Lampiran

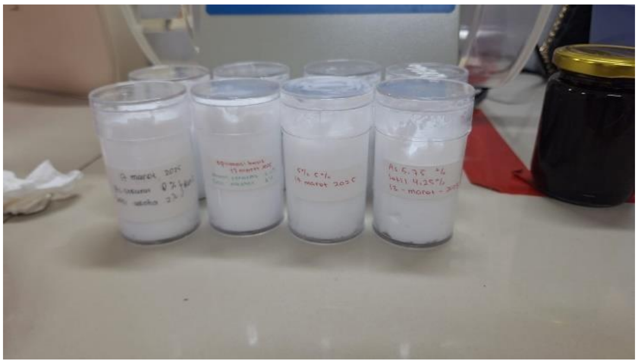
Lampiran 1. Timeline Penelitian

NO	Tahap Penelitian	Okt-Des	Jan				Feb				Mar				Apr				Mei			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1.	Penyusunan proposal																					
2.	Pemesanan bahan																					
3.	Skrining fitokimia ekstrak daun binahong																					
4.	Optimasi dan evaluasi basis krim																					
5.	Pembuatan sediaan krim kombinasi ekstrak daun binahong dan bemotrizinol																					
6.	Evaluasi sediaan krim																					
7.	Pengolahan dan analisis data																					
8.	Penyusunan laporan																					

Lampiran 2. Hasil Evaluasi Optimasi Basis Krim

a. Uji organoleptik

Parameter	O1	O2	O3	O4	O5
Tekstur	Semi padat	Semi padat	Semi padat	Semi padat	Semi padat
Warna	Putih	Putih	Putih	Putih	Putih
Aroma	Tidak beraroma	Tidak beraroma	Tidak beraroma	Tidak beraroma	Tidak beraroma



b. Uji pH

Replikasi	O1	O2	O3	O4	O5
1	6,74	6,87	6,89	6,93	6,78
2	6,75	6,85	6,85	6,88	6,80
3	6,82	6,80	6,88	6,96	6,82
Rata-rata ±SD	6,77±0,04	6,84±0,04	6,87±0,02	6,92±0,04	6,80±0,02

c. Uji homogenitas

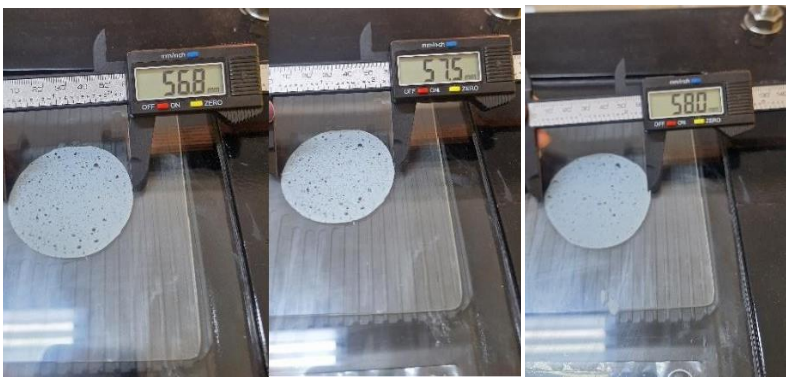
Replikasi	O1	O2	O3	O4	O5
1	Homogen	Homogen	Homogen	Homogen	Homogen
2	Homogen	Homogen	Homogen	Homogen	Homogen
3	Homogen	Homogen	Homogen	Homogen	Homogen

d. Uji viskositas

Replikasi	O1	O2	O3	O4	O5
1	15800	16433	15333	15167	15500
2	15933	15500	15400	15267	15667
3	15833	15667	15267	15100	15750
Rata-rata ±SD	15855±69	15533±121	15333±67	15178±84	15369±127

e. Uji daya sebar

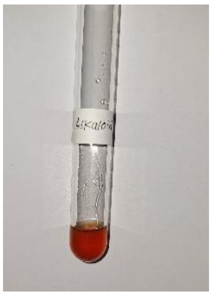
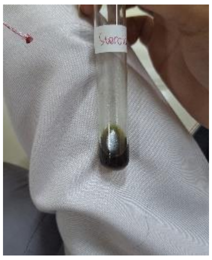
Replikasi	O1	O2	O3	O4	O5
1	5,55	5,67	5,69	5,78	5,62
2	5,57	5,68	5,71	5,80	5,60
3	5,54	5,70	5,75	5,82	5,58
Rata-rata ±SD	5,55±0,02	5,68±0,02	5,72±0,03	5,80±0,02	5,60±0,02



f. Uji daya lekat

Replikasi	O1	O2	O3	O4	O5
1	12.33	12.64	12.42	13.63	12,23
2	12.49	13.42	13.79	12,43	13,76
3	13.22	13.71	13.82	13,74	13,56
Rata-rata ±SD	12,68±0,47	13,26±0,55	13,34±0,80	13,27±0,73	13,18±0,83

Lampiran 3. Hasil uji skrining fitokimia

Gambar	Hasil
	(+) mengandung alkaloid yang ditandai dengan perubahan warna menjadi merah jingga
	(+) mengandung tanin yang ditandai dengan perubahan warna menjadi hijau kehitaman
	(+) mengandung steroid yang ditandai dengan perubahan warna menjadi hijau
	(+) mengandung saponin yang ditandai dengan adanya busa yang stabil

Lampiran 4. Hasil evaluasi stabilitas *real time* (28 hari)

a. Hasil uji organoleptik

Hari ke-	**Pengamatan**	**F0**	**F1**	**F2**	**F3**
0	Warna	P	C	HT	HM
	Aroma	TB	KB	KE	KCBE
	Tekstur	SP	SP	SP	SP
7	Warna	P	C	HT	HM
	Aroma	TB	KB	KE	KCBE
	Tekstur	SP	SP	SP	SP
14	Warna	P	C	HT	HM
	Arom	TB	KB	KE	KCBE
	Tekstur	SP	SP	SPAC	SP
21	Warna	P	C	HT	HM
	Aroma	TB	KB	KE	KCBE
	Tekstur	SP	SP	SPAC	SP
28	Warna	P	C	HT	HM
	Aroma	TB	KB	KE	KCBE
	Tekstur	SP	SP	SPAC	SP

Keterangan:
P= Putih
C = Cream
HT = Hijau Tua
HM = Hijau Muda
TB = Tidak Beraroma
KB = Khas Bemotrizinol
KE = Khas Ekstrak daun binahong
KCBE = Khas Campuran Bemotrizinol & Ekstrak daun binahong
SP = Semi Padat
SPAC = Semi Padat Agak Cair

b. Hasil uji homogenitas

Hari ke-	F0	F1	F2	F3
0	H	H	H	H
7	H	H	H	H
14	H	H	H	H
21	H	H	H	H
28	H	H	H	H

c. Hasil uji viskositas

Formula	Hari ke-	Batch			Rata-rata ±SD
		1	2	3	
F0	0	15744	15700	15711	15718±23
	7	15623	15615	15444	15561±101
	14	15389	15600	15440	15476±110
	21	15256	15500	15300	15352±130
	28	15172	15316	15044	15177±136
F1	0	16222	15722	15889	15944±255
	7	15750	15600	15611	15654±84
	14	15667	15522	15445	15545±113
	21	15394	15472	15300	15389±86
	28	14667	14622	14211	14500±251
F2	0	9682	9739	9589	9670±76
	7	9080	9128	9078	9095±29
	14	8711	8611	8500	8607±106
	21	8278	8267	8140	8228±77
	28	7600	7625	7722	7649±64
F3	0	15500	15556	15628	15561±64
	7	15345	15533	15611	15496±137
	14	15172	15317	15067	15185±126

	21	14389	14500	14611	14500±111
	28	14161	14171	14233	14188±39

d. Hasil uji pH

Formula	**Hari ke-**	**Batch**			**Rata-rata ±SD**
		1	**2**	**3**	
F0	0	7,11	6,88	7,01	7,00±0,12
	7	6,91	6,65	6,52	6,69±0,20
	14	6,87	6,47	6,34	6,56±0,28
	21	6,81	6,34	6,31	6,49±0,28
	28	6,51	6,04	6,20	6,25±0,24
F1	0	7,27	7,54	6,77	7,19±0,39
	7	6,99	6,74	6,67	6,80±0,17
	14	6,70	6,45	6,65	6,60±0,13
	21	6,69	6,25	6,57	6,50±0,23
	28	6,25	6,01	5,88	6,05±0,19
F2	0	5,74	6,08	5,48	5,77±0,30
	7	5,28	5,34	5,18	5,27±0,08
	14	5,26	5,31	5,08	5,22±0,13
	21	5,23	5,22	5,07	5,17±0,09
	28	4,50	4,62	4,52	4,55±0,06
F3	0	5,90	6,37	5,55	5,94±0,41
	7	5,41	5,91	5,34	5,55±0,31
	14	5,36	5,53	5,33	5,41±0,11
	21	5,35	5,54	5,22	5,37±0,16
	28	4,72	4,79	4,65	4,72±0,07

e. Hasil uji daya sebar

Formula	Hari ke-	Batch			Rata-rata ±SD
		1	2	3	
F0	0	5,66	5,64	5,65	5,65±0,01
	7	5,71	5,72	5,70	5,71±0,01
	14	5,74	5,76	5,73	5,74±0,01
	21	5,75	5,78	5,79	5,77±0,02
	28	5,88	5,84	5,85	5,86±0,02
F1	0	5,24	5,27	5,20	5,24±0,04
	7	5,32	5,33	5,26	5,30±0,03
	14	5,34	5,37	5,35	5,35±0,02
	21	5,36	5,43	5,41	5,40±0,04
	28	5,42	5,44	5,45	5,44±0,01
F2	0	6,06	6,11	6,08	6,08±0,06
	7	6,17	6,13	6,14	6,15±0,02
	14	6,22	6,21	6,16	6,20±0,03
	21	6,24	6,25	6,18	6,22±0,04
	28	6,30	6,37	6,19	6,29±0,09
F3	0	5,69	5,68	5,69	5,69±0,01
	7	5,74	5,75	5,72	5,74±0,02
	14	5,77	5,82	5,81	5,80±0,03
	21	5,81	5,83	5,82	5,82±0,01
	28	5,82	5,89	5,88	5,86±0,04

f. Hasil uji daya lekat

Formula	Hari ke-	Batch			Rata-rata ±SD
		1	2	3	
F0	0	13,29	13,28	13,37	13,37±0,05
	7	12,98	12,87	12,25	12,70±0,39
	14	12,53	12,47	12,42	12,47±0,06
	21	12,30	12,24	12,12	12,22±0,09
	28	11,52	11,95	11,92	11,80±0,24
F1	0	14,04	14,17	14,18	14,13±0,08
	7	12,80	12,68	12,67	12,72±0,08
	14	12,50	12,43	12,41	12,45±0,05
	21	12,12	12,34	11,96	12,14±0,19
	28	11,55	11,92	11,83	11,77±0,19
F2	0	10,69	10,94	10,42	10,68±0,26
	7	10,07	10,07	10,77	10,30±0,40
	14	9,26	9,95	10,09	9,77±0,44
	21	9,07	9,63	9,82	9,51±0,39
	28	9,01	9,47	9,44	9,31±0,26
F3	0	13,17	13,19	13,27	13,21±0,05
	7	12,86	12,83	13,02	12,90±0,10
	14	12,43	12,34	12,28	12,35±0,08
	21	12,12	12,11	12,03	12,09±0,05
	28	11,91	11,87	11,84	11,87±0,04

Lampiran 5. Hasil evaluasi stabilitas *cycling test*

a. Hasil uji organoleptik

Siklus ke-	Pengamatan	F0	F1	F2	F3
1	Warna	P	C	HT	HM
	Aroma	TB	KB	KE	KCBE
	Tekstur	SP	SP	SP	SP
2	Warna	P	C	HT	HM
	Aroma	TB	KB	KE	KCBE
	Tekstur	SP	SP	SP	SP
3	Warna	P	C	HT	HM
	Arom	TB	KB	KE	KCBE
	Tekstur	SP	SP	SP	SP
4	Warna	P	C	HT	HM
	Aroma	TB	KB	KE	KCBE
	Tekstur	SP	SP	SPAC	SP
5	Warna	P	C	HT	HM
	Aroma	TB	KB	KE	KCBE
	Tekstur	SP	SP	SPAC	SP
6	Warna	P	C	HT	HM
	Aroma	TB	KB	KE	KCBE
	Tekstur	SP	SP	SPAC	SP

Keterangan:
P = Putih
C = Cream
HT = Hijau Tua
HM = Hijau Muda
TB = Tidak Beraroma
KB = Khas Bemotrizinol
KE = Khas Ekstrak daun binahong
KCBE = Khas Campuran Bemotrizinol & Ekstrak daun binahong
SP = Semi Padat
SPAC = Semi Padat Agak Cair

b. Hasil uji homogenitas

Siklus ke-	F0	F1	F2	F3
1	H	H	H	H
2	H	H	H	H
3	H	H	H	H
4	H	H	H	H
5	H	H	H	H
6	H	H	H	H

c. Hasil uji pH

Formula	Siklus ke-	Batch			Rata – rata±SD
		1	2	3	
F0	1	7,18	7,11	7,00	7,10±0,09
	2	6,70	6,86	6,97	6,84±0,14
	3	6,65	6,69	6,07	6,47±0,35
	4	6,63	6,59	5,93	6,38±0,39
	5	6,21	6,09	5,91	6,07±0,15
	6	6,10	6,04	5,75	5,96±0,19
F1	1	7,33	7,15	7,25	7,24±0,09
	2	6,76	6,86	6,74	6,79±0,06
	3	6,52	6,70	6,57	6,60±0,09
	4	6,50	6,68	6,52	6,57±0,10
	5	5,92	6,11	5,93	5,99±0,11
	6	5,72	5,91	5,90	5,84±0,11
F2	1	5,80	5,96	5,82	5,86±0,09
	2	5,74	5,66	5,64	5,68±0,05
	3	5,55	5,42	5,51	5,49±0,07
	4	5,53	5,41	5,50	5,48±0,06

	5	5,09	5,06	5,07	5,07±0,02
	6	4,68	4,64	4,71	4,68±0,04
F3	1	5,89	5,98	5,90	5,92±0,05
	2	5,78	5,75	5,87	5,80±0,06
	3	5,55	5,75	5,64	5,65±0,10
	4	5,53	5,72	5,62	5,62±0,10
	5	5,12	5,31	5,19	5,21±0,10
	6	4,70	5,48	4,87	4,82±0,10

d. Hasil uji viskositas

Formula	**Siklus ke-**	**Batch**			**Rata – rata±SD**
		1	**2**	**3**	
F0	1	16211	16650	16383	16415±221
	2	16078	16267	16117	16154±100
	3	15630	15878	15811	15773±128
	4	15456	15756	15483	15565±166
	5	15113	15100	15300	15171±112
	6	15000	15022	15217	15080±119
F1	1	16756	16867	16450	16691±216
	2	16500	16444	15983	16309±284
	3	15582	15572	15767	15640±110
	4	15406	15106	15711	15408±303
	5	15039	15095	15000	15045±48
	6	14758	14778	14869	14802±59
F2	1	10717	10467	10744	10643±153
	2	10116	10040	10111	10089±43
	3	9880	9839	9683	9801±104
	4	9156	9178	9167	9167±11
	5	8072	7983	8039	8031±45
	6	6822	6707	6678	6736±76

F3	1	15672	15356	15685	15571±186
	2	15261	15221	15444	15309±119
	3	14367	14389	14567	14441±110
	4	14161	13911	13920	13997±142
	5	13778	13878	13233	13630±347
	6	12778	12678	12605	12687±87

e. Hasil uji daya sebar

Formula	**Siklus ke-**	**Batch**			**Rata – rata±SD**
		1	**2**	**3**	
F0	1	5,71	5,72	5,64	5,69±0,04
	2	5,79	5,74	5,75	5,76±0,03
	3	5,82	5,77	5,76	5,78±0,03
	4	5,83	5,81	5,84	5,83±0,02
	5	5,86	5,87	5,85	5,86±0,01
	6	5,88	5,89	5,90	5,89±0,01
F1	1	5,32	5,31	5,30	5,31±0,01
	2	5,38	5,37	5,31	5,35±0,04
	3	5,39	5,41	5,40	5,40±0,01
	4	5,42	5,43	5,45	5,43±0,02
	5	5,44	5,46	5,49	5,46±0,03
	6	5,47	5,48	5,50	5,48±0,02
F2	1	6,06	6,08	6,10	6,08±0,02
	2	6,22	6,13	6,12	6,16±0,06
	3	6,25	6,14	6,19	6,19±0,06
	4	6,26	6,24	6,34	6,28±0,05
	5	6,33	6,34	6,41	6,36±0,04
	6	6,44	6,48	6,47	6,46±0,02
F3	1	5,64	5,70	5,71	5,68±0,04

	2	5,74	5,73	5,72	5,73±0,01
	3	5,82	5,83	5,79	5,81±0,02
	4	5,85	5,86	5,84	5,85±0,01
	5	5,88	5,90	5,89	5,89±0,01
	6	5,95	5,94	5,96	5,95±0,01

f. Hasil uji daya lekat

Formula	**Siklus ke-**	**Batch**			**Rata – rata±SD**
		1	**2**	**3**	
F0	1	13,43	13,54	13,46	13,48±0,06
	2	12,70	12,94	12,96	12,89±0,10
	3	12,67	12,57	12,60	12,61±0,05
	4	11,32	11,34	11,27	11,31±0,04
	5	10,45	10,44	10,41	10,43±0,02
	6	9,68	9,50	9,43	9,54±0,13
F1	1	13,97	14,23	14,31	14,17±0,18
	2	13,79	13,84	13,69	13,77±0,08
	3	13,19	13,18	12,98	13,12±0,12
	4	12,70	12,95	12,30	12,65±0,33
	5	11,29	11,81	11,79	11,63±0,29
	6	10,23	9,71	9,65	9,86±0,32
F2	1	11,71	11,70	11,68	11,70±0,02
	2	11,42	11,48	11,38	11,43±0,05
	3	10,98	10,93	10,80	10,90±0,09
	4	9,44	9,36	9,27	9,36±0,09
	5	8,47	8,70	8,57	8,58±0,12
	6	7,60	7,45	7,56	7,54±0,08
F3	1	13,36	13,18	12,78	13,11±0,30
	2	12,73	12,74	12,62	12,70±0,07

	3	12,13	11,96	11,84	11,98±0,15
	4	10,67	10,26	10,21	10,38±0,25
	5	10,15	9,25	9,34	9,58±0,50
	6	8,71	8,43	8,73	8,62±0,17

Lampiran 6. Hasil uji SPF sebelum diformulasikan dalam sediaan krim

Sampel	λ (nm)	Absorbansi 1	Absorbansi 2	Absorbansi 3	EExI	EE x I x Abs 1	EE x I x Abs 2	EE x I x Abs 3	CF	SPF
F1	290	4,000	4,000	4,000	0,0150	0,0600	0,0600	0,0600		
	295	4,000	4,000	3,676	0,0817	0,3268	0,3268	0,3003		
	300	4,000	3,602	3,910	0,2874	1,1496	1,0352	1,1237		37,9910
	305	3,523	3,328	3,223	0,3278	1,1548	1,0909	1,0565	10	34,9042
	310	3,957	3,328	3,260	0,1864	0,7376	0,6073	0,6077		35,1852
	315	3,665	3,664	3,665	0,0839	0,3075	0,3074	0,3075		
	320	3,,488	3,488	3,489	0,0180	0,0628	0,0628	0,0628		
	SPF = CF x Σ_{290}^{320} EE λ x I x Abs					3,7991	3,4904	3,5185	Rata-rata	36,0268
F2	290	4,000	4,000	4,000	0,0150	0,0600	0,0600	0,0600		
	295	3,686	3,908	3,783	0,0817	0,3011	0,3193	0,3091		
	300	4,000	4,000	4,000	0,2874	1,1496	1,1496	1,1496		38,7362
	305	4,000	4,000	4,000	0,3278	1,3112	1,3112	1,3112	10	39,8676
	310	3,487	3,965	4,000	0,1864	0,6500	0,7391	0,7456		39,8307
	315	4,000	4,000	4,000	0,0839	0,3356	0,3356	0,3356		
	320	3,672	4,000	4,000	0,0180	0,0661	0,0720	0,0720		
	SPF = CF x Σ_{290}^{320} EE λ x I x Abs					3,8736	3,9868	3,9831	Rata-rata	39,4782
F3	290	4,000	4,000	4,000	0,0150	0,0600	0,0600	0,0600		
	295	4,000	3,602	3,838	0,0817	0,3268	0,2943	0,3136		38,4851
	300	4,000	4,000	3,907	0,2874	1,1496	1,1496	1,1229	10	39,49622
	305	4,000	4,000	4,000	0,3278	1,3112	1,3112	1,3112		38,9959
	310	3,183	3,961	4,000	0,1864	0,5933	0,7383	0,7456		
	315	4,000	4,000	3,270	0,0839	0,3356	0,3356	0,2744		
	320	4,000	3,367	4,000	0,0180	0,0720	0,0606	0,0720		
	SPF = CF x Σ_{290}^{320} EE λ x I x Abs					3,8485	3,9496	3,8996	Rata-rata	38,9924

Lampiran 7. Hasil uji SPF setelah diformulasikan dalam sediaan krim dan contoh perhitungannya

Sampel	λ (nm)	Absorbansi 1	Absorbansi 2	Absorbansi 3	EExI	EE x I x Abs 1	EE x I x Abs 2	EE x I x Abs 3	CF	SPF
	290	0,903	0,924	0,914	0,0150	0,0135	0,0139	0,0137		
	295	0,615	0,622	0,614	0,0817	0,0502	0,0508	0,0502		
	300	0,513	0,505	0,491	0,2874	0,1474	0,1451	0,1411		4,4701
F0	305	0,406	0,401	0,401	0,3278	0,1331	0,1314	0,1314	10	4,4571
	310	0,385	0,402	0,400	0,1864	0,0718	0,0749	0,0746		4,4114
	315	0,314	0,302	0,304	0,0839	0,0263	0,0253	0,0255		
	320	0,255	0,232	0,258	0,0180	0,0046	0,0042	0,0046		
SPF = CF x Σ_{290}^{320} EE λ x I x Abs						0,4470	0,4457	0,4411	Rata-rata	4,4462
	290	4,000	4,000	4,000	0,0150	0,0600	0,0600	0,0600		
	295	4,000	4,000	4,000	0,0817	0,3268	0,3268	0,3268		
	300	2,949	3,102	3,202	0,2874	0,8475	0,8915	0,9203		30,4788
F1	305	2,939	3,223	2,955	0,3278	0,9634	1,0565	0,9686	10	31,6163
	310	3,004	2,958	2,844	0,1864	0,5599	0,5514	0,5301		31,1111
	315	2,887	2,711	3,062	0,0839	0,2422	0,2275	0,2569		
	320	2,665	2,666	2,688	0,0180	0,0480	0,0480	0,0484		
SPF = CF x Σ_{290}^{320} EE λ x I x Abs						3,0479	3,1616	3,1111	Rata-rata	31,0687
	290	4,000	4,000	4,000	0,0150	0,0600	0,0600	0,0600		27,2149
F2	295	4,000	4,000	4,000	0,0817	0,3268	0,3268	0,3268	10	26,9735
	300	2,406	2,388	2,544	0,2874	0,6915	0,6863	0,7311		27,5529
	305	2,655	2,681	2,664	0,3278	0,8703	0,8788	0,8733		

	310	2,703	2,544	2,612	0,1864	0,5038	0,4742	0,4869		
	315	2,666	2,688	2,763	0,0839	0,2237	0,2255	0,2318		
	320	2,521	2,538	2,522	0,0180	0,0454	0,0457	0,0454		
SPF = CF x Σ_{290}^{320} EE λ x I x Abs						2,7215	2,6974	2,7553	Rata-rata	27,2471
F3	290	4,000	4,000	4,000	0,0150	0,0600	0,0600	0,0600	10	
	295	4,000	3,677	3,899	0,0817	0,3268	0,3004	0,3185		
	300	2,633	2,247	2,641	0,2874	0,7567	0,6458	0,7950		29,5942
	305	2,989	3,139	3,291	0,3278	0,9798	1,0290	1,0788		28,8902
	310	2,843	3,003	2,845	0,1864	0,5299	0,5598	0,5303		30,4225
	315	3,062	2,924	2,924	0,0839	0,2569	0,2453	0,2453		
	320	2,737	2,713	2,792	0,0180	0,0493	0,0488	0,0503		
SPF = CF x Σ_{290}^{320} EE λ x I x Abs						2,9594	2,8891	3,0422	Rata-rata	29,6358
Pembanding	290	4,000	4,000	4,000	0,0150	0,0600	0,0600	0,0600		
	295	4,000	4,000	4,000	0,0817	0,3268	0,3268	0,3268		
	300	4,000	4,000	4,000	0,2874	1,1496	1,1496	1,1496		40,008
	305	4,000	4,000	4,000	0,3278	1,3112	1,3112	1,3112	10	40,008
	310	4,000	4,000	4,000	0,1864	0,7456	0,7456	0,7456		40,008
	315	4,000	4,000	4,000	0,0839	0,3356	0,3356	0,3356		
	320	4,000	4,000	4,000	0,0180	0,0720	0,0720	0,0720		
SPF = CF x Σ_{290}^{320} EE λ x I x Abs						4,0008	4,0008	4,0008	Rata-rata	40,008

Contoh perhitungan SPF F0 $SPF = CF\ x \sum_{290}^{320} EE\ \lambda\ x\ I\ x\ Abs$

Replikasi 1

SPF = 10 x (0,0150 x 0,903) + (0,0817 x 0,615) + (0,2874 x 0,513) + (0,3278 x 0,406) + (0,1864 x 0,385) + (0,0839 x 0,314) + (0,0180 x 0,255)

SPF = 10 x 0,4470

SPF = 4,470

Replikasi 2

SPF = 10 x (0,0150 x 0,924) + (0,0817 x 0,622) + (0,2874 x 0,505) +

(0,3278 x 0,401) + (0,1864 x 0,402) + (0,0839 x 0,302) + (0,0,180 x 0,232)

SPF = 10 x 0,4457

SPF = 4,457

Replikasi 3

SPF = 10 x (0,0150 x 0,914) + (0,0817 x 0,614) + (0,2874 x 0,491) +
(0,3278 x 0,401) + (0,1864 x 0,400) + (0,0839 x 0,304) + (0,0180 x 0,258)

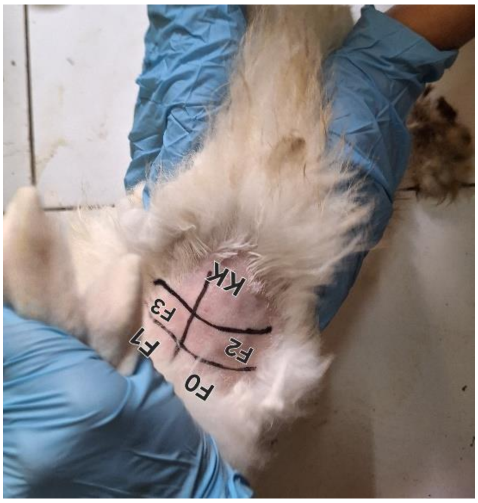
SPF = 10 x 0,4411

SPF = 4,411

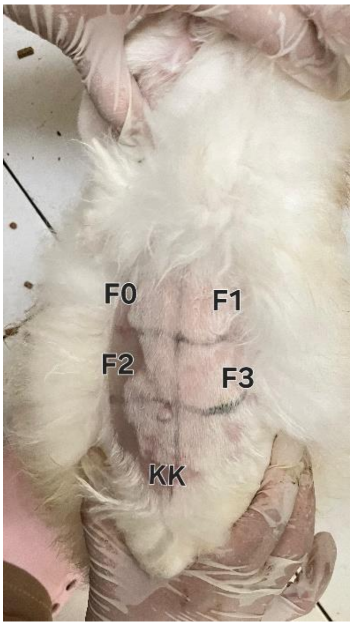
Lampiran 8. Hasil uji iritasi

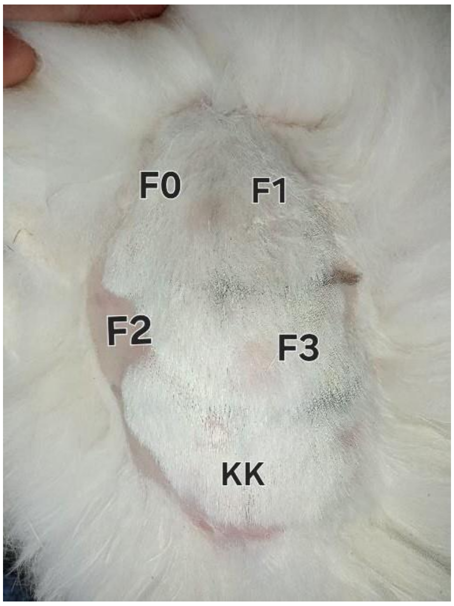
Waktu	**Efek iritasi**	**Kelompok uji**				
		KK	**F0**	**F1**	**F2**	**F3**
Jam ke-24	Eritema	0	0	0	0	0
	Udema	0	0	0	0	0
Jam ke-48	Eritema	0	0	0	1	1
	Udema	0	0	0	0	0
Jam ke-72	Eritema	0	0	0	1	0
	Udema	0	0	0	0	0
Jumlah eritema		0	0	0	2	1
Jumlah udema		0	0	0	0	0

Keterangan:
KK = Kelompok kontrol yaitu tidak diberi perlakuan
F0 = Krim tanpa zat aktif (basis krim)
F1 = Krim bemotrizinol tunggal 7%
F2 = Krim ekstrak daun binahong tunggal 10%
F3 = Krim kombinasi ekstrak daun binahong



Sebelum pengujian Jam ke-24





Jam ke-48 Jam ke-72

Jumlah pengamatan = jumlah kelinci x waktu pengamtan

Jumlah pengamatan = 1 x 3 = 3

F0

- $A = \frac{0}{3} = 0$
- $B = \frac{0}{3} = 0$

- C = jumlah hewan 1
- Indeks iritasi primer = $\frac{0-0}{1} = 0$

F1

- A = $\frac{0}{3} = 0$
- B = $\frac{0}{3} = 0$
- C = jumlah hewan 1
- Indeks iritasi primer = $\frac{0-0}{1} = 0$

F2

- A = $\frac{2}{3} = 0{,}67$
- B = $\frac{0}{3} = 0$
- C = jumlah hewan 1
- Indeks iritasi primer = $\frac{0{,}67-0}{1} = 0{,}67$

F3

- A = $\frac{1}{3} = 0{,}33$
- B = $\frac{0}{3} = 0$
- C = jumlah hewan 1
- Indeks iritasi primer = $\frac{0{,}33-0}{1} = 0{,}33$

Keterangan;
A = Jumlah skor eritema dan udema seluruh titik pengamatan sampel pada jam ke-24, 48 dan 72 dibagi jumlah pengamatan
B = Jumlah skor eritema dan udema seluruh titik pengamatan sampel pada jam ke-24, 48, dan 72 dibagi jumlah pengamatan
C = Jumlah kelinci

Lampiran 9. Hasil analisis statistic pengukuran pH *real time*
Uji normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Hari_ke	Statistic	df	Sig.	Statistic	df	Sig.
pH_F0	0	.201	3	.	.994	3	.856
	7	.253	3	.	.964	3	.637
	14	.294	3	.	.920	3	.454
	21	.366	3	.	.795	3	.102
	28	.250	3	.	.967	3	.652

pH_F1	0	.244	3	.	.971	3	.674
	7	.306	3	.	.905	3	.400
	14	.314	3	.	.893	3	.363
	21	.282	3	.	.936	3	.510
	28	.244	3	.	.971	3	.675
pH_F2	0	.202	3	.	.994	3	.853
	7	.232	3	.	.980	3	.726
	14	.307	3	.	.904	3	.398
	21	.365	3	.	.797	3	.107
	28	.328	3	.	.871	3	.298
pH_F3	0	.205	3	.	.993	3	.839
	7	.344	3	.	.841	3	.215
	14	.334	3	.	.860	3	.266
	21	.216	3	.	.988	3	.794
	28	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
pH_F0	Based on Mean	.999	4	10	.452
	Based on Median	.154	4	10	.957
	Based on Median and with adjusted df	.154	4	6.604	.955
	Based on trimmed mean	.893	4	10	.503
pH_F1	Based on Mean	1.346	4	10	.319
	Based on Median	.522	4	10	.722
	Based on Median and with adjusted df	.522	4	6.556	.724
	Based on trimmed mean	1.274	4	10	.343
pH_F2	Based on Mean	2.130	4	10	.152
	Based on Median	1.235	4	10	.356
	Based on Median and with adjusted df	1.235	4	4.868	.405
	Based on trimmed mean	2.072	4	10	.160
pH_F3	Based on Mean	2.382	4	10	.121

	Based on Median	.873	4	10	.513
	Based on Median and with adjusted df	.873	4	5.100	.539
	Based on trimmed mean	2.255	4	10	.135

One way ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
pH_F0	Between Groups	.917	4	.229	4.329	.027
	Within Groups	.530	10	.053		
	Total	1.446	14			
pH_F1	Between Groups	2.110	4	.528	9.243	.002
	Within Groups	.571	10	.057		
	Total	2.681	14			
pH_F2	Between Groups	2.260	4	.565	22.803	.000
	Within Groups	.248	10	.025		
	Total	2.507	14			
pH_F3	Between Groups	2.335	4	.584	9.466	.002
	Within Groups	.617	10	.062		
	Total	2.952	14			

Post-Hoc

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Hari_ke	(J) Hari_ke	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
pH_F0	0	7	.30667	.18789	1.000	-.3662	.9796
		14	.44000	.18789	.412	-.2329	1.1129
		21	.51333	.18789	.211	-.1596	1.1862
		28	.75000*	.18789	.026	.0771	1.4229
	7	0	-.30667	.18789	1.000	-.9796	.3662
		14	.13333	.18789	1.000	-.5396	.8062
		21	.20667	.18789	1.000	-.4662	.8796

		28	.44333	.18789	.400	-.2296	1.1162
	14	0	-.44000	.18789	.412	-1.1129	.2329
		7	-.13333	.18789	1.000	-.8062	.5396
		21	.07333	.18789	1.000	-.5996	.7462
		28	.31000	.18789	1.000	-.3629	.9829
	21	0	-.51333	.18789	.211	-1.1862	.1596
		7	-.20667	.18789	1.000	-.8796	.4662
		14	-.07333	.18789	1.000	-.7462	.5996
		28	.23667	.18789	1.000	-.4362	.9096
	28	0	-.75000*	.18789	.026	-1.4229	-.0771
		7	-.44333	.18789	.400	-1.1162	.2296
		14	-.31000	.18789	1.000	-.9829	.3629
		21	-.23667	.18789	1.000	-.9096	.4362
pH_F1	0	7	.39333	.19507	.714	-.3053	1.0920
		14	.59333	.19507	.124	-.1053	1.2920
		21	.69000	.19507	.054	-.0086	1.3886
		28	1.14667*	.19507	.002	.4480	1.8453
	7	0	-.39333	.19507	.714	-1.0920	.3053
		14	.20000	.19507	1.000	-.4986	.8986
		21	.29667	.19507	1.000	-.4020	.9953
		28	.75333*	.19507	.032	.0547	1.4520
	14	0	-.59333	.19507	.124	-1.2920	.1053
		7	-.20000	.19507	1.000	-.8986	.4986
		21	.09667	.19507	1.000	-.6020	.7953
		28	.55333	.19507	.177	-.1453	1.2520
	21	0	-.69000	.19507	.054	-1.3886	.0086
		7	-.29667	.19507	1.000	-.9953	.4020
		14	-.09667	.19507	1.000	-.7953	.6020
		28	.45667	.19507	.413	-.2420	1.1553
	28	0	-1.14667*	.19507	.002	-1.8453	-.4480
		7	-.75333*	.19507	.032	-1.4520	-.0547
		14	-.55333	.19507	.177	-1.2520	.1453
		21	-.45667	.19507	.413	-1.1553	.2420
pH_F2	0	7	.50000*	.12851	.030	.0397	.9603
		14	.55000*	.12851	.016	.0897	1.0103
		21	.59333*	.12851	.010	.1331	1.0536
		28	1.22000*	.12851	.000	.7597	1.6803

	7	0	-.50000*	.12851	.030	-.9603	-.0397
		14	.05000	.12851	1.000	-.4103	.5103
		21	.09333	.12851	1.000	-.3669	.5536
		28	.72000*	.12851	.002	.2597	1.1803
	14	0	-.55000*	.12851	.016	-1.0103	-.0897
		7	-.05000	.12851	1.000	-.5103	.4103
		21	.04333	.12851	1.000	-.4169	.5036
		28	.67000*	.12851	.004	.2097	1.1303
	21	0	-.59333*	.12851	.010	-1.0536	-.1331
		7	-.09333	.12851	1.000	-.5536	.3669
		14	-.04333	.12851	1.000	-.5036	.4169
		28	.62667*	.12851	.006	.1664	1.0869
	28	0	-1.22000*	.12851	.000	-1.6803	-.7597
		7	-.72000*	.12851	.002	-1.1803	-.2597
		14	-.67000*	.12851	.004	-1.1303	-.2097
		21	-.62667*	.12851	.006	-1.0869	-.1664
pH_F3	0	7	.38667	.20277	.856	-.3395	1.1129
		14	.53333	.20277	.252	-.1929	1.2595
		21	.57000	.20277	.184	-.1562	1.2962
		28	1.22000*	.20277	.001	.4938	1.9462
	7	0	-.38667	.20277	.856	-1.1129	.3395
		14	.14667	.20277	1.000	-.5795	.8729
		21	.18333	.20277	1.000	-.5429	.9095
		28	.83333*	.20277	.021	.1071	1.5595
	14	0	-.53333	.20277	.252	-1.2595	.1929
		7	-.14667	.20277	1.000	-.8729	.5795
		21	.03667	.20277	1.000	-.6895	.7629
		28	.68667	.20277	.069	-.0395	1.4129
	21	0	-.57000	.20277	.184	-1.2962	.1562
		7	-.18333	.20277	1.000	-.9095	.5429
		14	-.03667	.20277	1.000	-.7629	.6895
		28	.65000	.20277	.094	-.0762	1.3762
	28	0	-1.22000*	.20277	.001	-1.9462	-.4938
		7	-.83333*	.20277	.021	-1.5595	-.1071
		14	-.68667	.20277	.069	-1.4129	.0395
		21	-.65000	.20277	.094	-1.3762	.0762

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

Lampiran 10. Hasil analisis statistik uji viskositas *real time*
Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Hari_ke	Statistic	df	Sig.	Statistic	df	Sig.
Viskositas_F0	0	.292	3	.	.923	3	.463
	7	.371	3	.	.783	3	.076
	14	.296	3	.	.918	3	.446
	21	.322	3	.	.880	3	.325
	28	.182	3	.	.999	3	.935
Viskositas_F1	0	.253	3	.	.965	3	.638
	7	.362	3	.	.805	3	.126
	14	.246	3	.	.970	3	.666
	21	.191	3	.	.997	3	.898
	28	.353	3	.	.823	3	.171
Viskositas_F2	0	.230	3	.	.981	3	.737
	7	.373	3	.	.780	3	.067
	14	.181	3	.	.999	3	.943
	21	.360	3	.	.809	3	.137
	28	.312	3	.	.896	3	.373
Viskositas_F3	0	.200	3	.	.995	3	.862
	7	.272	3	.	.946	3	.552
	14	.209	3	.	.992	3	.824
	21	.175	3	.	1.000	3	1.000
	28	.338	3	.	.852	3	.246

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Viskositas_F0	Based on Mean	1.434	4	10	.293
	Based on Median	.391	4	10	.810
	Based on Median and with adjusted df	.391	4	7.703	.809

	Based on trimmed mean	1.326	4	10	.325
Viskositas_F1	Based on Mean	2.506	4	10	.109
	Based on Median	.493	4	10	.741
	Based on Median and with adjusted df	.493	4	4.981	.743
	Based on trimmed mean	2.265	4	10	.134
Viskositas_F2	Based on Mean	.820	4	10	.541
	Based on Median	.394	4	10	.808
	Based on Median and with adjusted df	.394	4	7.975	.808
	Based on trimmed mean	.787	4	10	.559
Viskositas_F3	Based on Mean	1.010	4	10	.447
	Based on Median	.554	4	10	.701
	Based on Median and with adjusted df	.554	4	6.835	.704
	Based on trimmed mean	.978	4	10	.462

One way ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Viskositas_F0	Between Groups	505962.267	4	126490.567	10.849	.001
	Within Groups	116596.667	10	11659.667		
	Total	622558.933	14			
Viskositas_F1	Between Groups	3574518.267	4	893629.567	28.816	.000
	Within Groups	310114.667	10	31011.467		
	Total	3884632.933	14			
Viskositas_F2	Between Groups	7261038.000	4	1815259.500	327.546	.000
	Within Groups	55420.000	10	5542.000		
	Total	7316458.000	14			
Viskositas_F3	Between Groups	4510950.267	4	1127737.567	107.577	.000
	Within Groups	104830.667	10	10483.067		
	Total	4615780.933	14			

Post-Hoc

Multiple Comparisons

Dependent Variable		(I) Hari_ke	(J) Hari_ke	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Viskositas_F0	Bonferroni	0	7	157.667	88.165	1.000	-158.09	473.42
			14	242.000	88.165	.207	-73.76	557.76
			21	366.333*	88.165	.020	50.58	682.09
			28	541.000*	88.165	.001	225.24	856.76
		7	0	-157.667	88.165	1.000	-473.42	158.09
			14	84.333	88.165	1.000	-231.42	400.09
			21	208.667	88.165	.395	-107.09	524.42
			28	383.333*	88.165	.014	67.58	699.09
		14	0	-242.000	88.165	.207	-557.76	73.76
			7	-84.333	88.165	1.000	-400.09	231.42
			21	124.333	88.165	1.000	-191.42	440.09
			28	299.000	88.165	.069	-16.76	614.76
		21	0	-366.333*	88.165	.020	-682.09	-50.58
			7	-208.667	88.165	.395	-524.42	107.09
			14	-124.333	88.165	1.000	-440.09	191.42
			28	174.667	88.165	.757	-141.09	490.42
		28	0	-541.000*	88.165	.001	-856.76	-225.24
			7	-383.333*	88.165	.014	-699.09	-67.58
			14	-299.000	88.165	.069	-614.76	16.76
			21	-174.667	88.165	.757	-490.42	141.09
Viskositas_F1	Bonferroni	0	7	290.667	143.786	.708	-224.29	805.62
			14	399.667	143.786	.195	-115.29	914.62
			21	555.667*	143.786	.031	40.71	1070.62
			28	1444.333*	143.786	.000	929.38	1959.29
		7	0	-290.667	143.786	.708	-805.62	224.29
			14	109.000	143.786	1.000	-405.95	623.95
			21	265.000	143.786	.951	-249.95	779.95
			28	1153.667*	143.786	.000	638.71	1668.62
		14	0	-399.667	143.786	.195	-914.62	115.29
			7	-109.000	143.786	1.000	-623.95	405.95
			21	156.000	143.786	1.000	-358.95	670.95
			28	1044.667*	143.786	.000	529.71	1559.62
		21	0	-555.667*	143.786	.031	-1070.62	-40.71
			7	-265.000	143.786	.951	-779.95	249.95
			14	-156.000	143.786	1.000	-670.95	358.95
			28	888.667*	143.786	.001	373.71	1403.62
		28	0	-1444.333*	143.786	.000	-1959.29	-929.38
			7	-1153.667*	143.786	.000	-1668.62	-638.71
			14	-1044.667*	143.786	.000	-1559.62	-529.71
			21	-888.667*	143.786	.001	-1403.62	-373.71

Viskositas_F2	Bonferroni	0	7	574.667*	60.784	.000	356.98	792.36
			14	1062.667*	60.784	.000	844.98	1280.36
			21	1441.667*	60.784	.000	1223.98	1659.36
			28	2021.000*	60.784	.000	1803.31	2238.69
		7	0	-574.667*	60.784	.000	-792.36	-356.98
			14	488.000*	60.784	.000	270.31	705.69
			21	867.000*	60.784	.000	649.31	1084.69
			28	1446.333*	60.784	.000	1228.64	1664.02
		14	0	-1062.667*	60.784	.000	-1280.36	-844.98
			7	-488.000*	60.784	.000	-705.69	-270.31
			21	379.000*	60.784	.001	161.31	596.69
			28	958.333*	60.784	.000	740.64	1176.02
		21	0	-1441.667*	60.784	.000	-1659.36	-1223.98
			7	-867.000*	60.784	.000	-1084.69	-649.31
			14	-379.000*	60.784	.001	-596.69	-161.31
			28	579.333*	60.784	.000	361.64	797.02
		28	0	-2021.000*	60.784	.000	-2238.69	-1803.31
			7	-1446.333*	60.784	.000	-1664.02	-1228.64
			14	-958.333*	60.784	.000	-1176.02	-740.64
			21	-579.333*	60.784	.000	-797.02	-361.64
Viskositas_F3	Bonferroni	0	7	65.000	83.599	1.000	-234.40	364.40
			14	376.000*	83.599	.011	76.60	675.40
			21	1061.333*	83.599	.000	761.93	1360.73
			28	1373.000*	83.599	.000	1073.60	1672.40
		7	0	-65.000	83.599	1.000	-364.40	234.40
			14	311.000*	83.599	.040	11.60	610.40
			21	996.333*	83.599	.000	696.93	1295.73
			28	1308.000*	83.599	.000	1008.60	1607.40
		14	0	-376.000*	83.599	.011	-675.40	-76.60
			7	-311.000*	83.599	.040	-610.40	-11.60
			21	685.333*	83.599	.000	385.93	984.73
			28	997.000*	83.599	.000	697.60	1296.40
		21	0	-1061.333*	83.599	.000	-1360.73	-761.93
			7	-996.333*	83.599	.000	-1295.73	-696.93
			14	-685.333*	83.599	.000	-984.73	-385.93
			28	311.667*	83.599	.039	12.27	611.07
		28	0	-1373.000*	83.599	.000	-1672.40	-1073.60
			7	-1308.000*	83.599	.000	-1607.40	-1008.60
			14	-997.000*	83.599	.000	-1296.40	-697.60
			21	-311.667*	83.599	.039	-611.07	-12.27

Lampiran 11. Hasil analisis statistic pengukuran daya sebar *real time*

Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Hari_ke	Statistic	df	Sig.	Statistic	df	Sig.
DayaSebar_F0	0	.175	3	.	1.000	3	1.000
	7	.175	3	.	1.000	3	1.000
	14	.253	3	.	.964	3	.637
	21	.292	3	.	.923	3	.463
	28	.292	3	.	.923	3	.463

DayaSebar_F1	0	.204	3	.	.993	3	.843
	7	.337	3	.	.855	3	.253
	14	.253	3	.	.964	3	.637
	21	.276	3	.	.942	3	.537
	28	.253	3	.	.964	3	.637
DayaSebar_F2	0	.219	3	.	.987	3	.780
	7	.292	3	.	.923	3	.463
	14	.328	3	.	.871	3	.298
	21	.337	3	.	.855	3	.253
	28	.225	3	.	.984	3	.756
DayaSebar_F3	0	.175	3	.	1.000	3	1.000
	7	.253	3	.	.964	3	.637
	14	.292	3	.	.923	3	.463
	21	.175	3	.	1.000	3	1.000
	28	.314	3	.	.893	3	.363

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
DayaSebar_F0	Based on Mean	1.159	4	10	.385
	Based on Median	.263	4	10	.895
	Based on Median and with adjusted df	.263	4	6.624	.892
	Based on trimmed mean	1.069	4	10	.421
DayaSebar_F1	Based on Mean	1.328	4	10	.325

	Based on Median	.348	4	10	.840
	Based on Median and with adjusted df	.348	4	6.310	.837
	Based on trimmed mean	1.227	4	10	.359
DayaSebar_F2	Based on Mean	2.316	4	10	.128
	Based on Median	1.022	4	10	.442
	Based on Median and with adjusted df	1.022	4	4.982	.477
	Based on trimmed mean	2.214	4	10	.140
DayaSebar_F3	Based on Mean	1.766	4	10	.212
	Based on Median	.340	4	10	.845
	Based on Median and with adjusted df	.340	4	5.459	.842
	Based on trimmed mean	1.607	4	10	.247

One Way ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
DayaSebar_F0	Between Groups	.071	4	.018	67.821	.000
	Within Groups	.003	10	.000		
	Total	.073	14			
DayaSebar_F1	Between Groups	.075	4	.019	21.117	.000
	Within Groups	.009	10	.001		
	Total	.084	14			
DayaSebar_F2	Between Groups	.071	4	.018	7.559	.005
	Within Groups	.024	10	.002		
	Total	.095	14			
DayaSebar_F3	Between Groups	.060	4	.015	47.479	.000
	Within Groups	.003	10	.000		
	Total	.063	14			

Post-hoc

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Hari_ke	(J) Hari_ke	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
DayaSebar_F0	0	7	-.06000*	.01317	.010	-.1072	-.0128
		14	-.09333*	.01317	.000	-.1405	-.0462
		21	-.12333*	.01317	.000	-.1705	-.0762
		28	-.20667*	.01317	.000	-.2538	-.1595
	7	0	.06000*	.01317	.010	.0128	.1072
		14	-.03333	.01317	.298	-.0805	.0138
		21	-.06333*	.01317	.007	-.1105	-.0162
		28	-.14667*	.01317	.000	-.1938	-.0995
	14	0	.09333*	.01317	.000	.0462	.1405
		7	.03333	.01317	.298	-.0138	.0805
		21	-.03000	.01317	.459	-.0772	.0172
		28	-.11333*	.01317	.000	-.1605	-.0662
	21	0	.12333*	.01317	.000	.0762	.1705
		7	.06333*	.01317	.007	.0162	.1105
		14	.03000	.01317	.459	-.0172	.0772
		28	-.08333*	.01317	.001	-.1305	-.0362
	28	0	.20667*	.01317	.000	.1595	.2538
		7	.14667*	.01317	.000	.0995	.1938
		14	.11333*	.01317	.000	.0662	.1605
		21	.08333*	.01317	.001	.0362	.1305
DayaSebar_F1	0	7	-.06667	.02431	.208	-.1537	.0204
		14	-.11667*	.02431	.007	-.2037	-.0296
		21	-.16333*	.02431	.001	-.2504	-.0763
		28	-.20000*	.02431	.000	-.2871	-.1129
	7	0	.06667	.02431	.208	-.0204	.1537
		14	-.05000	.02431	.668	-.1371	.0371
		21	-.09667*	.02431	.026	-.1837	-.0096
		28	-.13333*	.02431	.003	-.2204	-.0463
	14	0	.11667*	.02431	.007	.0296	.2037
		7	.05000	.02431	.668	-.0371	.1371
		21	-.04667	.02431	.839	-.1337	.0404
		28					

			-.08333	.02431	.065	-.1704	.0037
	21	0	.16333*	.02431	.001	.0763	.2504
		7	.09667*	.02431	.026	.0096	.1837
		14	.04667	.02431	.839	-.0404	.1337
		28	-.03667	.02431	1.000	-.1237	.0504
	28	0	.20000*	.02431	.000	.1129	.2871
		7	.13333*	.02431	.003	.0463	.2204
		14	.08333	.02431	.065	-.0037	.1704
		21	.03667	.02431	1.000	-.0504	.1237
DayaSebar_F2	0	7	-.06333	.03961	1.000	-.2052	.0785
		14	-.11333	.03961	.169	-.2552	.0285
		21	-.14000	.03961	.054	-.2819	.0019
		28	-.20333*	.03961	.004	-.3452	-.0615
	7	0	.06333	.03961	1.000	-.0785	.2052
		14	-.05000	.03961	1.000	-.1919	.0919
		21	-.07667	.03961	.817	-.2185	.0652
		28	-.14000	.03961	.054	-.2819	.0019
	14	0	.11333	.03961	.169	-.0285	.2552
		7	.05000	.03961	1.000	-.0919	.1919
		21	-.02667	.03961	1.000	-.1685	.1152
		28	-.09000	.03961	.464	-.2319	.0519
	21	0	.14000	.03961	.054	-.0019	.2819
		7	.07667	.03961	.817	-.0652	.2185
		14	.02667	.03961	1.000	-.1152	.1685
		28	-.06333	.03961	1.000	-.2052	.0785
	28	0	.20333*	.03961	.004	.0615	.3452
		7	.14000	.03961	.054	-.0019	.2819
		14	.09000	.03961	.464	-.0519	.2319
		21	.06333	.03961	1.000	-.0785	.2052
DayaSebar_F3	0	7	-.04667	.01445	.090	-.0984	.0051
		14	-.10333*	.01445	.000	-.1551	-.0516
		21	-.13000*	.01445	.000	-.1818	-.0782
		28	-.18000*	.01445	.000	-.2318	-.1282
	7	0	.04667	.01445	.090	-.0051	.0984
		14	-.05667*	.01445	.029	-.1084	-.0049
		21	-.08333*	.01445	.002	-.1351	-.0316
		28	-.13333*	.01445	.000	-.1851	-.0816

	14	0	.10333*	.01445	.000	.0516	.1551
		7	.05667*	.01445	.029	.0049	.1084
		21	-.02667	.01445	.948	-.0784	.0251
		28	-.07667*	.01445	.003	-.1284	-.0249
	21	0	.13000*	.01445	.000	.0782	.1818
		7	.08333*	.01445	.002	.0316	.1351
		14	.02667	.01445	.948	-.0251	.0784
		28	-.05000	.01445	.061	-.1018	.0018
	28	0	.18000*	.01445	.000	.1282	.2318
		7	.13333*	.01445	.000	.0816	.1851
		14	.07667*	.01445	.003	.0249	.1284
		21	.05000	.01445	.061	-.0018	.1018

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

Lampiran 12. Hasil analisis statistic uji daya lekat *real time*
Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Hari_ke	Statistic	df	Sig.	Statistic	df	Sig.
DayaLekat_F0	0	.349	3	.	.832	3	.194
	7	.334	3	.	.860	3	.268
	14	.191	3	.	.997	3	.900
	21	.253	3	.	.964	3	.637
	28	.363	3	.	.802	3	.119
DayaLekat_F1	0	.362	3	.	.803	3	.122
	7	.361	3	.	.807	3	.132
	14	.304	3	.	.907	3	.407
	21	.208	3	.	.992	3	.826
	28	.295	3	.	.919	3	.450
DayaLekat_F2	0	.178	3	.	1.000	3	.958
	7	.372	3	.	.782	3	.072
	14	.327	3	.	.872	3	.302
	21	.291	3	.	.925	3	.470
	28	.364	3	.	.799	3	.111
DayaLekat_F3	0	.314	3	.	.893	3	.363
	7	.331	3	.	.865	3	.281
	14	.219	3	.	.987	3	.780

	21	.349	3	.	.832	3	.194
	28	.204	3	.	.993	3	.843

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
DayaLekat_F0	Based on Mean	6.727	4	10	.007
	Based on Median	.745	4	10	.583
	Based on Median and with adjusted df	.745	4	3.794	.611
	Based on trimmed mean	5.713	4	10	.012
DayaLekat_F1	Based on Mean	2.124	4	10	.152
	Based on Median	.747	4	10	.582
	Based on Median and with adjusted df	.747	4	6.205	.593
	Based on trimmed mean	1.999	4	10	.171
DayaLekat_F2	Based on Mean	.767	4	10	.571
	Based on Median	.093	4	10	.982
	Based on Median and with adjusted df	.093	4	7.878	.982
	Based on trimmed mean	.666	4	10	.630
DayaLekat_F3	Based on Mean	1.599	4	10	.249
	Based on Median	.299	4	10	.872
	Based on Median and with adjusted df	.299	4	5.652	.869
	Based on trimmed mean	1.440	4	10	.291

One Way ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
DayaLekat_F0	Between Groups	3.826	4	.956	21.124	.000
	Within Groups	.453	10	.045		
	Total	4.279	14			
DayaLekat_F1	Between Groups	9.828	4	2.457	140.886	.000
	Within Groups	.174	10	.017		
	Total	10.003	14			

DayaLekat_F2	Between Groups	3.923	4	.981	7.663	.004
	Within Groups	1.280	10	.128		
	Total	5.203	14			
DayaLekat_F3	Between Groups	3.755	4	.939	207.687	.000
	Within Groups	.045	10	.005		
	Total	3.800	14			

Post-Hoc F0

Games-Howell	0	7	.61333	.22901	.315	-1.0882	2.3149
		14	.84000*	.04269	.000	.6490	1.0310
		21	1.09333*	.06009	.001	.7797	1.4070
		28	1.51667*	.14150	.021	.5205	2.5129
	7	0	-.61333	.22901	.315	-2.3149	1.0882
		14	.22667	.22944	.846	-1.4641	1.9174
		21	.48000	.23331	.447	-1.1261	2.0861
		28	.90333	.26617	.139	-.4178	2.2245
	14	0	-.84000*	.04269	.000	-1.0310	-.6490
		7	-.22667	.22944	.846	-1.9174	1.4641
		21	.25333	.06173	.086	-.0549	.5615
		28	.67667	.14220	.107	-.3051	1.6585
	21	0	-1.09333*	.06009	.001	-1.4070	-.7797
		7	-.48000	.23331	.447	-2.0861	1.1261
		14	-.25333	.06173	.086	-.5615	.0549
		28	.42333	.14836	.249	-.4653	1.3120
	28	0	-1.51667*	.14150	.021	-2.5129	-.5205
		7	-.90333	.26617	.139	-2.2245	.4178
		14	-.67667	.14220	.107	-1.6585	.3051
		21	-.42333	.14836	.249	-1.3120	.4653

F1

Games-Howell	0	7	1.41333*	.06146	.000	1.1393	1.6874
		14	1.68333*	.05270	.000	1.4209	1.9458
		21	1.99000*	.11902	.003	1.2955	2.6845
		28	2.36333*	.12019	.002	1.6590	3.0676
	7	0	-1.41333*	.06146	.000	-1.6874	-1.1393
		14	.27000*	.04989	.036	.0286	.5114
		21	.57667	.11780	.080	-.1307	1.2841
		28	.95000*	.11898	.025	.2326	1.6674
	14	0	-1.68333*	.05270	.000	-1.9458	-1.4209
		7	-.27000*	.04989	.036	-.5114	-.0286
		21	.30667	.11348	.297	-.4646	1.0779
		28	.68000	.11470	.067	-.1014	1.4614
	21	0	-1.99000*	.11902	.003	-2.6845	-1.2955
		7	-.57667	.11780	.080	-1.2841	.1307
		14	-.30667	.11348	.297	-1.0779	.4646
		28	.37333	.15667	.283	-.3232	1.0699
	28	0	-2.36333*	.12019	.002	-3.0676	-1.6590
		7	-.95000*	.11898	.025	-1.6674	-.2326
		14	-.68000	.11470	.067	-1.4614	.1014
		21	-.37333	.15667	.283	-1.0699	.3232

F2

Games-Howell	0	7	.37000	.27341	.684	-.9502	1.6902
		14	.91667	.29725	.179	-.5828	2.4162
		21	1.17667	.27060	.067	-.1231	2.4765
		28	1.37667*	.21124	.013	.4375	2.3158
	7	0	-.37000	.27341	.684	-1.6902	.9502
		14	.54667	.34354	.569	-.9912	2.0845
		21	.80667	.32076	.250	-.6195	2.2328
		28	1.00667	.27256	.108	-.3143	2.3277
	14	0	-.91667	.29725	.179	-2.4162	.5828
		7	-.54667	.34354	.569	-2.0845	.9912
		21	.26000	.34130	.929	-1.2707	1.7907
		28	.46000	.29646	.597	-1.0418	1.9618
	21	0	-1.17667	.27060	.067	-2.4765	.1231
		7	-.80667	.32076	.250	-2.2328	.6195
		14	-.26000	.34130	.929	-1.7907	1.2707
		28	.20000	.26973	.934	-1.1004	1.5004
	28	0	-1.37667*	.21124	.013	-2.3158	-.4375
		7	-1.00667	.27256	.108	-2.3277	.3143
		14	-.46000	.29646	.597	-1.9618	1.0418
		21	-.20000	.26973	.934	-1.5004	1.1004

F3

Games-Howell	0	7	.30667	.06642	.072	-.0455	.6589
		14	.86000*	.05323	.001	.6085	1.1115
		21	1.12333*	.04177	.000	.9372	1.3095
		28	1.33667*	.03667	.000	1.1602	1.5131
	7	0	-.30667	.06642	.072	-.6589	.0455
		14	.55333*	.07333	.010	.2123	.8943
		21	.81667*	.06549	.005	.4591	1.1742
		28	1.03000*	.06236	.005	.6426	1.4174
	14	0	-.86000*	.05323	.001	-1.1115	-.6085
		7	-.55333*	.07333	.010	-.8943	-.2123
		21	.26333*	.05207	.044	.0114	.5153
		28	.47667*	.04807	.011	.2101	.7432
	21	0	-1.12333*	.04177	.000	-1.3095	-.9372
		7	-.81667*	.06549	.005	-1.1742	-.4591
		14	-.26333*	.05207	.044	-.5153	-.0114
		28	.21333*	.03496	.022	.0490	.3777
	28	0	-1.33667*	.03667	.000	-1.5131	-1.1602
		7	-1.03000*	.06236	.005	-1.4174	-.6426
		14	-.47667*	.04807	.011	-.7432	-.2101
		21	-.21333*	.03496	.022	-.3777	-.0490

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

Lampiran 13. Hasil analisis statistic pengukuran pH *cycling test*
Normalitas

Tests of Normality

	Siklus_ke	Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
pH_F0	Siklus 1	.225	3	.	.984	3	.756
	Siklus 2	.216	3	.	.989	3	.797
	Siklus 3	.365	3	.	.798	3	.110
	Siklus 4	.367	3	.	.793	3	.097
	Siklus 5	.219	3	.	.987	3	.780
	Siklus 6	.326	3	.	.874	3	.307
pH_F1	Siklus 1	.196	3	.	.996	3	.878
	Siklus 2	.328	3	.	.871	3	.298
	Siklus 3	.280	3	.	.938	3	.520
	Siklus 4	.349	3	.	.832	3	.194
	Siklus 5	.369	3	.	.789	3	.089
	Siklus 6	.369	3	.	.789	3	.089
pH_F2	Siklus 1	.343	3	.	.842	3	.220
	Siklus 2	.314	3	.	.893	3	.363
	Siklus 3	.265	3	.	.953	3	.583
	Siklus 4	.292	3	.	.923	3	.463
	Siklus 5	.253	3	.	.964	3	.637
	Siklus 6	.204	3	.	.993	3	.843
pH_F3	Siklus 1	.349	3	.	.832	3	.194
	Siklus 2	.292	3	.	.923	3	.463
	Siklus 3	.193	3	.	.997	3	.890
	Siklus 4	.181	3	.	.999	3	.942
	Siklus 5	.236	3	.	.977	3	.712
	Siklus 6	.368	3	.	.792	3	.094

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
pH_F0	Based on Mean	3.568	5	12	.033
	Based on Median	.305	5	12	.901
	Based on Median and with adjusted df	.305	5	5.281	.892
	Based on trimmed mean	2.998	5	12	.055
pH_F1	Based on Mean	.370	5	12	.860
	Based on Median	.037	5	12	.999
	Based on Median and with adjusted df	.037	5	9.566	.999
	Based on trimmed mean	.317	5	12	.893
pH_F2	Based on Mean	2.149	5	12	.129
	Based on Median	.352	5	12	.871
	Based on Median and with adjusted df	.352	5	6.599	.865
	Based on trimmed mean	1.914	5	12	.166
pH_F3	Based on Mean	.422	5	12	.825
	Based on Median	.177	5	12	.966
	Based on Median and with adjusted df	.177	5	8.610	.964
	Based on trimmed mean	.400	5	12	.840

One Way ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
pH_F0	Between Groups	2.869	5	.574	9.578	.001
	Within Groups	.719	12	.060		
	Total	3.588	17			

pH_F1	Between Groups	4.029	5	.806	90.380	.000
	Within Groups	.107	12	.009		
	Total	4.136	17			
pH_F2	Between Groups	2.796	5	.559	166.085	.000
	Within Groups	.040	12	.003		
	Total	2.836	17			
pH_F3	Between Groups	2.577	5	.515	68.914	.000
	Within Groups	.090	12	.007		
	Total	2.666	17			

Post-Hoc

Multiple Comparisons

Games-Howell

Dependent Variable	(I) Siklus_ke	(J) Siklus_ke	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
pH_F0	Siklus 1	Siklus 2	.25333	.09428	.275	-.2304	.7371
		Siklus 3	.62667	.20707	.280	-.8693	2.1227
		Siklus 4	.71333	.23293	.279	-1.0160	2.4427
		Siklus 5	1.02667*	.10171	.007	.4834	1.5699
		Siklus 6	1.13333*	.12009	.014	.4316	1.8351
	Siklus 2	Siklus 1	-.25333	.09428	.275	-.7371	.2304
		Siklus 3	.37333	.21512	.599	-.9978	1.7445
		Siklus 4	.46000	.24012	.537	-1.1408	2.0608
		Siklus 5	.77333*	.11724	.016	.2140	1.3326
		Siklus 6	.88000*	.13350	.020	.2133	1.5467
	Siklus 3	Siklus 1	-.62667	.20707	.280	-2.1227	.8693
		Siklus 2	-.37333	.21512	.599	-1.7445	.9978
		Siklus 4	.08667	.30273	.999	-1.3608	1.5341
		Siklus 5	.40000	.21848	.560	-.9354	1.7354
		Siklus 6	.50667	.22762	.413	-.7645	1.7779
	Siklus 4	Siklus 1	-.71333	.23293	.279	-2.4427	1.0160
		Siklus 2	-.46000	.24012	.537	-2.0608	1.1408
		Siklus 3	-.08667	.30273	.999	-1.5341	1.3608

		Siklus 5	.31333	.24313	.781	-1.2472	1.8739
		Siklus 6	.42000	.25137	.620	-1.0601	1.9001
	Siklus 5	Siklus 1	-1.02667*	.10171	.007	-1.5699	-.4834
		Siklus 2	-.77333*	.11724	.016	-1.3326	-.2140
		Siklus 3	-.40000	.21848	.560	-1.7354	.9354
		Siklus 4	-.31333	.24313	.781	-1.8739	1.2472
		Siklus 6	.10667	.13884	.959	-.5677	.7811
	Siklus 6	Siklus 1	-1.13333*	.12009	.014	-1.8351	-.4316
		Siklus 2	-.88000*	.13350	.020	-1.5467	-.2133
		Siklus 3	-.50667	.22762	.413	-1.7779	.7645
		Siklus 4	-.42000	.25137	.620	-1.9001	1.0601
		Siklus 5	-.10667	.13884	.959	-.7811	.5677
pH_F1	Siklus 1	Siklus 2	.45667*	.06394	.016	.1356	.7777
		Siklus 3	.64667*	.07476	.006	.2920	1.0014
		Siklus 4	.67667*	.07717	.006	.3091	1.0442
		Siklus 5	1.25667*	.08076	.001	.8678	1.6455
		Siklus 6	1.40000*	.08076	.000	1.0111	1.7889
	Siklus 2	Siklus 1	-.45667*	.06394	.016	-.7777	-.1356
		Siklus 3	.19000	.06523	.227	-.1407	.5207
		Siklus 4	.22000	.06799	.181	-.1320	.5720
		Siklus 5	.80000*	.07203	.005	.4153	1.1847
		Siklus 6	.94333*	.07203	.003	.5587	1.3280
	Siklus 3	Siklus 1	-.64667*	.07476	.006	-1.0014	-.2920
		Siklus 2	-.19000	.06523	.227	-.5207	.1407
		Siklus 4	.03000	.07824	.998	-.3418	.4018
		Siklus 5	.61000*	.08179	.011	.2181	1.0019
		Siklus 6	.75333*	.08179	.005	.3614	1.1452
	Siklus 4	Siklus 1	-.67667*	.07717	.006	-1.0442	-.3091
		Siklus 2	-.22000	.06799	.181	-.5720	.1320
		Siklus 3	-.03000	.07824	.998	-.4018	.3418
		Siklus 5	.58000*	.08400	.014	.1803	.9797
		Siklus 6	.72333*	.08400	.006	.3236	1.1230
	Siklus 5	Siklus 1	-1.25667*	.08076	.001	-1.6455	-.8678
		Siklus 2	-.80000*	.07203	.005	-1.1847	-.4153
		Siklus 3	-.61000*	.08179	.011	-1.0019	-.2181
		Siklus 4	-.58000*	.08400	.014	-.9797	-.1803
		Siklus 6	.14333	.08731	.618	-.2707	.5573

	Siklus 6	Siklus 1	-1.40000*	.08076	.000	-1.7889	-1.0111
		Siklus 2	-.94333*	.07203	.003	-1.3280	-.5587
		Siklus 3	-.75333*	.08179	.005	-1.1452	-.3614
		Siklus 4	-.72333*	.08400	.006	-1.1230	-.3236
		Siklus 5	-.14333	.08731	.618	-.5573	.2707
pH_F2	Siklus 1	Siklus 2	.18000	.05888	.214	-.1332	.4932
		Siklus 3	.36667*	.06333	.030	.0550	.6784
		Siklus 4	.38000*	.06191	.026	.0696	.6904
		Siklus 5	.78667*	.05110	.012	.3902	1.1831
		Siklus 6	1.18333*	.05426	.002	.8413	1.5254
	Siklus 2	Siklus 1	-.18000	.05888	.214	-.4932	.1332
		Siklus 3	.18667	.04910	.107	-.0526	.4260
		Siklus 4	.20000	.04726	.075	-.0274	.4274
		Siklus 5	.60667*	.03180	.005	.3827	.8306
		Siklus 6	1.00333*	.03667	.000	.8147	1.1919
	Siklus 3	Siklus 1	-.36667*	.06333	.030	-.6784	-.0550
		Siklus 2	-.18667	.04910	.107	-.4260	.0526
		Siklus 4	.01333	.05270	1.000	-.2371	.2638
		Siklus 5	.42000*	.03944	.023	.1268	.7132
		Siklus 6	.81667*	.04346	.002	.5716	1.0617
	Siklus 4	Siklus 1	-.38000*	.06191	.026	-.6904	-.0696
		Siklus 2	-.20000	.04726	.075	-.4274	.0274
		Siklus 3	-.01333	.05270	1.000	-.2638	.2371
		Siklus 5	.40667*	.03712	.021	.1344	.6789
		Siklus 6	.80333*	.04137	.001	.5763	1.0304
	Siklus 5	Siklus 1	-.78667*	.05110	.012	-1.1831	-.3902
		Siklus 2	-.60667*	.03180	.005	-.8306	-.3827
		Siklus 3	-.42000*	.03944	.023	-.7132	-.1268
		Siklus 4	-.40667*	.03712	.021	-.6789	-.1344
		Siklus 6	.39667*	.02211	.003	.2615	.5318
	Siklus 6	Siklus 1	-1.18333*	.05426	.002	-1.5254	-.8413
		Siklus 2	-1.00333*	.03667	.000	-1.1919	-.8147
		Siklus 3	-.81667*	.04346	.002	-1.0617	-.5716
		Siklus 4	-.80333*	.04137	.001	-1.0304	-.5763
		Siklus 5	-.39667*	.02211	.003	-.5318	-.2615
pH_F3	Siklus 1	Siklus 2	.12333	.04595	.264	-.1009	.3476
		Siklus 3	.27667	.06446	.108	-.0975	.6509

		Siklus 4	.30000	.06182	.076	-.0510	.6510
		Siklus 5	.71667*	.06236	.007	.3610	1.0723
		Siklus 6	1.10667*	.06498	.003	.7279	1.4854
	Siklus 2	Siklus 1	-.12333	.04595	.264	-.3476	.1009
		Siklus 3	.15333	.06815	.395	-.2055	.5121
		Siklus 4	.17667	.06566	.276	-.1623	.5156
		Siklus 5	.59333*	.06616	.009	.2504	.9362
		Siklus 6	.98333*	.06864	.002	.6206	1.3461
	Siklus 3	Siklus 1	-.27667	.06446	.108	-.6509	.0975
		Siklus 2	-.15333	.06815	.395	-.5121	.2055
		Siklus 4	.02333	.07972	.999	-.3553	.4019
		Siklus 5	.44000*	.08014	.031	.0596	.8204
		Siklus 6	.83000*	.08219	.003	.4402	1.2198
	Siklus 4	Siklus 1	-.30000	.06182	.076	-.6510	.0510
		Siklus 2	-.17667	.06566	.276	-.5156	.1623
		Siklus 3	-.02333	.07972	.999	-.4019	.3553
		Siklus 5	.41667*	.07803	.033	.0466	.7867
		Siklus 6	.80667*	.08014	.003	.4258	1.1875
	Siklus 5	Siklus 1	-.71667*	.06236	.007	-1.0723	-.3610
		Siklus 2	-.59333*	.06616	.009	-.9362	-.2504
		Siklus 3	-.44000*	.08014	.031	-.8204	-.0596
		Siklus 4	-.41667*	.07803	.033	-.7867	-.0466
		Siklus 6	.39000*	.08055	.047	.0075	.7725
	Siklus 6	Siklus 1	-1.10667*	.06498	.003	-1.4854	-.7279
		Siklus 2	-.98333*	.06864	.002	-1.3461	-.6206
		Siklus 3	-.83000*	.08219	.003	-1.2198	-.4402
		Siklus 4	-.80667*	.08014	.003	-1.1875	-.4258
		Siklus 5	-.39000*	.08055	.047	-.7725	-.0075

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

Lampiran 14. Hasil analisis statistic pengujian viskositas *cycling test*
Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Siklus_ke	Statistic	df	Sig.	Statistic	df	Sig.
Viskositas_F0	Siklus 1	.224	3	.	.985	3	.763

	Siklus 2	.311	3	.	.897	3	.376
	Siklus 3	.283	3	.	.934	3	.505
	Siklus 4	.356	3	.	.817	3	.156
	Siklus 5	.365	3	.	.799	3	.111
	Siklus 6	.352	3	.	.825	3	.176
Viskositas_F1	Siklus 1	.285	3	.	.932	3	.496
	Siklus 2	.350	3	.	.830	3	.189
	Siklus 3	.369	3	.	.788	3	.087
	Siklus 4	.175	3	.	1.000	3	.991
	Siklus 5	.214	3	.	.989	3	.803
	Siklus 6	.322	3	.	.880	3	.324
Viskositas_F2	Siklus 1	.353	3	.	.822	3	.169
	Siklus 2	.364	3	.	.799	3	.112
	Siklus 3	.311	3	.	.898	3	.379
	Siklus 4	.175	3	.	1.000	3	1.000
	Siklus 5	.234	3	.	.978	3	.717
	Siklus 6	.313	3	.	.894	3	.366
Viskositas_F3	Siklus 1	.373	3	.	.780	3	.067
	Siklus 2	.322	3	.	.879	3	.323
	Siklus 3	.349	3	.	.831	3	.192
	Siklus 4	.374	3	.	.777	3	.061
	Siklus 5	.332	3	.	.863	3	.276
	Siklus 6	.208	3	.	.992	3	.828

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Viskositas_F0	Based on Mean	.749	5	12	.603
	Based on Median	.227	5	12	.944
	Based on Median and with adjusted df	.227	5	10.030	.942
	Based on trimmed mean	.692	5	12	.639
Viskositas_F1	Based on Mean	2.309	5	12	.109
	Based on Median	.727	5	12	.617

	Based on Median and with adjusted df	.727	5	6.159	.628
	Based on trimmed mean	2.166	5	12	.127
Viskositas_F2	Based on Mean	4.720	5	12	.013
	Based on Median	.542	5	12	.742
	Based on Median and with adjusted df	.542	5	4.757	.741
	Based on trimmed mean	4.035	5	12	.022
Viskositas_F3	Based on Mean	3.588	5	12	.032
	Based on Median	.395	5	12	.843
	Based on Median and with adjusted df	.395	5	5.647	.836
	Based on trimmed mean	3.042	5	12	.053

One Way Anova

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Viskositas_F0	Between Groups	4214308.444	5	842861.689	38.997	.000
	Within Groups	259361.333	12	21613.444		
	Total	4473669.778	17			
Viskositas_F1	Between Groups	7988620.278	5	1597724.056	40.538	.000
	Within Groups	472958.667	12	39413.222		
	Total	8461578.944	17			
Viskositas_F2	Between Groups	31747520.944	5	6349504.189	868.143	.000
	Within Groups	87766.667	12	7313.889		
	Total	31835287.611	17			
Viskositas_F3	Between Groups	17372692.444	5	3474538.489	99.730	.000
	Within Groups	418074.000	12	34839.500		
	Total	17790766.444	17			

Post-Hoc

Multiple Comparisons

Games-Howell

Dependent Variable	(I) Siklus_ke	(J) Siklus_ke	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Viskositas_F0	Siklus 1	Siklus 2	260.667	140.106	.547	-583.13	1104.46
		Siklus 3	641.667	147.638	.092	-158.34	1441.67
		Siklus 4	849.667*	159.661	.040	60.08	1639.26
		Siklus 5	1243.667*	143.126	.016	422.30	2065.03
		Siklus 6	1335.000*	145.142	.012	524.76	2145.24
	Siklus 2	Siklus 1	-260.667	140.106	.547	-1104.46	583.13
		Siklus 3	381.000	93.837	.089	-78.68	840.68
		Siklus 4	589.000	111.803	.052	-8.06	1186.06
		Siklus 5	983.000*	86.564	.002	569.63	1396.37
		Siklus 6	1074.333*	89.858	.002	640.93	1507.73
	Siklus 3	Siklus 1	-641.667	147.638	.092	-1441.67	158.34
		Siklus 2	-381.000	93.837	.089	-840.68	78.68
		Siklus 4	208.000	121.109	.587	-386.19	802.19
		Siklus 5	602.000*	98.289	.022	131.28	1072.72
		Siklus 6	693.333*	101.202	.014	212.11	1174.56
	Siklus 4	Siklus 1	-849.667*	159.661	.040	-1639.26	-60.08
		Siklus 2	-589.000	111.803	.052	-1186.06	8.06
		Siklus 3	-208.000	121.109	.587	-802.19	386.19
		Siklus 5	394.000	115.565	.156	-197.08	985.08
		Siklus 6	485.333	118.053	.090	-105.64	1076.31
	Siklus 5	Siklus 1	-1243.667*	143.126	.016	-2065.03	-422.30
		Siklus 2	-983.000*	86.564	.002	-1396.37	-569.63
		Siklus 3	-602.000*	98.289	.022	-1072.72	-131.28
		Siklus 4	-394.000	115.565	.156	-985.08	197.08
		Siklus 6	91.333	94.498	.908	-357.81	540.47
	Siklus 6	Siklus 1	-1335.000*	145.142	.012	-2145.24	-524.76
		Siklus 2	-1074.333*	89.858	.002	-1507.73	-640.93
		Siklus 3	-693.333*	101.202	.014	-1174.56	-212.11
		Siklus 4	-485.333	118.053	.090	-1076.31	105.64
		Siklus 5	-91.333	94.498	.908	-540.47	357.81
Viskositas_F1	Siklus 1	Siklus 2	382.000	205.858	.528	-632.04	1396.04
		Siklus 3	1050.667*	139.880	.024	249.66	1851.68
		Siklus 4	1283.333*	214.592	.029	206.38	2360.28

		Siklus 5	1646.333*	127.699	.016	690.41	2602.26
		Siklus 6	1889.333*	129.282	.010	965.99	2812.67
	Siklus 2	Siklus 1	-382.000	205.858	.528	-1396.04	632.04
		Siklus 3	668.667	175.641	.163	-455.47	1792.80
		Siklus 4	901.333	239.443	.104	-236.64	2039.31
		Siklus 5	1264.333	166.104	.052	-30.74	2559.41
		Siklus 6	1507.333*	167.323	.035	241.75	2772.92
	Siklus 3	Siklus 1	-1050.667*	139.880	.024	-1851.68	-249.66
		Siklus 2	-668.667	175.641	.163	-1792.80	455.47
		Siklus 4	232.667	185.802	.796	-984.80	1450.13
		Siklus 5	595.667*	69.134	.021	172.99	1018.35
		Siklus 6	838.667*	72.015	.006	436.28	1241.06
	Siklus 4	Siklus 1	-1283.333*	214.592	.029	-2360.28	-206.38
		Siklus 2	-901.333	239.443	.104	-2039.31	236.64
		Siklus 3	-232.667	185.802	.796	-1450.13	984.80
		Siklus 5	363.000	176.813	.509	-1025.40	1751.40
		Siklus 6	606.000	177.959	.237	-753.93	1965.93
	Siklus 5	Siklus 1	-1646.333*	127.699	.016	-2602.26	-690.41
		Siklus 2	-1264.333	166.104	.052	-2559.41	30.74
		Siklus 3	-595.667*	69.134	.021	-1018.35	-172.99
		Siklus 4	-363.000	176.813	.509	-1751.40	1025.40
		Siklus 6	243.000*	43.896	.033	29.81	456.19
	Siklus 6	Siklus 1	-1889.333*	129.282	.010	-2812.67	-965.99
		Siklus 2	-1507.333*	167.323	.035	-2772.92	-241.75
		Siklus 3	-838.667*	72.015	.006	-1241.06	-436.28
		Siklus 4	-606.000	177.959	.237	-1965.93	753.93
		Siklus 5	-243.000*	43.896	.033	-456.19	-29.81
Viskositas_F2	Siklus 1	Siklus 2	553.667	91.530	.071	-97.38	1204.71
		Siklus 3	842.000*	106.662	.012	298.21	1385.79
		Siklus 4	1475.667*	88.407	.012	750.84	2200.49
		Siklus 5	2611.333*	91.925	.002	1967.47	3255.20
		Siklus 6	3907.000*	98.534	.000	3338.07	4475.93
	Siklus 2	Siklus 1	-553.667	91.530	.071	-1204.71	97.38
		Siklus 3	288.333	64.837	.113	-117.93	694.60
		Siklus 4	922.000*	25.351	.001	738.39	1105.61
		Siklus 5	2057.667*	35.737	.000	1887.91	2227.43
		Siklus 6	3353.333*	50.357	.000	3076.11	3630.56

	Siklus 3	Siklus 1	-842.000*	106.662	.012	-1385.79	-298.21
		Siklus 2	-288.333	64.837	.113	-694.60	117.93
		Siklus 4	633.667*	60.347	.030	145.55	1121.78
		Siklus 5	1769.333*	65.393	.001	1368.77	2169.89
		Siklus 6	3065.000*	74.397	.000	2694.57	3435.43
	Siklus 4	Siklus 1	-1475.667*	88.407	.012	-2200.49	-750.84
		Siklus 2	-922.000*	25.351	.001	-1105.61	-738.39
		Siklus 3	-633.667*	60.347	.030	-1121.78	-145.55
		Siklus 5	1135.667*	26.742	.001	939.48	1331.85
		Siklus 6	2431.333*	44.427	.001	2079.47	2783.20
	Siklus 5	Siklus 1	-2611.333*	91.925	.002	-3255.20	-1967.47
		Siklus 2	-2057.667*	35.737	.000	-2227.43	-1887.91
		Siklus 3	-1769.333*	65.393	.001	-2169.89	-1368.77
		Siklus 4	-1135.667*	26.742	.001	-1331.85	-939.48
		Siklus 6	1295.667*	51.071	.000	1021.00	1570.33
	Siklus 6	Siklus 1	-3907.000*	98.534	.000	-4475.93	-3338.07
		Siklus 2	-3353.333*	50.357	.000	-3630.56	-3076.11
		Siklus 3	-3065.000*	74.397	.000	-3435.43	-2694.57
		Siklus 4	-2431.333*	44.427	.001	-2783.20	-2079.47
		Siklus 5	-1295.667*	51.071	.000	-1570.33	-1021.00
Viskositas_F3	Siklus 1	Siklus 2	262.333	127.603	.459	-403.50	928.17
		Siklus 3	1130.000*	124.819	.011	457.73	1802.27
		Siklus 4	1573.667*	135.181	.003	907.77	2239.57
		Siklus 5	1941.333*	227.464	.015	668.28	3214.38
		Siklus 6	2884.000*	118.679	.001	2178.97	3589.03
	Siklus 2	Siklus 1	-262.333	127.603	.459	-928.17	403.50
		Siklus 3	867.667*	93.389	.005	423.26	1312.07
		Siklus 4	1311.333*	106.844	.002	796.34	1826.32
		Siklus 5	1679.000*	211.853	.034	262.61	3095.39
		Siklus 6	2621.667*	85.008	.000	2198.02	3045.31
	Siklus 3	Siklus 1	-1130.000*	124.819	.011	-1802.27	-457.73
		Siklus 2	-867.667*	93.389	.005	-1312.07	-423.26
		Siklus 4	443.667	103.503	.076	-64.08	951.42
		Siklus 5	811.333	210.187	.171	-630.89	2253.56
		Siklus 6	1754.000*	80.769	.000	1360.05	2147.95
	Siklus 4	Siklus 1	-1573.667*	135.181	.003	-2239.57	-907.77
		Siklus 2	-1311.333*	106.844	.002	-1826.32	-796.34

	Siklus 3	-443.667	103.503	.076	-951.42	64.08
	Siklus 5	367.667	216.501	.613	-989.52	1724.86
	Siklus 6	1310.333*	96.009	.003	801.35	1819.32
Siklus 5	Siklus 1	-1941.333*	227.464	.015	-3214.38	-668.28
	Siklus 2	-1679.000*	211.853	.034	-3095.39	-262.61
	Siklus 3	-811.333	210.187	.171	-2253.56	630.89
	Siklus 4	-367.667	216.501	.613	-1724.86	989.52
	Siklus 6	942.667	206.601	.132	-565.33	2450.66
Siklus 6	Siklus 1	-2884.000*	118.679	.001	-3589.03	-2178.97
	Siklus 2	-2621.667*	85.008	.000	-3045.31	-2198.02
	Siklus 3	-1754.000*	80.769	.000	-2147.95	-1360.05
	Siklus 4	-1310.333*	96.009	.003	-1819.32	-801.35
	Siklus 5	-942.667	206.601	.132	-2450.66	565.33

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

Lampiran 15. Hasil analisis statistik pengujian daya sebar *cycling test*
Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Siklus_ke	Statistic	df	Sig.	Statistic	df	Sig.
DayaSebar_F0	Siklus 1	.343	3	.	.842	3	.220
	Siklus 2	.314	3	.	.893	3	.363
	Siklus 3	.328	3	.	.871	3	.298
	Siklus 4	.253	3	.	.964	3	.637
	Siklus 5	.175	3	.	1.000	3	1.000
	Siklus 6	.175	3	.	1.000	3	1.000
DayaSebar_F1	Siklus 1	.175	3	.	1.000	3	1.000
	Siklus 2	.337	3	.	.855	3	.253
	Siklus 3	.175	3	.	1.000	3	1.000
	Siklus 4	.253	3	.	.964	3	.637
	Siklus 5	.219	3	.	.987	3	.780
	Siklus 6	.253	3	.	.964	3	.637
DayaSebar_F2	Siklus 1	.175	3	.	1.000	3	1.000
	Siklus 2	.353	3	.	.824	3	.174
	Siklus 3	.191	3	.	.997	3	.900

	Siklus 4	.314	3	.	.893	3	.363
	Siklus 5	.343	3	.	.842	3	.220
	Siklus 6	.292	3	.	.923	3	.463
DayaSebar_F3	Siklus 1	.337	3	.	.855	3	.253
	Siklus 2	.175	3	.	1.000	3	1.000
	Siklus 3	.292	3	.	.923	3	.463
	Siklus 4	.175	3	.	1.000	3	1.000
	Siklus 5	.175	3	.	1.000	3	1.000
	Siklus 6	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
DayaSebar_F0	Based on Mean	3.565	5	12	.033
	Based on Median	.429	5	12	.820
	Based on Median and with adjusted df	.429	5	5.445	.813
	Based on trimmed mean	3.090	5	12	.051
DayaSebar_F1	Based on Mean	2.571	5	12	.084
	Based on Median	.504	5	12	.768
	Based on Median and with adjusted df	.504	5	4.109	.764
	Based on trimmed mean	2.340	5	12	.106
DayaSebar_F2	Based on Mean	1.390	5	12	.295
	Based on Median	.279	5	12	.916
	Based on Median and with adjusted df	.279	5	8.086	.912
	Based on trimmed mean	1.260	5	12	.342
DayaSebar_F3	Based on Mean	3.846	5	12	.026
	Based on Median	.595	5	12	.705
	Based on Median and with adjusted df	.595	5	3.479	.712
	Based on trimmed mean	3.438	5	12	.037

One Way ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
DayaSebar_F0	Between Groups	.079	5	.016	23.346	.000
	Within Groups	.008	12	.001		
	Total	.087	17			
DayaSebar_F1	Between Groups	.066	5	.013	29.017	.000
	Within Groups	.005	12	.000		
	Total	.072	17			
DayaSebar_F2	Between Groups	.297	5	.059	30.770	.000
	Within Groups	.023	12	.002		
	Total	.321	17			
DayaSebar_F3	Between Groups	.149	5	.030	78.650	.000
	Within Groups	.005	12	.000		
	Total	.153	17			

Post-Hoc

Multiple Comparisons

Games-Howell

Dependent Variable	(I) Siklus_ke	(J) Siklus_ke	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
DayaSebar_F0	Siklus 1	Siklus 2	-.07000	.02944	.360	-.2266	.0866
		Siklus 3	-.09333	.03127	.210	-.2487	.0621
		Siklus 4	-.13667	.02667	.090	-.3136	.0402
		Siklus 5	-.17000	.02582	.064	-.3619	.0219
		Siklus 6	-.20000*	.02582	.046	-.3919	-.0081
	Siklus 2	Siklus 1	.07000	.02944	.360	-.0866	.2266
		Siklus 3	-.02333	.02404	.906	-.1396	.0929
		Siklus 4	-.06667	.01764	.132	-.1624	.0291
		Siklus 5	-.10000	.01633	.057	-.2054	.0054
		Siklus 6	-.13000*	.01633	.030	-.2354	-.0246
	Siklus 3	Siklus 1	.09333	.03127	.210	-.0621	.2487
		Siklus 2	.02333	.02404	.906	-.0929	.1396
		Siklus 4	-.04333	.02055	.458	-.1644	.0778
		Siklus 5	-.07667	.01944	.165	-.2107	.0573

		Siklus 6	-.10667	.01944	.083	-.2407	.0273
	Siklus 4	Siklus 1	.13667	.02667	.090	-.0402	.3136
		Siklus 2	.06667	.01764	.132	-.0291	.1624
		Siklus 3	.04333	.02055	.458	-.0778	.1644
		Siklus 5	-.03333	.01054	.191	-.0878	.0212
		Siklus 6	-.06333*	.01054	.032	-.1178	-.0088
	Siklus 5	Siklus 1	.17000	.02582	.064	-.0219	.3619
		Siklus 2	.10000	.01633	.057	-.0054	.2054
		Siklus 3	.07667	.01944	.165	-.0573	.2107
		Siklus 4	.03333	.01054	.191	-.0212	.0878
		Siklus 6	-.03000	.00816	.111	-.0687	.0087
	Siklus 6	Siklus 1	.20000*	.02582	.046	.0081	.3919
		Siklus 2	.13000*	.01633	.030	.0246	.2354
		Siklus 3	.10667	.01944	.083	-.0273	.2407
		Siklus 4	.06333*	.01054	.032	.0088	.1178
		Siklus 5	.03000	.00816	.111	-.0087	.0687
DayaSebar_F1	Siklus 1	Siklus 2	-.04333	.02261	.544	-.2063	.1196
		Siklus 3	-.09000*	.00816	.002	-.1287	-.0513
		Siklus 4	-.12333*	.01054	.004	-.1778	-.0688
		Siklus 5	-.15333*	.01563	.017	-.2524	-.0543
		Siklus 6	-.17333*	.01054	.001	-.2278	-.1188
	Siklus 2	Siklus 1	.04333	.02261	.544	-.1196	.2063
		Siklus 3	-.04667	.02261	.497	-.2096	.1163
		Siklus 4	-.08000	.02357	.203	-.2285	.0685
		Siklus 5	-.11000	.02625	.091	-.2449	.0249
		Siklus 6	-.13000	.02357	.069	-.2785	.0185
	Siklus 3	Siklus 1	.09000*	.00816	.002	.0513	.1287
		Siklus 2	.04667	.02261	.497	-.1163	.2096
		Siklus 4	-.03333	.01054	.191	-.0878	.0212
		Siklus 5	-.06333	.01563	.141	-.1624	.0357
		Siklus 6	-.08333*	.01054	.013	-.1378	-.0288
	Siklus 4	Siklus 1	.12333*	.01054	.004	.0688	.1778
		Siklus 2	.08000	.02357	.203	-.0685	.2285
		Siklus 3	.03333	.01054	.191	-.0212	.0878
		Siklus 5	-.03000	.01700	.573	-.1204	.0604
		Siklus 6	-.05000	.01247	.086	-.1091	.0091

	Siklus 5	Siklus 1	.15333*	.01563	.017	.0543	.2524
		Siklus 2	.11000	.02625	.091	-.0249	.2449
		Siklus 3	.06333	.01563	.141	-.0357	.1624
		Siklus 4	.03000	.01700	.573	-.0604	.1204
		Siklus 6	-.02000	.01700	.828	-.1104	.0704
	Siklus 6	Siklus 1	.17333*	.01054	.001	.1188	.2278
		Siklus 2	.13000	.02357	.069	-.0185	.2785
		Siklus 3	.08333*	.01054	.013	.0288	.1378
		Siklus 4	.05000	.01247	.086	-.0091	.1091
		Siklus 5	.02000	.01700	.828	-.0704	.1104
DayaSebar_F2	Siklus 1	Siklus 2	-.07667	.03383	.425	-.2983	.1450
		Siklus 3	-.11333	.03383	.216	-.3350	.1083
		Siklus 4	-.20000	.03266	.057	-.4109	.0109
		Siklus 5	-.28000*	.02769	.012	-.4456	-.1144
		Siklus 6	-.38333*	.01667	.000	-.4624	-.3042
	Siklus 2	Siklus 1	.07667	.03383	.425	-.1450	.2983
		Siklus 3	-.03667	.04497	.950	-.2499	.1766
		Siklus 4	-.12333	.04410	.233	-.3326	.0860
		Siklus 5	-.20333*	.04055	.046	-.4012	-.0055
		Siklus 6	-.30667*	.03399	.022	-.5262	-.0872
	Siklus 3	Siklus 1	.11333	.03383	.216	-.1083	.3350
		Siklus 2	.03667	.04497	.950	-.1766	.2499
		Siklus 4	-.08667	.04410	.479	-.2960	.1226
		Siklus 5	-.16667	.04055	.085	-.3645	.0312
		Siklus 6	-.27000*	.03399	.030	-.4895	-.0505
	Siklus 4	Siklus 1	.20000	.03266	.057	-.0109	.4109
		Siklus 2	.12333	.04410	.233	-.0860	.3326
		Siklus 3	.08667	.04410	.479	-.1226	.2960
		Siklus 5	-.08000	.03958	.460	-.2714	.1114
		Siklus 6	-.18333	.03283	.068	-.3922	.0255
	Siklus 5	Siklus 1	.28000*	.02769	.012	.1144	.4456
		Siklus 2	.20333*	.04055	.046	.0055	.4012
		Siklus 3	.16667	.04055	.085	-.0312	.3645
		Siklus 4	.08000	.03958	.460	-.1114	.2714
		Siklus 6	-.10333	.02789	.155	-.2673	.0607
	Siklus 6	Siklus 1	.38333*	.01667	.000	.3042	.4624
		Siklus 2	.30667*	.03399	.022	.0872	.5262

		Siklus 3	.27000*	.03399	.030	.0505	.4895
		Siklus 4	.18333	.03283	.068	-.0255	.3922
		Siklus 5	.10333	.02789	.155	-.0607	.2673
DayaSebar_F3	Siklus 1	Siklus 2	-.04667	.02261	.497	-.2096	.1163
		Siklus 3	-.13000	.02494	.059	-.2682	.0082
		Siklus 4	-.16667*	.02261	.048	-.3296	-.0037
		Siklus 5	-.20667*	.02261	.030	-.3696	-.0437
		Siklus 6	-.26667*	.02261	.017	-.4296	-.1037
	Siklus 2	Siklus 1	.04667	.02261	.497	-.1163	.2096
		Siklus 3	-.08333*	.01333	.042	-.1615	-.0051
		Siklus 4	-.12000*	.00816	.001	-.1587	-.0813
		Siklus 5	-.16000*	.00816	.000	-.1987	-.1213
		Siklus 6	-.22000*	.00816	.000	-.2587	-.1813
	Siklus 3	Siklus 1	.13000	.02494	.059	-.0082	.2682
		Siklus 2	.08333*	.01333	.042	.0051	.1615
		Siklus 4	-.03667	.01333	.290	-.1149	.0415
		Siklus 5	-.07667	.01333	.053	-.1549	.0015
		Siklus 6	-.13667*	.01333	.011	-.2149	-.0585
	Siklus 4	Siklus 1	.16667*	.02261	.048	.0037	.3296
		Siklus 2	.12000*	.00816	.001	.0813	.1587
		Siklus 3	.03667	.01333	.290	-.0415	.1149
		Siklus 5	-.04000*	.00816	.045	-.0787	-.0013
		Siklus 6	-.10000*	.00816	.002	-.1387	-.0613
	Siklus 5	Siklus 1	.20667*	.02261	.030	.0437	.3696
		Siklus 2	.16000*	.00816	.000	.1213	.1987
		Siklus 3	.07667	.01333	.053	-.0015	.1549
		Siklus 4	.04000*	.00816	.045	.0013	.0787
		Siklus 6	-.06000*	.00816	.011	-.0987	-.0213
	Siklus 6	Siklus 1	.26667*	.02261	.017	.1037	.4296
		Siklus 2	.22000*	.00816	.000	.1813	.2587
		Siklus 3	.13667*	.01333	.011	.0585	.2149
		Siklus 4	.10000*	.00816	.002	.0613	.1387
		Siklus 5	.06000*	.00816	.011	.0213	.0987

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

Lampiran 16. Hasil analisis statistic pengujian daya lekat *cycling test*
Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Siklus_ke	Statistic	df	Sig.	Statistic	df	Sig.
DayaLekat_F0	Siklus 1	.282	3	.	.936	3	.510
	Siklus 2	.351	3	.	.828	3	.183
	Siklus 3	.269	3	.	.949	3	.567
	Siklus 4	.276	3	.	.942	3	.537
	Siklus 5	.292	3	.	.923	3	.463
	Siklus 6	.279	3	.	.939	3	.525
DayaLekat_F1	Siklus 1	.299	3	.	.915	3	.433
	Siklus 2	.253	3	.	.964	3	.637
	Siklus 3	.370	3	.	.786	3	.081
	Siklus 4	.227	3	.	.983	3	.747
	Siklus 5	.373	3	.	.779	3	.065
	Siklus 6	.351	3	.	.827	3	.180
DayaLekat_F2	Siklus 1	.253	3	.	.964	3	.637
	Siklus 2	.219	3	.	.987	3	.780
	Siklus 3	.280	3	.	.938	3	.520
	Siklus 4	.182	3	.	.999	3	.935
	Siklus 5	.201	3	.	.994	3	.856
	Siklus 6	.285	3	.	.932	3	.497
DayaLekat_F3	Siklus 1	.264	3	.	.954	3	.588
	Siklus 2	.358	3	.	.812	3	.144
	Siklus 3	.212	3	.	.990	3	.811
	Siklus 4	.349	3	.	.830	3	.189
	Siklus 5	.353	3	.	.824	3	.174
	Siklus 6	.364	3	.	.800	3	.114

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
DayaLekat_F0	Based on Mean	4.085	5	12	.021
	Based on Median	.591	5	12	.707

	Based on Median and with adjusted df	.591	5	4.560	.712
	Based on trimmed mean	3.585	5	12	.032
DayaLekat_F1	Based on Mean	2.159	5	12	.128
	Based on Median	.360	5	12	.866
	Based on Median and with adjusted df	.360	5	7.294	.862
	Based on trimmed mean	1.916	5	12	.165
DayaLekat_F2	Based on Mean	1.211	5	12	.362
	Based on Median	.628	5	12	.682
	Based on Median and with adjusted df	.628	5	8.524	.684
	Based on trimmed mean	1.169	5	12	.379
DayaLekat_F3	Based on Mean	3.820	5	12	.027
	Based on Median	.466	5	12	.795
	Based on Median and with adjusted df	.466	5	4.782	.789
	Based on trimmed mean	3.291	5	12	.042

One Way ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
DayaLekat_F0	Between Groups	35.364	5	7.073	939.573	.000
	Within Groups	.090	12	.008		
	Total	35.455	17			
DayaLekat_F1	Between Groups	37.545	5	7.509	129.653	.000
	Within Groups	.695	12	.058		
	Total	38.240	17			
DayaLekat_F2	Between Groups	42.560	5	8.512	1345.182	.000
	Within Groups	.076	12	.006		
	Total	42.636	17			
DayaLekat_F3	Between Groups	48.894	5	9.779	129.998	.000
	Within Groups	.903	12	.075		
	Total	49.796	17			

Post-Hoc

Multiple Comparisons

Games-Howell

Dependent Variable	(I) Siklus_ke	(J) Siklus_ke	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Inte Lower Bound	Upper
DayaLekat_F0	Siklus 1	Siklus 2	.61000*	.08975	.043	.0389	
		Siklus 3	.86333*	.04422	.000	.6525	
		Siklus 4	2.16667*	.03887	.000	1.9633	
		Siklus 5	3.04333*	.03496	.000	2.8149	
		Siklus 6	3.94000*	.08138	.000	3.4453	
	Siklus 2	Siklus 1	-.61000*	.08975	.043	-1.1811	
		Siklus 3	.25333	.08863	.292	-.3322	
		Siklus 4	1.55667*	.08609	.007	.9278	
		Siklus 5	2.43333*	.08439	.004	1.7647	
		Siklus 6	3.33000*	.11190	.000	2.7956	
	Siklus 3	Siklus 1	-.86333*	.04422	.000	-1.0742	
		Siklus 2	-.25333	.08863	.292	-.8389	
		Siklus 4	1.30333*	.03621	.000	1.1207	
		Siklus 5	2.18000*	.03197	.000	1.9790	
		Siklus 6	3.07667*	.08014	.000	2.5691	
	Siklus 4	Siklus 1	-2.16667*	.03887	.000	-2.3700	
		Siklus 2	-1.55667*	.08609	.007	-2.1856	
		Siklus 3	-1.30333*	.03621	.000	-1.4860	
		Siklus 5	.87667*	.02404	.000	.7462	
		Siklus 6	1.77333*	.07732	.004	1.2240	
	Siklus 5	Siklus 1	-3.04333*	.03496	.000	-3.2717	
		Siklus 2	-2.43333*	.08439	.004	-3.1020	
		Siklus 3	-2.18000*	.03197	.000	-2.3810	
		Siklus 4	-.87667*	.02404	.000	-1.0072	
		Siklus 6	.89667*	.07542	.021	.3058	
	Siklus 6	Siklus 1	-3.94000*	.08138	.000	-4.4347	
		Siklus 2	-3.33000*	.11190	.000	-3.8644	
		Siklus 3	-3.07667*	.08014	.000	-3.5842	
		Siklus 4	-1.77333*	.07732	.004	-2.3226	
		Siklus 5	-.89667*	.07542	.021	-1.4875	

DayaLekat_F1	Siklus 1	Siklus 2	.39667	.11170	.180	-.2896	
		Siklus 3	1.05333*	.12333	.010	.4199	
		Siklus 4	1.52000*	.21533	.026	.3200	
		Siklus 5	2.54000*	.19866	.003	1.4806	
		Siklus 6	4.30667*	.21082	.001	3.1453	
	Siklus 2	Siklus 1	-.39667	.11170	.180	-1.0830	
		Siklus 3	.65667*	.08138	.013	.2337	
		Siklus 4	1.12333	.19437	.084	-.3171	
		Siklus 5	2.14333*	.17572	.016	.8712	
		Siklus 6	3.91000*	.18936	.005	2.5147	
	Siklus 3	Siklus 1	-1.05333*	.12333	.010	-1.6868	
		Siklus 2	-.65667*	.08138	.013	-1.0797	
		Siklus 4	.46667	.20127	.411	-.8544	
		Siklus 5	1.48667*	.18333	.027	.3303	
		Siklus 6	3.25333*	.19644	.005	1.9767	
	Siklus 4	Siklus 1	-1.52000*	.21533	.026	-2.7200	
		Siklus 2	-1.12333	.19437	.084	-2.5637	
		Siklus 3	-.46667	.20127	.411	-1.7877	
		Siklus 5	1.02000	.25449	.087	-.1942	
		Siklus 6	2.78667*	.26409	.003	1.5338	
	Siklus 5	Siklus 1	-2.54000*	.19866	.003	-3.5994	
		Siklus 2	-2.14333*	.17572	.016	-3.4155	
		Siklus 3	-1.48667*	.18333	.027	-2.6431	
		Siklus 4	-1.02000	.25449	.087	-2.2342	
		Siklus 6	1.76667*	.25069	.013	.5739	
	Siklus 6	Siklus 1	-4.30667*	.21082	.001	-5.4680	
		Siklus 2	-3.91000*	.18936	.005	-5.3053	
		Siklus 3	-3.25333*	.19644	.005	-4.5300	
		Siklus 4	-2.78667*	.26409	.003	-4.0395	
		Siklus 5	-1.76667*	.25069	.013	-2.9595	
DayaLekat_F2	Siklus 1	Siklus 2	.27000*	.03037	.029	.0591	
		Siklus 3	.79333*	.05437	.014	.3683	
		Siklus 4	2.34000*	.04989	.001	1.9541	
		Siklus 5	3.11667*	.06716	.001	2.5809	
		Siklus 6	4.16000*	.04570	.000	3.8110	
	Siklus 2	Siklus 1	-.27000*	.03037	.029	-.4809	
		Siklus 3	.52333*	.06101	.015	.1832	

		Siklus 4	2.07000*	.05706	.000	1.7634	
		Siklus 5	2.84667*	.07265	.000	2.4032	
		Siklus 6	3.89000*	.05344	.000	3.6127	
	Siklus 3	Siklus 1	-.79333*	.05437	.014	-1.2184	
		Siklus 2	-.52333*	.06101	.015	-.8635	
		Siklus 4	1.54667*	.07272	.000	1.2004	
		Siklus 5	2.32333*	.08551	.000	1.9079	
		Siklus 6	3.36667*	.06992	.000	3.0295	
	Siklus 4	Siklus 1	-2.34000*	.04989	.001	-2.7259	
		Siklus 2	-2.07000*	.05706	.000	-2.3766	
		Siklus 3	-1.54667*	.07272	.000	-1.8930	
		Siklus 5	.77667*	.08273	.006	.3655	
		Siklus 6	1.82000*	.06650	.000	1.5033	
	Siklus 5	Siklus 1	-3.11667*	.06716	.001	-3.6524	
		Siklus 2	-2.84667*	.07265	.000	-3.2902	
		Siklus 3	-2.32333*	.08551	.000	-2.7388	
		Siklus 4	-.77667*	.08273	.006	-1.1878	
		Siklus 6	1.04333*	.08028	.002	.6326	
	Siklus 6	Siklus 1	-4.16000*	.04570	.000	-4.5090	
		Siklus 2	-3.89000*	.05344	.000	-4.1673	
		Siklus 3	-3.36667*	.06992	.000	-3.7039	
		Siklus 4	-1.82000*	.06650	.000	-2.1367	
		Siklus 5	-1.04333*	.08028	.002	-1.4541	
DayaLekat_F3	Siklus 1	Siklus 2	.41000	.17566	.425	-.9014	
		Siklus 3	1.13000*	.19093	.048	.0201	
		Siklus 4	2.72667*	.22497	.002	1.6449	
		Siklus 5	3.52667*	.33358	.006	1.7425	
		Siklus 6	4.48333*	.19686	.001	3.4050	
	Siklus 2	Siklus 1	-.41000	.17566	.425	-1.7214	
		Siklus 3	.72000*	.09250	.025	.1659	
		Siklus 4	2.31667*	.15070	.009	1.2302	
		Siklus 5	3.11667*	.28875	.027	.8159	
		Siklus 6	4.07333*	.10419	.000	3.4129	
	Siklus 3	Siklus 1	-1.13000*	.19093	.048	-2.2399	
		Siklus 2	-.72000*	.09250	.025	-1.2741	
		Siklus 4	1.59667*	.16826	.010	.6832	
		Siklus 5	2.39667*	.29829	.037	.3061	

		Siklus 6	3.35333*	.12828	.000	2.7386
	Siklus 4	Siklus 1	-2.72667*	.22497	.002	-3.8084
		Siklus 2	-2.31667*	.15070	.009	-3.4031
		Siklus 3	-1.59667*	.16826	.010	-2.5101
		Siklus 5	.80000	.32114	.344	-1.0379
		Siklus 6	1.75667*	.17496	.006	.8572
	Siklus 5	Siklus 1	-3.52667*	.33358	.006	-5.3109
		Siklus 2	-3.11667*	.28875	.027	-5.4175
		Siklus 3	-2.39667*	.29829	.037	-4.4872
		Siklus 4	-.80000	.32114	.344	-2.6379
		Siklus 6	.95667	.30212	.245	-1.0714
	Siklus 6	Siklus 1	-4.48333*	.19686	.001	-5.5617
		Siklus 2	-4.07333*	.10419	.000	-4.7338
		Siklus 3	-3.35333*	.12828	.000	-3.9680
		Siklus 4	-1.75667*	.17496	.006	-2.6561
		Siklus 5	-.95667	.30212	.245	-2.9847

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

Lampiran 17. Hasil analisis statistik krim tabir surya
Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
SPF	F0	.328	3	.	.871	3	.298
	F1	.195	3	.	.996	3	.884
	F2	.212	3	.	.990	3	.811
	F3	.189	3	.	.998	3	.906

a. Lilliefors Significance Correction

Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
SPF	Based on Mean	1.975	3	8	.196
	Based on Median	1.611	3	8	.262

	Based on Median and with adjusted df	1.611	3	4.410	.310
	Based on trimmed mean	1.954	3	8	.200

One Way ANOVA

ANOVA

SPF

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1408.741	3	469.580	1880.766	.000
Within Groups	1.997	8	.250		
Total	1410.738	11			

Post-Hoc

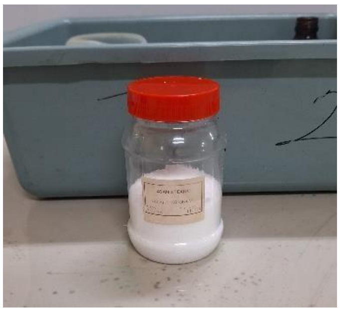
Multiple Comparisons

Dependent Variable: SPF Bonferroni

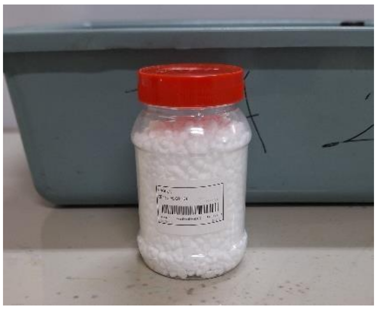
(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
F0	F1	-26.57667*	.40798	.000	-27.9960	-25.1573
	F2	-22.75000*	.40798	.000	-24.1693	-21.3307
	F3	-25.14000*	.40798	.000	-26.5593	-23.7207
F1	F0	26.57667*	.40798	.000	25.1573	27.9960
	F2	3.82667*	.40798	.000	2.4073	5.2460
	F3	1.43667*	.40798	.047	.0173	2.8560
F2	F0	22.75000*	.40798	.000	21.3307	24.1693
	F1	-3.82667*	.40798	.000	-5.2460	-2.4073
	F3	-2.39000*	.40798	.002	-3.8093	-.9707
F3	F0	25.14000*	.40798	.000	23.7207	26.5593
	F1	-1.43667*	.40798	.047	-2.8560	-.0173
	F2	2.39000*	.40798	.002	.9707	3.8093

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

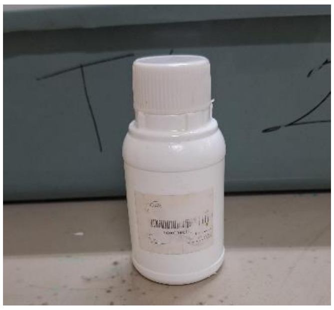
Lampiran 18. Pembuatan sediaan krim tabir surya



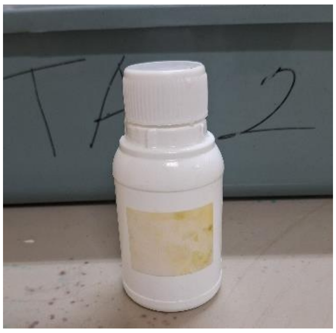
Asam stearat



Setil alkohol

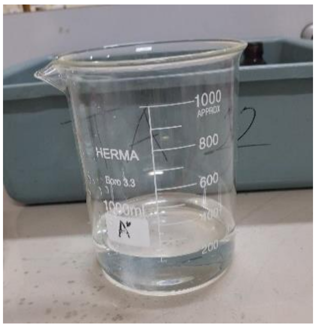


TEA



Gliserin

DMDM Hydantoin



Aquadest

Ekstrak daun binahong

Bemotrizinol

Proses peleburan fase minyak dan air

Pencampuran bahan dengan ultraturax

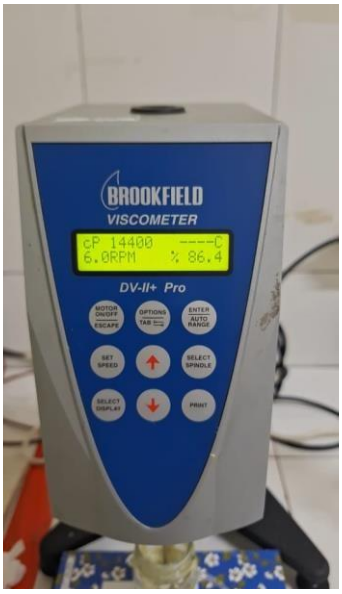
Sediaan krim tabir surya

Lampiran 19. Dokumentasi evaluasi sediaan

F0

F1

F2



F3

F0

F1

F2

F3

F0

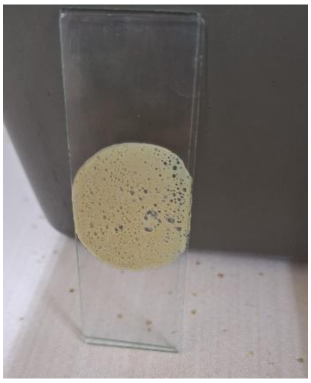
F1

F2

F3

F0

F1

F2 F3

Lampiran20. Surat determinasi daun binahong

LANSIDA
Herbal Technologi

Yogyakarta, 11 Februari 2025

No. : 59/LH/02/25
Hal : Hasil Determinasi

Kepada Yth.
Else Salsabilla
NIM : 211FF03057
Fakultas Farmasi Universitas Bhakti Kencana Bandung

Dengan hormat,

Bersama ini disampaikan hasil determinasi tumbuhan sesuai pemintaan sebagai berikut:

No.	Nama jenis	Nama Lokal
1	*Anredera cordifolia* (Ten.) Steenis	Binahong

Kunci Determinasi:
1b, 2b, 3b, 4b, 6b, 7b, 9a, (Gol 4. Tumbuhan membelit dan memanjat)
41b, 42b, 43b, 54b, 59b, 61b, 62b, 63a, 64b, ... Familia : Basellaceae
1b, ... Genus : Anredera
1a, ... Spesies : Anredera cordifolia (Tenore.) Steen.
(Steenis, 2005 ; Tjitrosoepomo, 2007)

Klasifikasi Tanaman :

Kingdom	:	Plantae
Subkingdom	:	Tracheobionta
Super divisi	:	Spermatophyta
Divisi	:	Magnoliphyta
Kelas	:	Magnoliopsida
Sub kelas	:	Hamamelidae
Ordo	:	Caryophyllales
Famili	:	Basellaceae
Genus	:	Anredera
Species	:	*Anredera cordifolia* (Ten.) Steenis

Demikian semoga berguna bagi saudara.

Divisi Taksonomi

Apriyani Susilowati, S.Si.

Lampiran 21. *Certificate of Analysis* ekstrak daun binahong

LANSIDA

SERTIFIKAT HASIL UJI

Nomor	: 250133199
Nama Sampel	: Ekstrak Daun Binahong
Uji	: Kadar Air, Kualitatif Flavonoid
Metode	: Gravimetri, TLC
Tanggal	: 11 Februari 2025
Permintaan	: Else Salsabilla
NIM	: 211FF03057
Institusi	: Fak. Farmasi Universitas Bhakti Kencana Bandung

Hasil Uji

Parameter Uji	Hasil Uji	Metode
Kadar Air	6,04 % v/b	Gravimetri
Kualitatif Flavonoid	Positif	TLC

Divisi Teknis

Pradekatiwi, S.Si.

Lampiran 22. Surat keterangan prosedur ekstraksi dan skrining fitokimia

LANSIDA jasaekstraksi.com	LEMBAR KERJA EKSTRAKSI LABORATORIUM PENGUJIAN		
Nama sampel	Binahong	Tanggal	11 Februari 2025
Kode sampel	250233199	Metode	Maserasi ; Gravimetri ;TLC

Prosedur ekstraksi :

1. Petik daun binahong
2. Cuci pada krain air mengalir.
3. Masukkan kedalam tabung spinner, putar selama 5 menit.
4. Keringkan dalam oven pada suhu 40ºC selama 12 jam
5. Giling simplisia kering menggunakan diskmill dengan ayakan 40 mesh
6. Masukkan ke dalam kontainer ekstraktor
7. Tambahkan solvent ethanol 70%
8. Ekstraksikan dengan ultra turax pada kecepatan 1.000 rpm selama 2 jam
9. Maserasikan selama 24 jam
10. Filtrasi dengan corong buchner, sedot dengan mesin vakum
11. Residu diekstraksi ulang seperti diatas
12. Filtrat pertama dan kedua dievaporasi dengan vakum rotary evaporator pada suhu 45ºC tekanan vakum
13. Tuang ekstrak ke dalam cawan porselin
14. Uapkan sisa solvent dengan penangas air waterbatch
15. Timbang ekstrak yang diperoleh.

Penetapan Kadar Air Metode Gravimetri

1. Timbang dengan seksama serbuk sampel dalam cawan yang sebelumnya telah dipanaskan pada suhu penetapan selama 30 menit.
2. Masukan kedalam oven, keringkan pada suhu pada 105ºC selama 2 jam.
3. Masukkan sampel ke dalam eksikator dan biarkan mendingin didalam eksikator.
4. Ulangi pengeringan hingga mendapat bobot tetap.

Uji Kualitatif Flavonoid :

1. Timbang ekstrak sejumlah 50 mg.
2. Masukkan kedalam labu, tambahkan 10 ml asam chlorida 4 N.
3. Hidrolisis/refluk dengan pendingin balik selama 30 menit.
4. Ekstraksi dengan 5 ml dietileter.
5. Ambil fase dietileter, uapkan dengan gas nitrogen
6. Spoting sampel sebanyak 10 µl pada plate silikagel GF254, sertakan pembanding.
7. Masukkan plate ke dalam chamber jenuh fase

8. Eluasikan hingga batas.
9. Keringkan plate, amati di bawah sinar UV 254 nm dan 365 nm.
10. Semprot dengan pereaksi aluminium chloride.

Spray reagent :
1% ethanolic solution of aluminium chloride.

Chemicals:
Aluminium chloride hexahydrate extra pure Ph Eur, USP, Ord. No. 1.01084
Ethanol absolute GR ACS, ISO, Ord. No. 1.00983

Kompilasi Data :

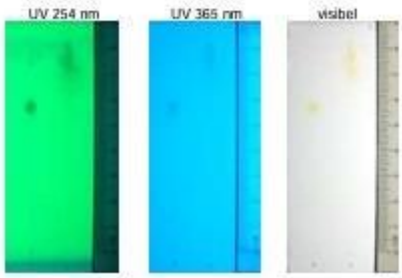
Berat daun segar	:	7,41	Kg
Berat serbuk	:	695	g
Volume solvent ethanol 70%	:	7.000	mL
Berat ekstrak	:	121,65	g

Kadar Air Ekstrak

Sampel	Replikasi	Berat cawan kosong	Berat cawan+ Ekstrak	Berat Ekstrak	Berat cawan + Ekstrak Kering	Berat Ekstrak Kering	Kadar Air
		(g)	(g)	(g)	(g)	(g)	(% v/b)
Ekstrak Binahong	1	30,0616	32,2623	2,0261	30,1834	0,1218	6,010
	2	28,9854	31,0925	2,1093	29,1132	0,1278	6,060
						Rata-rata	6,04

TLC PROFILE

Sample number	: 250233199b
Sample detail	: Ekstrak Binahong
Analysis	: Flavonoid
Adsorbent	: Silicagel 60 F_{254} (Al - Sheet)
Mobile Phase	: Etil Asetat : Asam Formiat : Asam Asetat : Air (100:11:11:27)
Detection	: Aluminium Chloride



Kiri : Comparator Quercetin
Kanan : Ekstrak Binahong

Warna spot flavonoid di visibel : kuning
Rf. flavonoid terdeteksi : 0,88

Lampiran 23. *Certificate of analysis* bemotrizinol

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Material	50509790
Order	6012317579 000010
Delivery	6214423421 000010
Batch	0028560572
Batch/Qty	50.000 KG
Total	50.000 KG
Transport	00000000001227682227

Manufacturing Location: ES, 08755 Castellbisbal (Barcelona), Pol.Ind. San Vicente S/N

Characteristic Method	Unit	Value	Lower Limit	Upper Limit
APPEARANCE 8000		PASS		
ODOR 8364		PASS		
ACTIVE INGREDIENT 9210	%	19	18	22
RELATIVE ABSORPTION 9161		158	144	176
PH VALUE (20°C; AS IS) EN 1262		10,1	8,0	11,0
VISCOSITY BROOK; 25°C; RVT ISO 2555	mPa.s	24	0	200
DRY RESIDUE ISO 3251	%	44,2	40,0	50,0

Released by Otilia Par

Production date 04.08.2024
Retest date 04.08.2026

Lampiran 24. *Certificate of analysis* asam stearate

PT.BRATACO

HASIL PEMERIKSAAN

Nama Bahan	: Acid Stearic Lokal
Batch	: JT 0024/18 (B 180104-22 W)
Ex	: Wilfarin (PT. Wilmar Nabati Indonesia)
ED	04-2025
Grade	Teknis

Jenis pemeriksaan	*Persyaratan usp nf 19*	*Hasil*
Pemerian	Zat padat mengkilat menunjukkan susunan hablur, putih atau kuning pucat,mirip lemak lilin	granul bulat, putih mengkilap
Kelarutan	Praktis tidak larut dalam air, larut dalam kloroform, larut dalam ethanol 95% dan dalam eter	sesuai
Bilangan asam	194-212 ml KOH/gr	204.22 mg KOH/gr
Bilangan sabun	200-220 ml KOH/gr	207.96 mg KOH/gr

Kesimpulan : *Memenuhi syarat*

Cikarang, 10 – 02 – 2018

Pemeriksa

Aptria Wariski
Staff QC

Penanggung Jawab

Telp. 6935132
Fax. 8934059
JAKARTA
CIKARANG

Dra. Tri Hartati
Apoteker
SIK.3836/B

Lampiran 25. *Certificate of analysis* setil alcohol

AKÖMA™
FROM THE HEART

CERTIFICATE OF ANALYSIS
CETYL ALCOHOL

DESCRIPTION

Product: Cetyl Alcohol 98%

INCI Name: Cetyl Alcohol

CAS No: 36653-82-4

EINECS No: --

CHARACTERISTICS

Test	Analysis	Specification
Appearance	Complies	Waxy flakes
Solubility & Clarity (Molten)	Complies	Complies
Colour, (APHA)	5	20 maximum
Acid Value (mg KOH/g)	<0.01	1.0 maximum
Saponification Value (mg KOH/g)	0.20	2.0 maximum
Iodine Value, gI./100g	<0.04	2.0 maximum
Hydroxyl Value (mg KOH/g)	233.0	218 - 238
Moisture Content, %	0.118	0.3 maximum
Solidification Point, °C	49.0	46.0 - 52.0 maximum
Chain Length Distribution (%)		
C14	0.09	3.0 maximum
C16	99.00	95.0 maximum
C18	0.050	3.0 maximum

This product has been tested and passes EP monograph for Cetyl Alcohol

We confirm that the above is a true copy of the original manufacturer's/supplier's COA.

We believe the information herein to be reliable. However, no warranty, express or implied, is made as to its accuracy or completeness, and none is made as to the fitness of this material for any purpose.

Akoma International (UK) Ltd shall not be liable for damages to person or property resulting from its use.

Page 1 of 1

Akoma International (UK) LTD
Unit 9A Sawley Park
Nottingham Road
Derby
DE21 6AS
Tel: +44 (0) 1332 613 967
E-mail: support@akoma.zendesk.com

Cetyl Alcohol - COA

Lampiran 26. Certificate of analaysis gliserin

PT. Palapa Muda Perkasa

CERTIFICATE OF ANALYSIS

Nama Bahan	: Glycerin PH
Batch (8085038811)	: J 0373/18
Ex	: P & G Chemicals, SIngapura
ED	:10/2024
Grade	: Farma

Jenis Pemeriksaan	*Persyaratan FI IV*	*Hasil*
Pemerian	Cairan, jernih, tidak berwarna, tidak berbau, rasa manis diikuti rasa hangat, higroskopik	Sesuai
Kelarutan	Dapat bercampur dengan air dan etanol, praktis tidak larut dalam kloroform dan dalam eter	Sesuai
Identifikasi	Panaskan dengan kalium bisulfat P; terjadi uap merangsang	Positif
pH	5,5 – 7,5	5,8
Index Bias	1,471-1,474	1,472
Susut Pengeringan	≤ 2,0 %	0,00%
Bobot jenis	1,255 g/ml – 1,260 g/ml sesuai dengan kadar 98,0% – 100,0%	1,260 g/mL

Kesimpulan : Memenuhi Syarat

Lampiran 27. *Certificate of analysis* trietanolamin

Specification

8.22341.5000 Triethanolamine EMPLURA®

	Specification	
Assay (GC, area%)	≥ 99.0	% (a/a)
Density (d 20 °C/ 4 °C)	1.122 - 1.125	
Water (K. F.)	≤ 0.30	%
Identity (IR)	passes test	

Due to its specific melting range the product may be solid, liquid, a solidified melt or a supercooled melt.

Dr. Oliver Schramel
Responsible laboratory manager quality control

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

Lampiran 28. *Certificate of analysis* DMDM hydantoin

NGUYEN BA TRADING AND MANUFACTURING CO. LTD
947/46/6 Cach Mang Thang 8 Street, Ward 7, Tan Binh District.
Tel: 39490974 – 39771039 – Fax: 39491374
Email:nguyenbachem@hotmail.com – Website: http://nguyenbachem.com

DMDM Hydantoin

Chemical name:

Dimethylol Dimethyl Hydantoin (DMDMH)

CAS NO: 6440-58-0

Trade name:

Hydantoin, 1,3-bis(hydroxymethyl)-5,5-dimethyl-,1,3-Bis(hydroxymethyl)-5,5-dimethylhydantoin;1,3-dimethylol-5,5-dimethylhydantoin;2,4-Imidazolidinedione, 1,3-bis(hydroxymethyl)-5,5-dimethyl-;Dantoindmdmh 55;Dimethylol-5,5-dimethylhydantoin;DMDM hydantoin;dmdmh;dmdmh 55;Glydant; Nipaguard

Molecular formula: C7H12N2O4

Molecular weight: 188.2

Introduction:
DMDMH isbiocide . The active ingredient provides broad-spectrum activity against common bacteria and fungi. It is approved by EPA and FDA for industrial and cosmetic applications.

Physical and Chemical Properites:
Percent Active: 55.0%
Description: Colorless liquid
PH: 6.5-7.5
Stability: Stable for 1 year @ 25 ^{0}C

Lampiran 29. Surat keterangan kode etik

KOMISI ETIK PENELITIAN KESEHATAN
UNIVERSITAS BHAKTI KENCANA
Jl. Soekarno - Hatta 754. Bandung
Telp : 022-7830 760 / 022-7830-768
Email : komisi.etik@bku.ac.id

KOMISI ETIK PENELITIAN KESEHATAN
HEALTH RESEARCH ETHICS COMMITTE
UNIVERSITAS BHAKTI KENCANA
BHAKTI KENCANA UNIVERSITY

KETERANGAN LAYAK ETIK
DESCRIPTION OF ETHICAL APPROVAL
"ETHICAL APPROVAL"
097/09.KEPK/UBK/VI/2025

Protokol penelitian yang diusulkan oleh :
The research protocol proposed by :

Peneliti Utama : Else Salsabilla
Principal in investigator

Nama institusi : Universitas Bhakti kencana
Name of institution

Dengan judul :
Tittle

Formulasi dan Evaluasi Krim Kombinasi Ekstrak Daun Binahong (Anredera cordifolia (Ten) Steenis), Kulit Buah Manggis (Garcinia mangostana L), Daun Pegagan (Centella asiatica) dan Bemotrizinol sebagai Tabir Surya

Formulation and Evaluation of Combination Cream of Binahong Leaf Extract (Anredera cordifolia (Ten) Steenis), Mangosteen Peel (Garcinia mangostana L), Pegagan Leaves (Centella asiatica) and Bemotrizinol as Sunscreen

Dinyatakan layak etik sesuai (tujuh) standar WH0 2011, yaitu 1) Nilai Sosial, 2) Nilai Ilmiah, 3) Pemerataan Beban dan Manfaat, dan 4) Risiko, 5) Bujukan atau eksploitasi, 6) Kerahasiaan atau Privacy, 7) Persetujuan Setelah Penjelasan, yang merujuk pada Pedoman CIOMS 2016. Hal ini seperti yang ditunjukan oleh terpenuhnya indikator setiap standar.

Declared to be ethically approviate in accordance to 7 (seven) WHO 2011standars, 1) Social Value, 2) Scientific Value, 3) Equitable Assessment and Benefits, 4) Risks, 5) Persuasion/Eksploitation, 6) Confidentiality and Privacy, and Informed Concent, referring to the 2016 CIOMS guidelines. This is as indicated by the fulfillment of the indicators of each standards.

Pernyataan Laik Etik ini berlaku selama kurun waktu 04 Juni 2025 sampai dengan tanggal 04 Juni 2026.

This declaration of ethics applies during the period 4 th June 2025 until 4 th June 2026.

04 Juni 2025
Professor and Chairperson

UNIVERSITAS BHAKTI KENCANA

R. Nety Rustikayanti, S.Kp., M.Kep
NIK. 02019010336

Lampiran 30. Kartu bimbingan

No	Tanggal	Dosen Pembimbing	Topik	Disetujui	Aksi
1	12 Februari 2025	Dr Rahma Ziska, M.Si	Kode etik	✔	
1	5 Maret 2025	Dr. apt. Dadih Supriadi, M.Si.	Diskusi offline tentang hasil optimasi basis krim	✔	
2	6 Mei 2025	Dr Rahma Ziska, M.Si	Diskusi offline (laporan logbook)	✔	
2	10 April 2025	Dr. apt. Dadih Supriadi, M.Si.	Diskusi offline terkait pengujian SPF dan orientasi sediaan dengan ekstrak	✔	
3	20 Maret 2025	Dr. apt. Dadih Supriadi, M.Si.	Diskusi Formulasi dan Uji iritasi	✔	
3	9 Mei 2025	Dr Rahma Ziska, M.Si	Diskusi (kemajuan penelitian & penyusunan laporan)	✔	
4	25 April 2025	Dr. apt. Dadih Supriadi, M.Si.	Diskusi produk pembanding SPF	✔	
4	20 Mei 2025	Dr Rahma Ziska, M.Si	Approve semhas G1	✔	
5	28 Mei 2025	Dr Rahma Ziska, M.Si	Koreksi PPT Semhas	✔	
5	3 Mei 2025	Dr. apt. Dadih Supriadi, M.Si.	Diskusi dan kemajuan 1	✔	
6	26 Mei 2025	Dr Rahma Ziska, M.Si	Draft semhas	✔	
6	15 Mei 2025	Dr. apt. Dadih Supriadi, M.Si.	Diskusi	✔	
7	21 Mei 2025	Dr. apt. Dadih Supriadi, M.Si.	Diskusi offline & approve semhas G1	✔	
7	27 Mei 2025	Dr Rahma Ziska, M.Si	Draft semhas (revisi 1)	✔	
8	29 Mei 2025	Dr Rahma Ziska, M.Si	Latihan presentasi Semhas	✔	
8	25 Mei 2025	Dr. apt. Dadih Supriadi, M.Si.	Draft semhas	✔	
9	28 Mei 2025	Dr. apt. Dadih Supriadi, M.Si.	Revisi 1 (Draft Semhas)	✔	

Lampiran 31. Hasil plagiarisme penulis

Else Salsabilla_SKRIPSI.pdf

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Exclude bibliography	Off		

Lampiran 32. *Curiculum vitae* (CV) penulis

ELSE SALSABILLA

+62 858-9259-8675 211ff03057@bku.ac.id Kp Cilaya, RT 11 / RW 06, Desa Bantarkuning, Kec Cariu, Kab Bogor, Jawa barat

Tentang Saya

Mahasiswa farmasi dengan performa akademik dan kemampuan interpersonal yang baik. Memiliki pengetahuan tentang pengolahan, penyimpanan, dan distribusi obat. Memiliki keterampilan pelayanan farmasi dan pengkajian resep obat. Memiliki kemampuan sofskill yang baik seperti komunikasi, mengatur waktu, disiplin, bekerja sama dan penyelesaian masalah. Bersemangat untuk berkontribusi di bidang farmasi dan terus belajar untuk meningkatkan keahlian.

Kemampuan

- Microssoft word (basic)
- Microssoft excel (basic)
- Bahasa arab (basic)
- Bahasa inggris (basic)
- Teamwork
- komunikasi
- Manejemen waktu
- Kepemimpinan

Pendidikan

Universitas Bhakti Kencana Bandung
S1 Farmasi (September 2021 - sekarang)

SMA Plus Al-ittihad Cianjur
Juni 2018 - Mei 2021

SMP Plus Al-ittihad Cianjur
Juni 2015 - Mei 2018

Mis Al-Khoeriyah Cilaya, Bogor
Juli 2009 - Juni 2015

Pengalaman & Pencapaian

Asisten akademik, MBKM Universitas Bhakti Kencana
Oktober 2024 - Februari 2025

- Menjadi asisten dosen dalam 3 matakuliah praktium.
- Menyiapkan alat bahan untuk praktikum.
- Membimbing mahasiswa selama praktikum dan menilai jurnal beserta laporan praktikum.

Humalogsi, Pharmaclub Universitas Bhakti Kencana
Juni 2022 - Juni 2023

- Menjadi perantara komunikasi

Protokoler, Al-ittihad Boarding School, Cianjur
April 2020 - Mei 2021

- Mengatur dan mengkoordinasikan setiap acara

Ketua Informasi, OSIS IP4A, SMA Plus Al-ittihad Cianjur
Januari 2020 - Februari 2021

- Mengumumkan setiap kegiatan di pondok pesantren Al-ittihad, membuat mading informasi, mengumumkan barang hilang, dan hal apapun yang bersangkutan dengan informasi.

Juara 2 PKM S1 Farmasi (September 2023)

Finalis personal branding (September 2022)