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LAMPIRAN

Lampiran 1. Izin Penelitian

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN GIGI
Jl. Perintis Kemerdekaan Km. 10, Makassar 90245
Telepon (0411) 586012, 584641 Faximile. (0411) 584641
Website : http://dent.unhas.ac.id, Email: fdhu@unhas.ac.id

No : 3315/UN4.13.1/PT.01.04/2021 6 Oktober 2021
Perihal : **Izin Penelitian**

Kepada Yth.
- **Dekan Fakultas Farmasi Unhas**
- **Kepala Laboratorium Biofarmaka PKP Unhas**
- **Kepala Laboratorium Farmakologi -Toksikologi Unhas**

di Tempat

Dengan hormat kami sampaikan bahwa mahasiswa Program Pendidikan Dokter Gigi Spesialis (PPDGS) Bedah Mulut dan Maksillofasial Fakultas Kedokteran Gigi Universitas Hasanuddin bermaksut untuk melakukan penelitian.

Sehubungan dengan hal tersebut kiranya dapat diberikan izn penelitian kepada peneliti di bawah ini

Nama, NIM : Paula Nesty Bano, drg (J045201007)

Waktu Penelitian : Oktober 2021 s/d Januari 2022

Tempat Penelitian : Lab. Biofarmaka PKP Unhas, dan Lab. Farmakologi - Toksikologi Fakultas Farmasi Unhas pada bulan Oktober 2021 s.d. Januari 2022.

Judul Penelitian : "Efektivitas Senyawa Florotanin pada Ekstrak Alga Coklat (*Sargassum Sp.)* sebagai Agen Anti Perdarahan pada Wistar (*Rattus norvegicus*) (in vivo study)".

Demikian permohonan kami atas perhatian dan kerjasamanya diucapkan terima kasih.

a.n. Dekan
Wakil Dekan Bidang Akademik, Riset dan Inovasi,

Prof. Dr. Edy Machmud, drg., Sp.Pros(K)
NIP 19631104 199401 1 001

Tembusan Yth:
1. Dekan FKG Unhas;
2. Kepala Lab. Biofarmaka PKP Unhas
3. Kepala Lab. Farmakologi -Toksikologi Unhas

Lampiran 2. Rekomendasi Persetujuan Etik

KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN GIGI
RUMAH SAKIT GIGI DAN MULUT
KOMITE ETIK PENELITIAN KESEHATAN
Sekretariat : Lantai 2, Gedung Lama RSGM Unhas
JL.Kandea No. 5 Makassar
Contact Person: drg. Muhammad Ikbal, Sp.Pros/Nur Aedah AR TELP. 081342971011/08114919191

RSGMP

REKOMENDASI PERSETUJUAN ETIK

Nomor: 0090/PL.09/KEPK FKG-RSGM UNHAS/2023

Tanggal: 24 Mei 2023

Dengan ini menyatakan bahwa protokol dan dokumen yang berhubungan dengan protokol berikut ini telah mendapatkan persetujuan etik:

No. Protokol	UH 17120806	No Protokol Sponsor	
Peneliti Utama	Drg. Paula Nesty Bano	Sponsor	Pribadi
Judul Peneliti	Evektivitas Senyawa Florotanin Dari Alga Cokelat (Sargassum Binderi) sebagai Agen Anti Perdarahan Pada Tikus Jantan (Rattus Norvegicus): Studi In Vivo		
No. Versi Protokol	1	Tanggal Versi	02 Mei 2023
No. Versi Protokol		Tanggal Versi	
Tempat Penelitian	1. Laboratorium Biofarmaka, 2. Laboratorium Biofarmasi Fakultas Farmasi Unhas 3. Laboratorium Terpadu Fakultas Peternakan Unhas 4. Laboratorium Teknik Kimia, PNUP Makassar		
Dokumen Lain			
Jenis Review	☐ Exempted ☒ Expedited ☐ Fullboard	Masa Berlaku 24 Mei 2023-24 Mei 2024	Frekuensi Review Lanjutan
Ketua Komisi Etik Penelitian	Nama: Dr. drg. Marhamah, M.Kes	Tanda Tangan	Tanggal
Sekretaris Komisi Etik Penelitian	Nama: drg. Muhammad Ikbal, Sp.Pros	Tanda Tangan	Tanggal

Kewajiban peneliti utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum diimplementasikan
- Menyerahkan laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan lapor SUSAR dalam 72 jam setelah peneliti utama menerima laporan.
- Menyerahkan laporan kemajuan (*progress report)* setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah.
- Menyerahkan laporan akhir setelah penelitian berakhir.
- Melaporkan penyimpangan dari protokol yang disetujui (*protocol deviation/violation)*
- Mematuhi semua aturan yang berlaku.

Lampiran 3.

Hasil Identifikasi Morfologi Alga Cokelat

Surat keterangan hasil identifikasi morfologi sampel alga cokelat *Sargassum binderi* dari perairan pantai Desa Punaga Kabupaten Takalar.

LABORATORIUM PRODUKTIVITAS & KUALITAS PERAIRAN
FAKULTAS ILMU KELAUTAN DAN PERIKANAN
UNIVERSITAS HASANUDDIN
Jl. Perintis Kemerdekaan, KM 10 Tamalanrea, Makassar, Indonesia 90245
Telp./Fax. +62-0411-586025, email : fikp@unhas.ac.id, website :http://fikp.unhas.ac.id

Nomor : 01.UM/Lab.Air/XI/2021
Pemilik Sampel : Iradatullah (FKG UH)
Tanggal Terima Sampel : 19 November 2021
Tanggal Sampling : 26 September 2021
Jumlah Sampel : 1
Jenis Sampel : Ganggang laut
Asal Sampel : Pantai Punaga , Kab. Takalar
Kegiatan : Penelitian S2

DATA HASIL IDENTIFIKASI

Kalsifikasi	Kode Sampel Sampel Uji
Kingdom	Plantae
Divisio	Phaeophyta
Classis	Phaeophyceae
Ordo	Fucales
Familia	*Sargassaceae*
Genus	*Sargassum*
Species	*Sargassum binderi*

Sumber pustaka :
World Register Of Marine Species

Makassar, 22 November 2021

Pranata Lab. Pendidikan (PLP)

Fitriyani, S.Si
Nip 19771012 200112 2 001

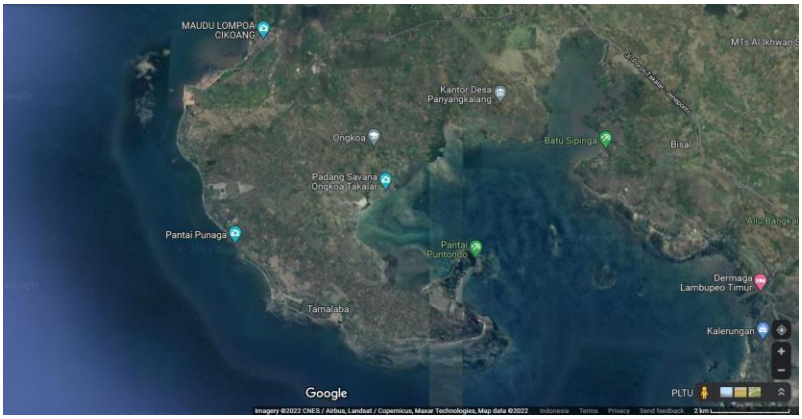
Kepala Lab.

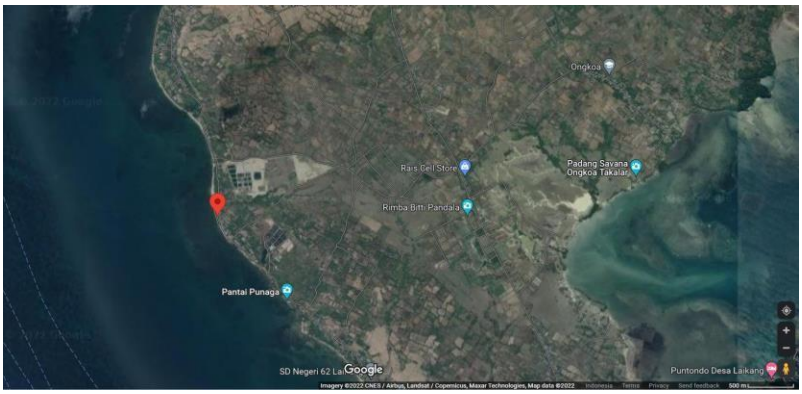
Dr. Ir.Hasni Yulianti Azis, MP
Nip 196407271991032001

Lampiran 4.

Peta Lokasi Pengambilan Sampel

Lokasi Pesisir Pantai Desa Punaga, Kecamatan Mangarabombang, KabupatenTakalar, Provinsi Sulawesi Selatan (5°34'29.0"S 119°25'29.4"E).





Lampiran 5.
Analisis data menggunakan SPSS 27
I. Intraclass Correlation Coefficient (ICC)

Reliability Statistics

Cronbach's Alpha	N of Items
.997	3

Intraclass Correlation Coefficient

	Intraclass Correlation[b]	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.992[a]	.985	.996	380.970	24	48	.000
Average Measures	.997[c]	.995	.999	380.970	24	48	.000

Two-way mixed effects model where people effects are random and measures effects are fixed.
a. The estimator is the same, whether the interaction effect is present or not.
b. Type C intraclass correlation coefficients using a consistency definition. The between-measure variance is excluded from the denominator variance.
c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

II. ANOVA Test

A. Observer 1

1. Normalitas

One-Sample Kolmogorov-Smirnov Test

			Residual for Waktu
N			25
Normal Parameters[a,b]	Mean		.0000
	Std. Deviation		8.39373
Most Extreme Differences	Absolute		.115
	Positive		.095
	Negative		-.115
Test Statistic			.115
Asymp. Sig. (2-tailed)[c]			.200[d]
Monte Carlo Sig. (2-tailed)[e]	Sig.		.522
	99% Confidence Interval	Lower Bound	.510
		Upper Bound	.535

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

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

e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 1314643744.

2. *Homogenitas*

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

		Levene Statistic	df1	df2	Sig.
Waktu	Based on Mean	.953	4	20	.455
	Based on Median	.860	4	20	.505
	Based on Median and with adjusted df	.860	4	11.302	.517
	Based on trimmed mean	.929	4	20	.467

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

a. Dependent variable: Waktu

b. Design: Intercept + Perlakuan

3. *Deskripsi*

Descriptive Statistics

Dependent Variable: Waktu

Perlakuan	Mean	Std. Deviation	N
Aquades (Kontrol (-))	57.7480	8.45357	5
Feracrylum 1% (Kontrol (+))	28.6760	5.84099	5
Florotanin 7.5 %	42.2800	14.54856	5
Florotanin 5 %	41.3220	4.02402	5
Florotanin 2.5 %	27.9680	9.44958	5
Total	39.5988	13.93674	25

4. *ANOVA*

Tests of Between-Subjects Effects

Dependent Variable: Waktu

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2970.674[a]	4	742.668	8.784	.000
Intercept	39201.624	1	39201.624	463.675	.000

Perlakuan	2970.674	4	742.668	8.784	.000
Error	1690.911	20	84.546		
Total	43863.209	25			
Corrected Total	4661.585	24			

a. R Squared = ,637 (Adjusted R Squared = ,565)

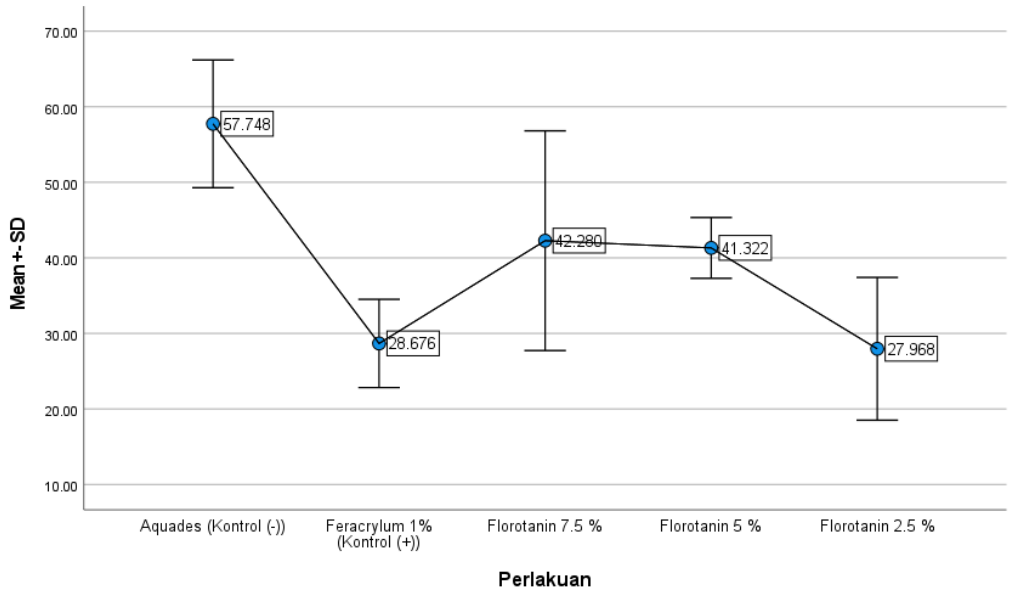
5. *Post Hoc Duncan*

Waktu

	Perlakuan	N	Subset 1	2	3
Duncan[a,b]	Florotanin 2.5 %	5	27.9680		
	Feracrylum 1% (Kontrol (+))	5	28.6760		
	Florotanin 5 %	5		41.3220	
	Florotanin 7.5 %	5		42.2800	
	Aquades (Kontrol (-))	5			57.7480
	Sig.		.904	.871	1.000

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square (Error) = 84,546.
a. Uses Harmonic Mean Sample Size = 5,000.
b. Alpha = ,05.

6. *Error Bar*



B. Observer 2

1. Normalitas

One-Sample Kolmogorov-Smirnov Test

			Residual for Waktu
N			25
Normal Parameters[a,b]	Mean		.0000
	Std. Deviation		8.16819
Most Extreme Differences	Absolute		.108
	Positive		.108
	Negative		-.107
Test Statistic			.108
Asymp. Sig. (2-tailed)[c]			.200[d]
Monte Carlo Sig. (2-tailed)[e]	Sig.		.618
	99% Confidence Interval	Lower Bound	.606
		Upper Bound	.631

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 624387341.

2. Homogenitas

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

		Levene Statistic	df1	df2	Sig.
Waktu	Based on Mean	1.007	4	20	.427
	Based on Median	.766	4	20	.560
	Based on Median and with adjusted df	.766	4	10.718	.569
	Based on trimmed mean	.997	4	20	.432

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a. Dependent variable: Waktu
b. Design: Intercept + Perlakuan

3. Deskripsi

Descriptive Statistics

Dependent Variable: Waktu

Perlakuan	Mean	Std. Deviation	N
Aquades (Kontrol (-))	58.1020	8.11470	5
Feracrylum 1% (Kontrol (+))	28.5260	6.26465	5
Florotanin 7.5 %	42.2220	13.83406	5
Florotanin 5 %	41.3960	3.39218	5

Florotanin 2.5 %	27.6540	9.60907	5
Total	39.5800	13.97927	25

4. ANOVA

Tests of Between-Subjects Effects

Dependent Variable: Waktu

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3088.814[a]	4	772.204	9.645	.000
Intercept	39164.410	1	39164.410	489.168	.000
Perlakuan	3088.814	4	772.204	9.645	.000
Error	1601.266	20	80.063		
Total	43854.490	25			
Corrected Total	4690.080	24			

a. R Squared = ,659 (Adjusted R Squared = ,590)

5. Post Hoc Duncan

Waktu

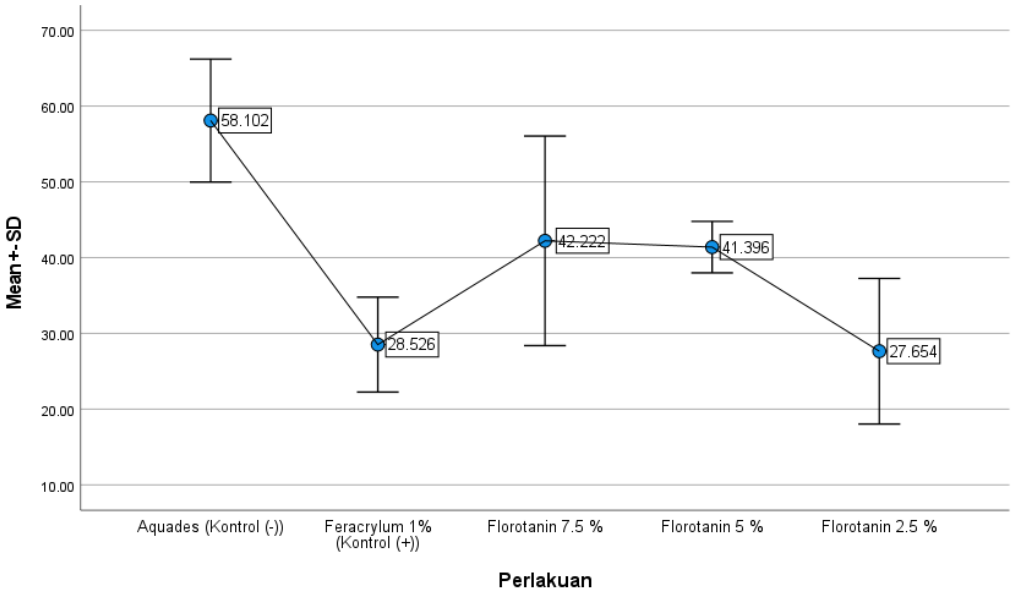
	Perlakuan	N	Subset 1	Subset 2	Subset 3
Duncan[a,b]	Florotanin 2.5 %	5	27.6540		
	Feracrylum 1% (Kontrol (+))	5	28.5260		
	Florotanin 5 %	5		41.3960	
	Florotanin 7.5 %	5		42.2220	
	Aquades (Kontrol (-))	5			58.1020
	Sig.		.879	.885	1.000

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square (Error) = 80,063.

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

b. Alpha = ,05.

6. Error Bar



C. Observer 3

1. Normalitas

One-Sample Kolmogorov-Smirnov Test

			Residual for Waktu
N			25
Normal Parameters[a,b]	Mean		.0000
	Std. Deviation		8.14942
Most Extreme Differences	Absolute		.125
	Positive		.125
	Negative		-.113
Test Statistic			.125
Asymp. Sig. (2-tailed)[c]			.200[d]
Monte Carlo Sig. (2-tailed)[e]	Sig.		.392
	99% Confidence Interval	Lower Bound	.380
		Upper Bound	.405

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 334431365.

2. Homogenitas

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

		Levene Statistic	df1	df2	Sig.
Waktu	Based on Mean	1.445	4	20	.256
	Based on Median	1.278	4	20	.312
	Based on Median and with adjusted df	1.278	4	9.870	.342
	Based on trimmed mean	1.462	4	20	.251

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

a. Dependent variable: Waktu

b. Design: Intercept + Perlakuan

3. Deskripsi

Descriptive Statistics

Dependent Variable: Waktu

Perlakuan	Mean	Std. Deviation	N
Aquades (Kontrol (-))	57.6520	8.10705	5
Feracrylum 1% (Kontrol (+))	28.3880	5.82253	5
Florotanin 7.5 %	42.7240	14.54685	5
Florotanin 5 %	42.5840	2.25195	5
Florotanin 2.5 %	27.9060	9.06475	5
Total	39.8508	13.88543	25

4. ANOVA

Tests of Between-Subjects Effects

Dependent Variable: Waktu

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3033.412[a]	4	758.353	9.516	.000
Intercept	39702.157	1	39702.157	498.173	.000
Perlakuan	3033.412	4	758.353	9.516	.000
Error	1593.911	20	79.696		
Total	44329.480	25			
Corrected Total	4627.323	24			

a. R Squared = ,656 (Adjusted R Squared = ,587)

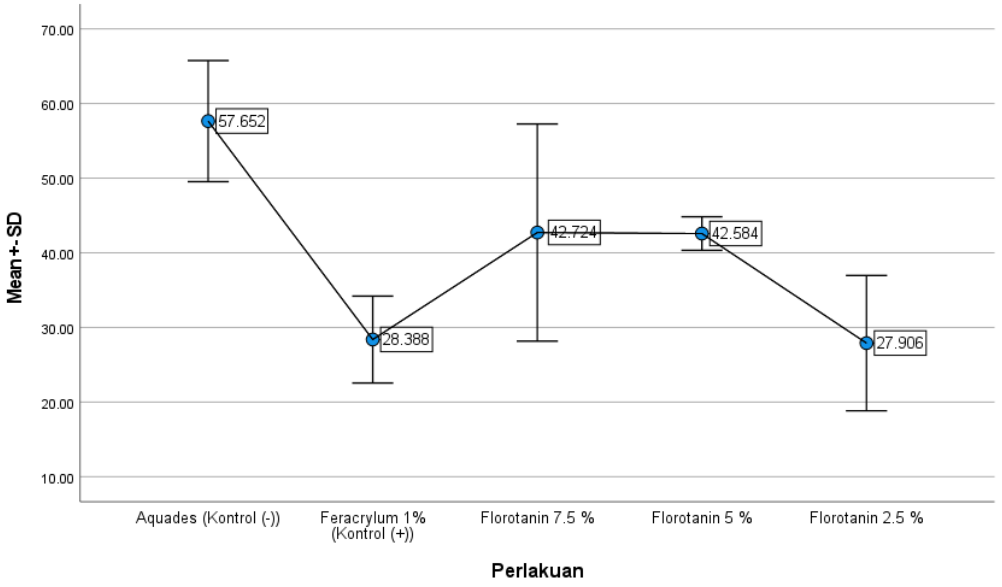
5. *Post Hoc Duncan*

Waktu

	Perlakuan	N	Subset 1	2	3
Duncan[a,b]	Florotanin 2.5 %	5	27.9060		
	Feracrylum 1% (Kontrol (+))	5	28.3880		
	Florotanin 5 %	5		42.5840	
	Florotanin 7.5 %	5		42.7240	
	Aquades (Kontrol (-))	5			57.6520
	Sig.		.933	.980	1.000

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square(Error) = 79,696.
a. Uses Harmonic Mean Sample Size = 5,000.
b. Alpha = ,05.

6. *Error Bar*



D. Keseluruhan

1. Normalitas

One-Sample Kolmogorov-Smirnov Test

			Residual for Waktu
N			75
Normal Parameters[a,b]	Mean		.0000
	Std. Deviation		8.13144
Most Extreme Differences	Absolute		.099
	Positive		.099
	Negative		-.093
Test Statistic			.099
Asymp. Sig. (2-tailed)[c]			.065
Monte Carlo Sig. (2-tailed)[d]	Sig.		.071
	99% Confidence Interval	Lower Bound	.064
		Upper Bound	.077

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 926214481.

2. Homogenitas

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

		Levene Statistic	df1	df2	Sig.
Waktu	Based on Mean	1.234	4	20	.328
	Based on Median	.915	4	20	.474
	Based on Median and with adjusted df	.915	4	10.565	.490
	Based on trimmed mean	1.240	4	20	.326

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a. Dependent variable: Waktu
b. Design: Intercept + Perlakuan

3. Deskripsi

Descriptive Statistics

Dependent Variable: Waktu

Perlakuan	Mean	Std. Deviation	N

Aquades (Kontrol (-))	57.8340	7.61907	15
Feracrylum 1% (Kontrol (+))	28.5300	5.53732	15
Florotanin 7.5 %	42.4087	13.25401	15
Florotanin 5 %	41.7673	3.11791	15
Florotanin 2.5 %	27.8427	8.68278	15
Total	39.6765	13.74484	75

4. ANOVA

Tests of Between-Subjects Effects

Dependent Variable: Waktu

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9087.228[a]	4	2271.807	32.501	.000
Intercept	118067.047	1	118067.047	1689.118	.000
Perlakuan	9087.228	4	2271.807	32.501	.000
Error	4892.904	70	69.899		
Total	132047.179	75			
Corrected Total	13980.132	74			

a. R Squared = ,650 (Adjusted R Squared = ,630)

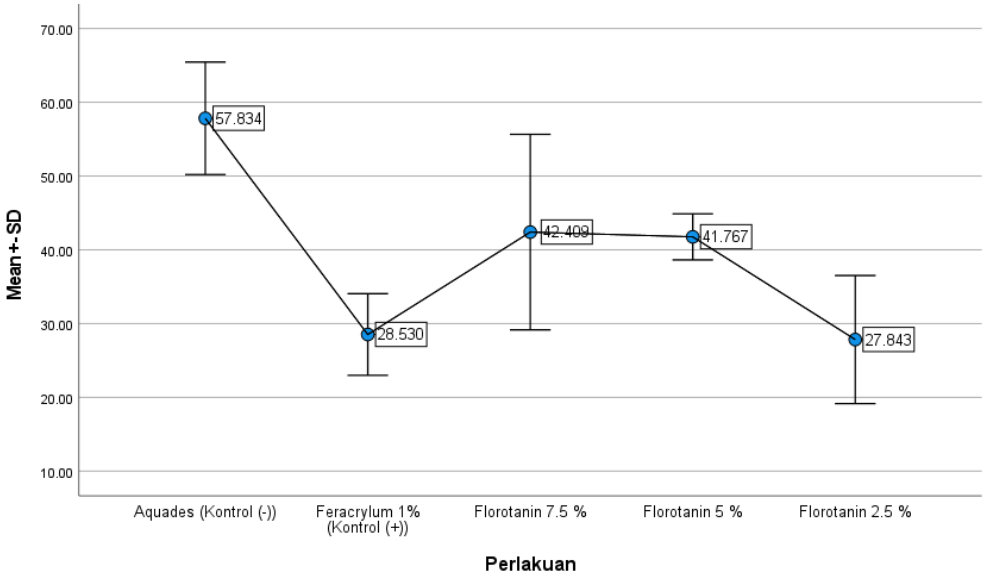
5. Post Hoc Duncan

Waktu

	Perlakuan	N	Subset 1	2	3
Duncan[a,b]	Florotanin 2.5 %	15	27.8427		
	Feracrylum 1% (Kontrol (+))	15	28.5300		
	Florotanin 5 %	15		41.7673	
	Florotanin 7.5 %	15		42.4087	
	Aquades (Kontrol (-))	15			57.8340
	Sig.		.823	.834	1.000

Means for groups in homogeneous subsets are displayed.
Based on observed means.
The error term is Mean Square (Error) = 69,899.
a. Uses Harmonic Mean Sample Size = 15,000.
b. Alpha = ,05.

6. Error Bar


70.00
60.00
50.00
40.00
30.00
20.00
10.00
Mean +- SD
57.834
28.530
42.409
41.767
27.843
Aquades (Kontrol (-))
Feracrylum 1% (Kontrol (+))
Florotanin 7.5 %
Florotanin 5 %
Florotanin 2.5 %
Perlakuan

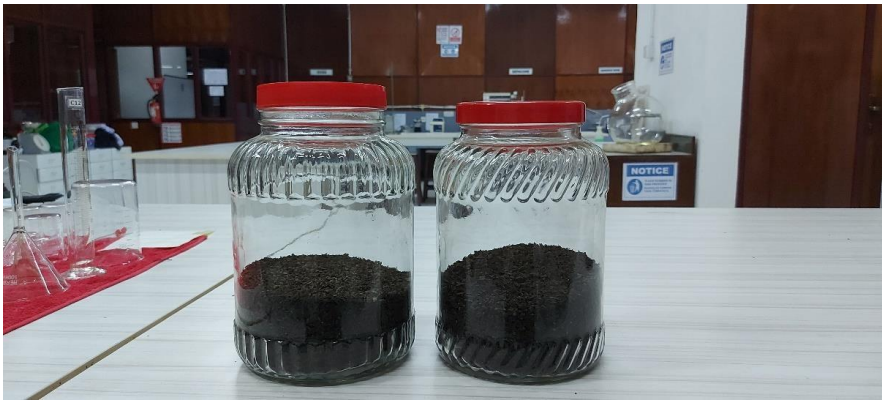
Lampiran 6.

a. Pengambilan sampel *Sargassum binderi* bersama tim peneliti di Pulau Punaga, Kabupaten Takalar, Sulawesi Selatan

b. Sampel yang telah dokeringkan

c. Pengeringan sampel pada oven *Herbs Dryer* di Laboratorium Biofarmaka Farmasi Unhas Lampiran

d. Pencacahan simplisia sampel alga cokelat



e. Proses Pencampuran dengan Pelarut Etanol 70%

f. **Proses Pencampuran dengan *Magnetic Stirrer***

g. Filtrat Hasil Ekstraksi

h. Proses Filtrasi dengan Kertas Saring

i. **Proses *Rotary Evaporator* dan Hasilnya**

j. Proses Sentrifugasi

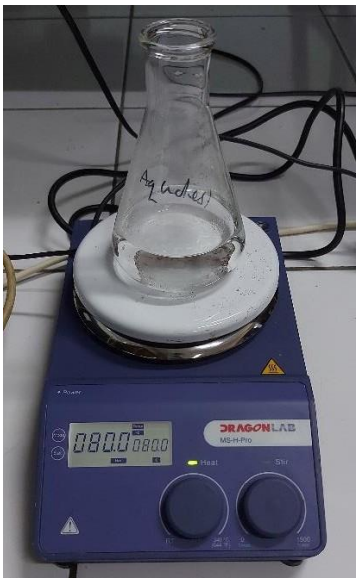
k. Pemisahan Fraksi Etil Asetat dan Etanol dengan Corong Pisah

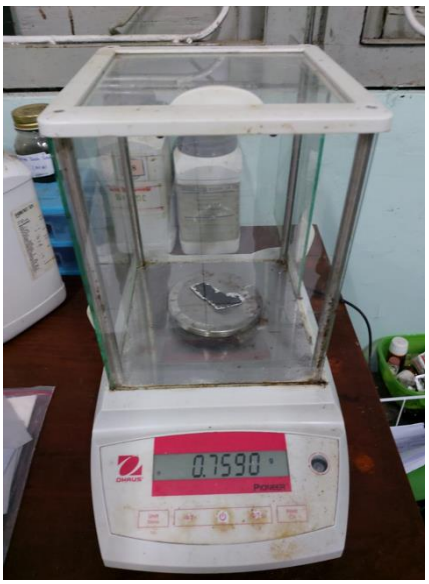
l. Proses *Rotary Evaporator* Fraksi Etil Asetat dan Hasilnya

m. Proses *freeze-dryer*

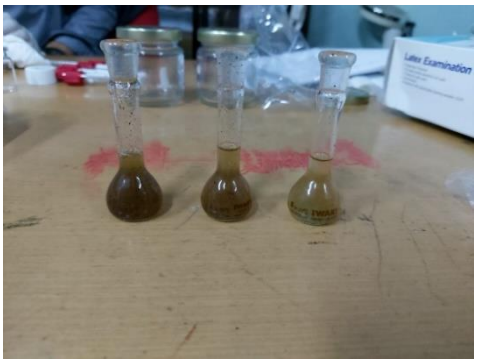
n. Adaptasi Hewan Uji di Laboratorium

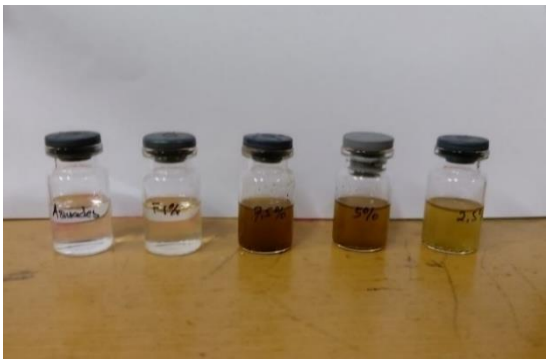
o. Pembuatan Bahan Uji



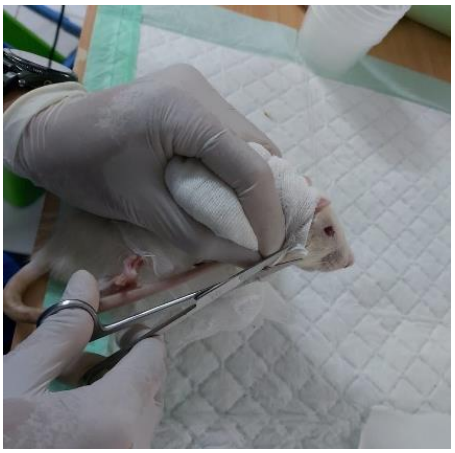


p. Bahan uji florotanin dibagi menjadi konsentrasi 2.5%, 5% dan 7.5%





q. Aplikasi bahan uji pada hewan coba



CURRICULUM VITAE

A. Data Pribadi

1. Nama : Paula Nesty Bano
2. Tempat, tgl. lahir : Jayapura, 27 Desember 1986
3. Alamat : Jl. Prajamukti I, No.3C Angkasapura, Jayapura Utara, Papua
4. Kewarganegaraan : Warga Negara Indonesia

B. Riwayat Pendidikan

1. Tamat SLTA tahun 2005 di SMAN 5, Jayapura, Provinsi Papua
2. Sarjana (S1) tahun 2010 di Universitas Sam Ratulangi, Manado, Provinsi Sulawesi Utara
3. Profesi Dokter Gigi tahun 2013 di Universitas Sam Ratulangi Manado, Sulawesi Utara

C. Pekerjaan dan Riwayat Pekerjaan

1. Jenis pekerjaan : Pegawai Negeri Sipil
2. NIP atau identitas lain (NIK) : 198612272015032001
3. Pangkat/Jabatan : -

D. Karya ilmiah yang telah dipublikasikan

1. -

E. Makalah pada Seminar/Konferensi Ilmiah Nasional dan Internasional

Nasional:

1. Bano PN et al 2022. Penatalaksanaan ameloblastoma pada pasien anak: Lapaoran kasus. PIT "Kongres Nasional 2020, Persatuan Ahli Bedah Mulut dan Maksilofasial Indonesia. Bandung, 28-30 Januari 2022"
2. Bano PN et al 2022. Penatalaksanaan insisi intraoral pada kasus abses mentale yang meluas ke submandibula dan bukal pada pasien anak dengan anestesi lokal. "*9th Makassar Scientific Meeting.* Makassar, 3-6 Maret 2022."
3. Bano PN et al 2023. The Potential Effect of Tannin as a Hemostatic Agent (in vivo study): A Literature Review. "PIT "Kongres Nasional 2023, Persatuan Ahli Bedah Mulut dan Maksilofasial Indonesia. Lombok, 24-26 Agustus 2023"

Internasional:

1. Bano PN et al 2023. Emergency Management Of Pediatric Ludwig's Angina: A Case Report and Literature Review. Internasional "The 12th International Scientific Meeting in Dentistry" with "The 8th International Conference on Biophysical Technology in Dentistry". March 16- 18,2023. Makassar Indonesia.
2. Bano PN et al 2023. Interpositional Gap Arthroplasty With Temporalis Fascia Flap in Unilateral TMJ Ankylosis: A Case Report. "The 6th ACOMS Conference Trainee and The 33rd Annual Scientific Meeting Of The Thai AOMS". October 8-11, 2023. Bangkok Thailand