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LAMPIRAN 1											
Kadar Glukosa Darah Pada Tikus Putih											
Kelompok Tikus	Berat Badan	KGD Sewaktu	KGD Puasa	Setelah Pemberian Glukosa							
				15'	30'	45'	60'	75'	90'	105'	120'
	204.64	119	89	118	122	148	159	146	131	118	117
	188.22	111	73	110	147	184	167	147	130	112	109
CMC 1%	184.96	125	72	108	143	178	200	180	162	144	124
	186.76	116	87	120	132	185	218	192	166	140	116
	193.54	112	84	118	152	186	220	192	166	139	110
Rata-rata	191.62	117	81	115	139	176	193	171	151	131	115
	209.20	110	110	110	110	110	110	110	110	110	110
	191.78	111	79	133	111	111	104	105	99	94	88
GLIBENKLAMID	198.70	135	100	140	130	130	126	120	114	109	98
	185.04	125	99	140	124	125	123	120	112	103	92
	194.64	116	98	139	120	114	110	108	98	87	81
Rata-rata	195.87	119	93	137	119	117	111	109	103	96	89
	207.84	105	80	123	163	143	122	105	105	104	103
	217.50	114	97	113	148	136	124	114	114	113	114
EEDA 0,0140 mg	185.06	134	86	136	185	168	151	134	132	133	134
EEDI 0,0105 mg	183.00	108	73	106	139	170	150	129	108	109	108
	181.68	110	78	134	190	163	136	110	111	110	111
Rata-rata	195.02	114	83	122	165	156	137	118	114	114	114
	183.12	113	82	137	112	111	112	108	105	103	100
	220.15	114	75	147	114	114	113	110	107	105	101
EEDA 0,0280 mg	218.19	112	85	127	112	110	111	109	106	106	103
EEDI 0,0210 mg	189.22	105	80	93	105	106	104	101	99	97	97
	200.63	110	90	101	110	109	108	104	101	100	100
Rata-rata	207.05	111	82	121	111	110	110	107	104	103	101
	189.48	116	90	116	116	115	115	112	110	107	105
	190.00	118	96	120	118	118	117	114	113	110	107
EEDA 0,0420 mg	196.18	113	89	113	114	113	112	109	109	104	101
EEDI 0,0315 mg	201.77	121	95	120	119	120	118	115	113	110	109
	197.15	120	97	119	120	118	119	116	113	108	106
Rata-rata	194.92	118	93	118	117	117	116	114	112	108	106

LAMPIRAN 2

Tabel Konversi Dosis Manusia dan Hewan

	Mencit 20 g	Tikus 200 g	Marmut 400 g	Kelinci 1,5 kg	Kucing 1,5 kg	Kera 4 kg	Anjing 12 kg	Manusia 70 kg
Mencit 20 g	1,0	7,0	12,23	27,80	29,7	64,10	124,20	387,9
Tikus 200 g	0,14	1,0	1,74	3,9	4,20	9,20	17,80	56,0
Marmut 400 g	0,08	0,57	1,0	2,25	2,40	5,20	10,20	31,50
Kelinci 1,5 kg	0,04	0,25	0,44	1,0	1,08	2,40	4,50	14,20
Kucing 1,5 kg	0,03	0,23	0,41	0,92	1,0	2,20	4,10	13,0
Kera 4 kg	0,016	0,11	0,19	0,42	0,43	0,1	1,9	6,1
Anjing 12 kg	0,008	0,06	0,010	0,22	1,24	0,52	1,0	3,10
Manusia 70 kg	0,0026	0,018	0,31	0,07	0,076	0,16	0,32	1,0

(Suhardjono D. 1995. Percobaan Hewan Laboratorium. Yogyakarta: Gajah Mada University Press, Hal.207)

LAMPIRAN 3

Tabel Daftar Volume Maksimal Larutan Sediaan Uji yang dapat di berikan pada berbagai Hewan

Jenis Hewan Uji	Volume Maksimal (ml) sesuai Jalur Pemberian				
	i.v.	i.m.	i.p.	s.c.	p.o.
Mencit (203gr)	0,5	0,05	1,0	0,5 - 1,0	1,0
Tikus (100gr)	1,0	0,1	2,5	2,5	5,0
Hamster(50gr)	-	0,1	1 - 2	2,5	2,5
Marmut (25gr)	-	0,025	2 - 5	5,0	10,0
Merpati (30gr)	2,0	0,5	2,0	2,0	10,0
Kelinci (2,5kg)	5 - 10	0,5	10 - 20	5 - 10	20,0
Kucing (3kg)	5 - 10	1,0	10 - 20	5 - 10	50,0
Anjing (5 kg)	10 - 20	5,0	20 - 50	10,0	100,0

(Suhardjono D. 1995. Percobaan Hewan Laboratorium. Yogyakarta: Gajah Mada University Press, Hal.207)

Keterangan :

- i.v. : Intravena
- i.m. : Intramuscular
- i.p. : Intraperotinal
- s.c. : Subcutan
- p.o. : Peroral

Lampiran 4
Tabel Gula Darah Normal

Pemeriksaan	Kadar Gula Darah Penderita Diabetes	Kadar Gula Darah Normal
Sebelum Makan (Puasa)	90 - 130	Di bawah 110
Setelah Makan	90 - 130	Di bawah 110
Dua Jam Setelah Makan	120 - 160	Di bawah 140
Sebelum Tidur	110 - 150	Di bawah 120

(Alatcekguladarah.com)

Lampiran 5
Hasil Uji Anova

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
KGDSewaktu	Between Groups	221,840	4	55,460	,925	,469
	Within Groups	1199,200	20	59,960		
	Total	1421,040	24			
KGDpuasa	Between Groups	1095,760	4	273,940	4,287	,011
	Within Groups	1278,000	20	63,900		
	Total	2373,760	24			
KGD15	Between Groups	899,360	4	224,840	1,234	,328
	Within Groups	3644,400	20	182,220		
	Total	4543,760	24			
KGD30	Between Groups	9827,360	4	2456,840	16,695	,000
	Within Groups	2943,200	20	147,160		
	Total	12770,560	24			
KGD45	Between Groups	16914,400	4	4228,600	35,570	,000
	Within Groups	2377,600	20	118,880		
	Total	19292,000	24			
KGD60	Between Groups	23763,760	4	5940,940	26,802	,000
	Within Groups	4433,200	20	221,660		
	Total	28196,960	24			

KGD75	Between Groups	14168,400	4	3542,100	23,064	,000
	Within Groups	3071,600	20	153,580		
	Total	17240,000	24			
KGD90	Between Groups	7406,160	4	1851,540	17,211	,000
	Within Groups	2151,600	20	107,580		
	Total	9557,760	24			
KGD105	Between Groups	2939,200	4	734,800	8,080	,000
	Within Groups	1818,800	20	90,940		
	Total	4758,000	24			
KGD120	Between Groups	1654,960	4	413,740	6,633	,001
	Within Groups	1247,600	20	62,380		
	Total	2902,560	24			

Lampiran 6

Hasil Uji Duncan

KGDSewaktu

Duncan^a

Perlakuan	N	Subset for alpha = 0.05
		1
EEDA 0,0280 & EEDI 0,0210	5	110,8000
EEDA 0,0140 & EEDI 0,0105	5	114,2000
CMC 1%	5	116,6000
EEDA 0,0420 & EEDI 0,0315	5	117,6000
GLIBENKLAMID	5	119,4000
Sig.		,129

Means for groups in homogeneous subsets are displayed.

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

KGDPuasa

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
CMC 1%	5	81,0000		
EEDA 0,0280 & EEDI 0,0210	5	82,4000	82,4000	
EEDA 0,0140 & EEDI 0,0105	5	82,8000	82,8000	
EEDA 0,0420 & EEDI 0,0315	5		93,4000	93,4000
GLIBENKLAMID	5			97,2000
Sig.		,741	,051	,461

Means for groups in homogeneous subsets are displayed.

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

KGD15

Duncan^a

Perlakuan	N	Subset for alpha = 0.05
		1
CMC 1%	5	114,8000
EEDA 0,0420 & EEDI 0,0315	5	117,6000
EEDA 0,0280 & EEDI 0,0210	5	121,0000
EEDA 0,0140 & EEDI 0,0105	5	122,4000
GLIBENKLAMID	5	132,4000
Sig.		,077

Means for groups in homogeneous subsets are displayed.

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

KGD30

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
EEDA 0,0280 & EEDI 0,0210	5	110,6000		
EEDA 0,0420 & EEDI 0,0315	5	117,4000		
GLIBENKLAMID	5	119,0000		
CMC 1%	5		139,2000	
EEDA 0,0140 & EEDI 0,0105	5			165,0000
Sig.		,313	1,000	1,000

Means for groups in homogeneous subsets are displayed.

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

KGD45

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
EEDA 0,0280 & EEDI 0,0210	5	110,0000		
EEDA 0,0420 & EEDI 0,0315	5	116,8000		
GLIBENKLAMID	5	118,0000		
EEDA 0,0140 & EEDI 0,0105	5		156,0000	
CMC 1%	5			176,2000
Sig.		,286	1,000	1,000

Means for groups in homogeneous subsets are displayed.

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

KGD60

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
EEDA 0,0280 & EEDI 0,0210	5	109,6000		
GLIBENKLAMID	5	114,6000		
EEDA 0,0420 & EEDI 0,0315	5	116,2000		
EEDA 0,0140 & EEDI 0,0105	5		136,6000	
CMC 1%	5			192,8000
Sig.		,516	1,000	1,000

Means for groups in homogeneous subsets are displayed.

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

KGD75Duncan^a

Perlakuan	N	Subset for alpha = 0.05	
		1	2
EEDA 0,0280 & EEDI 0,0210	5	106,4000	
GLIBENKLAMID	5	112,6000	
EEDA 0,0420 & EEDI 0,0315	5	113,2000	
EEDA 0,0140 & EEDI 0,0105	5	118,4000	
CMC 1%	5		171,4000
Sig.		,175	1,000

Means for groups in homogeneous subsets are displayed.

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

KGD90Duncan^a

Perlakuan	N	Subset for alpha = 0.05	
		1	2
EEDA 0,0280 & EEDI 0,0210	5	103,6000	
GLIBENKLAMID	5	106,6000	
EEDA 0,0420 & EEDI 0,0315	5	111,6000	

EEDA 0,0140 & EEDI 0,0105	5	114,0000	
CMC 1%	5		151,0000
Sig.		,161	1,000

Means for groups in homogeneous subsets are displayed.

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

KGD105

Duncan^a

Perlakuan	N	Subset for alpha = 0.05	
		1	2
GLIBENKLAMID	5	100,6000	
EEDA 0,0280 & EEDI 0,0210	5	102,2000	
EEDA 0,0420 & EEDI 0,0315	5	107,8000	
EEDA 0,0140 & EEDI 0,0105	5	113,8000	
CMC 1%	5		130,6000
Sig.		,057	1,000

Means for groups in homogeneous subsets are displayed.

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

KGD120

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
GLIBENKLAMID	5	93,8000		
EEDA 0,0280 & EEDI 0,0210	5	100,2000	100,2000	
EEDA 0,0420 & EEDI 0,0315	5		105,6000	105,6000
EEDA 0,0140 & EEDI 0,0105	5			114,0000
CMC 1%	5			115,2000
Sig.		,215	,293	,083

Means for groups in homogeneous subsets are displayed.

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

LAMPIRAN 7

Gambar Ekstrak Daun Afrika dan Daun Insulin



Gambar 1. Tikus dalam selongsong



Gambar 2. Pengerinan Daun



Gambar 3. Serbuk Daun Afrika dan Daun Insulin



Gambar 4. Ekstrak Kental Daun Afrika dan Daun Insulin



Gambar 5. Cairan Daun Afrika



Gambar 6. Pemberian Ekstrak secara Oral



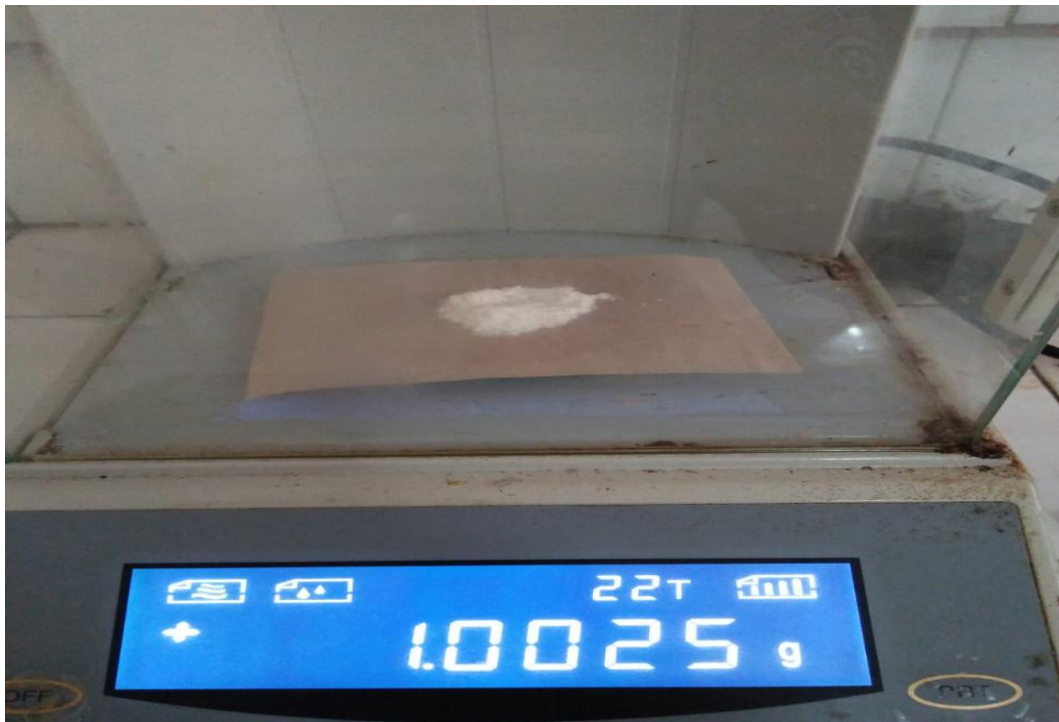
Gambar 7. Penimbangan Tikus Pakai Selongsong



Gambar 8. Alat pengukuran darah



Gambar. 9 Alat Evaporator



Gambar. 10 Penimbangan bahan

LAMPIRAN 8
KARTU BIMBINGAN KTI

POLITEKNIK KESEHATAN
JURUSAN FARMASI
JL. AIRLANGGA NO. 20 MEDAN



KARTU LAPORAN PERTEMUAN BIMBINGAN KTI

Nama Mahasiswa : WIDYA SAHARA
NIM : P07539016028
Pembimbing : Lavinur, S.T., M.Si.

No.	TGL	PERTE MUA	PEMBAHASAN	PARAF MAHASISWA	PARAF PEMBIMBING
1	⁰⁸ 03/19	I	Diskusi judul KTI	<i>[Signature]</i>	<i>[Signature]</i>
2	¹¹ 03/19	II	Konsultasi judul KTI	<i>[Signature]</i>	<i>[Signature]</i>
3	¹⁵ 03/19	III	ACC judul KTI	<i>[Signature]</i>	<i>[Signature]</i>
4	¹⁸ 03/19	IV	Revisi isi proposal KTI	<i>[Signature]</i>	<i>[Signature]</i>
5	²⁵ 03/19	V	Revisi Bab I dan II	<i>[Signature]</i>	<i>[Signature]</i>
6	⁶ 04/19	VI	Diskusi Bab III	<i>[Signature]</i>	<i>[Signature]</i>
7	²⁴ 04/19	VII	ACC proposal KTI	<i>[Signature]</i>	<i>[Signature]</i>
8	¹⁴ 05/19	VIII	Penyerahan hasil Penelitian	<i>[Signature]</i>	<i>[Signature]</i>
9	¹⁷ 06/19	IX	Bimbingan Bab IV	<i>[Signature]</i>	<i>[Signature]</i>
10	²⁰ 06/19	X	Bimbingan Bab IV dan V	<i>[Signature]</i>	<i>[Signature]</i>
11	¹² 07/19	XI	Perbaikan KTI	<i>[Signature]</i>	<i>[Signature]</i>
12	¹⁸ 07/19	XII	ACC KTI	<i>[Signature]</i>	<i>[Signature]</i>



KOMISI ETIK PENELITIAN KESEHATAN
 HEALTH RESEARCH ETHICS COMMITTEE
 POLITEKNIK KESEHATAN KEMENKES MEDAN
 POLYTECHNIC HEALTH MINISTRY OF HEALTH MEDAN

KETERANGAN LAYAK ETIK
 DESCRIPTION OF ETHICAL EXEMPTION
 "ETHICAL EXEMPTION"

No.324/KEPK POLTEKKES KEMENKES MEDAN/2019

Protokol penelitian yang diusulkan oleh :
The research protocol proposed by

Peneliti utama : Widya Sahara
Principal In Investigator

Nama Institusi : Poltekkes Kemenkes Medan
Name of the Institution

Dengan judul:
Title

"Uji Efek Ekstrak Etanol Daun Afrika (*Vernonia amygdalina Delile*) dan Ekstrak Etanol Daun Insulin (*Tithonia diversifolia (Hemsly) A Gray*) terhadap Penurunan Kadar Gula Darah pada Tikus Putih dengan Glibenklamid sebagai Pembanding"

*"Test of Effect of Ethanol Extract of African Leaves (*Vernonia amygdalina Delile*) and Ethanol Extract of Insulin Leaves (*Tithonia diversifolia (Hemsly) A Gray*) on Decreasing Blood Sugar Levels in White Mice with Glibenklamid as Comparative"*

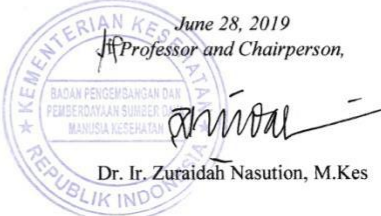
Dinyatakan layak etik sesuai 7 (tujuh) Standar WHO 2011, yaitu 1) Nilai Sosial, 2) Nilai Ilmiah, 3) Pemerataan Beban dan Manfaat, 4) Risiko, 5) Bujukan/Eksploitasi, 6) Kerahasiaan dan Privacy, dan 7) Persetujuan Setelah Penjelasan, yang merujuk pada Pedoman CIOMS 2016. Hal ini seperti yang ditunjukkan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

Declared to be ethically appropriate in accordance to 7 (seven) WHO 2011 Standards, 1) Social Values, 2) Scientific Values, 3) Equitable Assessment and Benefits, 4) Risks, 5) Persuasion/Exploitation, 6) Confidentiality and Privacy, and 7) Informed Consent, referring to the 2016 CIOMS Guidelines. This is as indicated by the fulfillment of the indicators of each standard.

Pernyataan Laik Etik ini berlaku selama kurun waktu tanggal 28 Juni 2019 sampai dengan tanggal 28 Juni 2020.

This declaration of ethics applies during the period June 28, 2019 until June 28, 2020.

June 28, 2019
 Professor and Chairperson.



Dr. Ir. Zuraidah Nasution, M.Kes