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Lampiran 1. Proses Ekstraksi Ekstrak Kulit Batang *R. Mucronata*

Kulit batang *R. mucronata* kering

Maserasi

Rotary evaporator

Pengentalan ekstrak

Ekstrak kental

Lampiran 2. Perhitungan Rendemen

∑ Bobot serbuk simplisia : 1700 gram

∑ Bobot ekstrak yang didapat : 306,884 gram

Rendemen $= \frac{\text{Bobot Ekstrak}}{\text{Bobot Simplisia}} \times 100\%$

$= \frac{306{,}884 \text{ gram}}{1700 \text{ gram}} \times 100\%$

= 18,052 %

Lampiran 3. Proses Pembuatan Lipstik

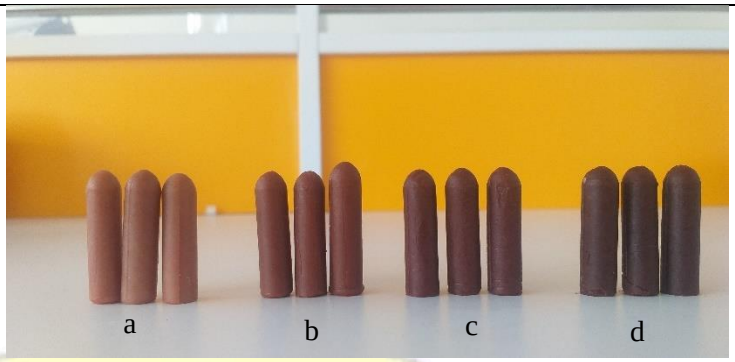
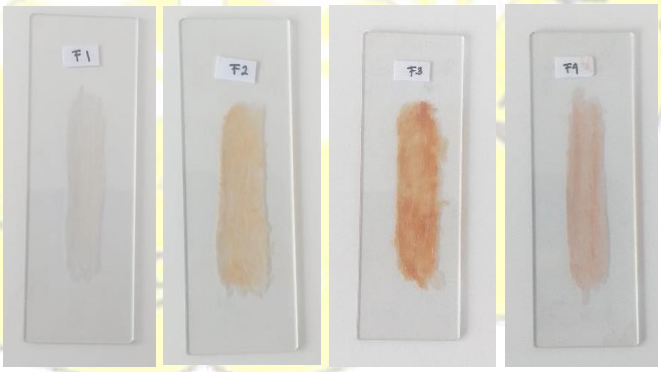
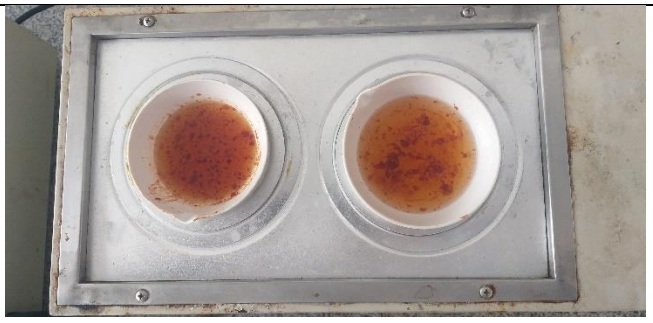
Campuran A

Campuran B

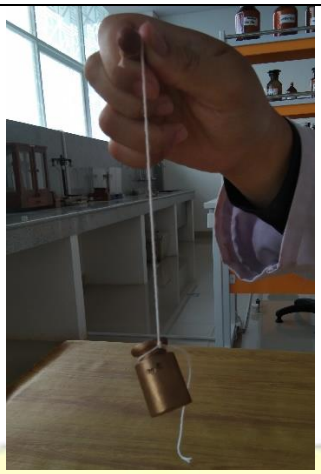
Campuran A + B

Penuangan ke dalam cetakan

Lampiran 4. Proses dan Hasil Evaluasi Sifat Fisik Sediaan Lipstik

No	Keterangan	Dokumentasi
1	**Organoleptik**	  Keterangan : a = Formula 1, b = Formula 2, c = Formula 3, d = Formula 4
2	**Homogenitas**	
3	**pH**	 Pelelehan sediaan

		  Hasil uji pH
4	**Titik leleh**	  Melting point  Hasil uji titik leleh

5	**Kekerasan**	  Beban 100 gram Beban 140 gram
6	**Daya Oles**	

Lampiran 5. Evaluasi Sabilitas Sediaan *Frezee thaw*

Stabilitas pada suhu 4^{o}C

Stabilitas pada suhu 40^{o}C

Hasil uji stabilitas

Lampiran 6. Data Hasil Evaluasi pH

HARI KE-	F1			RATA - RATA	SD
	REPLIKASI				
	1	2	3		
1	6,5	6,5	6,4	6,47	0,06
2	6,5	6,4	6,4	6,43	0,06
3	6,3	6,5	6,4	6,40	0,10
4	6,3	6,3	6,5	6,37	0,12
5	6,4	6,3	6,2	6,30	0,10
6	6,1	6,2	6,5	6,27	0,21
7	6,4	6,2	6,1	6,23	0,15
14	5,8	5,9	6,4	6,03	0,32
21	6,1	5,8	6,5	6,13	0,35
28	5,8	6,3	6,5	6,20	0,36

HARI KE-	F2			RATA - RATA	SD
	REPLIKASI				
	1	2	3		
1	6,5	6,4	6,2	6,37	0,15
2	6,4	6,3	6,2	6,30	0,10
3	6,4	6,3	6,1	6,27	0,15
4	6,3	6,1	6,3	6,23	0,12
5	6,1	6,2	6,2	6,17	0,06
6	6,2	6	6,1	6,10	0,10
7	6,1	6	6,3	6,13	0,15
14	6,4	5,8	6	6,07	0,31
21	5,7	6,5	5,9	6,03	0,42
28	5,6	6,5	5,9	6,00	0,46

HARI KE-	FORMULASI			RATA - RATA	SD
	F3				
	1	2	3		
1	6,3	6,4	6,3	6,33	0,06
2	6,2	6,3	6,4	6,30	0,10
3	6,1	6,4	6,2	6,23	0,15
4	6	6,2	6,3	6,17	0,15
5	6,3	6,2	5,9	6,13	0,21
6	6,1	5,9	6	6,00	0,10
7	5,7	5,9	6,2	5,93	0,25
14	5,8	6,2	5,7	5,90	0,26
21	6	5,7	5,7	5,80	0,17
28	5,7	5,6	5,8	5,70	0,10

HARI KE-	FORMULASI F4			RATA-RATA	SD
	1	2	3		
1	6,1	6,2	6,3	6,20	0,10
2	6	5,9	6,3	6,07	0,21
3	6	5,8	6,1	5,97	0,15
4	5,8	6	6	5,93	0,12
5	5,7	5,9	6	5,87	0,15
6	5,6	5,9	6	5,83	0,21
7	5,6	5,8	5,5	5,63	0,15
14	6,1	5,4	5,5	5,67	0,38
21	5,5	5,7	5,6	5,60	0,10
28	5,5	5,6	5,5	5,53	0,06

Lampiran 7. Hasil Uji Statistik pH

Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
pH	Formula 1	.133	10	.200*	.970	10	.886
	Formula 2	.119	10	.200*	.965	10	.844
	Formula 3	.146	10	.200*	.952	10	.698
	Formula 4	.167	10	.200*	.959	10	.779

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

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
pH	Based on Mean	2.350	3	36	.089
	Based on Median	2.275	3	36	.096
	Based on Median and with adjusted df	2.275	3	30.110	.100
	Based on trimmed mean	2.392	3	36	.085

One Way-ANOVA

ANOVA

pH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.122	3	.374	11.574	.000
Within Groups	1.164	36	.032		
Total	2.286	39			

LSD

Multiple Comparisons

Dependent Variable: pH

LSD

		Mean Difference (I-J)			95% Confidence Interval	
(I) Formula	(J) Formula		Std. Error	Sig.	Lower Bound	Upper Bound
Formula 1	Formula 2	.11600	.08040	.158	-.0471	.2791
	Formula 3	.23400*	.08040	.006	.0709	.3971
	Formula 4	.45300*	.08040	.000	.2899	.6161
Formula 2	Formula 1	-.11600	.08040	.158	-.2791	.0471
	Formula 3	.11800	.08040	.151	-.0451	.2811
	Formula 4	.33700*	.08040	.000	.1739	.5001
Formula 3	Formula 1	-.23400*	.08040	.006	-.3971	-.0709
	Formula 2	-.11800	.08040	.151	-.2811	.0451
	Formula 4	.21900*	.08040	.010	.0559	.3821
Formula 4	Formula 1	-.45300*	.08040	.000	-.6161	-.2899
	Formula 2	-.33700*	.08040	.000	-.5001	-.1739
	Formula 3	-.21900*	.08040	.010	-.3821	-.0559

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

Lampiran 8. Data Hasil Evaluasi Titik Leleh

HARI KE-	F1			RATA - RATA	SD
	REPLIKASI				
	1	2	3		
1	69,2	67,6	64,9	67,23	2,17
2	67,2	68,1	65,4	66,90	1,37
3	65,6	65,6	69,4	66,87	2,19
4	68,2	64,3	67,5	66,67	2,08
5	65,1	65,5	69,1	66,57	2,20
6	66,1	67,6	65,9	66,53	0,93
7	68,3	61,9	68,3	66,17	3,70
14	65,8	68,7	63,9	66,13	2,42
21	64,2	68,7	64,6	65,83	2,49
28	65,2	65,7	66,1	65,67	0,45

HARI KE-	F2			RATA - RATA	SD
	REPLIKASI				
	1	2	3		
1	67,1	69,7	69,3	68,70	1,40
2	68,7	65,4	69,9	68,00	2,33
3	66,5	67,7	68,6	67,60	1,05
4	66,6	67,6	69,8	68,00	1,64
5	64,4	67,5	69	66,97	2,35
6	64,6	68,1	67,7	66,80	1,92
7	65,8	65,2	67,9	66,30	1,42
14	67,8	64,8	65,3	65,97	1,61
21	61,6	65,5	68,3	65,13	3,37
28	64,6	65,3	65,2	65,03	0,38

HARI KE-	FORMULASI			RATA - RATA	SD
	F3				
	1	2	3		
1	69,2	68,7	67,2	68,37	1,04
2	66,7	67,3	68,8	67,60	1,08
3	65,4	67,1	68,7	67,07	1,65
4	64,7	69,4	66,3	66,80	2,39
5	64,4	65,6	68,6	66,20	2,16
6	65,6	67	66,9	66,50	0,78
7	66,3	67,5	65,8	66,53	0,87
14	64,3	64,5	67,3	65,37	1,68
21	59,6	65,5	68,3	64,47	4,44
28	65,4	63	64,8	64,40	1,25

HARI KE-	FORMULASI F4			RATA - RATA	SD
	1	2	3		
1	67,9	68,2	69,6	68,57	0,91
2	68,1	69,3	67,9	68,43	0,76
3	68,7	67,1	67,2	67,67	0,90
4	68,7	68,9	64,2	67,27	2,66
5	65,3	69,5	67,8	67,53	2,11
6	66,6	64,2	69,2	66,67	2,50
7	65,7	67,9	64,5	66,03	1,72
14	61,7	66,6	69,8	66,03	4,08
21	62,9	66,3	67,7	65,63	2,47
28	64,2	64,5	66,3	65,23	0,95

Lampiran 9. Hasil Uji Statistik Titik Leleh

Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Titik_leleh	Formula 1	.158	10	.200*	.967	10	.865
	Formula 2	.126	10	.200*	.953	10	.700
	Formula 3	.159	10	.200*	.953	10	.700
	Formula 4	.174	10	.200*	.944	10	.598

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

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Titik_leleh	Based on Mean	2.529	3	36	.073
	Based on Median	2.335	3	36	.090
	Based on Median and with adjusted df	2.335	3	26.702	.096
	Based on trimmed mean	2.538	3	36	.072

One Way- ANOVA

ANOVA

Titik_leleh

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.438	3	.813	.677	.572
Within Groups	43.184	36	1.200		
Total	45.621	39			

Lampiran 10. Data Hasil Evaluasi Kekerasan

HARI KE-	F1			RATA - RATA	SD
	REPLIKASI				
	1	2	3		
1	170	170	170	170,00	0,00
2	180	180	180	180,00	0,00
3	180	180	180	180,00	0,00
4	180	180	180	180,00	0,00
5	180	180	180	180,00	0,00
6	180	180	180	180,00	0,00
7	180	180	180	180,00	0,00
14	160	170	170	166,67	5,77
21	150	160	150	153,33	5,77
28	150	150	160	153,33	5,77

HARI KE-	F2			RATA - RATA	SD
	REPLIKASI				
	1	2	3		
1	160,0	160,0	160,0	160,00	0,0
2	170,0	170,0	170,0	170,00	0,0
3	170,0	170,0	170,0	170,00	0,0
4	170,0	170,0	170,0	170,00	0,0
5	170,0	170,0	170,0	170,00	0,0
6	170,0	170,0	170,0	170,00	0,0
7	170,0	170,0	170,0	170,00	0,0
14	160,0	160,0	160,0	168,57	0,0
21	150,0	140,0	150,0	146,67	5,8
28	140,0	150,0	140,0	143,33	5,8

HARI KE-	FORMULASI F3			RATA - RATA	SD
	1	2	3		
1	150,0	150,0	150,0	150,00	0,0
2	160,0	160,0	160,0	160,00	0,0
3	160,0	160,0	160,0	160,00	0,0
4	160,0	160,0	160,0	160,00	0,0
5	160,0	160,0	160,0	160,00	0,0
6	160,0	160,0	160,0	160,00	0,0
7	160,0	160,0	160,0	160,00	0,0
14	160,0	160,0	160,0	160,00	0,0
21	140,0	140,0	140,0	140,00	0,0
28	130,0	130,0	130,0	130,00	0,0
HARI KE-	**FORMULASI F4**			**RATA - RATA**	**SD**
	1	**2**	**3**		
1	160,0	150,0	150,0	153,33	5,77
2	150,0	150,0	150,0	150,00	0,00
3	150,0	150,0	150,0	150,00	0,00
4	150,0	150,0	150,0	150,00	0,00
5	150,0	150,0	150,0	150,00	0,00
6	150,0	150,0	150,0	150,00	0,00
7	150,0	150,0	150,0	150,00	0,00
14	150,0	160,0	160,0	156,67	5,77
21	130,0	120,0	130,0	126,67	5,77
28	120,0	120,0	120,0	120,00	0,00

Lampiran 11. Hasil Uji Statistik Kekerasan

Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Kekerasan	Formula 1	.355	10	.001	.713	10	.001
	Formula 2	.374	10	.000	.653	10	.000
	Formula 3	.412	10	.000	.647	10	.000
	Formula 4	.428	10	.000	.690	10	.001

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Kekerasan	Based on Mean	.052	3	36	.984
	Based on Median	.049	3	36	.985
	Based on Median and with adjusted df	.049	3	35.926	.985
	Based on trimmed mean	.057	3	36	.982

Kruskal Wallis

Ranks

	Formula	N	Mean Rank
Kekerasan	Formula 1	10	31.10
	Formula 2	10	24.55
	Formula 3	10	16.70
	Formula 4	10	9.65
	Total	40	

Test Statistics[a,b]

	Kekerasan
Kruskal-Wallis H	19.494
df	3
Asymp. Sig.	.000

a. Kruskal Wallis Test

b. Grouping Variable: Formula

Mann Whitney

- **F1 & F2**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Kekerasan	Formula 1	10	12.90	129.00
	Formula 2	10	8.10	81.00
	Total	20		

Test Statistics[a]

	Kekerasan
Mann-Whitney U	26.000
Wilcoxon W	81.000
Z	-1.880
Asymp. Sig. (2-tailed)	.060
Exact Sig. [2*(1-tailed Sig.)]	.075[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

- **F1 & F3**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Kekerasan	Formula 1	10	14.10	141.00
	Formula 3	10	6.90	69.00
	Total	20		

Test Statistics[a]

	Kekerasan
Mann-Whitney U	14.000
Wilcoxon W	69.000
Z	-2.821
Asymp. Sig. (2-tailed)	.005
Exact Sig. [2*(1-tailed Sig.)]	.005[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

- **F1 & F4**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Kekerasan	Formula 1	10	15.10	151.00
	Formula 4	10	5.90	59.00
	Total	20		

Test Statistics[a]

	Kekerasan
Mann-Whitney U	4.000
Wilcoxon W	59.000
Z	-3.565
Asymp. Sig. (2-tailed)	.000
Exact Sig. [2*(1-tailed Sig.)]	.000[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

- **F2 & F3**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Kekerasan	Formula 2	10	13.55	135.50
	Formula 3	10	7.45	74.50
	Total	20		

Test Statistics[a]

	Kekerasan
Mann-Whitney U	19.500
Wilcoxon W	74.500
Z	-2.416
Asymp. Sig. (2-tailed)	.016
Exact Sig. [2*(1-tailed Sig.)]	.019[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

- **F2 & F4**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Kekerasan	Formula 2	10	13.90	139.00
	Formula 4	10	7.10	71.00
	Total	20		

Test Statistics[a]

	Kekerasan
Mann-Whitney U	16.000
Wilcoxon W	71.000
Z	-2.626
Asymp. Sig. (2-tailed)	.009
Exact Sig. [2*(1-tailed Sig.)]	.009[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

- **F3 & F4**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Kekerasan	Formula 3	10	13.35	133.50
	Formula 4	10	7.65	76.50
	Total	20		

Test Statistics[a]

	Kekerasan
Mann-Whitney U	21.500
Wilcoxon W	76.500
Z	-2.233
Asymp. Sig. (2-tailed)	.026
Exact Sig. [2*(1-tailed Sig.)]	.029[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

Lampiran 12. Hasil Uji Statistik Daya Oles

Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Daya_oles	Formula 1	.412	10	.000	.606	10	.000
	Formula 2	.422	10	.000	.628	10	.000
	Formula 3	.416	10	.000	.650	10	.000
	Formula 4	.422	10	.000	.628	10	.000

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Daya_oles	Based on Mean	1.247	3	36	.307
	Based on Median	.181	3	36	.909
	Based on Median and with adjusted df	.181	3	29.505	.908
	Based on trimmed mean	.987	3	36	.410

Kruskal Wallis

Ranks

	Formula	N	Mean Rank
Daya_oles	Formula 1	10	33.30
	Formula 2	10	24.35
	Formula 3	10	16.70
	Formula 4	10	7.65
	Total	40	

Test Statistics[a,b]

	Daya_oles
Kruskal-Wallis H	27.499
df	3
Asymp. Sig.	.000

a. Kruskal Wallis Test

b. Grouping Variable: Formula

Mann Whitney

- **F1 dan F2**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Daya_oles	Formula 1	10	14.00	140.00
	Formula 2	10	7.00	70.00
	Total	20		

Test Statistics[a]

	Daya_oles
Mann-Whitney U	15.000
Wilcoxon W	70.000
Z	-2.770
Asymp. Sig. (2-tailed)	.006
Exact Sig. [2*(1-tailed Sig.)]	.007[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

- **F1 dan F3**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Daya_oles	Formula 1	10	14.80	148.00
	Formula 3	10	6.20	62.00
	Total	20		

Test Statistics[a]

	Daya_oles
Mann-Whitney U	7.000
Wilcoxon W	62.000
Z	-3.491
Asymp. Sig. (2-tailed)	.000
Exact Sig. [2*(1-tailed Sig.)]	.000[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

- **F1 dan F4**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Daya_oles	Formula 1	10	15.50	155.00
	Formula 4	10	5.50	55.00
	Total	20		

Test Statistics[a]

	Daya_oles
Mann-Whitney U	.000
Wilcoxon W	55.000
Z	-3.953
Asymp. Sig. (2-tailed)	.000
Exact Sig. [2*(1-tailed Sig.)]	.000[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

- **F2 dan F3**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Daya_oles	Formula 2	10	13.55	135.50
	Formula 3	10	7.45	74.50
	Total	20		

Test Statistics[a]

	Daya_oles
Mann-Whitney U	19.500
Wilcoxon W	74.500
Z	-2.448
Asymp. Sig. (2-tailed)	.014
Exact Sig. [2*(1-tailed Sig.)]	.019[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

- **F2 dan F4**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Daya_oles	Formula 2	10	14.80	148.00
	Formula 4	10	6.20	62.00
	Total	20		

Test Statistics[a]

	Daya_oles
Mann-Whitney U	7.000
Wilcoxon W	62.000
Z	-3.491
Asymp. Sig. (2-tailed)	.000
Exact Sig. [2*(1-tailed Sig.)]	.000[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

- **F3 dan F4**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Daya_oles	Formula 3	10	14.05	140.50
	Formula 4	10	6.95	69.50
	Total	20		

Test Statistics[a]

	Daya_oles
Mann-Whitney U	14.500
Wilcoxon W	69.500
Z	-2.883
Asymp. Sig. (2-tailed)	.004
Exact Sig. [2*(1-tailed Sig.)]	.005[b]

a. Grouping Variable: Formula

b. Not corrected for ties.

Lampiran 13. Hasil Uji Kelayakan etik

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI
UNIVERSITAS JENDERAL SOEDIRMAN
FAKULTAS ILMU-ILMU KESEHATAN
Jalan dr. Soeparno Grendeng Purwokerto 53122
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PERSETUJUAN ETIK
(ETHICAL APPROVAL)
No : 1028/EC/KEPK/II/2023

Judul Usulan Penelitian *Title of research proposal*	:	Formulasi Sediaan Lipstik Ekstrak Kulit Batang Bakau Hitam (*Rhizhopora mucronata*)
Peneliti Utama *Principle Investigator*	:	Reza Yufita Ekawati
Anggota Tim Peneliti *Members of research team*	:	- Prof. Dr. Dra. apt. Warsinah, M. Si - apt. Dhadhang Wahyu K, M. Sc., Ph. D
Institusi *Institution*	:	Jurusan Farmasi Fakultas Ilmu-ilmu Kesehatan Universitas Jenderal Soedirman
Dokumen yang disetujui *Documents approved*	:	Proposal Penelitian
Tanggal Persetujuan *Date of approval*	:	13 Februari 2023

Komisi Etik Penelitian Kesehatan Fakultas Ilmu-ilmu Kesehatan UNSOED menyatakan bahwa protokol penelitian tersebut telah memenuhi kaidah etik yang tertera dalam Deklarasi Helsinki 2008 dan dapat dilaksanakan. Komisi Etik Penelitian berhak memantau kegiatan penelitian tersebut sewaktu-waktu.
The Research Ethics Committee states that the above protocol meets the ethical principle outlined in the Declaration of Helsinki 2008 and therefore can be carried out. The Committee has the right to monitor the research activities at any time.
Para peneliti bertanggungjawab menyerahkan:
The investigator(s) is/are obliged to submit:

- ☐ Laporan kemajuan jika diperlukan telaah lebih lanjut
  Progress report in case a continuing review is needed
- ☐ Laporan kejadian yang tidak diinginkan
  Report of any cases of Serious Adverse Event (SAE)
- ☑ Laporan akhir
  Final report upon the completion of the study

Dokumen ini berlaku untuk **1 (satu) tahun** terhitung sejak tanggal disetujui.
This document is valid for one year beginning from the date of approval.

Ketua Komisi Etik Penelitian,

Made Sumarwati, S.Kp., M.N.
NIP. 196812021993032001

Lampiran 14. Informed Consent

LEMBAR INFORMASI DAN PERSETUJUAN BAGI PARTISIPAN PENELITIAN

Pada lembar berikut ini Anda akan mendapatkan penjelasan mengenai penelitian yang memerlukan **partisipasi Anda sebagai partisipan penelitian**, yang selanjutnya akan kami sebut sebagai **responden**. Sebelum menyetujui untuk berpartisipasi dalam penelitian ini, penting bagi Anda untuk mengetahui tujuan, prosedur, keuntungan dan risiko dalam berpartisipasi.

A. Judul penelitian

Formulasi Sediaan Lipstik Ekstrak Kulit Batang Bakau Hitam (*Rhizophora mucronata*)

B. Tujuan penelitian

1. Untuk mengetahui karakteristik sifat fisik dari lipstik yang terbuat dari ekstrak kulit batang *R. mucronata.*
2. Untuk mengetahui formula sediaan lipstik ekstrak kulit batang *R. mucronata* yang lebih diterima responden berdasarkan uji hedonik dan uji iritasi.

C. Keikutsertaan sukarela

Partisipasi Anda dalam penelitian ini bersifat sukarela tanpa adanya paksaan. Meskipun Anda telah menyatakan kesediaan untuk berpartisipasi, Anda memiliki hak untuk menolak keikutsertaan dan memiliki hak pula untuk mengundurkan diri dari penelitian ini. Tidak ada kerugian ataupun sanksi yang akan Anda alami akibat penolakan atau pengunduran diri Anda. Jika Anda memutuskan untuk tidak berpartisipasi atau mengundurkan diri dari penelitian ini, Anda dapat melakukannya kapan saja.

D. Prosedur penelitian, durasi (lama) penelitian, dan tanggung jawab partisipan

Prosedur yang akan dilakukan dalam penelitian ini meliputi 2 hal yaitu menguji iritasi dan kesukaan produk.

1. Uji Iritasi

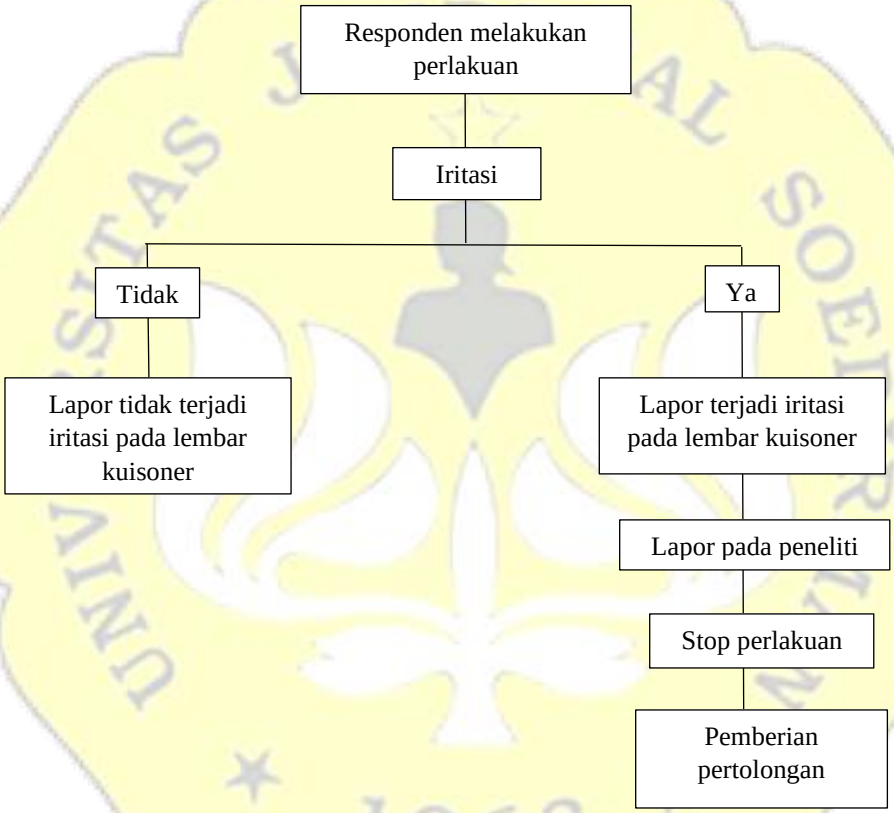
   Partisipan mendapatkan 4 sampel lipstik, Anda akan diminta untuk mengaplikasikan sediaan yang diberikan pada lengan kiri bawah bagian dalam sebanyak 3 kali sehari (dengan jeda waktu 8 jam) selama 10 menit dan diamati reaksi yang terjadi. Pengaplikasian lipstik dilakukan secara berurutan dari formulasi terendah (F1, F2, F3, F4) pada tangan kiri bagian bawah selama 10 menit setelah itu dilihat reaksi yang terjadi. Setelah 10 menit pengaplikasian dan telah melakukan penilaian lalu dibesihkan dan dilanjutkan dengan pengaplikasian formulasi lipstik selanjutnya. Reaksi iritasi positif ditandai dengan adanya eritema (kemerahan) pada tempat pengolesan. Setelah melihat reaksi yang

terjadi partisipan mengisi kuisoner yang telah disediakan dengan memberikan nilai skor 0 sampai 4 dengan ketentuan sebagai berikut:

0 = Tidak ada eritema
1 = Eritema ringan (bewarna merah muda)
2 = Eritema sedang (merah muda tua)
3 = Eritema ringan-berat
4 = Eritema (warna merah)

Pengolesan dihentikan setelah terdapat eritema pada tempat pengolesan lengan kiri bawah bagian dalam.

Berikut pelaporan jika terjadi iritasi:



2. Uji Kesukaan

Partisipan mendapatkan 4 sampel lipstik, Anda akan diminta untuk mengoleskan sediaan yang diberikan pada lengan kiri bawah bagian dalam dan mengisi kuisoner yang telah diberikan oleh peneliti mengenai kesukaan terkait warna, aroma, kemudahan dalam aplikasi dan kemasan. Pengisian kuesioner membutuhkan waktu ± 5 menit dengan memberikan skor pada masing-masing komponen yaitu warna, aroma, kemudahan dalam aplikasi dan kemasan.

Berikut skor yang dapat diberikan:

1 = Sangat Tidak Suka
2 = Tidak Suka
3 = Agak Suka
4 = Suka
5 = Sangat Suka

E. Manfaat penelitian

Partisipasi Anda dalam penelitian ini dapat memberikan manfaat untuk Anda/ orang lain berupa peningkatan daya guna dari kulit batang *R. mucronata* sebagai pewarna alami dalam sediaan lipstik yang aman digunakan oleh masyarakat.

F. Risiko dan ketidaknyamanan

Risiko dan ketidaknyamanan yang terjadi adalah menyita waktu anda selama 10 menit untuk melakukan pengamatan dan terjadinya iritasi pada lengan kiri bawah bagian dalam yang ditandai dengan adanya eritema (kemarahan).

G. Kerahasiaan

Semua informasi yang berkaitan dengan identitas responden akan dirahasiakan dan hanya diketahui oleh peneliti.

H. Kompensasi

Apabila terjadi hal yang tidak diinginkan yaitu iritasi dengan gejala berupa eritema (kemerahan), peneliti akan bertanggung jawab membiayai biaya pengobatan sampai gejala iritasi hilang.

I. Pertanyaan

Jika terdapat pertanyaanberkaitan dengan penelitian ini, Anda dapat menghubungi:

- Peneliti: Reza Yufita Ekawati (082257578623)
- Sekretariat Komisi Etik Fakultas Ilmu-ilmu Kesehatan UNSOED, Gedung D, Jl. Dr.
  Soeparno, Karangwangkal, Purwokerto

KESEDIAAN MENJADI PARTISIPAN DALAM PENELITIAN

Yang bertanda tangan di bawah ini:

Nama :_____

Umur :_____

Alamat :_____

Dengan ini menyatakan bahwa saya telah memperoleh penjelasan, sepenuhnya mengerti dan memahami tujuan, manfaat, dan risiko yang mungkin timbul dalam penelitian, serta telah diberi kesempatan bertanya. Saya juga mempunyai hak untuk sewaktu-waktu mengundurkan diri dari keikutsertaan dalam penelitian ini, tanpa sanksi apapun.

Maka dengan ini saya secara sukarela menyatakan:

BERSEDIA / TIDAK BERSEDIA* (coret yang tidak dipilih)

menjadi partisipan penelitian. Demikian surat ini saya buat dengan sebenarnya dan tanpa ada paksaan, untuk digunakan seperlunya.

Purwokerto,

Hormat saya,

(_____)

Lampiran 15. Form Iritasi

Kuisoner Uji Iritasi

Formulasi Sediaan Lipstik Ekstrak Kulit Batang Bakau Hitam (*Rhizophora mucronata*)

Nama Panelis :

Tanggal :

Petunjuk pengisian

Dihadapan Anda terdapat 4 sampel lipstik, Anda diminta untuk mengoleskan 4 sampel tersebut secara bergantian pada lengan kiri bagian bawah sebanyak 3 kali sehari (dengan jeda waktu 8 jam) selama 10 menit. Pertama Anda diminta untuk mengaplikasian lipstik secara berurutan yang dimulai dari F1, F2, F3, F4 pada tangan kiri bagian bawah selama 10 menit setelah itu dilihat reaksi yang terjadi. Setelah 10 menit pengaplikasian dan telah melakukan penilaian lalu dibesihkan dan dilanjutkan dengan pengaplikasian formulasi lipstik selanjutnya. Setelah itu anda diminta untuk memberikan tanda ✓ pada tabel yang disajikan untuk menilai apakah lipstik mengiritasi atau tidak.

Spefisikasi	Nilai	8 jam				16 jam				24 jam			
		F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4
Eritema (Warna merah)	4												
Eritema ringan-berat	3												
Eritema sedang (merah muda tua)	2												
Eritema ringan (merah muda)	1												
Tidak ada eritema	0												

Sumber: Al-Suwayeh *et al*., 2014

Tanda tangan panelis,

(……)

Lampiran 16. Data Hasil Uji Iritasi

Panelis	F1			F2			F3			F4		
	8 Jam	16 jam	24 jam	8 jam	16 jam	24 jam	8 jam	16 jam	24 jam	8 jam	16 jam	24 jam
1	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-
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22	-	-	-	-	-	-	-	-	-	-	-	-
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25	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-
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28	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-

Keterangan:

- : Tidak iritasi/ eritema

Lampiran 17. Form Hedonik

Kuisoner Uji Hedonik

Formulasi Sediaan Lipstik Ekstrak Kulit Batang Bakau Hitam (*Rhizophora mucronata*)

Nama Panelis :

Tanggal :

Petunjuk pengisian

Dihadapan Anda terdapat 4 sampel lipstik, Anda diminta untuk mengoleskan masing-masing sampel lipstik pada lengan kiri bagian bawah lalu memberikan tanda ✓ pada kolom nilai untuk menilai warna, aroma, kemasan dan kemudahan dalam aplikasi lipstik pada tabel yang disajikan.

Spefisikasi	Nilai	Warna				Aroma				Kemasan				Tekstur			
		F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4
Sangat suka	5																
Suka	4																
Agak suka	3																
Tidak suka	2																
Sangat tidak suka	1																

Sumber: Siregar and Utami, 2014; Kemp, Hollowood and Hort, 2009

Tanda tangan panelis,

(…….)

Lampiran 18. Uji Hedonik

Kemasan

F1

F2

F3

F4

Lipstik kulit batang *R. Mucronata*

Lipstik dan kemasan

Lampiran 19. Analisis Data Hedonik

- **Warna**

Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Warna	Formula 1	.222	30	.001	.881	30	.003
	Formula 2	.231	30	.000	.882	30	.003
	Formula 3	.262	30	.000	.863	30	.001
	Formula 4	.337	30	.000	.638	30	.000

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Warna	Based on Mean	7.199	3	116	.000
	Based on Median	4.659	3	116	.004
	Based on Median and with adjusted df	4.659	3	85.368	.005
	Based on trimmed mean	7.135	3	116	.000

Kruskal Wallis

Ranks

	Formula	N	Mean Rank
Warna	Formula 1	30	44.18
	Formula 2	30	49.13
	Formula 3	30	62.93
	Formula 4	30	85.75
	Total	120	

Test Statistics[a,b]

	Warna
Kruskal-Wallis H	28.431
df	3
Asymp. Sig.	.000

a. Kruskal Wallis Test

b. Grouping Variable: Formula

Mann Whitney

- **F1 dan F2**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Warna	Formula 1	30	28.57	857.00
	Formula 2	30	32.43	973.00
	Total	60		

Test Statistics[a]

	Warna
Mann-Whitney U	392.000
Wilcoxon W	857.000
Z	-.891
Asymp. Sig. (2-tailed)	.373

a. Grouping Variable: Formula

- **F1 dan F3**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Warna	Formula 1	30	25.62	768.50
	Formula 3	30	35.38	1061.50
	Total	60		

Test Statistics[a]

	Warna
Mann-Whitney U	303.500
Wilcoxon W	768.500
Z	-2.265
Asymp. Sig. (2-tailed)	.023

a. Grouping Variable: Formula

- **F1 dan F4**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Warna	Formula 1	30	21.00	630.00
	Formula 4	30	40.00	1200.00
	Total	60		

Test Statistics[a]

	Warna
Mann-Whitney U	165.000
Wilcoxon W	630.000
Z	-4.464
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Formula

- **F2 dan F3**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Warna	Formula 2	30	26.70	801.00
	Formula 3	30	34.30	1029.00
	Total	60		

Test Statistics[a]

	Warna
Mann-Whitney U	336.000
Wilcoxon W	801.000
Z	-1.779
Asymp. Sig. (2-tailed)	.075

a. Grouping Variable: Formula

- **F2 dan F4**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Warna	Formula 2	30	21.00	630.00
	Formula 4	30	40.00	1200.00
	Total	60		

Test Statistics[a]

	Warna
Mann-Whitney U	165.000
Wilcoxon W	630.000
Z	-4.472
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Formula

- **F3 dan F4**

Ranks

	Formula	N	Mean Rank	Sum of Ranks
Warna	Formula 3	30	24.25	727.50
	Formula 4	30	36.75	1102.50
	Total	60		

Test Statistics[a]

	Warna
Mann-Whitney U	262.500
Wilcoxon W	727.500
Z	-3.031
Asymp. Sig. (2-tailed)	.002

a. Grouping Variable: Formula

Rata-Rata

Statistics

Warna

N	Valid	30
	Missing	0
Mean		3.20
Median		3.00
Std. Deviation		1.157
Variance		1.338
Minimum		1
Maximum		5

F1

Statistics

Warna

N	Valid	30
	Missing	0
Mean		3.47
Median		3.00
Std. Deviation		.900
Variance		.809
Minimum		2
Maximum		5

F2

Statistics

Warna

N	Valid	30
	Missing	0
Mean		3.87
Median		4.00
Std. Deviation		.860
Variance		.740
Minimum		2
Maximum		5

F3

Statistics

Warna

N	Valid	30
	Missing	0
Mean		4.50
Median		4.50
Std. Deviation		.509
Variance		.259
Minimum		4
Maximum		5

F4

- **Aroma**

Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Aroma	Formula 1	.211	30	.001	.878	30	.003
	Formula 2	.267	30	.000	.851	30	.001
	Formula 3	.338	30	.000	.798	30	.000
	Formula 4	.300	30	.000	.825	30	.000

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Aroma	Based on Mean	2.606	3	116	.055
	Based on Median	1.804	3	116	.150
	Based on Median and with adjusted df	1.804	3	114.655	.150
	Based on trimmed mean	2.520	3	116	.061

Kruskal Wallis

Ranks

	Formula	N	Mean Rank
Aroma	Formula 1	30	54.57
	Formula 2	30	61.50
	Formula 3	30	61.50
	Formula 4	30	64.43
	Total	120	

Test Statistics[a,b]

	Aroma
Kruskal-Wallis H	1.552
df	3
Asymp. Sig.	.670

a. Kruskal Wallis Test

b. Grouping Variable: Formula

Rata-Rata

Statistics

Aroma

N	Valid	30
	Missing	0
Mean		3.73
Median		4.00
Std. Deviation		.944
Variance		.892
Minimum		2
Maximum		5

F1

Statistics

Aroma

N	Valid	30
	Missing	0
Mean		3.93
Median		4.00
Std. Deviation		.785
Variance		.616
Minimum		2
Maximum		5

F2

Statistics

Aroma

N	Valid	30
	Missing	0
Mean		3.93
Median		4.00
Std. Deviation		.691
Variance		.478
Minimum		2
Maximum		5

F3

Statistics

Aroma

N	Valid	30
	Missing	0
Mean		4.00
Median		4.00
Std. Deviation		.743
Variance		.552
Minimum		2
Maximum		5

F4

- **Tekstur**

Normlitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Tekstur	Formula 1	.287	30	.000	.860	30	.001
	Formula 2	.298	30	.000	.850	30	.001
	Formula 3	.317	30	.000	.834	30	.000
	Formula 4	.328	30	.000	.816	30	.000

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Tekstur	Based on Mean	.242	3	116	.867
	Based on Median	.123	3	116	.946
	Based on Median and with adjusted df	.123	3	115.352	.946
	Based on trimmed mean	.291	3	116	.832

Kruskal Wallis

Ranks

	Formula	N	Mean Rank
Tekstur	Formula 1	30	55.42
	Formula 2	30	60.42
	Formula 3	30	61.92
	Formula 4	30	64.25
	Total	120	

Test Statistics[a,b]

	Tekstur
Kruskal-Wallis H	1.257
df	3
Asymp. Sig.	.739

a. Kruskal Wallis Test

b. Grouping Variable: Formula

Rata-Rata

Statistics

Tekstur

N	Valid	30
	Missing	0
Mean		3.67
Median		4.00
Std. Deviation		.844
Variance		.713
Minimum		2
Maximum		5

FI

Statistics

Tekstur

N	Valid	30
	Missing	0
Mean		3.80
Median		4.00
Std. Deviation		.805
Variance		.648
Minimum		2
Maximum		5

F2

Statistics

Tekstur

N	Valid	29
	Missing	0
Mean		3.86
Median		4.00
Std. Deviation		.789
Variance		.623
Minimum		2
Maximum		5

F3

Statistics

Tekstur

N	Valid	30
	Missing	0
Mean		3.87
Median		4.00
Std. Deviation		.860
Variance		.740
Minimum		2
Maximum		5

F4

- **Kemasan**

Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Kemasan	Formula 1	.406	30	.000	.612	30	.000
	Formula 2	.406	30	.000	.612	30	.000
	Formula 3	.406	30	.000	.612	30	.000
	Formula 4	.406	30	.000	.612	30	.000

a. Lilliefors Significance Correction

Homogenitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Kemasan	Formula 1	.406	30	.000	.612	30	.000
	Formula 2	.406	30	.000	.612	30	.000
	Formula 3	.406	30	.000	.612	30	.000
	Formula 4	.406	30	.000	.612	30	.000

a. Lilliefors Significance Correction

Kruskal Wallis

Ranks

	Formula	N	Mean Rank
Kemasan	Formula 1	30	60.50
	Formula 2	30	60.50
	Formula 3	30	60.50
	Formula 4	30	60.50
	Total	120	

Test Statistics[a,b]

	Kemasan
Kruskal-Wallis H	.000
df	3
Asymp. Sig.	1.000

a. Kruskal Wallis Test

b. Grouping Variable: Formula

Rata-Rata

Statistics

Kemasan

N	Valid	30
	Missing	0
Mean		4.63
Median		5.00
Std. Deviation		.490
Variance		.240
Minimum		4
Maximum		5

F1

Statistics

Kemasan

N	Valid	30
	Missing	0
Mean		4.63
Median		5.00
Std. Deviation		.490
Variance		.240
Minimum		4
Maximum		5

F2

Statistics

Kemasan

N	Valid	30
	Missing	0
Mean		4.63
Median		5.00
Std. Deviation		.490
Variance		.240
Minimum		4
Maximum		5

F3

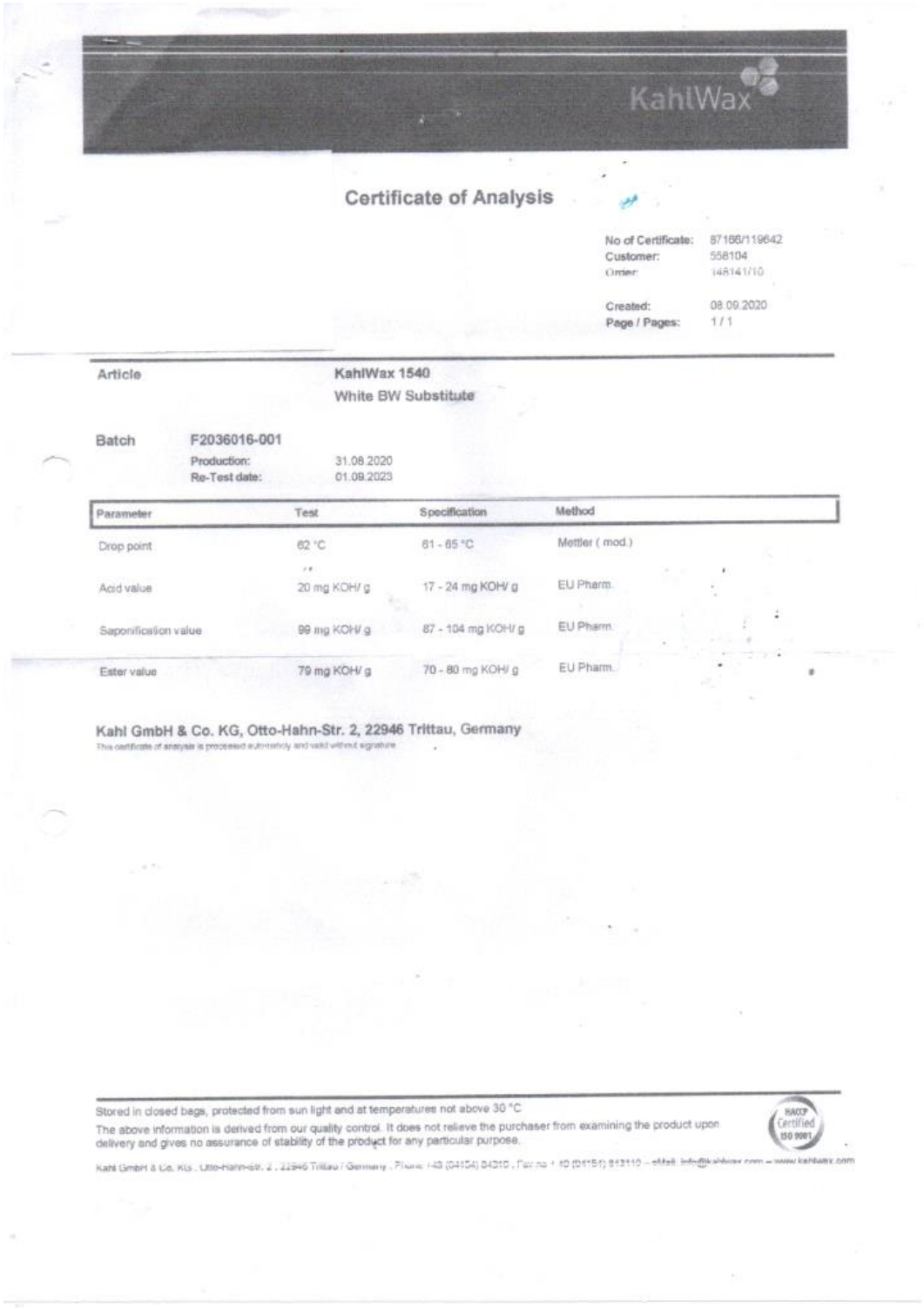
Statistics

Kemasan

N	Valid	30
	Missing	0
Mean		4.63
Median		5.00
Std. Deviation		.490
Variance		.240
Minimum		4
Maximum		5

F4

Lampiran 20. CoA Bahan



KahlWax

Certificate of Analysis

No of Certificate: 87166/119642
Customer: 558104
Order: 148141/10

Created: 08.09.2020
Page / Pages: 1 / 1

Article: KahlWax 1540
White BW Substitute

Batch: F2036016-001
Production: 31.08.2020
Re-Test date: 01.09.2023

Parameter	Test	Specification	Method
Drop point	62 °C	61 - 65 °C	Mettler (mod.)
Acid value	20 mg KOH/ g	17 - 24 mg KOH/ g	EU Pharm.
Saponification value	99 mg KOH/ g	87 - 104 mg KOH/ g	EU Pharm.
Ester value	79 mg KOH/ g	70 - 80 mg KOH/ g	EU Pharm.

Kahl GmbH & Co. KG, Otto-Hahn-Str. 2, 22946 Trittau, Germany
This certificate of analysis is processed automatically and valid without signature

Stored in closed bags, protected from sun light and at temperatures not above 30 °C
The above information is derived from our quality control. It does not relieve the purchaser from examining the product upon delivery and gives no assurance of stability of the product for any particular purpose.

HACCP Certified ISO 9001

Kahl GmbH & Co. KG , Otto-Hahn-Str. 2 , 22946 Trittau / Germany , Phone +49 (04154) 84010 , Fax no +49 (04154) 843110 – eMail: info@kahlwax.com – www.kahlwax.com

THAI CASTOR OIL INDUSTRIES CO., LTD.

12th FL. ORAKARN BLDG.,
26/42 SOI CHIDLOM PLOENCHIT RD.,
LUMPINI, PATUMWAN,
BANGKOK 10330, THAILAND.

TELEPHONE : +66 (0) 2254 1499-7
FAX : +66 (0) 2254 1498
+66 (0) 2253 8355
E-MAIL : tocgroup@thaicastoroil.com

CERTIFICATE OF ANALYSIS

Bangkok : April 12, 2022

REF. INVOICE NO. : TCO-022/22 dated April 05, 2022
GOODS : 160 Drums of Castor Oil No. 1
LOT NO. : 2203033
LAB NO. : 040/2022
PRODUCTION DATE : 24/03/2022
EXPIRY DATE : 24/03/2023
SHIPMENT PER : AS CARINTHIA V.028S
TO : TANJUNG PRIOK, JAKARTA, INDONESIA.
CONTAINER / SEAL NO. : SEGU1409538 / HAS1180522
: SKLU2067134 / HAS1180524

We hereby certify that the analysis results of the above-mentioned goods tested by our laboratory are as follows :-

SPECIFICATION	RESULTS	AOCS METHOD
COLOUR IN LOVIBOND, 5 1/4" CELL : 20.0Y, 2.0R MAX.	17.5 Y - 1.8 R	Cc 13a - 92
MOISTURE, MAX. : 0.25 %	0.16	Ca 2c - 25
FREE FATTY ACIDS, MAX : 1.00 %	0.84	Ca 5a - 40
ACID VALUE, MAX. : 1.99	1.68	Cd 3a - 63
HYDROXYL VALUE : 160 - 168	164.79	Cd 13 - 60
IODINE VALUE : 82 - 90	84.60	Cd1a - 25
INSOLUBLE IMPURITIES, : 0.02 %	0.0155	Ca 3a - 46
SOLUBILITY IN ALCOHOL AT 20 °C	COMPLETE WITHOUT TURSIDITY IN TWO VOLUMES OF SPECIALLY DENATURED ALCOHOL FORMULA 3A (95%).	

Certificate of Analysis

ACROS ORGANICS

Version	00
Molecular weight	.00
Quality Test / Release Date	07/19/2017
Molecular Formula	
CAS No	8015-86-9
Linear Formula	
Flash Point (°C)	282

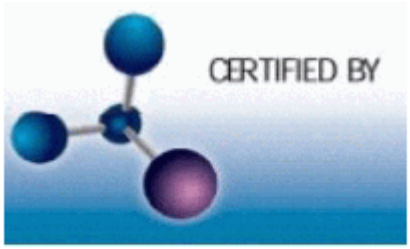
Certificate of Analysis

This is to certify that units of the above mentioned lot number were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties,expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Unless otherwise stated, these products are not intended for dialysis, parenteral, or injectable use without further processing. The following are the actual analytical results obtained:

Catalog Number	22238	**Quality Test / Release Date** 07/19/2017
Lot Number	A0386622	
Description	Carnauba wax,refined, No. 1, yellow	
Country of Origin	UNITED STATES OF AMERICA	
Declaration of Origin	plant	

BSE/TSE comment	
Chemical Comment	

Result name	Units	Specifications	Test Value
Appearance (Color)		Yellow	Yellow
Appearance (Form)		Powder or flakes	flakes
Melting point		81°C to 86°C	83.9°C
Heavy metals (as Pb)		=<40 ppm	=<40 ppm
Acid value		2 to 7 mg KOH/g	2.59 mg KOH/g
Saponification value		78 to 95 mg KOH/g	84.07 mg KOH/g
Residue after ignition		=<0.25 %	0.04 %



L. Van den Broek, QA Manager Issued: 07-20-2017

Acros Organics
ENA23, zone1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium
Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: http://www.acros.com
1 Regent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

ThermoFisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0090918

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. ThermoFisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing.ThermoFisher does not maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	G37	Quality Test / Release Date	09/26/2018
Lot Number	185433		
Description	GLYCERIN, USP/FCC/EP/BP/JP		
Country of Origin	United States	Suggested Retest Date	Sep/2020
Chemical Origin	Plant		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		
Chemical Comment	Glycerin does not contain potential allergens, including peanuts, milk, egg, wheat, gluten, or soybean. In addition, it does not contain melamine, phthalates or Bis-Phenol A. The glycerin is solely sourced from vegetable oils, which can include oil from GMO oilseeds. However, GMO genetic materials are not expected to be present in the refined glycerin made from the highly refined oils.		

British Pharmacopeia Grade

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	CLEAR COLORLESS LIQUID
WATER	%	<= 2.0	<0.2
ACIDITY - ALKALINITY	PASS/FAIL	= PASS TEST	PASS TEST
SUGARS	PASS/FAIL	= PASS TEST	PASS TEST
RESIDUAL SOLVENTS	CONFORMS	= CONFORMS	CONFORMS
REFRACTIVE INDEX @ 20 DEG C		Inclusive Between 1.470 - 1.475	1.474
IMPURITY A & RELATED SUBSTANCES	PASS/FAIL	= PASS TEST	PASS TEST
IDENTIFICATION (ALL LISTED)	PASS/FAIL	= PASS TEST	PASS TEST
HEAVY METALS	ppm	<= 5	<5
HALOGENATED COMPONDS (AS CL)	ppm	<= 35	<35
ESTERS	PASS/FAIL	= PASS TEST	PASS TEST
CHLORIDES	ppm	<= 10	<10
ASSAY	%	Inclusive Between 98.0 - 101.0	99.8
APPEARANCE OF SOLUTION	REPORT	= CLEAR AND COLORLESS	CLEAR AND COLORLESS
ALDEHYDES	PASS/FAIL	= PASS TEST	PASS TEST
SULFATED ASH	%	<= 0.01	<0.001

EP Grade

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	CLEAR COLORLESS

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Lampiran 21. Biodata Peneliti

BIODATA

1.	Nama lengkap	:	Reza Yufita Ekawati
2.	NIM	:	I1C019010
3.	Tempat dan tanggal lahir	:	Magetan, 11 Agustus 2000
4.	Jenis Kelamin	:	Perempuan
5.	Agama	:	Islam
6.	Alamat asal	:	Desa Randugede RT 03/RW 01 Kec. Plaosan, Kab. Magetan 63361
7.	Nomor Hp	:	082257578623
8.	E-mail	:	rezayufitaekawati20@gmail.com
9.	Judul Penelitian	:	Formulasi Sediaan Lipstik Ekstrak Kulit Batang Bakau Hitam (*Rhizophora Mucronata*)

RIWAYAT PENDIDIKAN

Tahun	Institusi
2004 - 2005	Paud Harapan
2005 - 2007	TK Kemala Bhayangkari
2007 - 2013	SD Negeri 2 Magetan
2013 - 2016	SMP Negeri 1 Magetan
2016 - 2019	SMA Negeri 1 Magetan
2019 - 2023	Universitas Jenderal Soedirman

RIWAYAT ORGANISASI

Periode	Instansi	Posisi
2021	UKMJ PIO Farmasi Unsoed	Staff Pengmas
2020	UKMJ PIO Farmasi Unsoed	Staff Pengmas

PENGALAMAN MENULIS

Tahun	Judul	Keterangan
2022	Tisu Basah Antiseptik dari Minyak Atsiri Sereh Wangi (*Cymbopogon nardus* (L.))	PKM-RE
2022	Pembuatan Serbuk Gelatin dari Limbah Sisik Ikan Mas Sebagai Bahan Dasar Pembuatan Cangkang Kapsul	PKM-RE
2020	Si Merah sebagai *Immune Booster*	Lomba Esai Nasional "Agricultural Food Competition"

PENGALAMAN KEPANITIAN

Tahun	Kepanitian	Tingkat
2020	PPKMB Veegum Farmasi Divisi PK	Jurusan
2020	Musyawarah Wilayah ISMAFARSI JOGLOSEPUR	Regional
2020	Panitia Pharmacy Genius Divisi Humas	Jurusan

KEGIATAN PENGEMBANGAN DIRI YANG DILAKUKAN

Tahun	Kegiatan
2020	Latihan Kepemimpinan Managerial Mahasiswa Tingkat 1 Farmasi (LKKMF)
2019	Pengembangan Karakter dan Kepribadian Mahasiswa (PKKM) Fakultas Ilmu-Ilmu Kesehatan
2019	Pengenalan Kehidupan Kampus Mahasiswa Baru (PKKMB)

KEGIATAN ILMIAH YANG PERNAH DIIKUTI

Tahun	Kegiatan
2021	Webinar Nasional PHARASOED VI "Eksplorasi dan Pengembangan Skincare Berbahan Dasar Alam serta Peluangnya dalam Kewirausahaan"
2021	Webinar Ebizmark Research Series "Rahasia Skripsi dan Penelitian Cepat Selesai"
2020	Bedah Riset "Penggunaan Metode Systematic Literature Review sebagai Alternatif Riset ditengah Pandemi Covid-19"
2020	Webinar Nasional Farmasi COLLUTRIUM "Kontribusi Farmasi Seiring dengan Skenario *New Normal* Pada Masa Pandemi"
2020	Webinar Nasional Kefarmasian PHARMACIOUS "Strategi Manajemen Pandemi dalam Prespektif Farmasi"
2020	Webinar Nasional Kefarmasian GEMFAR "Advancing The Existence of Indonesian Pharmacist in Pharmaceutical Care"
2019	Webinar Nasional Kefarmasian PHARASOED "Peran Farmasis dalam Pengembangan Obat dan Kosmetika Bahan Alam serta Peluangnya dalam Wirausaha Kefarmasian di Era Teknologi Modern"

PENGALAMAN KERJA

Tahun	Kegiatan
2023	Asisten Praktikum Farmasi Fisika
2022	Praktik Belajar Lapangan di Apotek Omnia Farma

Purwokerto, 12 Mei 2023

Reza Yufita Ekawati

I1C019010