

LAMPIRAN

Lampiran 1. Surat Izin Penelitian



Lamongan, 2 Desember 2024

Nomor : 3110 /III.3/AU/F/2024
Lamp. : -
Perihal : Ijin melakukan penelitian

Kepada
Yth. Dekan FIKes
Universitas Muhammadiyah Lamongan

Di -
Tempat

Assalamu'alaikum Wr. Wb.

Menunjuk proposal yang masuk ke LPPM tanggal 29 November 2024, Perihal :
Tugas Akhir Penelitian.

Maka dengan ini menyatakan bahwa pada prinsipnya tidak keberatan dan
memberikan ijin untuk melakukan Penelitian, adapun mahasiswa tersebut adalah :

No.	NAMA	NIM	JUDUL PENELITIAN
1.	Muhammad Arendra Ardiansyah	22.02.05.0407	Kombinasi Minyak Jeruk Manis dan Pepermint sebagai Pengaroma pada Sediaan Deodoran Krim yang Mengandung Tawas

Dengan ketentuan – ketentuan sebagai berikut :

1. Menjaga tata tertib, keamanan, kesopanan dan kesusilaan serta menghindari pernyataan-pernyataan baik lisan maupun tulisan/lukisan yang dapat melukai/menyinggung perasaan atau menghina agama, bangsa dan negara dari suatu golongan tertentu.
2. Setelah berakhirnya Penelitian, yang bersangkutan diwajibkan untuk memberikan laporan tertulis tentang pelaksanaan dan hasil Kepada Dekan FiKes Universitas Muhammadiyah Lamongan.

Demikian untuk menjadikan maklum dan guna seperlunya
Wassalamu'alaikum Wr. Wb.

Kepala LPPM

Abdul Rokhman, S.Kep., Ns., M.Kep.
NIK. 19881020201211 056

Tembusan disampaikan Kepada:

- Yth. 1. Kaprodi D3 Farmasi FiKes Universitas Muhammadiyah Lamongan
2. Arsip.

Lampiran 2. Surat Permohonan Penelitian Laboratorium

SURAT PERMOHONAN PENELITIAN DI LABORATORIUM

Hal: Permohonan Izin Penelitian di Laboratorium

Kepada Yth:

**Kepala Laboratorium Pendidikan Kesehatan Terpadu
Univeritas Muhammadiyah Lamongan**

Assalamu'alaikum Wr. Wb.

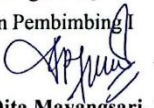
Dengan hormat,

Sehubungan dengan penelitian yang akan saya lakukan, maka saya yang bertanda tangan di bawah ini:

Nama	: Muhammad Arendra Ardiansyah
NIM	: 2202050407
Program Studi	: D3 Farmasi
Fakultas	: Fakultas Ilmu Kesehatan
Judul Penelitian	: Kombinasi Minyak Kulit Jeruk Manis Dan Pepermin Sebagai Pengaroma Pada Sediaan Deodoran Krim Yang Mengandung Tawas

Memohon izin kepada Bapak untuk melakukan penelitian di Laboratorium Pendidikan Kesehatan Terpadu Universitas Muhammadiyah Lamongan. Demikian surat permohonan ini saya buat. Atas perhatian Bapak, saya ucapkan terima kasih.

Mengetahui,
Dosen Pembimbing I


apt. Fransisca Dita Mayangsari, M.Farm

Hormat Saya


Muhammad Arendra A.

Menyetujui
Ketua Pelaksana


Dr. H. Dadang Kusbiantoro, S.Kep., Ns., M., Si.,
M.M.

Mengetahui,
Dosen Pembimbing II


apt. Elasari Dwi Pratiwi,
M.Farm

Lampiran 3. Surat Permohonan Ethical Clearance



Lamongan, 3 Desember 2024

Nomor : 3903/III.3.AU/A/2024
 Lampiran : -
 Perihal : Permohonan Ethical Clearance

Kepada Yth.

Ketua Komite Etik Penelitian

Universitas Ahmad Dahlan, Daerah Istimewa Yogyakarta

Jl. Prof. Dr. Soepomo SH. Janturan, Warungboto, Umbulharjo, Yogyakarta

Sehubungan akan dilaksanakannya penelitian, maka dengan ini kami mengajukan permohonan untuk mendapatkan *Ethical Clearance* dari Komite Etik Penelitian Universitas Ahmad Dahlan, dengan data peneliti :

Nama : Muhammad Arendra Ardiansyah
 NIY/NIM/NIDN/NIK : 2202050407
 No. telp./ HP : 085942992160
 Email : muhammadarendra89@gmail.com
 Keperluan Penelitian : Karya Tulis Ilmiah
 Pembimbing : Apt. Fransisca Dita Mayangsari, M.Farm
 Judul Penelitian : Kombinasi Minyak Kulit Jeruk Manis Dan Peppermint Sebagai Pengaroma Pada Sediaan Deodoran Krim Yang Mengandung Tawas

Atas perhatian dan kerjasamanya kami ucapkan terima kasih.


 Dekan/Pimpinan
 (Dr. Virgianti Nur Farida, S.Kep., Ns., M.Kep.)
 NIDN: 0712128301

Lampiran 4. Surat Keterangan Sehat Hewan



**PEMERINTAH KABUPATEN LAMONGAN
DINAS PETERNAKAN DAN KESEHATAN HEWAN**

Jl. Kombes Pol. M. Duryat No. 18 Lamongan – Kode Pos 62217
Telp. (0322) 321031 Fax. (0322) 312264 E-mail : dphk@lamongan.go.id
Website : www.lamongankab.go.id

SURAT KETERANGAN KESEHATAN HEWAN

Nomor : 524.3/ 61 /413.114 /SKKH/2025

Yang bertanda tangan dibawah ini adalah Pejabat Otoritas Veteriner Kab. Lamongan bahwa pada Hari Rabu Tanggal Delapan Bulan Januari Tahun 2025 telah melakukan pemeriksaan terhadap hewan / bibit hewan / benih hewan dengan hasil pada saat dilakukan pemeriksaan dalam keadaan sehat tidak menunjukkan tanda adanya Penyakit Hewan Menular dengan rincian sebagai berikut:

NO	JENIS	RAS	UMUR	JENIS KELAMIN		JUMLAH (Ekor)	KET
				JANTAN	BETINA		
1.	Tikus	Wistar	2-3 bulan	√	√	5	(lima ekor)

Nama Pemilik : Muhammad Afifuddin
 Nomor KTP : 3524132503000004
 Alamat : Desa Bugoharjo RT 4 RW 2, Kec Pucuk, Kab. Lamongan
 Daerah Asal : Desa Bugoharjo RT 4 RW 2, Kec Pucuk, Kab. Lamongan
 Daerah Tujuan : Universitas Muhammadiyah Lamongan
 Keperluan : Penelitian Mahasiswa
 Alat Angkut : Sepeda Motor
 Catatan : Surat Keterangan Kesehatan Hewan hanya berlaku untuk sekali jalan

Lamongan, 8 Januari 2024
 Pejabat Otoritas Veteriner
 Kab. Lamongan

Dr. H. AZIT KUSTIAWAN
 NIP. 19770804 200312 1 005

Lampiran 5. Surat Laik Uji Etik



UNIVERSITAS AHMAD DAHLAN KOMITE ETIK PENELITIAN (KEP UAD)

Jl. Prof. Dr. Soepomo, S. H, Yogyakarta Telp (0274) 563515, Ekstension 3310.

Surat Persetujuan Etik (*Ethical Approval*) Untuk Penelitian yang Menggunakan Hewan Coba sebagai Subjek Penelitian

PERSETUJUAN ETIK (*ETHICAL APPROVAL*)
Nomor : 022412177

Yang bertanda tangan di bawah ini, Ketua Komite Etik Penelitian Universitas Ahmad Dahlan, setelah dilaksanakan pembahasan dan penilaian, dengan ini memutuskan protokol penelitian yang berjudul: **"Kombinasi Minyak Kulit Jeruk Manis dan Pepermin sebagai Pengaroma pada Sediaan Deodoran Krim yang Mengandung Tawas"**

yang menggunakan hewan coba sebagai subjek penelitian, yang diajukan oleh:

Ketua Peneliti: **apt. Fransisca Dita Mayangsari, M. Farm.**

Anggota: **Muhammad Arendra Ardiansyah**

dapat disetujui pelaksanaannya. Persetujuan ini berlaku selama 1(satu) tahun setelah *Ethical Approval* dikeluarkan.

Pada akhir penelitian, laporan pelaksanaan penelitian harus diserahkan kepada KEP UAD. Jika ada perubahan protokol dan/atau perpanjangan penelitian, harus mengajukan kembali permohonan kajian etik penelitian (amandemen protokol).

Yogyakarta, 30 Desember 2024
Komite Etik Penelitian
Universitas Ahmad Dahlan,



dr. Nurul Qomariyah, M.Med., Ed.

Lampiran 6. Lembar bimbingan proposal KTI kepada Pembimbing I

LAMPIRAN 15
Lembar Kartu Bimbingan

Nama Mahasiswa : Muhammad Arendra Andriansyah
 NIM : 2202050407
 Nama Pembimbing I : Apt. Fransisca Dita Maxingsari, M. Farm.

No.	Tanggal	Bab/Materi	Saran/Keterangan	Tanda Tangan
1	31-Jul-2024	Acc judul		
2	19-Agustus-2024	Bab I	Perbaiki latar belakang	
3	28-Agustus-2024	Bab I, Bab II	Pembuatan bab I & bab II	
4	2-SEPTEMBER-2024	Bab I & Bab II	Perbaiki bab I & bab II	
5	11-SEP-2024	Bab I & Bab II	Perbaiki bab I & bab II	
6	19-SEP-2024	Bab I & Bab II	Perbaiki bab I & bab II	
7	11-OKTOBER-2024	Bab 1, 2, 3	Evaluasi bab 1, 2, 3	
8	5-Mei-2025	Bab 4 & 5	Perbaiki Hasil penelitian	
9	7-Mei-2025	Bab 4	Perbaiki Hasil penelitian	
10	8-Mei-2025	Bab 4 & 5	Perbaiki Hasil penelitian & pembahasan	
11	19-Mei-2025	Evaluasi hasil penelitian bab 1-5	Evaluasi Hasil penelitian & pembahasan KTI & acc sidang	

Lampiran 7. Lembar bimbingan proposal KTI kepada Pembimbing II

Lembar Kartu Bimbingan

Nama Mahasiswa : Muhammad Arelis Ardiansyah

NIM : 2202050407

Nama Pembimbing 2 : Apt. Elisari Iwui Pratiwi ..M.Parm

No.	Tanggal	Bab/Materi	Saran/Keterangan	Tanda Tangan
1	30-sep-2024	bab 1	Pembuatan bab 1	
2	11-okt-2024	bab 1,2,3	perbaikan bab 1,2,3	
3	17-okt-2024	bab 1,2,3	Perbaikan & evaluasi	
4	5-Mei-25	bab 4	Perbaikan Hasil & pembahasan	
5	8-Mei-25	bab 4 bab 5	perbaikan Hasil uji tntesi	
6	15-Mei-2025	bab 4 & bab 5 analisis statistik	2 cc sidang	

Lampiran 8. CoA Aluminium kalium sulfat

2019. 12. 27.

규격성적서



Certificate of Analysis

Aluminium Sulfate crystal 16~18water

[7784-31-8] (Al₂(SO₄)₃·16~18H₂O) FW:

Product code. 1788

Extra Pure Grade

TESTS	UNIT	SPECIFICATION
Appearance	-	Colorless crystals or white crystalline, insoluble in ethanol.
Identification A	-	To pass test
Identification B	-	Precipitation reaction Test
Solubility in Water	-	To pass test
Assay [Al ₂ (SO ₄) ₃]	%	51 ~ 57
pH (5% Sol.)	-	Min. 2.2
Chloride (Cl)	%	Max. 0.005
Heavy Metals (as Pb)	%	Max. 0.003
Iron (Fe)	%	Max. 0.005
Alkaline & other alkaline earths (as Sulfate)	%	Max. 0.5
Arsenic (As)	ppm	Max. 5

Test Method : JIS K 8957

Exp. Date : 5 years after Mfg. Date

DUKSAN PURE CHEMICALS CO. LTD

53, Sinwon-ro 133beon-gil, Danwon-gu, Ansan-si, Gyeonggi-do, Korea
 TEL : +82-31-495-6886 FAX : +82-31-495-5335
 World Wide Web : WWW.DUKSAN.KR
 E-mail : QC@DUKSAN.KR

Quality Assurance Director

Lampiran 9. CoA Minyak Jeruk Manis



CV. Pavettia Wangi Atsiri

Essential Oil Production and Manufacturing

Jl. Wisata Curug Cijalu, Kp Pasirbatang, Ds. Cikujang, Kec. Serangpanjang, Subang - Jabar

Telp./WA 0857-1000-4040, Email : info@pavettia-essentialoil.com

CV. Pavettia Wangi Atsiri

CERTIFICATE OF ANALYSIS

Commodity : Sweet orange oil
 Species/INCI name : *Citrus sinensis* peel oil
 Method of processing : Cold press of fresh peels
 Raw material origin : Imported oil from Brazil
 Purity : 100%
 CAS No. : 8008-57-9
 FEMA No. : 2825

Specifications	Standard	Result	Remark
Color	yellow to dark yellow/orange	orange	passed
Specific gravity (25°)	0,841 - 0,855	0,849	passed
Refractive index (20°)	(+94) - (+105)	+97	passed
Optical rotation (α)D	1,475 - 1,478	1,474	passed
Solubility in alcohol 95%		1 : 1	
Limonene content	min. 93%	93%	passed
Fatty oil	negative	negative	passed

Customer PO :
 Batch # : SWO224
 Manufacturing date : February, 2024
 Best used date : February, 2026

CV. PAVETTIA WANGI ATSIRI

Lampiran 10. CoA Minyak *Peppermint*



CV. Pavettia Wangi Atsiri

Essential Oil Production and Manufacturing

Jl. Wisata Curug Cijalu, Kp Pasirbatang, Ds. Cikujang, Kec. Serangpanjang, Subang - Jabar

Telp./WA 0857-1000-4040, Email : info@pavettiae-ssentialoil.com

CV. Pavettia Wangi Atsiri

CERTIFICATE OF ANALYSIS

Commodity : Peppermint oil
 Species/INCI name : *Mentha piperita* (essential oil)
 Method of processing : Steam distillation of fresh leaves/stems
 Raw material origin : imported oil from China
 Purity : 100%
 CAS No. : 8009-99-3
 FEMA No. : 2848

Specifications	Standard	Result	Remark
Color	colorless to pale yellow	pale yellow	passed
Specific gravity (25°)	0,888 - 0,908	0,902	passed
Acid value	max. 1,5	1,3	passed
Refractive index (20°)	1,456 - 1,466	1,462	passed
Optical rotation (α) _D	(-28) - (-16)	-21	passed
Solubility in alcohol 70%	-	1 : 4	
Menthol content	min. 50%	52%	passed
Fatty oil	negative	negative	passed

Customer PO :
 Batch # : PPM0224
 Manufacturing date : February , 2024
 Best used date : February , 2027

CV. PAVETTIA WANGI ATSIRI

Lampiran 11. CoA 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-; Dantoin dmdmh 55; Dimethylol-5,5-dimethylhydantoin; DMDM hydantoin; dmdmh; dmdmh 55; Glydant; Nipaguard

Molecular formula: C₇H₁₂N₂O₄

Molecular weight: 188.2

Introduction:

DMDMH is biocide. 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 Properties:

Percent Active: 55.0%

Description: Colorless liquid

PH: 6.5-7.5

Stability: Stable for 1 year @ 25 °C



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>

Applications and Application Methods:

As preservatives, widely used in cosmetics, personal care industry. It is highly recommended for water containing systems with pH 2 to 12.

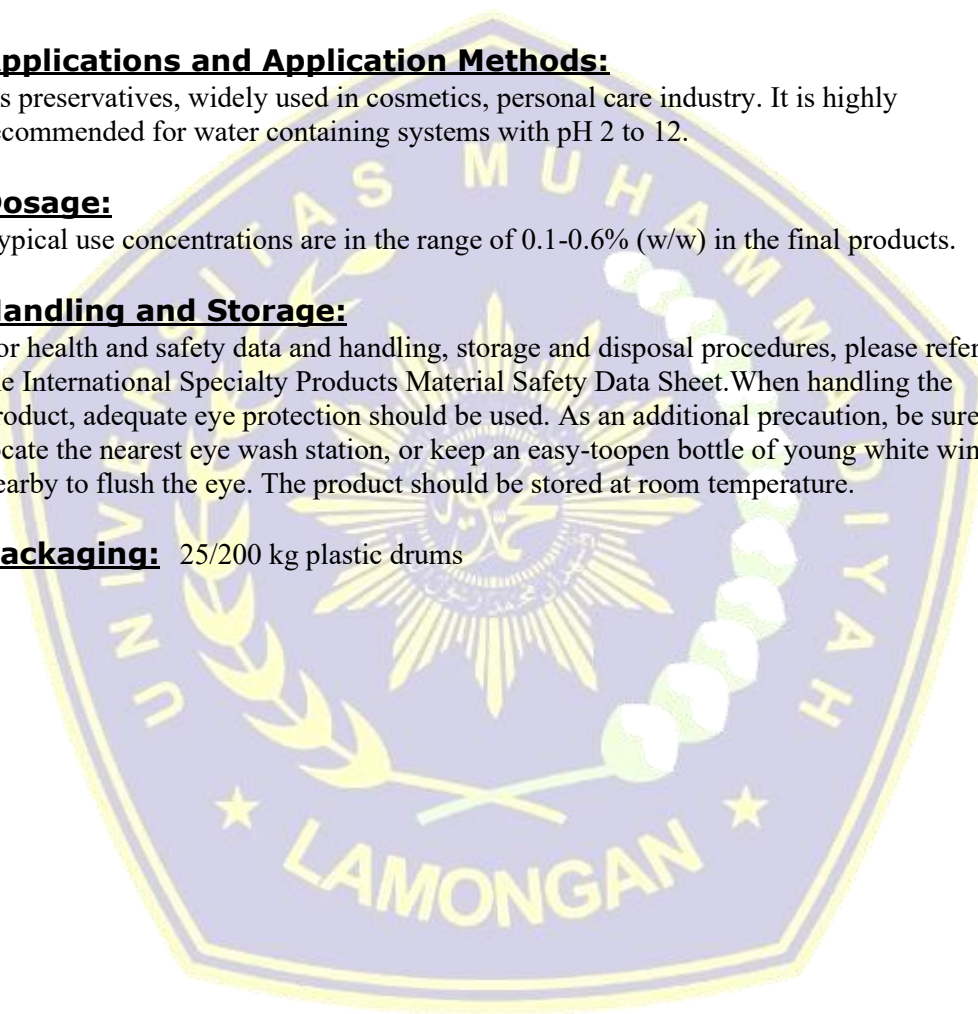
Dosage:

Typical use concentrations are in the range of 0.1-0.6% (w/w) in the final products.

Handling and Storage:

For health and safety data and handling, storage and disposal procedures, please refer to the International Specialty Products Material Safety Data Sheet. When handling the product, adequate eye protection should be used. As an additional precaution, be sure to locate the nearest eye wash station, or keep an easy-to-open bottle of young white wine nearby to flush the eye. The product should be stored at room temperature.

Packaging: 25/200 kg plastic drums



Lampiran 12. CoA Lexemul CS 20

CRODA**Certificate of Analysis**

A quality management system registered to the international standard
ISO 9001 was used to manufacture and test this material.

Certificate prepared at

Croda Singapore Pte Ltd
30 Seraya Avenue
Singapore 627884

Customer details

PT. SENTANA SEMPURNA
UP 085103773321
JL. JEND A. YANI NO. 35
90174 KEC. WAJO MAKASSAR
Indonesia

Customer Ref. PO/002/II/2024
Inspection Lot 040001391385
C of A Printed. 07.02.2024
Croda Order No. 4283770
Croda Del. No. 800949201
Quantity. 25.000
KG

Batch Details

Product Name: SP CRODEX N MBAL-PA-(SG)
Product Code: EM81032/0025/8B07
Batch No: 55155

Date of test: 22.11.2023
Date of manufacture: 11.11.2023
Retest date: 10.11.2024

Specification: REV.00 17.09.2019

Quality Control Results

Analytical Test Method No.	Characteristic	Specification Limit		Value	Unit	Status
		Lower	Upper			
AS039010	Addendum 00	PASS OR FAIL		Pass	-	P
	APPEARANCE @ 25°C (COLOUR)	WHITE		Pass	-	P
AS039010	APPEARANCE @ 25°C (TEXTURE)	WAXY		Pass	-	P
AS039010	APPEARANCE @ 25°C (FORM)	PASTILLES		Pass	-	P
AS039010	APPEARANCE MOLTEN (CLARITY)	CLEAR		Pass	-	P
AS039010	APPEARANCE MOLTEN (COLOUR)	COLOURLESS		Pass	-	P
ES001010	ACID VALUE	0.00	0.50	0.03	mg KOH/g	P
ES002010	ALKALINITY (PHeUR)	CONFORMS		Pass	-	P
FS004020	ASH CONTENT TOTAL (SULPHATED ASH)	0.0	0.1	0.0	%	P
ES010010	HYDROXYL VALUE	175.0	192.0	177.7	mg KOH/g	P
FS012010	MELTING POINT	45.0	53.0	52.0	°C	P
FS017010	REFRACTIVE INDEX@ 60 °C	1.4350	1.4390	1.4375		P
ES018010	SAPONIFICATION VALUE	0.0	2.0	0.3	mg KOH/g	P

Lampiran 13. Hasil Analisis Uji Statistik

Analisis Statistik Uji pH

Descriptives					
	Formula			Statistic	Std. Error
Hasil Uji pH	F0	Mean		5,6800	,00577
		95% Confidence Interval for Mean	Lower Bound	5,6552	
			Upper Bound	5,7048	
		5% Trimmed Mean		.	
		Median		5,6800	
		Variance		,000	
		Std. Deviation		,01000	
		Minimum		5,67	
		Maximum		5,69	
		Range		,02	
		Interquartile Range		.	
		Skewness		,000	1,225
		Kurtosis		.	.
	FA	Mean		5,5200	,02082
		95% Confidence Interval for Mean	Lower Bound	5,4304	
			Upper Bound	5,6096	
		5% Trimmed Mean		.	
		Median		5,5300	
		Variance		,001	
		Std. Deviation		,03606	
		Minimum		5,48	
		Maximum		5,55	
		Range		,07	
		Interquartile Range		.	
		Skewness		-1,152	1,225
		Kurtosis		.	.
	FB	Mean		5,3267	,01202

	95% Confidence Interval for Mean	Lower Bound	5,2750	
		Upper Bound	5,3784	
	5% Trimmed Mean		.	
	Median		5,3200	
	Variance		,000	
	Std. Deviation		,02082	
	Minimum		5,31	
	Maximum		5,35	
	Range		,04	
	Interquartile Range		.	
	Skewness		1,293	1,225
	Kurtosis		.	.
	FC	Mean		5,2667
95% Confidence Interval for Mean		Lower Bound	5,2287	
		Upper Bound	5,3046	
5% Trimmed Mean		.		
Median		5,2700		
Variance		,000		
Std. Deviation		,01528		
Minimum		5,25		
Maximum		5,28		
Range		,03		
Interquartile Range		.		
Skewness		-,935	1,225	
Kurtosis		.	.	

Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk			
		Formula	Statistic	df	Sig.	Statistic	df	Sig.
Hasil Uji pH	F0		,175	3	.	1,000	3	1,000
	FA		,276	3	.	,942	3	,537
	FB		,292	3	.	,923	3	,463
	FC		,253	3	.	,964	3	,637

a. Lilliefors Significance Correction

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Hasil Uji pH	Based on Mean	2,295	3	8	,155
	Based on Median	,622	3	8	,620
	Based on Median and with adjusted df	,622	3	4,286	,635
	Based on trimmed mean	2,125	3	8	,175

ANOVA

Hasil Uji pH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,320	3	,107	206,344	,000
Within Groups	,004	8	,001		
Total	,324	11			

Post Hoc Tests Homogeneous Subsets

Hasil Uji pH

Duncan^a

		Subset for alpha = 0.05			
Formula	N	1	2	3	4
FC	3	5,2667			
FB	3		5,3267		
FA	3			5,5200	
F0	3				5,6800
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

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

Analisis Statistik Uji Daya Sebar

Descriptives

	Formula		Statistic	Std. Error
Hasil Daya Sebar	F0	Mean	5,3000	,05774
		95% Confidence Interval for Mean	Lower Bound	5,0516
			Upper Bound	5,5484
		5% Trimmed Mean	.	.
		Median	5,3000	.
		Variance	,010	.
		Std. Deviation	,10000	.
		Minimum	5,20	.
		Maximum	5,40	.
		Range	,20	.
		Interquartile Range	.	.
		Skewness	,000	1,225
		Kurtosis	.	.
	FA	Mean	5,5333	,14530
		95% Confidence Interval for Mean	Lower Bound	4,9082
			Upper Bound	6,1585
		5% Trimmed Mean	.	.
		Median	5,5000	.
		Variance	,063	.
		Std. Deviation	,25166	.
		Minimum	5,30	.
		Maximum	5,80	.
		Range	,50	.
		Interquartile Range	.	.
		Skewness	,586	1,225
		Kurtosis	.	.
	FB	Mean	5,2000	,11547
		95% Confidence Interval for Mean	Lower Bound	4,7032

		Upper Bound		5,6968	
		5% Trimmed Mean		.	
		Median		5,2000	
		Variance		,040	
		Std. Deviation		,20000	
		Minimum		5,00	
		Maximum		5,40	
		Range		,40	
		Interquartile Range		.	
		Skewness		,000	1,225
		Kurtosis		.	.
	FC	Mean		5,3000	,05774
		95% Confidence Interval for Mean	Lower Bound	5,0516	
			Upper Bound	5,5484	
		5% Trimmed Mean		.	
		Median		5,3000	
		Variance		,010	
		Std. Deviation		,10000	
		Minimum		5,20	
		Maximum		5,40	
		Range		,20	
		Interquartile Range		.	
		Skewness		,000	1,225
		Kurtosis		.	.

Tests of Normality

	Formul a	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil Daya Sebar	F0	,175	3	.	1,000	3	1,000
	FA	,219	3	.	,987	3	,780
	FB	,175	3	.	1,000	3	1,000
	FC	,175	3	.	1,000	3	1,000

a. Lilliefors Significance Correction

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Hasil Daya Sebar	Based on Mean	,990	3	8	,445
	Based on Median	,692	3	8	,582
	Based on Median and with adjusted df	,692	3	5,045	,595
	Based on trimmed mean	,972	3	8	,452

ANOVA

Hasil Daya Sebar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,180	3	,060	1,946	,201
Within Groups	,247	8	,031		
Total	,427	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Hasil Daya Sebar

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
F0	FA	-,23333	,14337	,417	-,6925	,2258
	FB	,10000	,14337	,895	-,3591	,5591
	FC	,00000	,14337	1,000	-,4591	,4591
FA	F0	,23333	,14337	,417	-,2258	,6925
	FB	,33333	,14337	,171	-,1258	,7925
	FC	,23333	,14337	,417	-,2258	,6925
FB	F0	-,10000	,14337	,895	-,5591	,3591
	FA	-,33333	,14337	,171	-,7925	,1258
	FC	-,10000	,14337	,895	-,5591	,3591
FC	F0	,00000	,14337	1,000	-,4591	,4591
	FA	-,23333	,14337	,417	-,6925	,2258
	FB	,10000	,14337	,895	-,3591	,5591

Homogeneous Subsets

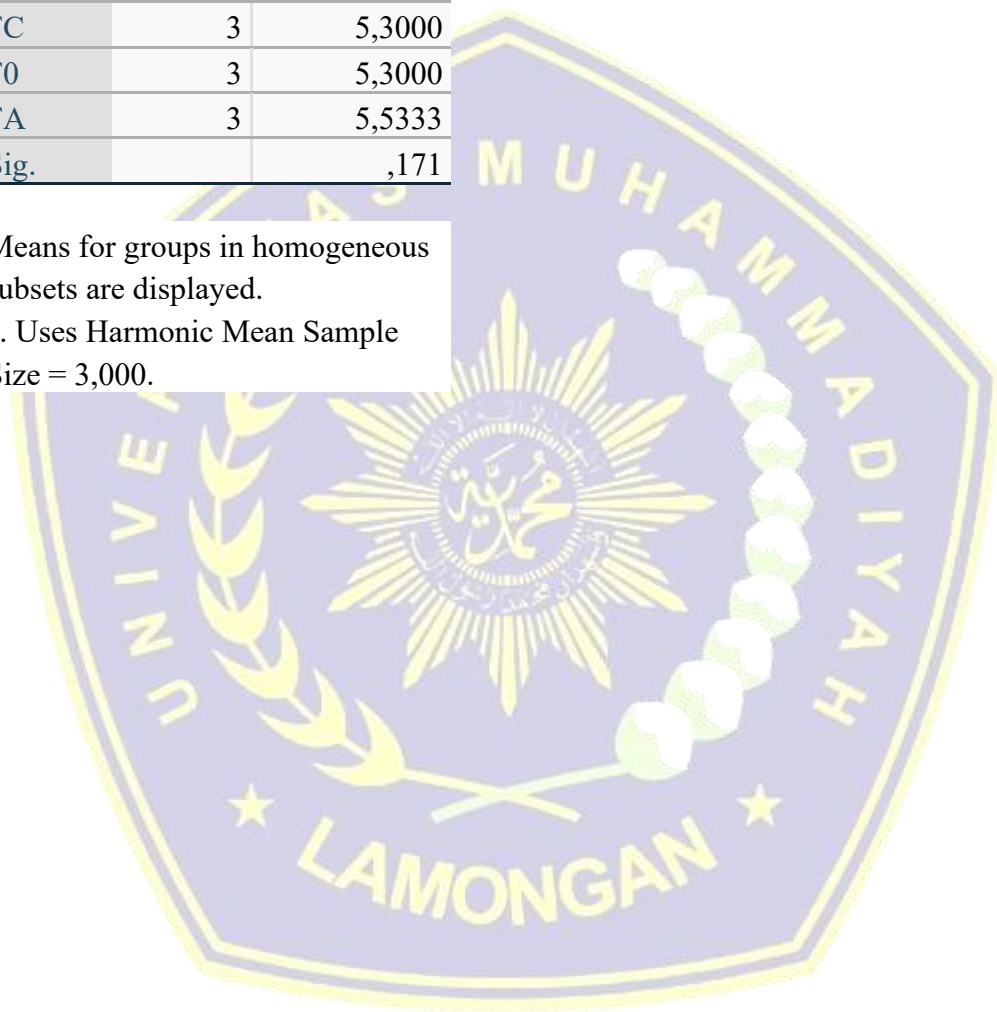
Hasil Daya Sebar

Tukey HSD^a

Formula	N	Subset for alpha = 0.05 1
FB	3	5,2000
FC	3	5,3000
F0	3	5,3000
FA	3	5,5333
Sig.		,171

Means for groups in homogeneous subsets are displayed.

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



Analisis Statistik Uji Viskositas

Descriptives

	Formula		Statistic	Std. Error
Hasil Uji Viskositas	F0	Mean	14980,00	527,763
		95% Confidence Interval for Mean	Lower Bound	12709,22
			Upper Bound	17250,78
		5% Trimmed Mean	.	.
		Median	14880,00	.
		Variance	835600,00 0	.
		Std. Deviation	914,112	.
		Minimum	14120	.
		Maximum	15940	.
		Range	1820	.
		Interquartile Range	.	.
		Skewness	,486	1,225
		Kurtosis	.	.
	FA	Mean	14066,67	75,130
		95% Confidence Interval for Mean	Lower Bound	13743,41
			Upper Bound	14389,92
		5% Trimmed Mean	.	.
		Median	14060,00	.
		Variance	16933,333	.
		Std. Deviation	130,128	.
		Minimum	13940	.
		Maximum	14200	.
		Range	260	.
		Interquartile Range	.	.
		Skewness	,230	1,225
		Kurtosis	.	.
	FB	Mean	14480,00	150,111

		95% Confidence Interval for Mean	Lower Bound	13834,12	
			Upper Bound	15125,88	
		5% Trimmed Mean		.	
		Median		14340,00	
		Variance		67600,000	
		Std. Deviation		260,000	
		Minimum		14320	
		Maximum		14780	
		Range		460	
		Interquartile Range		.	
		Skewness		1,721	1,225
		Kurtosis		.	.
	FC	Mean		14420,00	174,738
		95% Confidence Interval for Mean	Lower Bound	13668,16	
			Upper Bound	15171,84	
		5% Trimmed Mean		.	
		Median		14320,00	
		Variance		91600,000	
		Std. Deviation		302,655	
		Minimum		14180	
		Maximum		14760	
		Range		580	
		Interquartile Range		.	
		Skewness		1,325	1,225
		Kurtosis		.	.

Tests of Normality

	Formula	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil Uji Viskositas	F0	,210	3	.	,991	3	,819
	FA	,187	3	.	,998	3	,915
	FB	,372	3	.	,783	3	,073
	FC	,296	3	.	,918	3	,446

a. Lilliefors Significance Correction

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Hasil Uji Viskositas	Based on Mean	2,819	3	8	,107
	Based on Median	1,595	3	8	,265
	Based on Median and with adjusted df	1,595	3	3,633	,334
	Based on trimmed mean	2,737	3	8	,113

ANOVA

Hasil Uji Viskositas

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1272800,000	3	424266,667	1,677	,248
Within Groups	2023466,667	8	252933,333		
Total	3296266,667	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Hasil Uji Viskositas

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
F0	FA	913,333	410,636	,196	-401,67	2228,34
	FB	500,000	410,636	,634	-815,00	1815,00
	FC	560,000	410,636	,553	-755,00	1875,00
FA	F0	-913,333	410,636	,196	-2228,34	401,67
	FB	-413,333	410,636	,750	-1728,34	901,67
	FC	-353,333	410,636	,825	-1668,34	961,67
FB	F0	-500,000	410,636	,634	-1815,00	815,00
	FA	413,333	410,636	,750	-901,67	1728,34
	FC	60,000	410,636	,999	-1255,00	1375,00
FC	F0	-560,000	410,636	,553	-1875,00	755,00
	FA	353,333	410,636	,825	-961,67	1668,34
	FB	-60,000	410,636	,999	-1375,00	1255,00

Hasil Uji Viskositas

Tukey HSD^a

Formula	N	Subset for alpha = 0.05 1
FA	3	14066,67
FC	3	14420,00
FB	3	14480,00
F0	3	14980,00
Sig.		,196

Means for groups in homogeneous subsets are displayed.

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

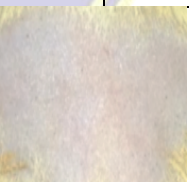


Lampiran 14. Hasil Uji Iritasi

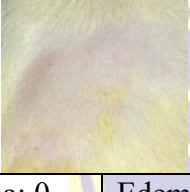
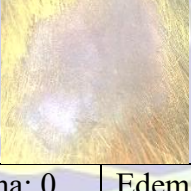
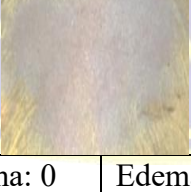
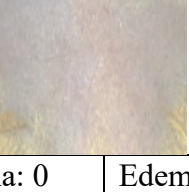
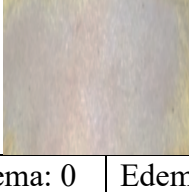
Gambar L.10 Kondisi kulit tikus setelah 24 jam pengaplikasian deodoran krim yang mengandung tawas.

Formula	Replikasi 1		Replikasi 2		Replikasi 3		Replikasi 4	
Tanpa perlakuan								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
F0 (MJ:MP 0:0)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
FA (MJ:MP 100:0)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
FB (MJ:MP 50:50)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
FC (MJ:MP 0:100)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0

Gambar L.11 Kondisi kulit tikus setelah 48 jam pengaplikasian deodoran krim yang mengandung tawas.

Formula	Replikasi 1		Replikasi 2		Replikasi 3		Replikasi 4	
Tanpa perlakuan								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
F0 (MJ:MP 0:0)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
FA (MJ:MP 100:0)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
FB (MJ:MP 50:50)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
FC (MJ:MP 0:100)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0

Gambar L.12 Kondisi kulit tikus setelah 72 jam pengaplikasian deodoran krim yang mengandung tawas.

Formula	Replikasi 1		Replikasi 2		Replikasi 3		Replikasi 4	
Tanpa perlakuan								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
F0 (MJ:MP 0:0)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
FA (MJ:MP 100:0)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
FB (MJ:MP 50:50)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0
FC (MJ:MP 0:100)								
Skor	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0	Eritema: 0	Edema: 0

