6
Normal Parameters[a,,b]	Mean	10.0700
	Std. Deviation	.05550
Most Extreme Differences	Absolute	.264
	Positive	.264
	Negative	-.264
Kolmogorov-Smirnov Z		.648
Asymp. Sig. (2-tailed)		.795

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_WkMngrngPdkaca_F1	Equal variances assumed	.000	1.000	12.247	4	.000	.10000	.00816	.07733	.12267
	Equal variances not assumed			12.247	4.000	.000	.10000	.00816	.07733	.12267

- **FORMULA II**

One-Sample Kolmogorov-Smirnov Test

		Uji_WkMngrngPdkaca_F2
N		6
Normal Parameters[a,,b]	Mean	10.2083
	Std. Deviation	.07935
Most Extreme Differences	Absolute	.281
	Positive	.269
	Negative	-.281
Kolmogorov-Smirnov Z		.689
Asymp. Sig. (2-tailed)		.729

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_WkMngrngPdkaca_F2	Equal variances assumed	.727	.442	13.598	4	.000	.14333	.01054	.11407	.17260
	Equal variances not assumed			13.598	3.448	.000	.14333	.01054	.11212	.17454

- **FORMULA III**

One-Sample Kolmogorov-Smirnov Test

		Uji_WkMngrngPdkaca_F3
N		6
Normal Parameters[a,,b]	Mean	15.3300
	Std. Deviation	.12442
Most Extreme Differences	Absolute	.312
	Positive	.289
	Negative	-.312
Kolmogorov-Smirnov Z		.763
Asymp. Sig. (2-tailed)		.605

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_WkMngrngPdkaca_F3	Equal variances assumed	3.200	.148	30.411	4	.000	.22667	.00745	.20597	.24736
	Equal variances not assumed			30.411	2.941	.000	.22667	.00745	.20268	.25066

- **FORMULA IV**

One-Sample Kolmogorov-Smirnov Test

		Uji_WkMngrngPdkaca_F4
N		6
Normal Parameters[a,,b]	Mean	20.3550
	Std. Deviation	5.13583
Most Extreme Differences	Absolute	.319
	Positive	.319
	Negative	-.319
Kolmogorov-Smirnov Z		.781
Asymp. Sig. (2-tailed)		.576

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_WkMngrngPdkaca_F4	Equal variances assumed	.000	1.000	751.806	4	.000	9.37667	.01247	9.34204	9.41130
	Equal variances not assumed			751.806	4.000	.000	9.37667	.01247	9.34204	9.41130

- **FORMULA V**

One-Sample Kolmogorov-Smirnov Test

		Uji_WkMngrngPdkaca_F5
N		6
Normal Parameters[a,,b]	Mean	23.2617
	Std. Deviation	7.98400
Most Extreme Differences	Absolute	.319
	Positive	.319
	Negative	-.318
Kolmogorov-Smirnov Z		.782
Asymp. Sig. (2-tailed)		.574

a. Test distribution is Normal.

b. Calculated from data.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Uji_WkMngrngPdkaca_F5	Equal variances assumed	1.176	.339	785.414	4	.000	14.57667	.01856	14.52514	14.62820
	Equal variances not assumed			785.414	2.580	.000	14.57667	.01856	14.51177	14.64156

Lampiran 25. Data hasil uji aktivitas antibakteri ekstrak daun binahong (*Anredera cordifolia* (Ten.) Steenis)

Uji aktivitas ekstrak							
Replikasi	**10%**	**15%**	**20%**	**25%**	**30%**	**K+**	**k-**
1	**11**	**14,34**	**17,33**	**17,35**	**17,78**	**45,44**	**0**
2	**11,5**	**14,11**	**17,14**	**17,14**	**17,88**	**44,98**	**0**
3	**11,92**	**13,9**	**17,24**	**17,77**	**17,76**	**43,68**	**0**
Rata-rata	**11,47**	**14,12**	**17,24**	**17,42**	**17,81**	**44,70**	**0,00**
SD	**0,46**	**0,22**	**0,10**	**0,32**	**0,06**	**0,91**	**0,00**

One-Sample Kolmogorov-Smirnov Test

		DDH
N		15
Normal Parameters[a.,b]	Mean	15.6107
	Std. Deviation	2.54982
Most Extreme Differences	Absolute	.326
	Positive	.187
	Negative	-.326
Kolmogorov-Smirnov Z		1.261
Asymp. Sig. (2-tailed)		.083

a. Test distribution is Normal.

b. Calculated from data.

Test of Homogeneity of Variances

DDH

Levene Statistic	df1	df2	Sig.
1.871	4	10	.192

ANOVA

DDH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	90.269	4	22.567	299.591	.000
Within Groups	.753	10	.075		
Total	91.022	14			

DDH

			Subset for alpha = 0.05		
	Konsentrasi	N	1	2	3
Tukey HSD[a]	konsentrasi 10%	3	11.4733		
	konsentrasi 15%	3		14.1167	
	konsentrasi 20%	3			17.2367
	konsentrasi 25%	3			17.4200
	konsentrasi 30%	3			17.8067
	Sig.		1.000	1.000	.156

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 26. Data hasil uji aktivitas antibakteri masker gel *peel-off* ekstrak daun binahong (*Anredera cordifolia* (Ten.) Steenis)

UJI AKTIVITAS ANTIBAKTERI								
Replikasi	**FI**	**FII**	**FIII**	**FIV**	**FV**	**K+**	**K-**	**K p**
1	**17,5**	**13,67**	**12,65**	**12,71**	**11,35**	**22,06**	**0**	**24,63**
2	**16,45**	**13,34**	**12,89**	**12,58**	**10,86**	**22,23**	**0**	**24,82**
3	**15,3**	**13,33**	**12,15**	**12,67**	**11,13**	**22,36**	**0**	**24,57**
Rata-rata	**16,42**	**13,45**	**12,56**	**12,65**	**11,11**	**22,22**	**0,00**	**24,67**
SD	**1,10**	**0,19**	**0,38**	**0,07**	**0,25**	**0,15**	**0,00**	**0,13**

One-Sample Kolmogorov-Smirnov Test

		DDH
N		15
Normal Parameters[a,,b]	Mean	13.2387
	Std. Deviation	1.87630
Most Extreme Differences	Absolute	.212
	Positive	.212
	Negative	-.102
Kolmogorov-Smirnov Z		.820
Asymp. Sig. (2-tailed)		.512

a. Test distribution is Normal.

b. Calculated from data.

ANOVA

DDH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	46.376	4	11.594	39.829	.000
Within Groups	2.911	10	.291		
Total	49.287	14			

DDH

			Subset for alpha = 0.05		
	Formula	N	1	2	3
Tukey HSD[a]	formula 5	3	11.1133		
	formula 3	3		12.5633	
	formula 4	3		12.6533	
	formula 2	3		13.4467	
	formula 1	3			16.4167
	Sig.		1.000	.329	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.