

LAMPIRAN

LAMPIRAN 1 – Hasil Identifikasi/Determinasi Tumbuhan

	LEMBAGA ILMU PENGETAHUAN INDONESIA (INDONESIAN INSTITUTE OF SCIENCES) PUSAT PENELITIAN BIOLOGI (RESEARCH CENTER FOR BIOLOGY) Cibinong Science Center, Jl. Raya Jakarta - Bogor KM. 46 Cibinong 16911 Telp. (+62 21) 87907636 - 87907604, Fax. 87907612 Website : www.biologi.lipi.go.id	 
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Cibinong, Agustus 2017

Nomor : *2008*/IPH.1.01/If.07/VIII/2017
Lampiran : -
Perihal : Hasil identifikasi/ determinasi Tumbuhan

Kepada Yth.
Bpk./Ibu/Sdr(i). **Eric Eksany**
Univ. TARUMANAGARA
Jl. Letjend S. Parman No. 1
Jakarta 11440

Dengan hormat,

Bersama ini kami sampaikan hasil identifikasi/determinasi tumbuhan yang Saudara kirimkan ke "Herbarium Bogoriense", Bidang Botani Pusat Penelitian Biologi-LIPI Bogor, adalah sebagai berikut :

No.	No. Kol.	Jenis	Suku
1	Buah maja	<i>Aegle marmelos</i> (L.) Correa	Rutaceae

Demikian, semoga berguna bagi Saudara.


Kepala Bidang Botani
Pusat Penelitian Biologi-LIPI,
Dr. Joeni Setijo Rahajoe
NIP. 196706241993032004

C:\Users\windows 7\Desktop\dokumen lia\Ident 2017\Eric Eksany OKE.doc\Mega-Narti
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LAMPIRAN 2 – Lembar Persetujuan Etik Peneliti



KOMISI ETIK RISET
FAKULTAS KEDOKTERAN
UNIVERSITAS TRISAKTI
Jalan Kyai Tapa, Grogol, (Kampus B) Jakarta 11440
Telp: (021) 5672731, 5655786
Fax : (021) 5660706

PERSETUJUAN ETIK *Ethical Clearance* Nomor: 124/KER/FK/XII/2017

Komisi Etik Riset Fakultas Kedokteran Universitas Trisakti setelah mempelajari dengan seksama dan mendengarkan penjelasan dari peneliti utama tentang kemungkinan adanya dampak etis terhadap subyek riset, masyarakat dan lingkungan, menetapkan penelitian dengan judul:

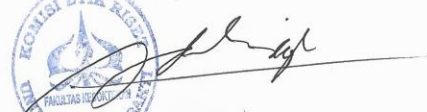
”PENGARUH PEMBERIAN EKSTRAK BUAH *AEGLE MARMELOS* TERHADAP STRES OKSIDATIF PADA PARU TIKUS *SPRAGUE DAWLEY* YANG DIINDUKSI HIPOKSIA”

Peneliti Utama : Natasha Olivia Christian

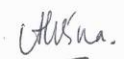
Lembaga/Tempat penelitian : FK Universitas Tarumanagara

Dinyatakan memenuhi persyaratan etik untuk dilaksanakan.

Jakarta, 18 Desember 2017

Ketua

Prof. DR. dr. Adi Hidayat, MS

Sekretaris


dr. Alvina. SpPK

LAMPIRAN 3 – Dokumentasi Buah Maja

Pohon Maja



Buah Maja



Buah Maja yang Telah Dipotong

LAMPIRAN 4 – Pembuatan Ekstrak Buah Maja



Buah maja yang dikeringkan



Maserasi & Penampungan Ekstrak Maja

LAMPIRAN 5 – Dokumentasi Alat dan Bahan Penelitian



Spektrofotometer UV



Alat vortex

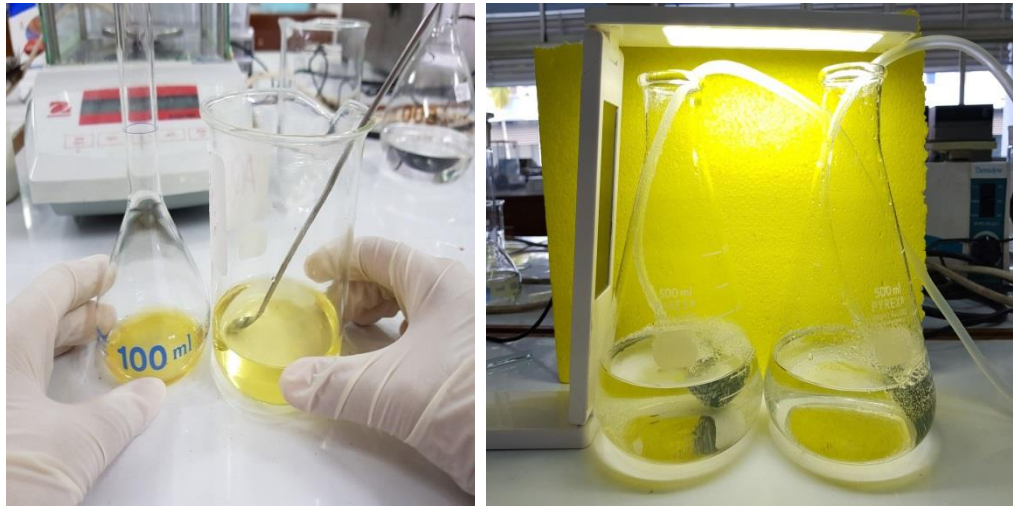


Centrifuge berkecepatan tinggi

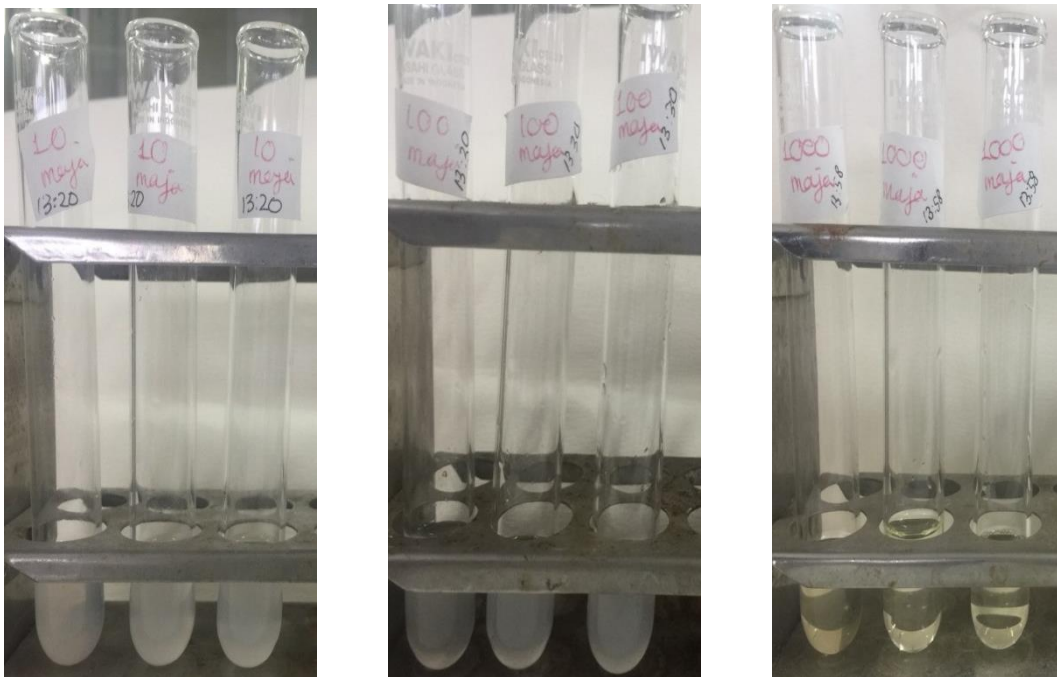


Micropipet

LAMPIRAN 6 – Pengujian Toksisitas dengan metode BSLT



Proses Penetasan Larva Udang *A. salina*



Pengujian Toksisitas Ekstrak Maja dalam Konsentrasi Berbeda dengan Metode BSLT

LAMPIRAN 7 – Perlakuan Hipoksia dan Pembelean Tikus



Tabung gas, Chamber dan Sodalime



Perlakuan hipoksia pada chamber yang dihubungkan dengan gas oksigen dan sodalime



Pengecekan kondisi tikus pada saat perlakuan hipoksia

LAMPIRAN 8 – Hasil Uji Skrining Fitokimia



Alkaloid



Fenolik



Terpenoid



Flavonoid

LAMPIRAN 9 – Hasil Uj Statistik Kadar Total Fenolik

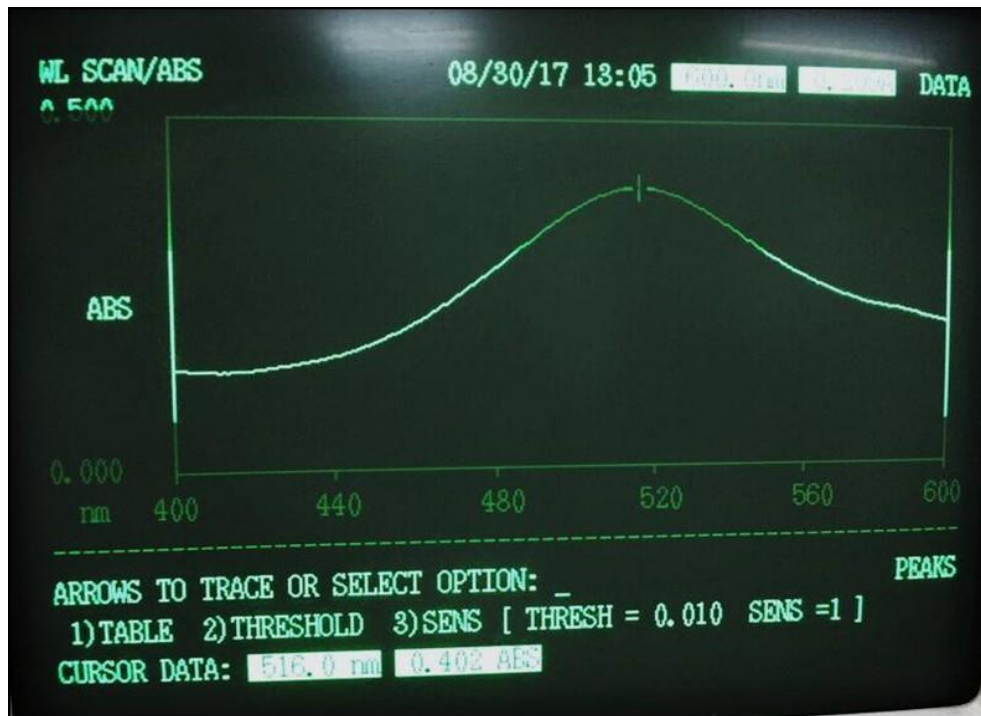
Linear Reg.	
Best-fit values ± SE	
Slope	0.000728 ± 4.881e-005
Y-intercept	0.1254 ± 0.02536
X-intercept	-172.3
1/slope	1374
95% Confidence Intervals	
Slope	0.0005727 to 0.0008833
Y-intercept	0.04468 to 0.2061
X-intercept	-357.8 to -50.89
Goodness of Fit	
R square	0.9867
Sy.x	0.01544
Is slope significantly non-zero?	
F	222.4
DFn, DFd	1, 3
P value	0.0007
Deviation from zero?	Significant
Equation	$Y = 0.000728 * X + 0.1254$
Data	
Number of X values	5
Maximum number of Y replicates	1
Total number of values	5
Number of missing values	0

LAMPIRAN 10 – Hasil Uji Statistik Kadar Total Flavonoid

Linear Reg.	
Best-fit values \pm SE	
Slope	0.01248 \pm 0.0003456
Y-intercept	0.0056 \pm 0.004233
X-intercept	-0.4487
1/slope	80.13
95% Confidence Intervals	
Slope	0.01138 to 0.01358
Y-intercept	-0.007872 to 0.01907
X-intercept	-1.65 to 0.5888
Goodness of Fit	
R square	0.9977
Sy.x	0.005465
Is slope significantly non-zero?	
F	1304
DFn, DFd	1, 3
P value	<0.0001
Deviation from zero?	Significant
Equation	$Y = 0.01248 * X + 0.0056$
Data	
Number of X values	5
Maximum number of Y replicates	1
Total number of values	5
Number of missing values	0

LAMPIRAN 11 – Hasil Uji Statistik Aktivitas Antioksidan DPPH

1. Panjang Gelombang Optimum



2. Konsentrasi dan Persentase Inhibisi Standar Vitamin C

Konsentrasi ($\mu\text{g/ml}$)	Absorbansi	Inhibisi (%)
2	0.312	22.388
3	0.235	41.542
4	0.189	52.985
5	0.123	69.403
6	0.065	83.831

3. Konsentrasi dan Persentase Inhibisi Ekstrak Buah *Aegle marmelos*

Konsentrasi ($\mu\text{g/mL}$)	Absorbansi	Inhibisi (%)
10	0.301	25.124
50	0.297	26.119
100	0.263	34.577
150	0.244	39.303
200	0.232	42.289

4. Uji Regresi Linear Konsentrasi Vitamin C dan Persentase Inhibisi

Linear Reg.	
Best-fit values \pm SE	
Slope	15.07 \pm 0.5837
Y-intercept	-6.269 \pm 2.476
X-intercept	0.4159
1/slope	0.06634
95% Confidence Intervals	
Slope	13.22 to 16.93
Y-intercept	-14.15 to 1.612
X-intercept	-0.121 to 0.8422
Goodness of Fit	
R square	0.9955
Sy.x	1.846
Is slope significantly non-zero?	
F	667
DFn, DFd	1, 3
P value	0.0001
Deviation from zero?	Significant
Equation	$Y = 15.07 * X - 6.269$
Data	
Number of X values	5
Maximum number of Y replicates	1
Total number of values	5
Number of missing values	0

5. Uji Regresi Linear Konsentrasi Ekstrak Buah *Aegle marmelos* dan Persentase Inhibisi

Linear Reg.	
Best-fit values \pm SE	
Slope	0.09931 \pm 0.01145
Y-intercept	23.35 \pm 1.404
X-intercept	-235.1
1/slope	10.07
95% Confidence Intervals	
Slope	0.06286 to 0.1358
Y-intercept	18.89 to 27.82
X-intercept	-433.1 to -142.1
Goodness of Fit	
R square	0.9616
Sy.x	1.74
Is slope significantly non-zero?	
F	75.19
DFn, DFd	1, 3
P value	0.0032
Deviation from zero?	Significant
Equation	$Y = 0.09931 * X + 23.35$
Data	
Number of X values	5
Maximum number of Y replicates	1
Total number of values	5
Number of missing values	0

LAMPIRAN 12 – Hasil Uji Statistik Toksisitas dengan metode BSLT

Linear Reg.	
Best-fit values ± SE	
Slope	0.0003665 ± 8.828e-006
Y-intercept	0.4105 ± 0.004955
X-intercept	-1120
1/slope	2728
95% Confidence Intervals	
Slope	0.0003285 to 0.0004045
Y-intercept	0.3892 to 0.4318
X-intercept	-1301 to -971.9
Goodness of Fit	
R square	0.9988
Sy.x	0.006907
Is slope significantly non-zero?	
F	1724
DFn, DFd	1, 2
P value	0.0006
Deviation from zero?	Significant
Equation	$Y = 0.0003665 * X + 0.4105$
Data	
Number of X values	4
Maximum number of Y replicates	1
Total number of values	4
Number of missing values	0

LAMPIRAN 13 – Uji Statistik Regresi Linear Standar GSH

Linear Reg.	
Best-fit values \pm SE	
Slope	0.02364 \pm 0.0005366
Y-intercept	-0.02263 \pm 0.0029
X-intercept	0.957
1/slope	42.3
95% Confidence Intervals	
Slope	0.02193 to 0.02535
Y-intercept	-0.03185 to -0.0134
X-intercept	0.6011 to 1.277
Goodness of Fit	
R square	0.9985
Sy.x	0.003764
Is slope significantly non-zero?	
F	1941
DFn, DFd	1, 3
P value	<0.0001
Deviation from zero?	Significant
Equation	$Y = 0.02364 * X - 0.02263$
Data	
Number of X values	5
Maximum number of Y replicates	1
Total number of values	5
Number of missing values	0

LAMPIRAN 14 – Hasil Absorbansi GSH Hepar

1. GSH Hepar - Hipoksia Normoksia Non-Cekok (P1A)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Hepar ($\mu\text{g/mL}$)
	A	B		
1	0.032	0.036	0.034	2.396
2	0.03	0.034	0.032	2.311
3	0.03	0.035	0.033	2.332
4	0.029	0.033	0.031	2.269
Rata-rata			0.032	2.327

2. GSH Hepar - Hipoksia Normoksia Cekok (P1B)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Hepar ($\mu\text{g/mL}$)
	A	B		
1	0.033	0.037	0.035	2.438
2	0.036	0.04	0.038	2.565
3	0.034	0.038	0.036	2.480
4	0.032	0.036	0.034	2.396
Rata-rata			0.036	2.470

3. GSH Hepar - Hipoksia 3 Hari Non-Cekok (P2A)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Hepar ($\mu\text{g/mL}$)
	A	B		
1	0.027	0.03	0.029	2.163
2	0.025	0.029	0.027	2.099
3	0.025	0.029	0.027	2.099
4	0.026	0.03	0.028	2.142
Rata-rata			0.028	2.126

4. GSH Hepar - Hipoksia 3 Hari Cekok (P2B)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Hepar ($\mu\text{g/mL}$)
	A	B		
1	0.029	0.033	0.031	2.269
2	0.03	0.035	0.033	2.332
3	0.028	0.032	0.030	2.226
4	0.031	0.035	0.033	2.353
Rata-rata			0.032	2.295

5. GSH Hepar - Hipoksia 7 Hari Non-Cekok (P3A)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Hepar ($\mu\text{g/mL}$)
	A	B		
1	0.015	0.019	0.017	1.676
2	0.016	0.02	0.018	1.719
3	0.017	0.021	0.019	1.761
4	0.017	0.021	0.019	1.761
Rata-rata			0.018	1.729

6. GSH Hepar - Hipoksia 7 Hari Cekok (P3B)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Hepar ($\mu\text{g/mL}$)
	A	B		
1	0.018	0.022	0.020	1.803
2	0.024	0.028	0.026	2.057
3	0.023	0.027	0.025	2.015
4	0.026	0.03	0.028	2.142
Rata-rata			0.025	2.004

7. GSH Darah - Hipoksia 14 Hari Non-Cekok (P4A)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Hepar ($\mu\text{g/mL}$)
	A	B		
1	0.013	0.017	0.015	1.592
2	0.013	0.017	0.015	1.592
3	0.011	0.015	0.013	1.507
4	0.01	0.015	0.013	1.486
Rata-rata			0.014	1.544

8. GSH Hepar - Hipoksia 14 Hari Cekok (P4B)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Hepar ($\mu\text{g/mL}$)
	A	B		
1	0.017	0.021	0.019	1.761
2	0.015	0.019	0.017	1.676
3	0.012	0.016	0.014	1.549
4	0.015	0.019	0.017	1.676
Rata-rata			0.017	1.666

LAMPIRAN 15 – Hasil Absorbansi GSH Darah

1. GSH Darah – Normoksia Non-Cekok (P1A)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Darah ($\mu\text{g/mL}$)
	A	B		
1	0.145	0.149	0.147	7.176
2	0.153	0.157	0.155	7.514
3	0.158	0.162	0.160	7.725
4	0.151	0.155	0.153	7.429
Rata-rata			0.154	7.461

2. GSH Darah – Normoksia Cekok (P1B)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Darah ($\mu\text{g/mL}$)
	A	B		
1	0.164	0.168	0.166	7.979
2	0.175	0.171	0.173	8.275
3	0.16	0.164	0.162	7.810
4	0.158	0.154	0.156	7.556
Rata-rata			0.164	7.905

3. GSH Darah – Hipoksia 3 Hari Non-Cekok (P2A)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Darah ($\mu\text{g/mL}$)
	A	B		
1	0.03	0.034	0.032	2.311
2	0.029	0.033	0.031	2.269
3	0.033	0.037	0.035	2.438
4	0.03	0.035	0.033	2.332
Rata-rata			0.033	2.337

4. GSH Darah – Hipoksia 3 Hari Cekok (P2B)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Darah ($\mu\text{g/mL}$)
	A	B		
1	0.061	0.065	0.063	3.622
2	0.048	0.052	0.050	3.072
3	0.058	0.062	0.060	3.495
4	0.034	0.038	0.036	2.480
Rata-rata			0.052	3.168

5. GSH Darah – Hipoksia 7 Hari Non-Cekok (P3A)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Darah ($\mu\text{g/mL}$)
	A	B		
1	0.028	0.032	0.030	2.226
2	0.023	0.027	0.025	2.015
3	0.019	0.023	0.021	1.846
4	0.017	0.021	0.019	1.761
Rata-rata			0.024	1.962

6. GSH Darah – Hipoksia 7 Hari Cekok (P3B)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Darah ($\mu\text{g/mL}$)
	A	B		
1	0.022	0.026	0.024	1.973
2	0.023	0.027	0.025	2.015
3	0.048	0.052	0.050	3.072
4	0.037	0.041	0.039	2.607
Rata-rata			0.035	2.417

7. GSH Darah – Hipoksia 14 Hari Non-Cekok (P4A)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Darah ($\mu\text{g/mL}$)
	A	B		
1	0.024	0.028	0.026	2.057
2	0.016	0.02	0.018	1.719
3	0.014	0.018	0.016	1.634
4	0.016	0.02	0.018	1.719
Rata-rata			0.020	1.782

8. GSH Darah – Hipoksia 14 Hari Cekok (P4B)

Tikus	Duplo		Rerata Absorbansi	Kadar GSH Darah ($\mu\text{g/mL}$)
	A	B		
1	0.028	0.032	0.030	2.226
2	0.029	0.032	0.031	2.247
3	0.026	0.03	0.028	2.142
4	0.028	0.032	0.030	2.226
Rata-rata			0.030	2.210

LAMPIRAN 16 – Uji Statistik Kadar GSH Darah dan Hepar

1. Nilai Rerata dan Uji Mann-Whitney untuk Perbedaan Kadar GSH Darah

Col. Stat	P1A	P1B	P2A	P2B	P3A	P3B	P4A	P4B
Mean	7.461	7.905	2.337	3.168	1.962	2.417	1.782	2.210
SD	0.227	0.302	0.072	0.515	0.205	0.524	0.188	0.047
SEM	0.114	0.151	0.036	0.258	0.103	0.262	0.094	0.023
Mann-Whitney Test			P2A vs. P1A	P2B vs. P1B	P3A vs. P1A	P3B vs. P1B	P4A vs. P1A	P4B vs. P1B
P value			0.0286	0.0286	0.0286	0.0286	0.0286	0.0286
Significantly different (P<0.05)?			Yes	Yes	Yes	Yes	Yes	Yes
One-or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

2. Nilai Rerata dan Uji Mann-Whitney untuk Perbedaan Kadar GSH Hepar

Col. Stat	P1A	P1B	P2A	P2B	P3A	P3B	P4A	P4B
Mean	2.327	2.470	2.126	2.295	1.729	2.004	1.544	1.666
SD	0.053	0.072	0.032	0.058	0.041	0.144	0.056	0.087
SEM	0.026	0.036	0.016	0.029	0.020	0.072	0.028	0.044
Mann-Whitney Test			P2A vs. P1A	P2B vs. P1B	P3A vs. P1A	P3B vs. P1B	P4A vs. P1A	P4B vs. P1B
P value			0.0286	0.0286	0.0286	0.0286	0.0286	0.0286
Significantly different (P<0.05)?			Yes	Yes	Yes	Yes	Yes	Yes
One-or two-tailed P value?			Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed	Two-tailed

LAMPIRAN 17 – Hasil Uji Korelasi Kadar GSH Darah dan Hepar

1. Kadar GSH Darah dan Hepar

Perlakuan	X		Y	
	Kadar GSH Darah		Kadar GSH Hepar	
	A	B	A	B
P1 (Kontrol)	7.461	7.905	2.327	2.470
P2 (Hipoksia 3 Hari)	2.337	3.168	2.126	2.295
P3 (Hipoksia 7 Hari)	1.962	2.417	1.729	2.004
P4 (Hipoksia 14 Hari)	1.782	2.210	1.544	1.666

2. Uji Regresi Linear antara Kadar GSH Darah dan Kadar GSH Hepar Kelompok Tikus A

Best-fit values \pm SE	
Slope	0.1039 \pm 0.05694
Y-intercept	1.58 \pm 0.235
X-intercept	-15.21
1/slope	9.625
95% Confidence Intervals	
Slope	-0.1411 to 0.3489
Y-intercept	0.5685 to 2.591
X-intercept	-infinity to -1.79
Goodness of Fit	
R square	0.6247
Sy.x	0.2689
Is slope significantly non-zero?	
F	3.33
DFn, DFd	1, 2
P value	0.2096
Deviation from zero?	Not Significant
Equation	$Y = 0.1039 * X + 1.58$

3. Uji Regresi Linear antara Kadar GSH Darah dan Kadar GSH Hepar Kelompok Tikus B

Best-fit values \pm SE	
Slope	0.1024 \pm 0.05801
Y-intercept	1.707 \pm 0.2646
X-intercept	-16.67
1/slope	9.769
95% Confidence Intervals	
Slope	-0.1472 to 0.3519
Y-intercept	0.5684 to 2.846
X-intercept	-infinity to -1.742
Goodness of Fit	
R square	0.609
Sy.x	0.2698
Is slope significantly non-zero?	
F	3.114
DFn, DFd	1, 2
P value	0.2196
Deviation from zero?	Not Significant
Equation	$Y = 0.1024 * X + 1.707$
Data	
Number of X values	4
Maximum number of Y replicates	1
Total number of values	4
Number of missing values	0

4. Uji Korelasi Pearson – Kadar GSH Darah dan Hepar Kelompok Tikus A

Pearson r	
r	0.7904
95% confidence interval	-0.7101 to 0.9954
R squared	0.6247
P value	
P (two-tailed)	0.2096
P value summary	ns
Significant? (alpha = 0.05)	No
Number of XY Pairs	4

5. Uji Korelasi Pearson – Kadar GSH Darah dan Hepar Kelompok Tikus B

Pearson r	
r	0.7804
95% confidence interval	-0.7229 to 0.9951
R squared	0.609
P value	
P (two-tailed)	0.2196
P value summary	ns
Significant? (alpha = 0.05)	No
Number of XY Pairs	4

RIWAYAT HIDUP

DATA PRIBADI

Nama : Clareta Vero Patricia Widya
Jenis Kelamin : Perempuan
Tempat dan Tanggal Lahir : Bekasi, 27 Oktober 1998
Kewarganegaraan : Indonesia
Status : Belum menikah
Alamat : Jl. Mujaer 8 No. 373, Perumnas 1
Kayuringin Jaya, Bekasi Selatan
Nomor Telepon : 081281228335
Alamat E-mail : claretaveropw@gmail.com
Bahasa : Indonesia dan Inggris

LATAR BELAKANG PENDIDIKAN

1. S-1 Program Studi Sarjana Kedokteran, Universitas Tarumanagara, Jakarta
2015 – sekarang
2. SMA Negeri 1, Kota Bekasi, 2013 – 2015
3. SMP Pax Ecclesia, Kota Bekasi, 2010 – 2013
4. SD Maria Fransisca, Kota Bekasi, 2004 – 2010