

LAMPIRAN

Lampiran 1. Lembar Persetujuan Etik



**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: 145/KER/FK/I/2019**

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 INDUKSI HIPOKSIA KRONIK SISTEMIK
TERHADAP KADAR MALONDIALDEHIDA (MDA) HATI DAN
DARAH TIKUS *SPRAGUE DAWLEY* YANG DIBERI EKSTRAK
DAUN RASBERI (*RUBUS IDAEUS L*)**

Peneliti Utama : Ria Nata Sia

Lembaga/Tempat penelitian : FK Universitas Tarumanagara

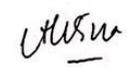
Dinyatakan memenuhi persyaratan etik untuk dilaksanakan.

Jakarta, 17 Januari 2019

Ketua

Prof. DR. dr. Adi Hidayat, MS

Sekretaris


dr. Alvina SpPK

Lampiran 2. Identifikasi LIPI Tanaman



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



Cibinong, 6 April 2018

Nomor : 865/IPH.1.01/Hf.07/IV/2018
Lampiran : -
Perihal : Hasil identifikasi/determinasi Tumbuhan

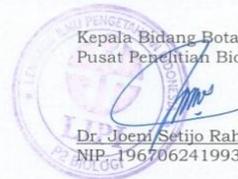
Kepada Yth.
Bpk./Ibu/Sdr(i). **Chindy Tjandra**
Mhs. Univ. Tarumanagara
Jl. Letjend S. Parman No.1
Jakarta - 11440

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	Strawberry	<i>Fragaria vesca</i> L.	Rosaceae
2	Raspberry	<i>Rubus idaeus</i> L.	Rosaceae
3	Blackberry	<i>Rubus</i> sp.	Rosaceae

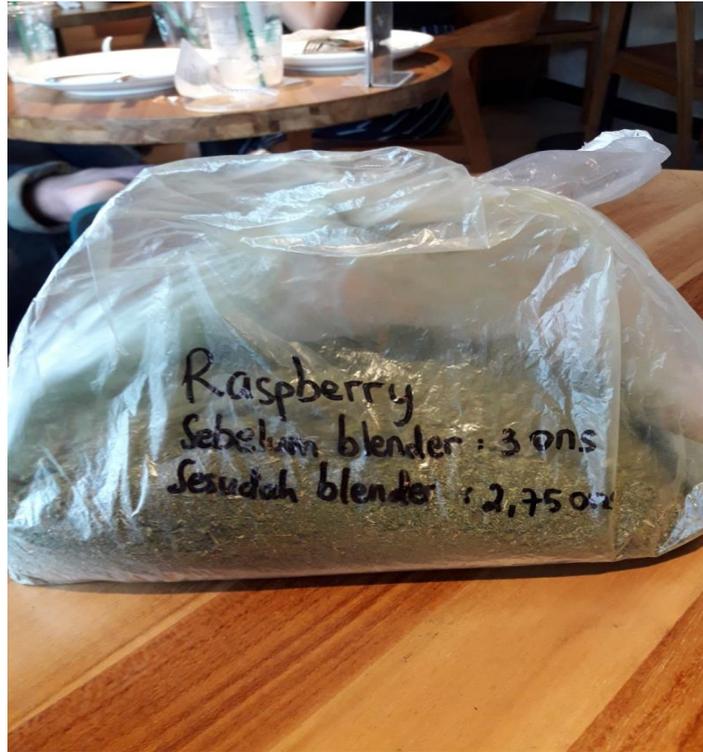
Demikian, semoga berguna bagi Saudara.


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

Lampiran 3. Pembuatan Ekstrak Daun Rasberi



Daun rasberi dikeringkan selama beberapa hari.

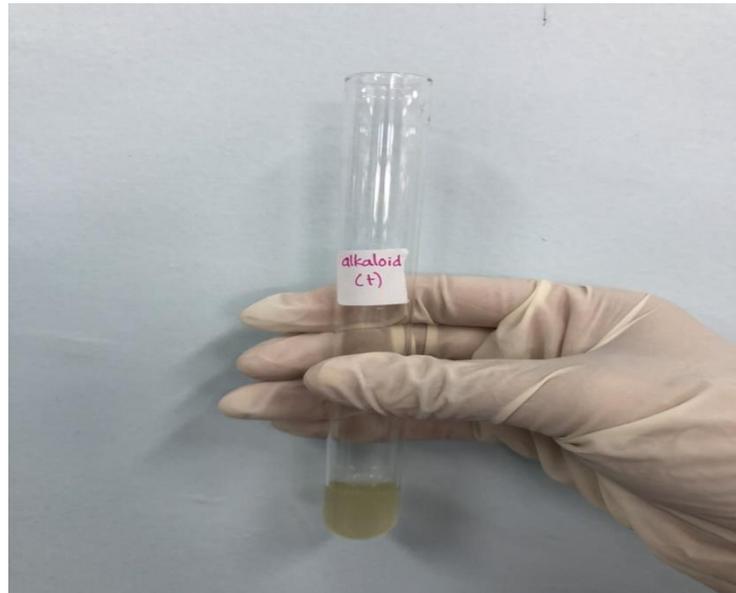


Hasil daun rasberi yang dihaluskan menggunakan blender

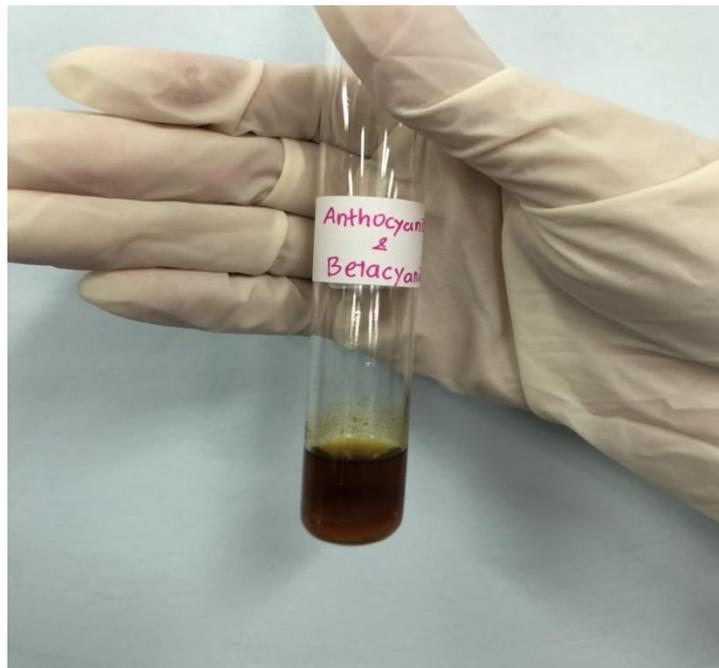


Ekstra k yang diperoleh dari maserasi akan dievaporasi dengan *rotary evaporator* sehingga didapatkan ekstrak yang kental.

Lampiran 4. Fitokimia



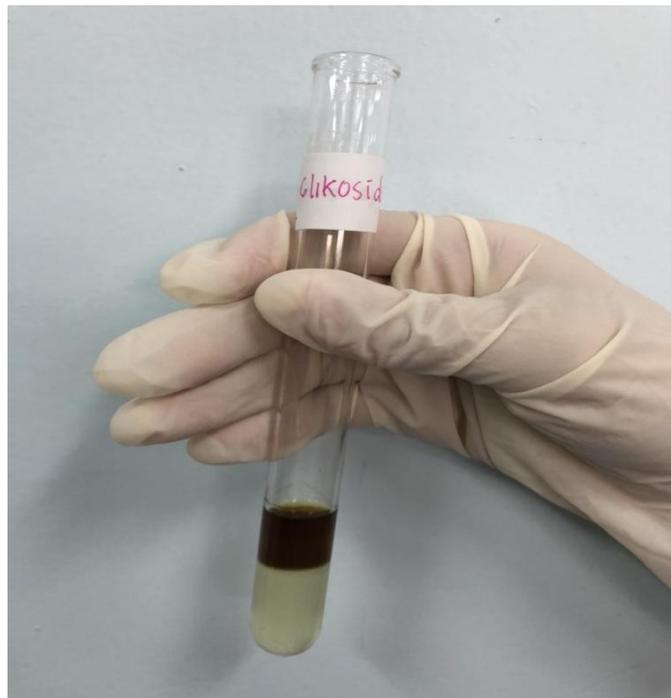
Mendeteksi kandungan alkaloid dari kandungan ekstrak daun rasberi



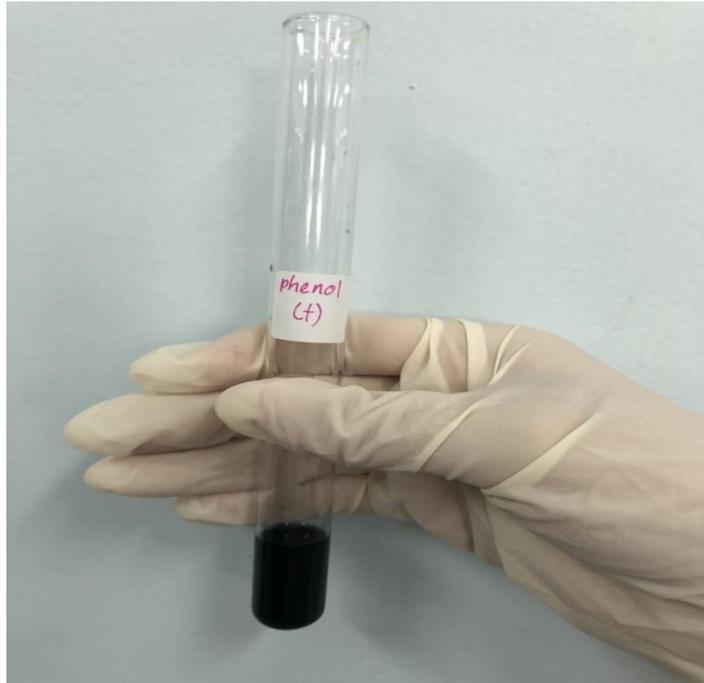
Mendeteksi kandungan antosianin dan betasianin dari kandungan ekstrak daun rasberi



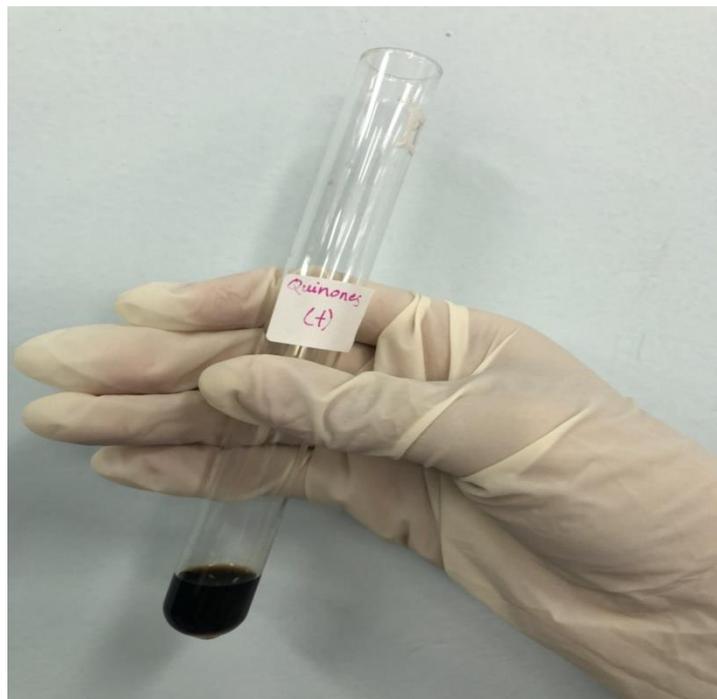
Mendeteksi kandungan flavonoid dari kandungan ekstrak daun rasberi



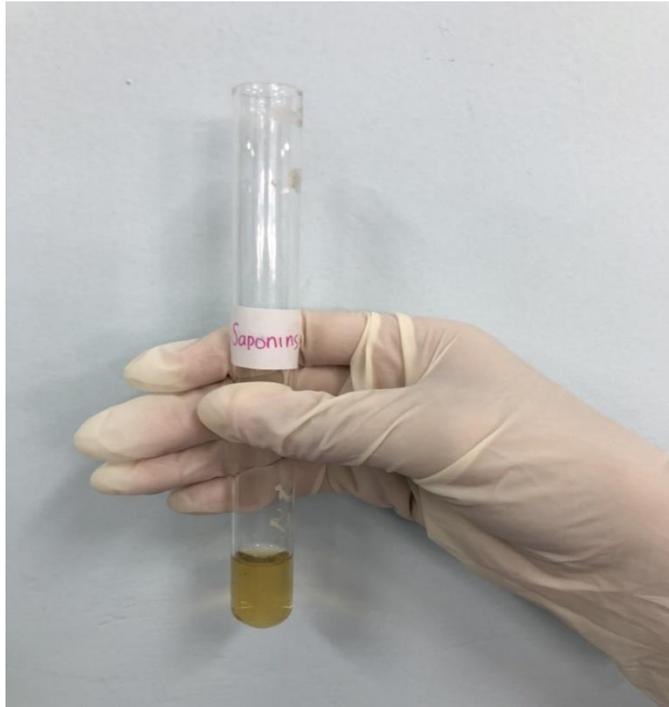
Mendeteksi kandungan glikosida dari kandungan ekstrak daun rasberi



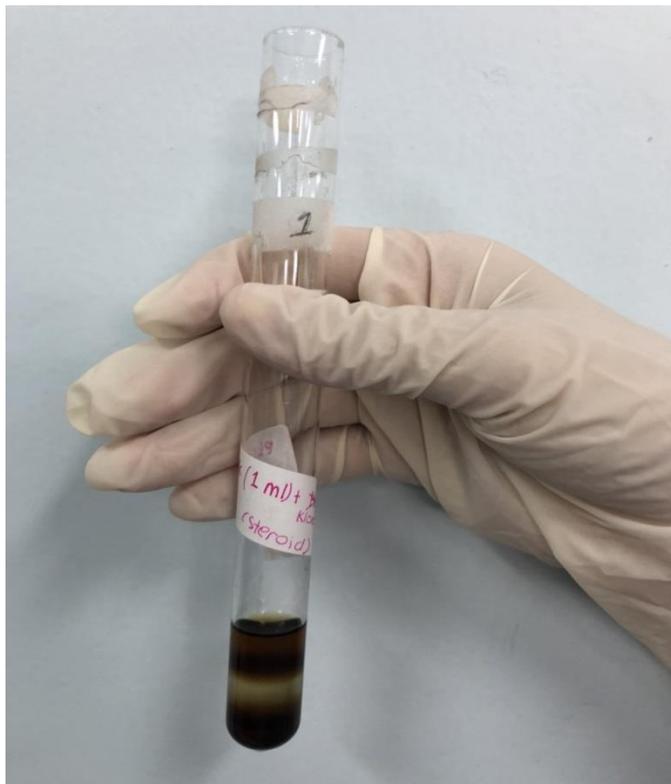
Mendeteksi kandungan fenolik dari kandungan ekstrak daun rasberi



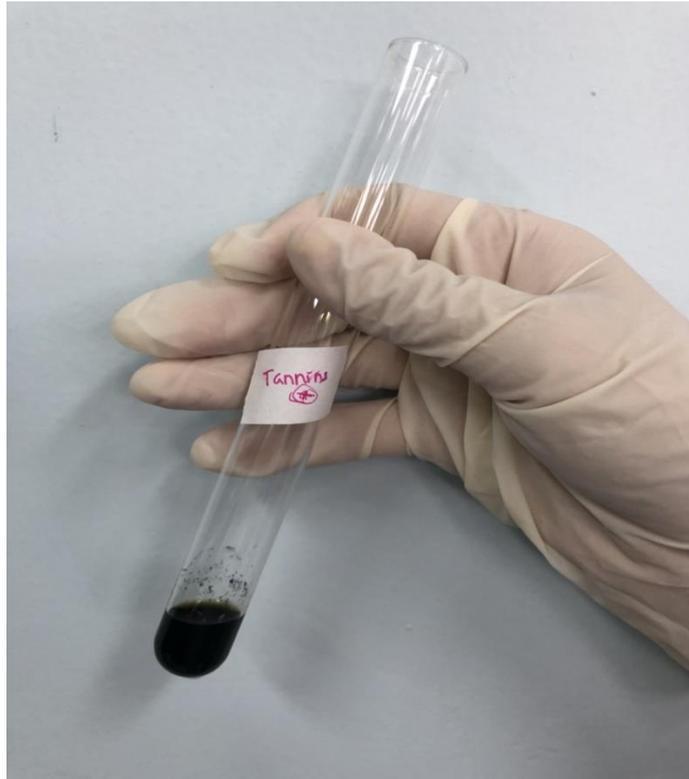
Mendeteksi kandungan Kuinon dari kandungan ekstrak daun rasberi



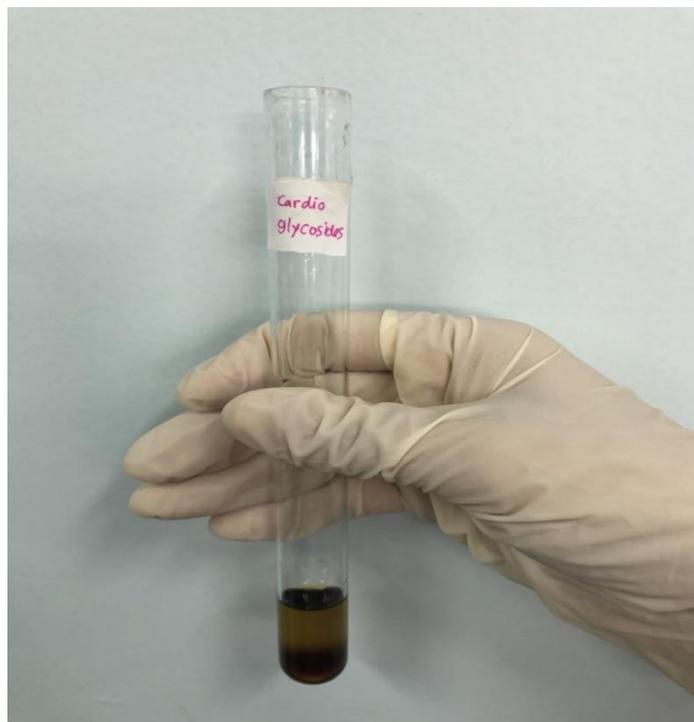
Mendeteksi kandungan saponin dari kandungan ekstrak daun rasberi



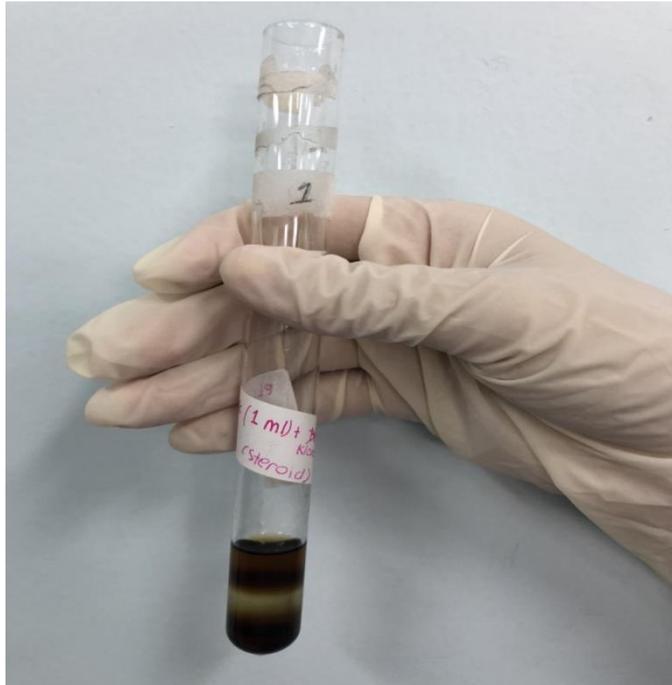
Mendeteksi kandungan glikosida dari kandungan ekstrak daun rasberi



Mendeteksi kandungan tanin dari kandungan ekstrak daun rasberi



Mendeteksi kandungan *cardio glycosides* dari kandungan ekstrak daun rasberi



Mendeteksi kandungan steroid dari kandungan ekstrak daun rasberi



Lampiran 5. Tabel Regresi Linear Larutan Uji DPPH

Tabel regresi linear uji kapasitas antioksidan ekstrak daun rasberi.

Linear Regression	Nilai
Best-fit values \pm SE	
Slope	0,4447 \pm 0,03783
Y-intercept	7,184 \pm 2,173
X-intercept	-16,16
1/slope	2,249
95% Confidence Intervals	
Slope	0,3243 to 0,565
Y-intercept	0,2672 to 14,1
X-intercept	-42,29 to -0,4862
Goodness of Fit	
R square	0,9787
Sy.x	2,393
Is slope significantly non-zero?	
F	138,1
DFn, DFd	1, 3
P value	0,0013
Deviation from zero?	Significant
Equation	$Y = 0,4447 * X + 7,184$
Data	
Number of X values	5
Maximum number of Y replicates	1
Total number of values	5
Number of missing values	0

Lampiran 6. Tabel Regresi Linear Larutan Pembanding (Vitamin C)

Tabel regresi linear uji kapasitas antioksidan vitamin C

Linear Regression	Nilai
Best-fit values \pm SE	
Slope	6,382 \pm 0,1258
Y-intercept	19,49 \pm 0,8347
X-intercept	-3,054
1/slope	0,1567
95% Confidence Intervals	
Slope	5,982 to 6,782
Y-intercept	16,83 to 22,15
X-intercept	-3,687 to -2,492
Goodness of Fit	
R square	0,9988
Sy.x	0,7958
Is slope significantly non-zero?	
F	2572
DFn, DFd	1, 3
P value	<0,0001
Deviation from zero?	Significant
Equation	$Y = 6,382 * X + 19,49$
Data	
Number of X values	5
Maximum number of Y replicates	1
Total number of values	5
Number of missing values	0

Lampiran 7. Tabel Konsentrasi dan Absorbansi Larutan Standar Tanin dan Tabel Regresi Linear Standar Tanin

Tabel konsentrasi dan rata-rata absorbansi larutan standar tanin

Konsentrasi ($\mu\text{g/mL}$)	Rata-rata Absorbansi
300	0,344
400	0,421
500	0,469
600	0,531
700	0,654

Tabel Regresi Linear Standar Tanin

Linear Regression	Nilai
Best-fit values \pm SE	
Slope	0,00073 \pm 7,332e-005
Y-intercept	0,1188 \pm 0,0381
X-intercept	-162,7
1/slope	1370
95% Confidence Intervals	
Slope	0,0004967 to 0,0009633
Y-intercept	-0,002447 to 0,24
X-intercept	-478,9 to 2,564
Goodness of Fit	
R square	0,9706
Sy.x	0,02319
Is slope significantly non-zero?	
F	99,13
DFn, DFd	1, 3
P value	0,0022
Deviation from zero?	Significant
Equation	$Y = 0,00073 * X + 0,1188$
Data	
Number of X values	5
Maximum number of Y replicates	1
Total number of values	5
Number of missing values	0

Lampiran 8. Tabel Konsentrasi dan Absorbansi Larutan Standar *Berberine Chloride* dan Tabel Regresi Linear Standar *Berberine Chloride*

Tabel 4.6 Konsentrasi dan Rata-rata Absorbansi Larutan Standar *Berberine Chloride*

Konsentrasi ($\mu\text{g/ml}$)	Rata-rata Absorbansi
20	0,088
40	0,123
60	0,134
80	0,178
100	0,232

Lampiran 9

Tabel Regresi Linear Standar *Berberine Chloride*

Linear Regression	Nilai
Best-fit values \pm SE	
Slope	0,001715 \pm 0,0002174
Y-intercept	0,0481 \pm 0,01442
X-intercept	-28,05
1/slope	583,1
95% Confidence Intervals	
Slope	0,001023 to 0,002407
Y-intercept	0,002209 to 0,09399
X-intercept	-89,38 to -0,9434
Goodness of Fit	
R square	0,954
Sy.x	0,01375
Is slope significantly non-zero?	
F	62,24
DFn, DFd	1, 3
P value	0,0042
Deviation from zero?	Significant
Equation	$Y = 0,001715 * X + 0,0481$
Data	
Number of X values	5
Maximum number of Y replicates	1
Total number of values	5
Number of missing values	0

Lampiran 9. Tabel Regresi Linear Uji Toksisitas Ekstrak Daun Rasberi

Tabel Regresi Linear Ekstrak Daun Rasberi

Linear Regression	Nilai
Best-fit values \pm SE	
Slope	0,09074 \pm 0,01653
Y-intercept	13,73 \pm 9,278
X-intercept	-151,3
1/slope	11,02
95% Confidence Intervals	
Slope	0,01961 to 0,1619
Y-intercept	-26,19 to 53,65
X-intercept	-2263 to 195,6
Goodness of Fit	
R square	0,9378
Sy.x	12,93
Is slope significantly non-zero?	
F	30,13
DFn, DFd	1, 2
P value	0,0316
Deviation from zero?	Significant
Equation	$Y = 0,09074 * X + 13,73$
Data	
Number of X values	4
Maximum number of Y replicates	1
Total number of values	4
Number of missing values	0

Lampiran 10. Uji Statistik

1. Kadar GSH Hati kontrol hipoksia 1 hari

Table Analyzed	Hati + Uji
Column B	hipoksia1
vs.	vs,
Column A	normoksia
Mann Whitney test	
P value	0,0286
Exact or approximate P value?	Exact
P value summary	*
Significantly different ($P < 0.05$)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,B	26 , 10
Mann-Whitney U	0
Difference between medians	
Median of column A	0,062, n=4
Median of column B	0,0485, n=4
Difference: Actual	-0,0135
Difference: Hodges-Lehmann	-0,013

2. Kadar GSH Hati Kontrol Hipoksia 7 hari

Table Analyzed	Hati + Uji
Column C	hipoksia 7
vs.	vs,
Column A	normoksia
Mann Whitney test	
P value	0,0286
Exact or approximate P value?	Exact
P value summary	*
Significantly different ($P < 0.05$)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,C	26 , 10
Mann-Whitney U	0
Difference between medians	
Median of column A	0,062, n=4
Median of column C	0,0345, n=4
Difference: Actual	-0,0275
Difference: Hodges-Lehmann	-0,0265

3. Kadar GSH Hati Kontrol Hipoksia 14 hari

Table Analyzed	Hati + Uji
Column D	hipoksia 14
vs.	vs,

Column A	normoksia
Mann Whitney test	
P value	0,0286
Exact or approximate P value?	Exact
P value summary	*
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,D	26 , 10
Mann-Whitney U	0
Difference between medians	
Median of column A	0,062, n=4
Median of column D	0,0245, n=4
Difference: Actual	-0,0375
Difference: Hodges-Lehmann	-0,0375

4. Kadar GSH Hati Uji Hipoksia 1 Hari

Table Analyzed	Darah GSH uji kontrol +
Column B	Hipoksia 1 Hari
vs.	vs,
Column A	Normoksia
Mann Whitney test	
P value	0,0286
Exact or approximate P value?	Exact
P value summary	*
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,B	26 , 10
Mann-Whitney U	0
Difference between medians	
Median of column A	4,786, n=4
Median of column B	4,532, n=4
Difference: Actual	-0,2538
Difference: Hodges-Lehmann	-0,275

5. Kadar GSH Hati Uji Hipoksia 7 Hari

Table Analyzed	Darah GSH uji kontrol +
Column C	Hipoksia 7 Hari
vs.	vs,
Column A	Normoksia
Mann Whitney test	
P value	0,0286
Exact or approximate P value?	Exact
P value summary	*

Significantly different ($P < 0.05$)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,C	26 , 10
Mann-Whitney U	0
Difference between medians	
Median of column A	4,786, n=4
Median of column C	3,94, n=4
Difference: Actual	-0,846
Difference: Hodges-Lehmann	-0,846

6. Kadar GSH Hati Uji Hipoksia 14 Hari

Table Analyzed	Darah GSH uji kontrol +
Column D	Hipoksia 14 Hari
vs.	vs,
Column A	Normoksia
Mann Whitney test	
P value	0,0286
Exact or approximate P value?	Exact
P value summary	*
Significantly different ($P < 0.05$)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,D	26 , 10
Mann-Whitney U	0
Difference between medians	
Median of column A	4,786, n=4
Median of column D	3,622, n=4
Difference: Actual	-1,163
Difference: Hodges-Lehmann	-1,184

7. Perbandingan kadar GSH Darah Kontrol dan Uji

Table Analyzed	Data 4
Column B	Kontrol +
vs.	vs,
Column A	Kontrol -
Mann Whitney test	
P value	0,0286
Exact or approximate P value?	Exact
P value summary	*
Significantly different ($P < 0.05$)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,B	10 , 26
Mann-Whitney U	0

Median of column A	0,05575, n=4
Median of column B	0,07738, n=4
Difference: Actual	0,02163
Difference: Hodges-Lehmann	0,01913

8. Korelasi Kadar GSH Darah dan Hati Uji Dengan Uji Pearson

Pearson r	
r	0,9876
95% confidence interval	0,5212 to 0,9998
R squared	0,9753
P value	
P (two-tailed)	0,0124
P value summary	*
Significant? (alpha = 0.05)	Yes
Number of XY Pairs	4

9. Korelasi Kadar GSH Darah dan Hati Kontrol Dengan Uji Pearson

Pearson r	
r	0,9905
95% confidence interval	0,6112 to 0,9998
R squared	0,981
P value	
P (two-tailed)	0,0095
P value summary	**
Significant? (alpha = 0.05)	Yes
Number of XY Pairs	4

DAFTAR RIWAYAT HIDUP

A. Data Pribadi

Nama Lengkap : Eny Magfironi
NIM : 405160215
Jenis Kelamin : Perempuan
Tempat/tanggal lahir : Pulau Burung,05 Oktober 1998
Agama : Islam
Alamat : Jalan Alpukat 4 No.33,Tanjung Duren Utara II
Kewarganegaraan : Indonesia
Status : Belum menikah
Nomor Hp : 082166253845
E-mail : magfironieny@gmail.com

B. Latar Belakang Pendidikan

- 2004 – 2010 : SDN 015 Keramat Jaya
- 2010 – 2013 : SMPN 1 Pulau Burung
- 2013 – 2016 : SMAN Tunas Bangsa
- 2016 – sekarang : Fakultas Kedokteran Universitas Tarumanagara