

LAMPIRAN

Lampiran 1 Kode Etik



KOMISI ETIK PENELITIAN KESEHATAN UNIVERSITAS BHAKTI KENCANA

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

KETERANGAN LAYAK ETIK
DESCRIPTION OF ETHICAL APPROVAL
"ETHICAL APPROVAL"
227/09.KEPK/UBK/VII/2025

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

Peneliti Utama : Muhammad Dodit Rinaldi
Principal In Investigator

Nama institusi : Universitas Bhakti kencana
Name of institution

Dengan judul :
Title

Uji Aktivitas Diuretik Ekstrak Daun Girang (*Leea Indica* (Burm.F.) Merr) Pada Tikus Galur Wistar

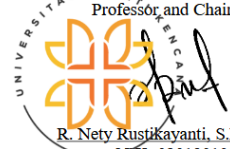
Diuretic Activity Test of Girang Leaf Extract (Leea Indica (Burm.F.) Merr) in Wistar Rats

Dinyatakan layak etik sesuai (tujuh) standar WHO 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 ditunjukkan oleh terpenuhinya indikator setiap standar.

Declared to be ethically appropriate in accordance to 7 (seven) WHO 2011 standards, 1) Social Value, 2) Scientific Value, 3) Equitable Assessment and Benefits, 4) Risks, 5) Persuasion/Exploitation, 6) Confidentiality and Privacy, and Informed Consent, 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 16 Juli 2025 sampai dengan tanggal 16 Juli 2026.

This declaration of ethics applies during the period 16th July 2025 until 16th July 2026.

16 Juli 2025
Professor and Chairperson

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

Lampiran 2 Determinasi Tanaman

HERBARIUM JATINANGOR
LABORATORIUM TAKSONOMI TUMBUHAN
JURUSAN BIOLOGI FMIPA UNPAD
 Gedung D2-212, Jl. Raya Bandung Sumedang Km 21 Jatinangor
 Telp. 089689992695, email: phanerogamae@yahoo.com

LEMBAR IDENTIFIKASI TUMBUHAN
 No.90/HB/02/2025.

Herbarium Jatinangor, Laboratorium Taksonomi Tumbuhan, Jurusan Biologi FMIPA UNPAD, dengan ini menerangkan bahwa:

Nama : Sarah Nadia
 NIM/NIDN : 211FF03035
 Instansi : Universitas Bhakti Kencana.
 Lokasi : Bandung.

Telah melakukan identifikasi tumbuhan, dengan No. Koleksi: -
 Tanggal Koleksi : 18 Februari 2025

Hasil Identifikasi

Nama Ilmiah : ***Leea indica* (Burm.f.) Merr.**
 Sinonim : *Leea biserrata* Miq.
 Nama Lokal : Daun Girang
 Famili : Vitaceae

Klasifikasi (Hirarki Taksonomi)

Kingdom : Plantae
 Divisi : Tracheophytes
 Class : Angiosperms
 Ordo : Vitales
 Famili : Vitaceae
 Genus : *Leea*
 Species : *Leea indica* (Burm.f.) Merr.

Referensi:

Cronquist, Arthur. 1981. *An Integrated System of Classification of Flowering Plants*.
 Columbia University Press. New York
 The Plant List. *Website Dunia Tumbuhan*. <http://www.theplantlist.org/tpl1.1/record/kew-158489>.
 Backer, C. A. and Bakhuizen v/d Brink R. C Jr. 1963. *Flora of Java*. Wolter-Noordhoff NV. Groningen.

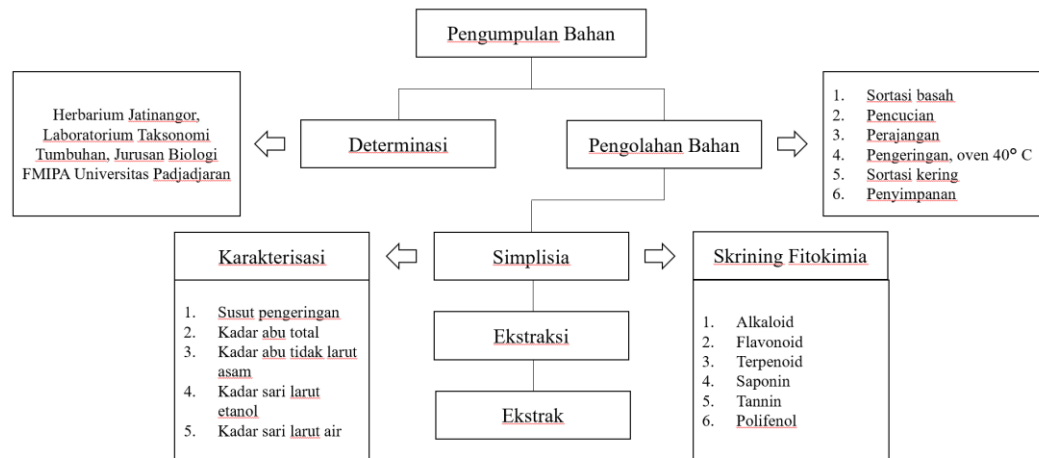
Jatinangor, 19 Februari 2025.

Identifikator,

LABORATORIUM TAKSONOMI TUMBUHAN
 JURUSAN BIOLOGI FMIPA-UNPAD

Drs. Joko Kusmoro, M.P.
 NIP. 19600801 199101 1 001

Lampiran 3 Prosedur Pengolahan Simplisia Daun Girang (*Leea indica*)



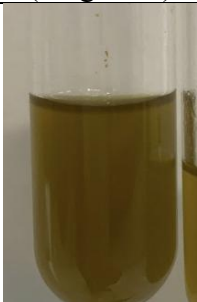
Lampiran 4 Pengolahan Simplisia

		
Sortasi Basah	Pencucian	Pengeringan
		
Sortasi Kering	Proses Grinder	Serbuk Simplisia

Lampiran 5 Perhitungan Karakterisasi Daun Girang (*Leea indica*)

No	Karakterisasi	Hasil
1	Susut Pengerinan	5,21%
2	Kadar Abu Total	Berat residu = 0,196 gram Berat simplisia = 2 gram <u>Perhitungan:</u> $\text{Kadar Abu Total (\%)} = \frac{0,196}{2} \times 100\% = 9,80\%$
3	Kadar Abu Tidak Larut Asam	Berat residu = 0,0174 gram Berat simplisia = 2 gram <u>Perhitungan:</u> $\text{Kadar Abu Tidak Larut Asam (\%)} = \frac{0,0174}{2} \times 100\% = 0,87\%$
4	Kadar Sari Larut Air	Berat residu = 0,1087 gram Berat simplisia = 5 gram Volume filtrat diambil = 20 mL dari 100 mL <u>Perhitungan:</u> $\text{Kadar Sari Larut Air (\%)} = \frac{0,1087}{5} \times \frac{100}{20} \times 100\% = 10,87\%$
5	Kadar Sari Larut Etanol	Berat residu = 0,064 gram Berat simplisia = 5 gram Volume filtrat diambil = 20 mL dari 100 mL <u>Perhitungan:</u> $\text{Kadar Sari Larut Etanol (\%)} = \frac{0,064}{5} \times \frac{100}{20} \times 100\% = 6,40\%$

Lampiran 6 Skrining Fitokimia

			
Alkaloid (Wagner +)	Alkaloid (Mayer +)	Alkaloid (Dragendorf +)	Flavonoid (+)
			
Tanin (+)	Saponin (+)	Steroid/Terpenoid (+)	

Lampiran 7 Ekstraksi Daun Girang (*Leea indica*)

		
Penyaringan	Hasil Maserasi	Pemekatan Ekstrak
		
Pemanasan di Waterbath	Ekstrak Kental	

Lampiran 8 Perhitungan Pembuatan Sediaan dan Volume Pemberian

1. Larutan Na-CMC 0,5% = 0,5 gram ad 100 mL
2. Furosemide 40 mg

Konversi $= 40 \text{ mg} \times 0,018 = 0,72 \text{ mg}/200 \text{ gram BB}$

Volume pemberian $= \frac{0,72 \text{ mg}}{40 \text{ mg}} \times 100 \text{ mL} = 1,8 \text{ mL} \sim 2 \text{ mL}/200 \text{ gram BB}$

Volume pemberian tikus $= \frac{\text{bobot tikus}}{200 \text{ gram}} \times 2 \text{ mL}$
3. Larutan Ekstrak 50 mg

Jumlah ekstrak yang dibutuhkan $= 50 \text{ mg/Kg BB} \times 0,2 \text{ Kg} = 10 \text{ mg}$

Pembuatan larutan stok $= \frac{10 \text{ mg}}{2 \text{ ml}} = 5 \text{ mg/mL} \times 50 \text{ mL}$
 $= 250 \text{ mg}/50 \text{ mL}$
4. Larutan Ekstrak 100 mg

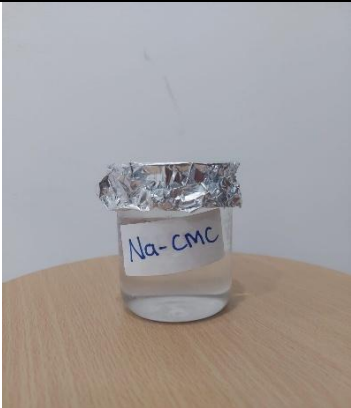
Jumlah ekstrak yang dibutuhkan $= 100 \text{ mg/Kg BB} \times 0,2 \text{ Kg} = 20 \text{ mg}$

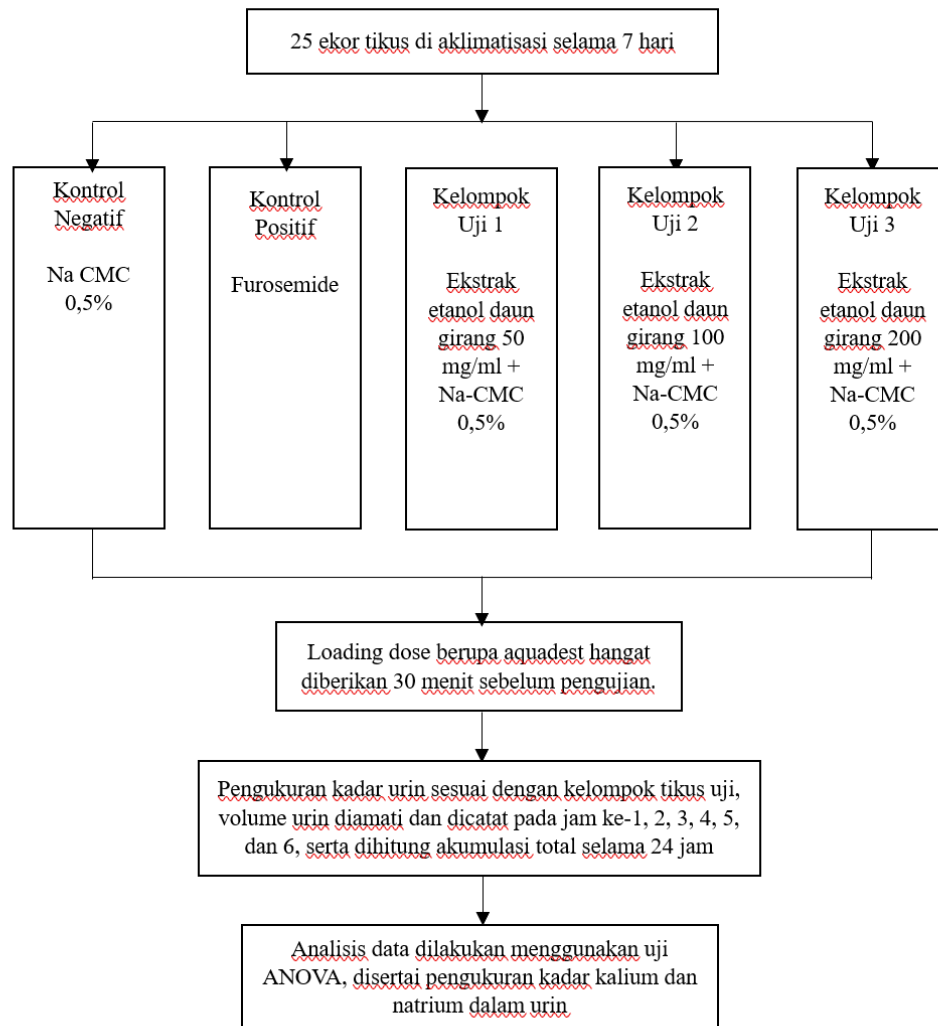
Pembuatan larutan stok $= \frac{20 \text{ mg}}{2 \text{ ml}} = 10 \text{ mg/mL} \times 50 \text{ mL}$
 $= 500 \text{ mg}/50 \text{ mL}$
5. Larutan Ekstrak 200 mg

Jumlah ekstrak yang dibutuhkan $= 200 \text{ mg/Kg BB} \times 0,2 \text{ Kg} = 40 \text{ mg}$

Pembuatan larutan stok $= \frac{40 \text{ mg}}{2 \text{ ml}} = 20 \text{ mg/mL} \times 50 \text{ mL}$
 $= 1000 \text{ mg}/50 \text{ mL}$

Lampiran 9 Sediaan Larutan Uji

	
Na CMC 0,5% (Kontrol Negatif)	Furosemide (Kontrol Positif)
	
Ekstrak Daun Girang (<i>Leea indica</i>)	

Lampiran 10 Prosedur Pengujian Diuretik

Lampiran 11 Data Volume Urin

KONTROL NEGATIF	Bobot Tikus (gram)	Volume Urin							Total Volume
		Jam ke 1	Jam ke 2	Jam ke 3	Jam ke 4	Jam ke 5	Jam ke 6	Jam ke 7- 24	
Tikus 1	223	0.86 (ml)	0.88 (ml)	1.14 (ml)	1.26 (ml)	1.1 (ml)	0.66 (ml)	3.2 (ml)	9.10 (ml)
Tikus 2	256	0 (ml)	0.22 (ml)	0.82 (ml)	0.88 (ml)	0.64 (ml)	1.17 (ml)	4.98 (ml)	8.71 (ml)
Tikus 3	236	0.32 (ml)	1.08 (ml)	1.12 (ml)	0.98 (ml)	1.06 (ml)	0.76 (ml)	2.52 (ml)	7.84 (ml)
Tikus 4	245	0.6 (ml)	0.82 (ml)	0.94 (ml)	1.12 (ml)	0.78 (ml)	1.02 (ml)	3.7 (ml)	8.98 (ml)
Tikus 5	234	0.4 (ml)	0.46 (ml)	0.62 (ml)	0.9 (ml)	0.34 (ml)	0.9 (ml)	6.5 (ml)	9.12 (ml)
KONTROL POSITIF	Bobot Tikus (gram)	Volume Urin							Total Volume
		Jam ke 1	Jam ke 2	Jam ke 3	Jam ke 4	Jam ke 5	Jam ke 6	Jam ke 7- 24	
Tikus 1	289	1.22 (ml)	1.52 (ml)	1.4 (ml)	1.38 (ml)	1.8 (ml)	2 (ml)	7.3 (ml)	16.62 (ml)
Tikus 2	246	1.4 (ml)	1.66 (ml)	1.28 (ml)	1.86 (ml)	1.96 (ml)	2.12 (ml)	8.8 (ml)	19.08 (ml)
Tikus 3	275	1.38 (ml)	1.22 (ml)	1.44 (ml)	2.02 (ml)	1.62 (ml)	2.44 (ml)	7.3 (ml)	17.42 (ml)
Tikus 4	267	1.46 (ml)	2.08 (ml)	1.46 (ml)	1.86 (ml)	1.82 (ml)	1.96 (ml)	10.42 (ml)	21.06 (ml)
Tikus 5	242	1.12 (ml)	1.46 (ml)	1.88 (ml)	2.34 (ml)	1.98 (ml)	1.62 (ml)	8.62 (ml)	18.98 (ml)
DOSIS 1	Bobot Tikus (gram)	Volume Urin							Total Volume
		Jam ke 1	Jam ke 2	Jam ke 3	Jam ke 4	Jam ke 5	Jam ke 6	Jam ke 7- 24	
Tikus 1	236	1.82 (ml)	1.86 (ml)	2.32 (ml)	1.88 (ml)	1.68 (ml)	1.72 (ml)	6.2 (ml)	17.48 (ml)
Tikus 2	259	2.1 (ml)	2.14 (ml)	1.62 (ml)	0.82 (ml)	1.42 (ml)	0.8 (ml)	5.86 (ml)	14.76 (ml)
Tikus 3	231	2.26 (ml)	2.62 (ml)	1.74 (ml)	1.42 (ml)	1.48 (ml)	1.64 (ml)	5.22 (ml)	16.38 (ml)
Tikus 4	202	1.04 (ml)	1.2 (ml)	0.82 (ml)	2.4 (ml)	1.62 (ml)	1.32 (ml)	7.12 (ml)	15.52 (ml)
Tikus 5	219	1.4 (ml)	1.86 (ml)	1.36 (ml)	1.84 (ml)	2.04 (ml)	1.6 (ml)	6.98 (ml)	17.08 (ml)
DOSIS 2	Bobot Tikus (gram)	Volume Urin							Total Volume
		Jam ke 1	Jam ke 2	Jam ke 3	Jam ke 4	Jam ke 5	Jam ke 6	Jam ke 7- 24	
Tikus 1	236	2.02 (ml)	1.88 (ml)	1.84 (ml)	1.76 (ml)	2.14 (ml)	1.98 (ml)	8.66 (ml)	20.28 (ml)
Tikus 2	236	2.14 (ml)	1.76 (ml)	2.62 (ml)	2.12 (ml)	1.9 (ml)	1.62 (ml)	6.44 (ml)	18.60 (ml)
Tikus 3	237	1.52 (ml)	1.48 (ml)	1.24 (ml)	2.08 (ml)	2.24 (ml)	1.86 (ml)	10.08 (ml)	20.50 (ml)
Tikus 4	255	2.08 (ml)	2.26 (ml)	2.04 (ml)	2.22 (ml)	2.12 (ml)	2.92 (ml)	10.2 (ml)	23.84 (ml)
Tikus 5	220	1.12 (ml)	0.86 (ml)	2.04 (ml)	2.18 (ml)	2.34 (ml)	2.22 (ml)	6.86 (ml)	17.62 (ml)
DOSIS 3	Bobot Tikus (gram)	Volume Urin							Total Volume
		Jam ke 1	Jam ke 2	Jam ke 3	Jam ke 4	Jam ke 5	Jam ke 6	Jam ke 7- 24	
Tikus 1	247	2.38 (ml)	1.44 (ml)	2.88 (ml)	2.04 (ml)	2.28 (ml)	2.38 (ml)	8.82 (ml)	22.22 (ml)
Tikus 2	254	2.14 (ml)	2.02 (ml)	2.62 (ml)	2.68 (ml)	2.74 (ml)	3.26 (ml)	6.14 (ml)	21.60 (ml)
Tikus 3	251	1.22 (ml)	2.36 (ml)	2.66 (ml)	2.46 (ml)	1.94 (ml)	1.98 (ml)	8.34 (ml)	20.96 (ml)
Tikus 4	204	2.3 (ml)	2.22 (ml)	2.3 (ml)	1.84 (ml)	1.92 (ml)	2.12 (ml)	9.76 (ml)	22.34 (ml)
Tikus 5	253	2.12 (ml)	2.16 (ml)	2.34 (ml)	2.18 (ml)	2.44 (ml)	2.78 (ml)	10.98 (ml)	24.00 (ml)

Lampiran 12 Hasil SPSS Volume Urin

Tests of Normality							
jam	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
negatif	1	.159	5	.200 [*]	.993	5	.988
	2	.244	5	.200 [*]	.946	5	.706
	3	.212	5	.200 [*]	.927	5	.577
	4	.218	5	.200 [*]	.908	5	.466
	5	.210	5	.200 [*]	.934	5	.622
	6	.158	5	.200 [*]	.981	5	.941
positif	24	.219	5	.200 [*]	.948	5	.726
	1	.275	5	.200 [*]	.913	5	.485
	2	.210	5	.200 [*]	.952	5	.750
	3	.356	5	.037	.822	5	.122
	4	.263	5	.200 [*]	.951	5	.747
	5	.203	5	.200 [*]	.916	5	.503
dosis1	6	.209	5	.200 [*]	.973	5	.894
	24	.221	5	.200 [*]	.889	5	.354
	1	.176	5	.200 [*]	.950	5	.736
	2	.241	5	.200 [*]	.962	5	.825
	3	.180	5	.200 [*]	.987	5	.969
	4	.212	5	.200 [*]	.969	5	.871
dosis2	5	.248	5	.200 [*]	.899	5	.405
	6	.288	5	.200 [*]	.839	5	.163
	24	.213	5	.200 [*]	.939	5	.662
	1	.310	5	.132	.847	5	.186
	2	.185	5	.200 [*]	.968	5	.880
	3	.233	5	.200 [*]	.950	5	.738
dosis3	4	.317	5	.111	.816	5	.110
	5	.232	5	.200 [*]	.959	5	.803
	6	.220	5	.200 [*]	.916	5	.504
	24	.224	5	.200 [*]	.870	5	.268
	1	.375	5	.021	.761	5	.037
	2	.278	5	.200 [*]	.854	5	.208
	3	.220	5	.200 [*]	.923	5	.549
	4	.171	5	.200 [*]	.977	5	.916
	5	.225	5	.200 [*]	.921	5	.537
	6	.194	5	.200 [*]	.940	5	.667
	24	.197	5	.200 [*]	.978	5	.921

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
negatif	8.508	6	28	.000
positif	4.456	6	28	.003
dosis1	1.153	6	28	.359
dosis2	8.625	6	28	.000
dosis3	3.170	6	28	.017

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) jam	(J) jam	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
negatif	1	2	-.25600	.40899	.995	-1.5534	1.0414
		3	-.49200	.40899	.887	-1.7894	.8054
		4	-.59200	.40899	.772	-1.8894	.7054
		5	-.34800	.40899	.977	-1.6454	.9494
		6	-.46600	.40899	.910	-1.7634	.8314
		24	-3.74400 [*]	.40899	.000	-5.0414	-2.4466
	2	1	.25600	.40899	.995	-1.0414	1.5534
		3	-.23600	.40899	.997	-1.5334	1.0614
		4	-.33600	.40899	.981	-1.6334	.9614
		5	-.09200	.40899	1.000	-1.3894	1.2054
		6	-.21000	.40899	.998	-1.5074	1.0874
		24	-3.48800 [*]	.40899	.000	-4.7854	-2.1906
	3	1	.49200	.40899	.887	-.8054	1.7894
		2	.23600	.40899	.997	-1.0614	1.5334
		4	-.10000	.40899	1.000	-1.3974	1.1974
		5	.14400	.40899	1.000	-1.1534	1.4414
		6	.02600	.40899	1.000	-1.2714	1.3234
		24	-3.25200 [*]	.40899	.000	-4.5494	-1.9546
	4	1	.59200	.40899	.772	-.7054	1.8894
		2	.33600	.40899	.981	-.9614	1.6334
		3	.10000	.40899	1.000	-1.1974	1.3974
		5	.24400	.40899	.998	-1.0534	1.5414
		6	.12600	.40899	1.000	-1.1714	1.4234
		24	-3.15200 [*]	.40899	.000	-4.4494	-1.8546

positif	5	1	.34800	.40899	.911	-.8499	1.0404
		2	.09200	.40899	1.000	-1.2054	1.3894
		3	-.14400	.40899	1.000	-1.4414	1.1534
		4	-.24400	.40899	.998	-1.5414	1.0534
		6	-.11800	.40899	1.000	-1.4154	1.1794
		24	-3.39800	.40899	.000	-4.6934	-2.0986
	6	1	.46600	.40899	.910	-.8314	1.7634
		2	.21000	.40899	.998	-1.0874	1.5074
		3	-.02600	.40899	1.000	-1.3234	1.2714
		4	-.12600	.40899	1.000	-1.4234	1.1714
		5	.11800	.40899	1.000	-1.1794	1.4154
		24	-3.27800	.40899	.000	-4.5754	-1.9806
	24	1	3.74400	.40899	.000	2.4468	5.0414
		2	3.48800	.40899	.000	2.1908	4.7854
		3	3.25200	.40899	.000	1.9548	4.5494
		4	3.15200	.40899	.000	1.8548	4.4494
		5	3.39800	.40899	.000	2.0988	4.6934
		6	3.27800	.40899	.000	1.9808	4.5754
	1	2	-.27200	.34386	.984	-1.3628	.8188
		3	-.17600	.34386	.998	-1.2668	.9148
		4	-.57600	.34386	.637	-1.6668	.5148
		5	-.52000	.34386	.735	-1.6108	.5708
		6	-.71200	.34386	.396	-1.8028	.3788
		24	-7.17200	.34386	.000	-8.2628	-6.0812
	2	1	.27200	.34386	.984	-.8188	1.3628
		3	.09600	.34386	1.000	-.9948	1.1888
		4	-.30400	.34386	.972	-1.3948	.7888
		5	-.24800	.34386	.990	-1.3388	.8428
		6	-.44000	.34386	.855	-1.5308	.6508
		24	-6.90000	.34386	.000	-7.9908	-5.8092
	3	1	.17600	.34386	.998	-.9148	1.2668
		2	-.09600	.34386	1.000	-1.1868	.9948
		4	-.40000	.34386	.902	-1.4908	.6908
		5	-.34400	.34386	.950	-1.4348	.7468
		6	-.53600	.34386	.708	-1.6268	.5548
		24	-6.99600	.34386	.000	-8.0868	-5.9052
	4	1	.57600	.34386	.637	-.5148	1.6668

dosis1	5	2	.30400	.34386	.972	-.7868	1.3948
		3	.40000	.34386	.902	-.6908	1.4908
		5	.05600	.34386	1.000	-1.0348	1.1468
		6	-.13600	.34386	1.000	-1.2268	.9548
		24	-6.59600 [†]	.34386	.000	-7.6868	-5.5052
		1	.52000	.34386	.735	-.5708	1.6108
		2	.24800	.34386	.990	-.8428	1.3388
		3	.34400	.34386	.950	-.7468	1.4348
		4	-.05600	.34386	1.000	-1.1468	1.0348
		6	-.19200	.34386	.998	-1.2828	.8988
		24	-6.65200 [†]	.34386	.000	-7.7428	-5.5612
		1	.71200	.34386	.396	-.3788	1.8028
		2	.44000	.34386	.855	-.6508	1.5308
		3	.53600	.34386	.708	-.5548	1.6268
		4	.13600	.34386	1.000	-.9548	1.2268
		5	.19200	.34386	.998	-.8988	1.2828
		24	-6.46000 [†]	.34386	.000	-7.5508	-5.3692
		1	7.17200 [†]	.34386	.000	6.0812	8.2628
		2	6.90000 [†]	.34386	.000	5.8092	7.9908
		3	6.99600 [†]	.34386	.000	5.9052	8.0868
		4	6.59600 [†]	.34386	.000	5.5052	7.6868
		5	6.65200 [†]	.34386	.000	5.5612	7.7428
		6	6.46000 [†]	.34386	.000	5.3692	7.5508
	6	2	-.21200	.33737	.995	-1.2822	.8582
		3	.15200	.33737	.999	-.9182	1.2222
		4	.05200	.33737	1.000	-1.0182	1.1222
		5	.07600	.33737	1.000	-.9942	1.1462
		6	.30800	.33737	.967	-.7622	1.3782
		24	-4.55200 [†]	.33737	.000	-5.6222	-3.4818
		1	.21200	.33737	.995	-.8582	1.2822
		3	.36400	.33737	.929	-.7062	1.4342
		4	.26400	.33737	.985	-.8062	1.3342
		5	.28800	.33737	.977	-.7822	1.3582
		6	.52000	.33737	.718	-.5502	1.5902
		24	-4.34000 [†]	.33737	.000	-5.4102	-3.2698
		1	-.15200	.33737	.999	-1.2222	.9182
		2	-.36400	.33737	.929	-1.4342	.7062
		4	-.10000	.33737	1.000	-1.1702	.9702
		5	-.07600	.33737	1.000	-1.1462	.9942
		6	.15600	.33737	.999	-.9142	1.2262
		24	-4.70400 [†]	.33737	.000	-5.7742	-3.6338
	4	1	-.05200	.33737	1.000	-1.1222	1.0182
		2	-.26400	.33737	.985	-1.3342	.8062

dosis2	5	3	.10000	.33737	1.000	-.9702	1.1702
		5	.02400	.33737	1.000	-1.0462	1.0942
		6	.25600	.33737	.987	-.8142	1.3262
		24	-4.60400	.33737	.000	-5.6742	-3.5338
		1	-.07600	.33737	1.000	-1.1462	.9942
		2	-.28800	.33737	.977	-1.3582	.7822
		3	.07600	.33737	1.000	-.9942	1.1462
		4	-.02400	.33737	1.000	-1.0942	1.0462
		6	.23200	.33737	.992	-.8382	1.3022
		24	-4.62800	.33737	.000	-5.6982	-3.5578
		1	-.30800	.33737	.967	-1.3782	.7622
		2	-.52000	.33737	.718	-1.5902	.5502
		3	-.15600	.33737	.999	-1.2262	.9142
		4	-.25600	.33737	.987	-1.3262	.8142
		5	-.23200	.33737	.992	-1.3022	.8382
		24	-4.86000	.33737	.000	-5.9302	-3.7898
		1	4.55200	.33737	.000	3.4818	5.6222
		2	4.34000	.33737	.000	3.2698	5.4102
		3	4.70400	.33737	.000	3.6338	5.7742
		4	4.60400	.33737	.000	3.5338	5.6742
		5	4.62800	.33737	.000	3.5578	5.6982
		6	4.86000	.33737	.000	3.7898	5.9302
	1	2	.12800	.48420	1.000	-1.4079	1.6639
		3	-.18000	.48420	1.000	-1.7159	1.3559
		4	-.29600	.48420	.996	-1.8319	1.2399
		5	-.37200	.48420	.986	-1.9079	1.1639
		6	-.34400	.48420	.991	-1.8799	1.1919
		24	-6.67200	.48420	.000	-8.2079	-5.1361
		1	-.12800	.48420	1.000	-1.6639	1.4079
		3	-.30800	.48420	.995	-1.8439	1.2279
	2	4	-.42400	.48420	.973	-1.9599	1.1119
		5	-.50000	.48420	.942	-2.0359	1.0359
		6	-.47200	.48420	.955	-2.0079	1.0639
		24	-6.80000	.48420	.000	-8.3359	-5.2641
		1	.18000	.48420	1.000	-1.3559	1.7159
	3	2	.30800	.48420	.995	-1.2279	1.8439
		4	-.11600	.48420	1.000	-1.6519	1.4199
		5	-.19200	.48420	1.000	-1.7279	1.3439
		6	-.16400	.48420	1.000	-1.6999	1.3719
		24	-6.49200	.48420	.000	-8.0279	-4.9561
	4	1	.29600	.48420	.996	-1.2399	1.8319
		2	.42400	.48420	.973	-1.1119	1.9599
		3	.11600	.48420	1.000	-1.4199	1.6519

dosis3	5	5	-.07600	.48420	1.000	-1.6119	1.4599
		6	-.04800	.48420	1.000	-1.5839	1.4879
		24	-6.37600	.48420	.000	-7.9119	-4.8401
		1	.37200	.48420	.988	-1.1639	1.9079
		2	.50000	.48420	.942	-1.0359	2.0359
		3	.19200	.48420	1.000	-1.3439	1.7279
		4	.07600	.48420	1.000	-1.4599	1.6119
		6	.02800	.48420	1.000	-1.5079	1.5639
	6	24	-6.30000	.48420	.000	-7.8359	-4.7641
		1	.34400	.48420	.991	-1.1919	1.8799
		2	.47200	.48420	.955	-1.0639	2.0079
		3	.16400	.48420	1.000	-1.3719	1.6999
		4	.04800	.48420	1.000	-1.4879	1.5839
		5	-.02800	.48420	1.000	-1.5639	1.5079
		24	-6.32800	.48420	.000	-7.8639	-4.7921
	24	1	6.67200	.48420	.000	5.1361	8.2079
		2	6.80000	.48420	.000	5.2641	8.3359
		3	6.49200	.48420	.000	4.9561	8.0279
		4	6.37600	.48420	.000	4.8401	7.9119
		5	6.30000	.48420	.000	4.7641	7.8359
		6	6.32800	.48420	.000	4.7921	7.8639
	1	2	-.00800	.48677	1.000	-1.5521	1.5361
		3	-.52800	.48677	.927	-2.0721	1.0161
		4	-.20800	.48677	.999	-1.7521	1.3361
		5	-.23200	.48677	.999	-1.7761	1.3121
		6	-.47200	.48677	.956	-2.0161	1.0721
		24	-6.77600	.48677	.000	-8.3201	-5.2319
	2	1	.00800	.48677	1.000	-1.5361	1.5521
		3	-.52000	.48677	.932	-2.0641	1.0241
		4	-.20000	.48677	1.000	-1.7441	1.3441
		5	-.22400	.48677	.999	-1.7681	1.3201
		6	-.46400	.48677	.960	-2.0081	1.0801
		24	-6.76800	.48677	.000	-8.3121	-5.2239
	3	1	.52800	.48677	.927	-1.0161	2.0721
		2	.52000	.48677	.932	-1.0241	2.0641
		4	.32000	.48677	.994	-1.2241	1.8641
		5	.29600	.48677	.996	-1.2481	1.8401
		6	.05600	.48677	1.000	-1.4881	1.6001
		24	-6.24800	.48677	.000	-7.7921	-4.7039
	4	1	.20800	.48677	.999	-1.3361	1.7521
		2	.20000	.48677	1.000	-1.3441	1.7441

	3	-.32000	.48677	.994	-1.8641	1.2241
	5	-.02400	.48677	1.000	-1.5681	1.5201
	6	-.26400	.48677	.998	-1.8081	1.2801
	24	-6.56800 [*]	.48677	.000	-8.1121	-5.0239
5	1	.23200	.48677	.999	-1.3121	1.7761
	2	.22400	.48677	.999	-1.3201	1.7681
	3	-.29800	.48677	.998	-1.8401	1.2481
	4	.02400	.48677	1.000	-1.5201	1.5681
	6	-.24000	.48677	.999	-1.7841	1.3041
	24	-6.54400 [*]	.48677	.000	-8.0881	-4.9999
6	1	.47200	.48677	.956	-1.0721	2.0161
	2	.46400	.48677	.960	-1.0801	2.0081
	3	-.05600	.48677	1.000	-1.6001	1.4881
	4	.26400	.48677	.998	-1.2801	1.8081
	5	.24000	.48677	.999	-1.3041	1.7841
	24	-6.30400 [*]	.48677	.000	-7.8481	-4.7599
24	1	6.77600 [*]	.48677	.000	5.2319	8.3201
	2	6.76800 [*]	.48677	.000	5.2239	8.3121
	3	6.24800 [*]	.48677	.000	4.7039	7.7921
	4	6.56800 [*]	.48677	.000	5.0239	8.1121
	5	6.54400 [*]	.48677	.000	4.9999	8.0881
	6	6.30400 [*]	.48677	.000	4.7599	7.8481

ANOVA

dosis1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	92.004	6	15.334	53.888	.000
Within Groups	7.968	28	.285		
Total	99.972	34			

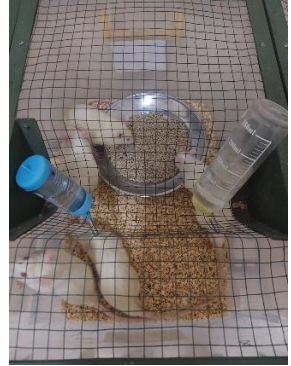
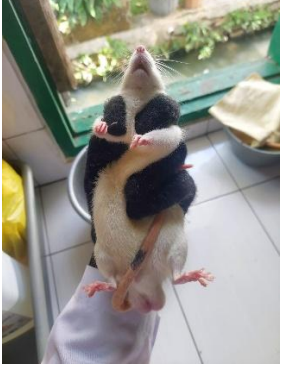
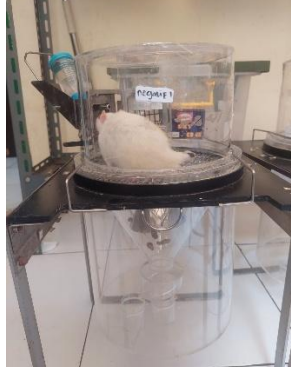
Test Statistics^a

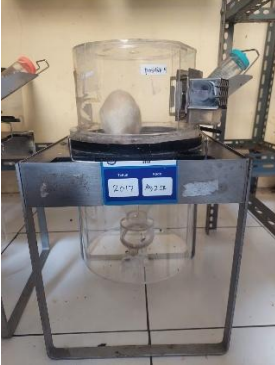
	negatif	positif	dosis2	dosis3
Chi-Square	10.742	15.057	5.638	6.329
df	5	5	5	5
Asymp. Sig.	.057	.010	.343	.275

a. Kruskal Wallis Test

b. Grouping Variable: jam

Lampiran 13 Pengamatan Pengujian Diuretik

		
Pakan Tikus	Pakan Tikus Untuk 5 Ekor	Pembagian Kelompok Tikus
		
Aklimatisasi Tikus	Tikus di Puasakan Sebelum Pengujian	Proses Oral Tikus
		
Tikus 1 (Kontrol Negatif)	Tikus 2 (Kontrol Negatif)	Tikus 3 (Kontrol Negatif)

		
Tikus 4 (Kontrol Negatif)	Tikus 5 (Kontrol Negatif)	Tikus 1 (Kontrol Positif)
		
Tikus 2 (Kontrol Positif)	Tikus 3 (Kontrol Positif)	Tikus 4 (Kontrol Positif)
		
Tikus 5 (Kontrol Positif)	Tikus 1 (Dosis 1)	Tikus 2 (Dosis 1)

		
Tikus 3 (Dosis 1)	Tikus 4 (Dosis 1)	Tikus 5 (Dosis 1)
		
Tikus 1 (Dosis 2)	Tikus 2 (Dosis 2)	Tikus 3 (Dosis 2)
		
Tikus 4 (Dosis 2)	Tikus 5 (Dosis 2)	Tikus 1 (Dosis 3)

		
Tikus 2 (Dosis 3)	Tikus 3 (Dosis 3)	Tikus 4 (Dosis 3)
		
Tikus 5 (Dosis 3)	Hasil Pengukuran Volume Urin	

Lampiran 14 Perhitungan Indeks Aktivitas Diuretik (IAD)

$$1. \text{ Kontrol Negatif} = \frac{9.10+8.71+7.84+8.98+9.12}{5} = \frac{43.75}{5} = 8.75 \text{ ml}$$

$$2. \text{ Kontrol Positif} = \frac{16.62+19.08+17.42+21.06+18.98}{5} = \frac{93.16}{5} = 18.63 \text{ ml}$$

$$\text{IAD} = \frac{18.63}{8.75} = 2.13$$

$$3. \text{ Dosis 1} = \frac{17.48+14.76+16.38+15.52+17.08}{5} = \frac{81.22}{5} = 16.24 \text{ ml}$$

$$\text{IAD} = \frac{16.24}{8.75} = 1.86$$

$$4. \text{ Dosis 2} = \frac{20.28+18.60+20.50+23.84+17.62}{5} = \frac{100.84}{5} = 20.17 \text{ ml}$$

$$\text{IAD} = \frac{20.17}{8.75} = 2.30$$

$$5. \text{ Dosis 3} = \frac{22.22+21.60+20.96+22.34+24.00}{5} = \frac{111.12}{5} = 22.22 \text{ ml}$$

$$\text{IAD} = \frac{22.22}{8.75} = 2.54$$

Lampiran 15 Pengukuran Kadar Natrium (Na^+) dan Kalsium (Ca^{2+}) Urin



KEMENTERIAN PENDIDIKAN TINGGI, SAINS DAN TEKNOLOGI

UNIVERSITAS PADJADJARAN

DIREKTORAT PENGELOLAAN BISNIS

LABORATORIUM SENTRAL

Jalan Raya Bandung-Sumedang Km.21 Jatinangor 453636

Website: www.unpad.ac.id, Email : info.labsentral@unpad.ac.id

LAPORAN HASIL UJI

TEST REPORT

Hari/Day : Kamis/Thursday
Tgl./Date : 19 Juni 2025
Hal./Page : 1 dari 2
No./ Number : 205/LP-Unpad/HU/VI/2025
No. Analisis / No. Analysis : S-290/LS-AK.146/2025
Lampiran / Attachment : 1 berkas

Yth.
Muhammad Dodit Rinaldi
di tempat

Yang bertanda tangan di bawah ini menerangkan, bahwa hasil pengujian
The undersigned below describe that the testing of

Contoh : 10 Sampel urin
Sample (s)

Kode Contoh : Terlampir
Sample Code

Untuk Analisis : Penentuan kadar Ca dan Na dengan metode AAS
For Analysis

Keterangan Pengemasan contoh : Dikemas dalam vial
Description Packaging of Sample

Diterima Oleh : Witriany Rayapratwi, S.Si.
Received By

Tanggal Penerimaan Contoh : 17 Juni 2025
Date of Sample Receipt

Tanggal Pengujian Contoh : 19 Juni 2025
Date of Sample Analysis

Hasil sebagai berikut :
The Result to as Follows



Direktur Laboratorium,

Prof. Dr. Ungang Supratman
NIP. 196607041991011001

HASIL PENGUJIAN INI TIDAK UNTUK
DIGANDAKAN
DAN HANYA BERLAKU UNTUK CONTOH-CONTOH
TERSEBUT DIATAS
PENGAMBIL CONTOH BERTANGGUNGJAWAB ATAS
KEBENARAN TANDING BARANG

1 | LS/Form/Adm-15.00/00



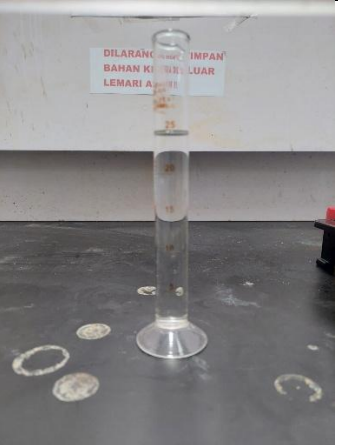
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 Website: www.unpad.ac.id, Email : info.labsentral@unpad.ac.id

Lampiran Hasil Uji

No	Sample ID	Kadar (mg/L)
1	Sampel 1 Ca (Negatif)	0,300
2	Sampel 2 Ca (Positif)	1,108
3	Sampel 3 Ca (Uji 1)	0,418
4	Sampel 4 Ca (Uji 2)	0,360
5	Sampel 5 Ca (Uji 3)	0,302
6	Sampel 1 Na (Negatif)	1,175
7	Sampel 2 Na (Positif)	1,912
8	Sampel 3 Na (Uji 1)	4,035
9	Sampel 4 Na (Uji 2)	2,767
10	Sampel 5 Na (Uji 3)	1,737

HASIL PENGUJIAN INI TIDAK UNTUK
 DIGANDAKAN
 DAN HANYA BERLAKU UNTUK CONTOH-CONTOH
 TERSEBUT DIATAS
 PENGAMBIL CONTOH BERTANGGUNGJAWAB ATAS
 KEBENARAN TANDING BARANG

		
Urin Tikus	HNO3 Pekat	HNO3 Pekat 25 mL
		
Pemanasan Destruksi Urin di Lemari Asam	Pemanasan Destruksi Urin di Lemari Asam	Hasil Destruksi Urin

Lampiran 16 Bukti cek plagiarisme

Muhammad Dodit Rinaldi_231FF04024_DRAFT KOMPRE

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Lampiran 17 Bimbingan tugas akhir

No	Tanggal	Pembimbing Proposal	Topik	Disetujui	Aksi
1	8 Oktober 2024	Dr. apt. Widhya Aligita, M.Si.	Perkenalan dan diskusi tema judul	✓	
1	24 Oktober 2024	Dr. apt. Ika Kurnia Sukmawati, M.Si	Perkenalan data diri mahasiswa	✓	
2	17 Oktober 2024	Dr. apt. Widhya Aligita, M.Si.	Diskusi tema judul penelitian	✓	
2	8 November 2024	Dr. apt. Ika Kurnia Sukmawati, M.Si	Pengajuan laporan kemajuan	✓	
3	9 November 2024	Dr. apt. Ika Kurnia Sukmawati, M.Si	laporan pengajuan	✓	
3	22 Oktober 2024	Dr. apt. Widhya Aligita, M.Si.	Pengajuan tema judul penelitian	✓	
4	15 November 2024	Dr. apt. Ika Kurnia Sukmawati, M.Si	bimbingan proposal	✓	
4	8 November 2024	Dr. apt. Widhya Aligita, M.Si.	Pengajuan laporan kemajuan	✓	
5	20 Desember 2024	Dr. apt. Ika Kurnia Sukmawati, M.Si	Pengajuan laporan kemajuan	✓	
5	25 November 2024	Dr. apt. Widhya Aligita, M.Si.	bimbingan proposal	✓	
6	7 November 2024	Dr. apt. Widhya Aligita, M.Si.	bimbingan proposal	✓	
6	14 Januari 2025	Dr. apt. Ika Kurnia Sukmawati, M.Si	bimbingan proposal	✓	
7	16 Januari 2025	Dr. apt. Ika Kurnia Sukmawati, M.Si	bimbingan proposal	✓	
7	18 Desember 2024	Dr. apt. Widhya Aligita, M.Si.	bimbingan proposal	✓	
8	20 Desember 2024	Dr. apt. Widhya Aligita, M.Si.	laporan pengajuan 2	✓	
8	17 Januari 2025	Dr. apt. Ika Kurnia Sukmawati, M.Si	pengajuan draft seminar proposal	✓	
9	16 Januari 2025	Dr. apt. Widhya Aligita, M.Si.	pengajuan draft seminar proposal	✓	

No	Tanggal	Dosen Pembimbing	Topik	Disetujui	Aksi
8	13 Februari 2025	Dr. apt. Widhya Aligita, M.Si.	pembelian tikus batch 1	✓	
9	30 April 2025	Dr. apt. Ika Kurnia Sukmawati, M.Si	pembahasan penggantian metode	✓	
9	14 Februari 2025	Dr. apt. Widhya Aligita, M.Si.	surat izin determinasi	✓	
10	5 Mei 2025	Dr. apt. Ika Kurnia Sukmawati, M.Si	bimbingan proposal	✓	
10	5 Maret 2025	Dr. apt. Widhya Aligita, M.Si.	pengambilan t0	✓	
10	6 Mei 2025	Dr. apt. Ika Kurnia Sukmawati, M.Si	bimbingan proposal	✓	
11	18 Maret 2025	Dr. apt. Widhya Aligita, M.Si.	pembuatan induksi pakan	✓	
11	26 Juni 2025	Dr. apt. Ika Kurnia Sukmawati, M.Si	bimbingan proposal	✓	
12	30 Juni 2025	Dr. apt. Ika Kurnia Sukmawati, M.Si	bimbingan proposal	✓	

12	24 April 2025	Dr. apt. Widhya Aligita, M.Si.	pembahasan tentang t akhir	✓	 
13	5 Mei 2025	Dr. apt. Widhya Aligita, M.Si.	kemajuan 1 ta 2	✓	 
13	1 Juli 2025	Dr. apt. Ika Kurnia Sukmawati, M.Si	bimbingan proposal	✓	 
14	4 Juli 2025	Dr. apt. Ika Kurnia Sukmawati, M.Si	bimbingan proposal	✓	 
14	23 Mei 2025	Dr. apt. Widhya Aligita, M.Si.	bimbingan prosedur	✓	 
15	12 Juni 2025	Dr. apt. Widhya Aligita, M.Si.	Pengajuan laporan kemajuan	✓	 
15	10 Juli 2025	Dr. apt. Ika Kurnia Sukmawati, M.Si	bimbingan proposal	✓	 
16	16 Juni 2025	Dr. apt. Widhya Aligita, M.Si.	bimbingan proposal	✓	 
17	9 Juli 2025	Dr. apt. Widhya Aligita, M.Si.	bimbingan proposal	✓	 
18	10 Juli 2025	Dr. apt. Widhya Aligita, M.Si.	bimbingan proposal	✓	 

Lampiran 18 *Curriculum Vitae***BIODATA**

Nama lengkap : Muhammad Dodit Rinaldi
Nama panggilan : Dodit
Tempat/Tanggal lahir : Sumedang, 05 Desember 1999
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Kecamatan Sumedang Utara, Kabupaten
Sumedang, Jawa Barat
Email : 231ff04024@bku.ac.id
Nama Ayah : Dyki Darmadi
Nama Ibu : Endang Yulyanthi