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Lampiran 1. Hasil Determinasi Tanaman



PEMERINTAH PROVINSI JAWA TIMUR
DINAS KESEHATAN
UPT LABORATORIUM HERBAL
MATERIA MEDICA BATU

Jl. Lahor 87 Kota Batu
Jl. Raya 228 Kejayan Kabupaten Pasuruan
Jl. Kolonel Sugiono 457 - 459 Kota Malang
Email : materiamedicabatu@jatimprov.go.id



Nomor : 000.9.3/ 3187/ 102.20/ 2023
Sifat : Biasa
Perihal : **Determinasi Tanaman Patah Tulang**

Memenuhi permohonan saudara :

Nama : LETICIA FATIMA SENANES
NIM/NIP/NIK : 26206148A
FAKULTAS : FARMASI, UNIVERSITAS SETIA BUDI

1. Perihal determinasi tanaman patah tulang

Kingdom : Plantae (Tumbuhan)
Divisi : Magnoliophyta (Tumbuhan berbunga)
Kelas : Magnoliopsida (berkeping dua / dikotil)
Sub Kelas : Rosidae
Ordo : Euphorbiales
Famili : Euphorbiaceae
Genus : Euphorbia
Spesies : *Euphorbia tirucalli* L.
Nama Daerah : Susuru (Sunda), kayu urip, pacing tawa, tikel balung (Jawa); Kayu jaliso, kayu leso, kayu langtolangan, kayu tabar (Madura); Patah tulang (Sumatera).

Kunci Determinasi : 1b-2b-3b-4b-6a-1b-34b-37a:Euphorbiaceae-1a-2a:Euphorbia-1b-2a:*E.tirucalli*.

2. Morfologi : Perdu, tumbuh tegak, tinggi 2-6 m, pangkal berkayu, banyak bercabang, bergetah seperti susu yang beracun. Tangkainya setelah tumbuh sekitar 1 jengkal akan segera bercabang dua yang letaknya melintang, demikian seterusnya sehingga tampak seperti percabangan yang terpatah-patah. Rantingnya bulat silindris berbentuk pensil, beralur halus membujur, warnanya hijau. Daunnya jarang, terdapat pada ujung ranting yang masih muda, kecil-kecil, bentuknya lanset, panjang 7-25 mm, cepat rontok. Bunga terdapat diujung batang, berupa bunga majemuk yang tersusun seperti mangkok, warnanya kuning kehijauan. Buahnya bila masak akan pecah dan melepaskan biji-bijinya.

3. Bagian yang digunakan : Ranting.

4. Penggunaan : Penelitian.

5. Daftar Pustaka

- Van Steenis, CGGJ. 2008. *FLORA: untuk Sekolah di Indonesia*. Pradnya Paramita, Jakarta.

Demikian surat keterangan determinasi ini kami buat untuk dipergunakan sebagaimana mestinya.

Batu, 23 November 2023

KEP. PROV. JAWA TIMUR
UPT LABORATORIUM HERBAL
MATERIA MEDICA BATU



dr. RATNA YULIANTI, M.M.
Pembina Tk. I
NIP. 19710711 200012 2 002

Lampiran 2. Surat *Ethical Clearance*

10/2/23, 12:00 PM

KEPK-RSDM



**HEALTH RESEARCH ETHICS COMMITTEE
KOMISI ETIK PENELITIAN KESEHATAN**

***Dr. Moewardi General Hospital
RSUD Dr. Moewardi***

***ETHICAL CLEARANCE
KELAIKAN ETIK***

Nomor : 1.767 / IX / HREC / 2023

The Health Research Ethics Committee Dr. Moewardi
Komisi Etik Penelitian Kesehatan RSUD Dr. Moewardi

after reviewing the proposal design, herewith to certify
setelah menilai rancangan penelitian yang diusulkan, dengan ini menyatakan

That the research proposal with topic :
Bahwa usulan penelitian dengan judul

FORMULASI DAN UJI AKTIVITAS SEDIAAN GEL EKSTRAK RANTING PATAH TULANG (*Euphorbia tirucalli*) SEBAGAI PENYEMBUH LUKA BAKAR PADA PUNGGUNG KELINCI NEW ZEALAND

Principal investigator
Peneliti Utama : Leticia Fatima Senanes
26206148A

Location of research
Lokasi Tempat Penelitian : Laboratorium Universitas Setia Budi

Is ethically approved
Dinyatakan layak etik



Lampiran 3. Surat Izin Hewan

"ABIMANYU FARM"

√ Mencit putih jantan √ Tikus Wistar √ Swis Webster √ Cacing
 √ Mencit Balb/C √ Kelinci New Zealand

Ngampon RT 04 / RW 04. Mojosongo Kec. Jebres Surakarta. Phone 0897-8729-933/ Lab USB Ska

Yang bertanda tangan di bawah ini:

Nama : Sigit Pramono

Selaku pengelola Abimanyu Farm, menerangkan bahwa hewan uji yang digunakan untuk penelitian, oleh:

Nama : Leticia Fatima Senanes

NIM : 26206148A

Institusi : Universitas Setia Budi

Merupakan hewan uji dengan spesifikasi sebagai berikut:

Jenis hewan : Kelinci New Zealand

Umur : 2-3 bulan

Jumlah : 5 ekor

Keterangan : Sehat

Asal-usul : Unit Pengembangan Hewan Percobaan Boyolali

Yang pengembangan dan pengelolaannya disesuaikan standar baku penelitian. Demikian surat keterangan ini dibuat untuk digunakan sebagaimana mestinya.

Surakarta, 16 Desember 2023

Hormat kami



Sigit Pramono

"ABIMANYU FARM"

Lampiran 4. Pengumpulan Sampel Ranting Patah Tulang



Ranting Patah Tulang



Pencucian Sampel



Pengeringan Sampel



Serbuk Ranting Patah Tulang

Lampiran 5. Hasil susut Pengeringan dan Kadar air Serbuk



Lampiran 6. Pembuatan Ekstrak Ranting Patah Tulang



Penimbangan Serbuk



Maserasi



Penyaringan



Lampiran 7. Kadar Air Ekstrak

Wadah kosong R1



Wadah kosong R2



Wadah kosong R3



Wadah + Ekstrak R1



Wadah + Ekstrak R2



Wadah + Ekstrak R3



Bobot akhir replikasi 1



Bobot akhir replikasi 2



Bobot akhir replikasi 3

Lampiran 8. Hasil Uji Fitokimia Ekstrak

Uji Flavonoid



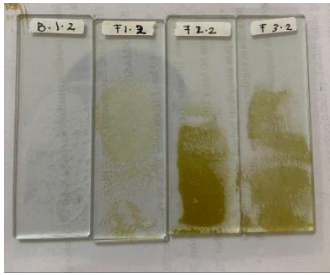
Uji Saponin



Uji Tannin

Lampiran 9. Hasil Pembuatan Sediaan Gel

Lampiran 10. Pengujian Mutu Fisik Sediaan Gel



Homogenitas



pH



Daya Sebar



Viskositas



Daya Lekat

Lampiran 11. Pengujian Stabilitas



Sebelum Cycling Test



Sesudah Cycling Test

Lampiran 12. Perlakuan Terhadap Hewan Uji



Pencukuran Bulu Kelinci



Pembuatan Luka



Luka Hari 1



Luka Hari 7



Luka Hari 14



Luka Hari 21

Lampiran 13. Hasil Analisis SPSS

- Uji Normalitas

	Formula	Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
pH hari ke-1	Basis	.175	3	.	1.000	3	1.000
	Formula 1	.175	3	.	1.000	3	1.000
	Formula 2	.253	3	.	.964	3	.637
	Formula 3	.253	3	.	.964	3	.637
pH hari ke-7	Basis	.314	3	.	.893	3	.363
	Formula 1	.175	3	.	1.000	3	1.000
	Formula 2	.314	3	.	.893	3	.363
	Formula 3	.175	3	.	1.000	3	1.000
pH hari ke-14	Basis	.276	3	.	.942	3	.537
	Formula 1	.175	3	.	1.000	3	1.000
	Formula 2	.175	3	.	1.000	3	1.000
	Formula 3	.328	3	.	.871	3	.298
pH hari ke-21	Basis	.314	3	.	.893	3	.363
	Formula 1	.175	3	.	1.000	3	1.000
	Formula 2	.253	3	.	.964	3	.637
	Formula 3	.253	3	.	.964	3	.637
Daya lekat hari ke-1	Basis	.219	3	.	.987	3	.780
	Formula 1	.241	3	.	.974	3	.688
	Formula 2	.223	3	.	.985	3	.765
	Formula 3	.328	3	.	.871	3	.298
Daya lekat hari ke-7	Basis	.337	3	.	.855	3	.253
	Formula 1	.262	3	.	.957	3	.600
	Formula 2	.217	3	.	.988	3	.792
	Formula 3	.253	3	.	.964	3	.637
Daya lekat hari ke-14	Basis	.193	3	.	.997	3	.890
	Formula 1	.219	3	.	.987	3	.780
	Formula 2	.343	3	.	.842	3	.220
	Formula 3	.304	3	.	.907	3	.407
Daya lekat hari ke-21	Basis	.265	3	.	.953	3	.583
	Formula 1	.189	3	.	.998	3	.908
	Formula 2	.198	3	.	.995	3	.870
	Formula 3	.178	3	.	.999	3	.952
Viskositas hari ke-1	Basis	.270	3	.	.948	3	.562
	Formula 1	.291	3	.	.925	3	.471
	Formula 2	.225	3	.	.984	3	.756
	Formula 3	.232	3	.	.980	3	.726
Viskositas hari ke-7	Basis	.262	3	.	.957	3	.600
	Formula 1	.295	3	.	.919	3	.451
	Formula 2	.251	3	.	.966	3	.644
	Formula 3	.348	3	.	.833	3	.195
Viskositas hari ke-14	Basis	.286	3	.	.930	3	.490
	Formula 1	.258	3	.	.960	3	.615

		Formula 2	.191	3	.	.997	3	.898
		Formula 3	.347	3	.	.835	3	.202
Viskositas hari ke-21		Basis	.233	3	.	.979	3	.723
		Formula 1	.177	3	.	1.000	3	.961
		Formula 2	.234	3	.	.979	3	.720
		Formula 3	.361	3	.	.806	3	.129
		Basis	.279	3	.	.939	3	.524
Daya sebar hari ke-1		Formula 1	.362	3	.	.805	3	.126
		Formula 2	.261	3	.	.958	3	.603
		Formula 3	.385	3	.	.750	3	.000
		Basis	.319	3	.	.885	3	.339
Daya sebar hari ke-7		Formula 1	.215	3	.	.989	3	.797
		Formula 2	.241	3	.	.974	3	.690
		Formula 3	.322	3	.	.880	3	.323
		Basis	.245	3	.	.971	3	.674
Daya sebar hari ke-14		Formula 1	.197	3	.	.996	3	.872
		Formula 2	.334	3	.	.860	3	.267
		Formula 3	.278	3	.	.940	3	.529
		Basis	.226	3	.	.983	3	.750
Daya sebar hari ke-21		Formula 1	.302	3	.	.910	3	.418
		Formula 2	.175	3	.	1.000	3	.994
		Formula 3	.328	3	.	.871	3	.298
		Basis	.354	3	.	.821	3	.165
pH stabilitas sebelum		Formula 1	.378	3	.	.767	3	.037
		Formula 2	.371	3	.	.784	3	.077
		Formula 3	.364	3	.	.801	3	.116
		Basis	.385	3	.	.750	3	.000
pH stabilitas sesudah		Formula 1	.308	3	.	.901	3	.389
		Formula 2	.375	3	.	.773	3	.052
		Formula 3	.185	3	.	.998	3	.923
		Basis	.235	3	.	.978	3	.713
Viskositas sebelum stabilitas		Formula 1	.177	3	.	1.000	3	.961
		Formula 2	.234	3	.	.979	3	.720
		Formula 3	.361	3	.	.806	3	.129
		Basis	.286	3	.	.931	3	.493
Viskositas setelah stabilitas		Formula 1	.298	3	.	.915	3	.435
		Formula 2	.279	3	.	.939	3	.525
		Formula 3	.323	3	.	.879	3	.322

a. Lilliefors Significance Correction

- **Uji Homogenitas**

Test of Homogeneity of Variances

			Levene Statistic	df1	df2	Sig.
pH ke-1	hari	Based on Mean	.874	3	8	.494
		Based on Median	.750	3	8	.552
		Based on Median and with adjusted df	.750	3	5.120	.567
		Based on trimmed mean	.868	3	8	.497
pH ke-7	hari	Based on Mean	1.333	3	8	.330
		Based on Median	.258	3	8	.854
		Based on Median and with adjusted df	.258	3	5.414	.853
		Based on trimmed mean	1.217	3	8	.365
pH ke-14	hari	Based on Mean	3.223	3	8	.082
		Based on Median	.514	3	8	.684
		Based on Median and with adjusted df	.514	3	3.308	.699
		Based on trimmed mean	2.884	3	8	.103
pH ke-21	hari	Based on Mean	1.634	3	8	.257
		Based on Median	.317	3	8	.813
		Based on Median and with adjusted df	.317	3	4.255	.814
		Based on trimmed mean	1.487	3	8	.290
Daya lekat hari ke-1	hari	Based on Mean	1.735	3	8	.237
		Based on Median	.597	3	8	.635
		Based on Median and with adjusted df	.597	3	5.905	.640
		Based on trimmed mean	1.633	3	8	.257
Daya lekat hari ke-7	hari	Based on Mean	1.912	3	8	.206
		Based on Median	.891	3	8	.486
		Based on Median and with adjusted df	.891	3	5.081	.505
		Based on trimmed mean	1.832	3	8	.219
Daya lekat hari ke-14	hari	Based on Mean	.833	3	8	.513
		Based on Median	.165	3	8	.917
		Based on Median and with adjusted df	.165	3	5.028	.916
		Based on trimmed mean	.758	3	8	.548
Daya lekat hari ke-21	hari	Based on Mean	.196	3	8	.896
		Based on Median	.121	3	8	.945
		Based on Median and with adjusted df	.121	3	7.186	.945
		Based on trimmed mean	.190	3	8	.900
Viskositas hari ke-1	hari	Based on Mean	3.773	3	8	.059
		Based on Median	1.207	3	8	.368
		Based on Median and with adjusted df	1.207	3	3.702	.421
		Based on trimmed mean	3.532	3	8	.068
Viskositas hari ke-7	hari	Based on Mean	2.748	3	8	.112
		Based on Median	.717	3	8	.569
		Based on Median and with adjusted df	.717	3	5.011	.583
		Based on trimmed mean	2.528	3	8	.131
Viskositas hari ke-14	hari	Based on Mean	1.572	3	8	.270
		Based on Median	.766	3	8	.544
		Based on Median and with adjusted df	.766	3	5.535	.556
		Based on trimmed mean	1.512	3	8	.284
Viskositas		Based on Mean	1.301	3	8	.339

hari ke-21	Based on Median	.886	3	8	.488
	Based on Median and with adjusted df	.886	3	5.842	.501
	Based on trimmed mean	1.278	3	8	.346
Daya sebar hari ke-1	Based on Mean	.675	3	8	.591
	Based on Median	.159	3	8	.921
	Based on Median and with adjusted df	.159	3	7.011	.921
Daya sebar hari ke-7	Based on Mean	.610	3	8	.627
	Based on Median	1.818	3	8	.222
	Based on Median and with adjusted df	.491	3	4.816	.704
Daya sebar hari ke-14	Based on Mean	1.683	3	8	.247
	Based on Median	2.557	3	8	.128
	Based on Median and with adjusted df	.471	3	3.554	.721
Daya sebar hari ke-21	Based on Mean	2.310	3	8	.153
	Based on Median	.704	3	8	.576
	Based on Median and with adjusted df	.386	3	6.660	.767
pH sebelum stabilitas	Based on Mean	.681	3	8	.588
	Based on Median	1.913	3	8	.206
	Based on Median and with adjusted df	.154	3	6.078	.923
pH sesudah stabilitas	Based on Mean	1.551	3	8	.275
	Based on Median	2.553	3	8	.129
	Based on Median and with adjusted df	.238	3	5.118	.866
Viskositas sebelum stabilitas	Based on Mean	2.149	3	8	.172
	Based on Median	1.290	3	8	.342
	Based on Median and with adjusted df	.881	3	5.851	.503
Viskositas setelah stabilitas	Based on Mean	.881	3	8	.491
	Based on Median	1.267	3	8	.349
	Based on Median and with adjusted df	3.174	3	8	.085
Daya sebar hari ke-21	Based on Mean	.714	3	8	.570
	Based on Median	.714	3	4.738	.586
	Based on Median and with adjusted df	.714	3	4.738	.586
pH sebelum stabilitas	Based on Mean	2.883	3	8	.103
	Based on Median	.886	3	8	.488
	Based on Median and with adjusted df	.886	3	5.842	.501

- Uji mutu fisik pH

Waktu	Formula	Uji pH			Rata - Rata	SD
		R1	R2	R3		
Hari 1	F0	6,56	6,53	6,59	6,56	0,03
	F1	5,88	5,89	5,89	5,88	0,005
	F2	5,21	5,19	5,22	5,20	0,01
	F3	5,1	5,12	5,09	5,10	0,01
Hari 7	F0	6,49	6,45	6,50	6,48	0,02
	F1	5,76	5,75	5,77	5,76	0,01
	F2	5,18	5,13	5,17	5,16	0,02
	F3	5,06	5,08	5,04	5,06	0,02
Hari 14	F0	6,20	6,15	6,22	6,19	0,03
	F1	5,70	5,66	5,68	5,68	0,02
	F2	5,12	5,08	5,10	5,10	0,02
	F3	4,90	5,00	4,88	4,92	0,06
Hari 21	F0	6,08	6,00	6,10	6,06	0,05
	F1	5,62	5,58	5,60	5,60	0,02
	F2	5,06	5,00	5,02	5,02	0,03
	F3	4,78	4,84	4,80	4,80	0,03

- Uji mutu fisik viskositas

Waktu	Formula	Uji Visko			Rata - Rata	SD
		R1	R2	R3		
Hari 1	F0	6280	6140	5810	6076,666667	241,3158373
	F1	41680	42560	45150	43130	1803,856979
	F2	34720	33600	36480	34933,333333	1451,803476
	F3	28560	28800	29200	28853,333333	323,3161507
Hari 7	F0	6000	5820	5430	5750	291,3760457
	F1	41420	42200	44620	42746,666667	1668,572244
	F2	34080	33120	35970	34390	1450,068964
	F3	27280	27430	28620	27776,666667	734,1888949
Hari 14	F0	5760	5200	5000	5320	393,9543121
	F1	41110	42108	44200	42472,666667	1576,946839
	F2	33880	32610	35410	33966,666667	1402,010461
	F3	26770	26920	28070	27253,333333	711,2196098
Hari 21	F0	5230	4710	4400	4780	419,4043395
	F1	39760	41810	43720	41763,333333	1980,412415
	F2	33210	32090	35100	33466,666667	1521,326176
	F3	26110	26230	27710	26683,333333	891,1415899

Keterangan

F0 : Kontrol negative

F1 : Konsentrasi ekstrak ranting patah tulang 5%

F2 : Konsentrasi ekstrak ranting patah tulang 10%

F3 : Konsentrasi ekstrak ranting patah tulang 20%

R1 : Replikasi 1

R2 : Replikasi 2

R3 : Replikasi 3

• **Uji mutu fisik daya sebar**

Waktu	Formula	Daya Sebar			Rata – Rata	SD
		R1	R2	R3		
Hari 1	F0	5,05	5,19	5,53	5,26	0,24
	F1	5,17	5,14	4,79	5,03	0,20
	F2	5,29	5,40	5,03	5,24	0,18
	F3	5,61	5,61	5,39	5,54	0,12
Hari 7	F0	5,92	5,99	6,32	6,08	0,21
	F1	5,29	5,19	5,04	5,17	0,12
	F2	5,39	5,52	5,15	5,35	0,18
	F3	5,63	5,62	5,54	5,59	0,05
Hari 14	F0	6,00	6,16	6,24	6,13	0,12
	F1	5,37	5,27	5,15	5,26	0,10
	F2	5,54	5,60	5,22	5,45	0,20
	F3	5,73	5,71	5,64	5,69	0,04
Hari 21	F0	6,27	6,45	6,74	6,49	0,23
	F1	5,55	5,47	5,22	5,41	0,17
	F2	5,60	5,78	5,42	5,60	0,18
	F3	5,90	5,87	5,74	5,84	0,08

• **Uji mutu fisik daya lekat**

Waktu	Formula	Daya Lekat			Rata - Rata	SD
		R1	R2	R3		
Hari 1	0	2,15	2,20	2,18	2,17	0,02
	1	4,92	5,02	5,20	5,04	0,14
	2	4,15	3,98	4,26	4,13	0,14
	3	3,81	3,85	4,05	3,90	0,12
Hari 7	0	2,10	2,17	2,10	2,12	0,04
	1	4,78	4,90	5,16	4,94	0,19
	2	4,02	3,80	4,17	3,99	0,18
	3	3,70	3,76	3,88	3,78	0,09
Hari 14	0	2,10	2,09	1,89	1,99	0,10
	1	4,70	4,82	5,00	4,84	0,15
	2	3,96	3,68	4,00	3,88	0,17
	3	3,58	3,62	3,76	3,65	0,09
Hari 21	0	1,88	1,96	1,70	1,84	0,13
	1	4,62	4,73	4,86	4,73	0,12
	2	3,77	3,58	3,92	3,75	0,17
	3	3,40	3,52	3,63	3,51	0,11

Keterangan

F0 : Kontrol negative

F1 : Konsentrasi ekstrak ranting patah tulang 5%

F2 : Konsentrasi ekstrak ranting patah tulang 10%

F3 : Konsentrasi ekstrak ranting patah tulang 20%

R1 : Replikasi 1

R2 : Replikasi 2

R3 : Replikasi 3

Lampiran 14. Hasil Analisis Data Stabilitas Gel

• Stabilitas Viskositas

Replikasi	Formula	Viskositas		Rata - Rata	SD
		Sebelum	Sesudah		
I	F0	5240	4820	5030	296,9848481
	F1	39760	29200	34480	7467,047609
	F2	33210	23070	28140	7170,062761
	F3	26110	19460	22785	4702,260095
II	F0	4710	4140	4425	403,0508653
	F1	41810	30050	35930	8315,575747
	F2	32090	22180	27135	7007,428202
	F3	26230	19700	22965	4617,407281
III	F0	4400	4320	4360	56,56854249
	F1	43720	32800	38260	7721,606051
	F2	35100	25360	30230	6887,220049
	F3	27710	20800	24255	4886,107858

Keterangan

F0 : Kontrol negative

F1 : Konsentrasi ekstrak ranting patah tulang 5%

F2 : Konsentrasi ekstrak ranting patah tulang 10%

F3 : Konsentrasi ekstrak ranting patah tulang 20%

• Stabilitas pH

Replikasi	Formula	pH		Rata - Rata	SD
		Sebelum	Sesudah		
I	F0	6,08	5,05	5,56	0,72
	F1	5,62	4,70	5,16	0,65
	F2	5,06	4,58	4,82	0,33
	F3	4,78	4,25	4,51	0,37
II	F0	6,00	5,00	5,5	0,70
	F1	5,80	4,55	5,06	0,72
	F2	5,00	4,50	4,75	0,35
	F3	4,84	4,40	4,62	0,31
III	F0	6,10	5,00	5,55	0,77
	F1	5,60	4,68	5,14	0,65
	F2	5,02	4,50	4,76	0,36
	F3	4,80	4,30	4,55	0,35

Keterangan

F0 : Kontrol negative

F1 : Konsentrasi ekstrak ranting patah tulang 5%

F2 : Konsentrasi ekstrak ranting patah tulang 10%

F3 : Konsentrasi ekstrak ranting patah tulang 20%

Lampiran 15. Hasil Analisis Persentase Penyembuhan Luka Bakar

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Perlakuan	Statistic	df	Sig.	Statistic	df	Sig.
PanjangLuka Hari1	K+	.	5	.	.	5	.
	K-	.	5	.	.	5	.
	KN	.	5	.	.	5	.
	Formula 1	.	5	.	.	5	.
	Formula 2	.	5	.	.	5	.
	Formula 3	.	5	.	.	5	.
PanjangLuka Hari3	K+	.231	5	.200	.881	5	.314
	K-	.348	5	.047	.779	5	.054
	KN	.300	5	.161	.883	5	.325
	Formula 1	.231	5	.200	.881	5	.314
	Formula 2	.254	5	.200	.914	5	.492
	Formula 3	.180	5	.200	.952	5	.754
PanjangLuka Hari5	K+	.221	5	.200	.902	5	.421
	K-	.241	5	.200	.821	5	.119
	KN	.237	5	.200	.961	5	.814
	Formula 1	.237	5	.200	.961	5	.814
	Formula 2	.237	5	.200	.961	5	.814
	Formula 3	.237	5	.200	.961	5	.814
PanjangLuka Hari7	K+	.136	5	.200	.987	5	.967
	K-	.243	5	.200	.894	5	.377
	KN	.136	5	.200	.987	5	.967
	Formula 1	.237	5	.200	.961	5	.814
	Formula 2	.237	5	.200	.961	5	.814
	Formula 3	.136	5	.200	.987	5	.967
PanjangLuka Hari9	K+	.237	5	.200	.961	5	.814
	K-	.221	5	.200	.902	5	.421
	KN	.246	5	.200	.956	5	.777
	Formula 1	.237	5	.200	.961	5	.814
	Formula 2	.237	5	.200	.961	5	.814
	Formula 3	.243	5	.200	.894	5	.377
PanjangLuka Hari11	K+	.237	5	.200	.961	5	.814
	K-	.141	5	.200	.979	5	.928
	KN	.246	5	.200	.956	5	.777
	Formula 1	.180	5	.200	.952	5	.754
	Formula 2	.136	5	.200	.987	5	.967
	Formula 3	.229	5	.200	.867	5	.254
PanjangLuka Hari13	K+	.175	5	.200	.974	5	.899
	K-	.201	5	.200	.881	5	.314
	KN	.179	5	.200	.984	5	.955
	Formula 1	.175	5	.200	.974	5	.899
	Formula 2	.136	5	.200	.987	5	.967
	Formula 3	.197	5	.200	.943	5	.685
PanjangLuka Hari15	K+	.136	5	.200	.987	5	.967
	K-	.141	5	.200	.979	5	.928
	KN	.197	5	.200	.943	5	.685
	Formula 1	.274	5	.200	.867	5	.254
	Formula 2	.179	5	.200	.962	5	.823
	Formula 3	.146	5	.200	.992	5	.985

PanjangLuka Hari17	K+	.	5	.	.	5	.
	K-	.246	5	.200	.956	5	.777
	KN	.198	5	.200	.951	5	.742
	Formula 1	.180	5	.200	.952	5	.754
	Formula 2	.141	5	.200	.979	5	.928
	Formula 3	.	5	.	.	5	.
PanjangLuka Hari19	K+	.	5	.	.	5	.
	K-	.273	5	.200	.852	5	.201
	KN	.198	5	.200	.957	5	.787
	Formula 1	.	5	.	.	5	.
	Formula 2	.	5	.	.	5	.
	Formula 3	.	5	.	.	5	.
PanjangLuka Hari21	K+	.	5	.	.	5	.
	K-	.	5	.	.	5	.
	KN	.	5	.	.	5	.
	Formula 1	.	5	.	.	5	.
	Formula 2	.	5	.	.	5	.
	Formula 3	.	5	.	.	5	.

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

a. Lilliefors Significance Correction

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Panjang Luka Hari1	Between Groups	.000	5	.000	.	.
	Within Groups	.000	24	.000		
	Total	.000	29			
Panjang Luka_Hari 3	Between Groups	8.439	5	1.688	90.414	.000
	Within Groups	.448	24	.019		
	Total	8.887	29			
Panjang Luka_Hari 5	Between Groups	13.256	5	2.651	201.357	.000
	Within Groups	.316	24	.013		
	Total	13.572	29			
Panjang Luka_Hari 7	Between Groups	21.807	5	4.361	196.752	.000
	Within Groups	.532	24	.022		
	Total	22.339	29			
Panjang Luka_Hari 9	Between Groups	26.620	5	5.324	290.400	.000
	Within Groups	.440	24	.018		
	Total	27.060	29			
Panjang Luka_Hari 11	Between Groups	25.202	5	5.040	174.809	.000
	Within Groups	.692	24	.029		
	Total	25.894	29			
Panjang Luka_Hari 13	Between Groups	28.759	5	5.752	120.245	.000
	Within Groups	1.148	24	.048		
	Total	29.907	29			
Panjang Luka_Hari 15	Between Groups	815.221	5	163.044	10439.284	.000
	Within Groups	.375	24	.016		
	Total	815.596	29			
Panjang Luka_Hari 17	Between Groups	.508	5	.102	329.686	.000
	Within Groups	.007	24	.000		
	Total	.516	29			
Panjang Luka_Hari	Between Groups	.037	5	.007	34.043	.000
	Within Groups	.005	24	.000		

19	Total		.042	29		
Panjang	Between Groups		.000	5	.000	.
Luka_Hari	Within Groups		.000	24	.000	
21	Total		.000	29		

PanjangLuka_Hari3

Tukey HSD^a

Perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
K+	5	18.2200				
Formula 3	5		18.6400			
Formula 2	5			18.9400		
Formula 1	5				19.3200	
K-	5				19.4800	
KN	5					19.8000
Sig.		1.000	1.000	1.000	.454	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

PanjangLuka_Hari5

Tukey HSD^a

Perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
K+	5	17.3200				
Formula 3	5		17.9600			
Formula 2	5			18.3400		
Formula 1	5				18.6600	
K-	5					19.1000
KN	5					19.2600
Sig.		1.000	1.000	1.000	1.000	.272

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

PanjangLuka_Hari7

Tukey HSD^a

Perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
K+	5	16.2000				
Formula 3	5		16.7000			
Formula 2	5			17.3600		
Formula 1	5				17.8600	
K-	5					18.3200
KN	5					18.6000
Sig.		1.000	1.000	1.000	1.000	.064

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

PanjangLuka_Hari9Tukey HSD^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
K+	5	15.1600			
Formula 3	5		15.8200		
Formula 2	5			16.8400	
Formula 1	5			16.9400	
K-	5				17.6200
KN	5				17.8200
Sig.		1.000	1.000	.847	.219

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

PanjangLuka_Hari11Tukey HSD^a

Perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
K+	5	14.1400				
Formula 3	5		14.8400			
Formula 2	5			15.9000		
Formula 1	5			15.9400		
K-	5				16.4200	
KN	5					16.8200
Sig.		1.000	1.000	.999	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

PanjangLuka_Hari13Tukey HSD^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
K+	5	12.8200			
Formula 3	5		13.4400		
Formula 1	5			14.7800	
Formula 2	5			14.8000	
K-	5			15.1400	
KN	5				15.6200
Sig.		1.000	1.000	.135	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

PanjangLuka_Hari15Tukey HSD^a

Perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
K+	5	.4000				
Formula 3	5	.4980	.4980			
Formula 2	5		.7420	.7420		
Formula 1	5			.9280		
K-	5				11.2200	
KN	5					12.1400
Sig.		.813	.051	.212	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

PanjangLuka_Hari17

Tukey HSD^a

Perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
K+	5	.0000				
Formula 3	5	.0000				
Formula 2	5		.1220			
Formula 1	5			.1960		
K-	5				.2780	
KN	5					.3440
Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

PanjangLuka_Hari19

Tukey HSD^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
K+	5	.0000		
Formula 1	5	.0000		
Formula 2	5	.0000		
Formula 3	5	.0000		
K-	5		.0380	
KN	5			.0940
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

- Contoh Perhitungan Persentase Luka Bakar :

Hari Ke 2 Untuk Kontrol Positif :

$$Pt2 = \frac{2^2 - 1,89^2}{2^2} \times 100\% = \frac{4 - 3,5721}{4} \times 100\%$$

$$= 10,69\%$$

Lampiran 16. Perhitungan Rendemen Simplisia, Serbuk, dan Ekstrak.

• Rendemen simplisia

Bobot basah (g)	Bobot kering (g)	Rendemen (% b/b)
1500	1300	86,67

$$\text{Rendemen} = \frac{\text{bobot kering (g)}}{\text{bobot basah (g)}} \times 100\%$$

$$\text{Rendemen} = \frac{1300 \text{ gram}}{1500 \text{ gram}} \times 100\% = 86,67\%$$

• Rendemen serbuk

Bobot kering (g)	Bobot serbuk (g)	Rendemen (% b/b)
1300	1100	84,61

$$\text{Rendemen} = \frac{\text{bobot serbuk (g)}}{\text{bobot kering (g)}} \times 100\%$$

$$\text{Rendemen} = \frac{1100}{1300} \times 100\% = 84,61\%$$

• Rendemen Ekstrak

Bobot serbuk (g)	Bobot kental (g)	Rendemen (% b/b)
900	199,32	22,14

- Bobot botol kosong : 123,48 gram
- Bobot botol kosong + ekstrak : 322,80 gram
- Bobot ekstrak : 322,80 gr – 124,48 gr = 199,32 gram

$$\text{Rendemen} = \frac{\text{bobot ekstrak(g)}}{\text{bobot serbuk (g)}} \times 100\% = \frac{199,32 \text{ gram}}{900 \text{ gram}} \times 100\% = 22,14\%$$

Lampiran 17. Perhitungan Formula Sediaan Gel

Formula 1 :

- Ektrak 5% = $(5 / 100) \times 100 = 5$ gram
- CMC Na 3% = $(3 / 100) \times 100 = 3$ gram
- Gliserin 10% = $(10 / 100) \times 100 = 10$ gram
- Propilen glikol 15% = $(15 / 100) \times 100 = 15$ gram
- Metil paraben 0,03% = $(0,03 / 100) \times 100 = 0,03$ gram
- Aquadest = $100 - (5 + 3 + 10 + 15 + 0,03) = 66,97$ gram

Formula 2 :

- Ektrak 10% = $(10 / 100) \times 100 = 10$ gram
- CMC Na 3% = $(3 / 100) \times 100 = 3$ gram
- Gliserin 10% = $(10 / 100) \times 100 = 10$ gram
- Propilen glikol 15% = $(15 / 100) \times 100 = 15$ gram
- Metil paraben 0,03% = $(0,03 / 100) \times 100 = 0,03$ gram
- Aqadest = $100 - (10 + 3 + 10 + 15 + 0,03) = 61,97$ gram

Formula 3 :

- Ektrak 20% = $(5 / 100) \times 100 = 5$ gram
- CMC Na 3% = $(3 / 100) \times 100 = 3$ gram
- Gliserin 10% = $(10 / 100) \times 100 = 10$ gram
- Propilen glikol 15% = $(15 / 100) \times 100 = 15$ gram
- Metil paraben 0,03% = $(0,03 / 100) \times 100 = 0,03$ gram
- Aquadest = $100 - (20 + 3 + 10 + 15 + 0,03) = 51,97$ gram

Basis (Kontrol negative) :

- CMC Na 3% = $(3 / 100) \times 100 = 3$ gram
- Gliserin 10% = $(10 / 100) \times 100 = 10$ gram
- Propilen glikol 15% = $(15 / 100) \times 100 = 15$ gram
- Metil paraben 0,03% = $(0,03 / 100) \times 100 = 0,03$ gram
- Aquadest = $100 - (3 + 10 + 15 + 0,03) = 71,97$ gram

Lampiran 18. Data Penimbangan Kadar Air Ekstrak

- **Replikasi 1 :**

% Kadar air

$$= \frac{\text{bobot sebelum pemanasan} - \text{bobot setelah pemanasan}}{\text{bobot sebelum pemanasan}} \times 100\%$$

$$\% \text{ Kadar air} = \frac{10,0113 - 9,6297}{10,0113} \times 100\% = 3,81\%$$

- **Replikasi 2 :**

% Kadar air

$$= \frac{\text{bobot sebelum pemanasan} - \text{bobot setelah pemanasan}}{\text{bobot sebelum pemanasan}} \times 100\%$$

$$\% \text{ Kadar air} = \frac{10,0141 - 9,6695}{10,0141} \times 100\% = 3,44\%$$

- **Replikasi 3 :**

% Kadar air

$$= \frac{\text{bobot sebelum pemanasan} - \text{bobot setelah pemanasan}}{\text{bobot sebelum pemanasan}} \times 100\%$$

$$\% \text{ Kadar air} = \frac{10,0106 - 9,6729}{10,0106} \times 100\% = 3,37\%$$

Lampiran 19. Perhitungan Kadar Air Serbuk

- **Replikasi 1 :**

$$\% \text{ Kadar air} = \frac{\text{Volume air}}{\text{bobot serbuk}} \times 100\% = \frac{0,8}{20} \times 100\% = 4\%$$

- **Replikasi 2 :**

$$\begin{aligned} \% \text{ Kadar air} &= \frac{\text{Volume air}}{\text{Bobot serbuk}} \times 100\% = \frac{1,1}{20} \times 100\% \\ &= 5,5\% \end{aligned}$$

- **Replikasi 3 :**

$$\begin{aligned} \% \text{ Kadar air} &= \frac{\text{Volume air}}{\text{Bobot serbuk}} \times 100\% = \frac{1,5}{20} \times 100\% \\ &= 7,5\% \end{aligned}$$

