

## LAMPIRAN

### Lampiran 1. Data Berat Badan Tikus

#### 1. KELOMPOK KONTROL (K)

Berat Badan Tikus Hari ke	Kode Nomor Tikus						
	1	2	3	4	5	6	7
1	80	80	65	65	55	50	70
3	90	80	70	75	65	70	80
5	100	100	90	85	85	70	90
7	110	85	80	90	85	70	90
9	130	95	90	90	85	60	85
11	120	100	80	110	100	80	100
13	150	115	85	115	100	85	100
15	170	110	80	110	80	100	90
17	190	140	90	150	100	100	100
19	170	110	80	120	90	70	90
21	190	170	110	170	140	120	130
23	200	160	90	150	150	110	100
25	200	160	100	160	120	120	110
27	240	170	115	160	160	115	120
29	225	180	110	170	165	120	115
31	250	180	120	170	160	120	125
33	250	180	160	200	180	150	160
35	250	180	140	180	175	130	145
Berat rata-rata	177,63	136,84	100,26	135,79	120,79	99,47	108,95
Keterangan: Berat Badan dalam gram							

## 2. KELOMPOK PEWANGI RUANGAN GEL (P1)

Berat Badan Tikus Hari ke	Kode Nomor Tikus						
	1	2	3	4	5	6	7
1	45	70	50	80	70	55	65
3	50	90	65	80	75	70	80
5	60	95	75	90	75	70	90
7	80	105	75	110	90	85	100
9	75	105	90	115	105	80	80
11	90	100	95	115	100	75	90
13	80	100	90	130	115	70	100
15	100	120	120	160	110	80	120
17	110	150	140	160	140	90	130
19	100	120	130	160	140	90	100
21	140	150	150	180	170	110	100
23	150	150	150	200	150	100	100
25	150	150	170	150	170	120	110
27	150	160	165	190	150	120	110
29	150	160	155	195	170	110	95
31	165	165	190	200	180	130	120
33	180	180	200	210	180	150	120
35	160	160	190	215	180	140	110
Berat rata-rata	133,06	129,44	127,78	152,22	131,67	96,94	101,11
Keterangan: Berat Badan dalam gram							

### 3. KELOMPOK KARBON AKTIF GRANULAR (P2)

Berat Badan Tikus Hari ke	Kode Nomor Tikus						
	1	2	3	4	5	6	7
1	50	80	60	45	70	60	50
3	70	95	90	70	70	85	80
5	80	100	105	85	90	100	100
7	95	115	125	80	95	100	100
9	80	120	125	85	95	90	95
11	90	130	125	95	100	100	105
13	110	130	130	100	90	100	110
15	120	160	160	105	105	130	115
17	120	170	170	140	100	120	130
19	105	150	150	110	100	110	100
21	160	180	190	160	140	160	150
23	140	170	190	140	150	150	120
25	150	180	200	160	160	170	120
27	150	200	215	170	140	160	130
29	150	180	185	160	150	160	120
31	145	200	200	130	155	160	140
33	170	205	195	160	155	180	130
35	170	200	200	140	180	180	160
Berat rata-rata	119,72	153,61	156,39	118,61	119,17	128,89	114,17
Keterangan: Berat Badan dalam gram							

4. KELOMPOK PEWANGI RUANGAN GEL+ KARBON AKTIF GRANULAR (P3)

Berat Badan Tikus Hari ke	Kode Nomor Tikus						
	1	2	3	4	5	6	7
1	70	80	55	60	90	60	90
3	70	100	80	80	90	70	100
5	85	115	90	100	100	90	125
7	95	130	95	110	115	70	130
9	85	125	95	95	100	75	90
11	95	140	100	115	120	140	80
13	100	120	100	140	115	80	110
15	120	160	110	120	130	110	110
17	130	160	110	140	150	90	130
19	110	130	110	140	140	70	100
21	160	170	140	150	150	90	140
23	150	170	150	150	170	190	140
25	160	180	150	150	170	200	115
27	180	190	160	180	200	170	190
29	165	170	150	175	195	150	195
31	185	190	170	190	195	155	200
33	180	190	170	210	210	160	220
35	180	180	170	195	185	160	215
Berat rata-rata	128,89	150	122,50	138,89	145,83	118,33	137,78
Keterangan: Berat Badan dalam gram							

## Lampiran 2. Hasil Uji SPSS Ketebalan Septum Inter-alveolaris

### Tests of Normality

Kelompok		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Septum	Kontrol	,241	7	,200*	,842	7	,104
	Pewangi	,233	7	,200*	,887	7	,260
	Karbon Aktif	,214	7	,200*	,917	7	,448
	Karbon Pewangi	,174	7	,200*	,944	7	,677

a. Lilliefors Significance Correction

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

### ANOVA

Septum

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	445,840	3	148,613	4,460	,013
Within Groups	799,652	24	33,319		
Total	1245,492	27			

### Septum

Duncan<sup>a</sup>

Kelompok	N	Subset for alpha = 0.05	
		1	2
Kontrol	7	6,8386	
Karbon Aktif	7	7,6586	
Karbon Pewangi	7		14,9971
Pewangi	7		15,4086
Sig.		,793	,895

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 7,000.

### Lampiran 3. Hasil Uji SPSS Diameter Alveolus

#### Tests of Normality

Kelompok		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Diameter	Kontrol	,249	7	,200 <sup>*</sup>	,921	7	,476
	Pewangi	,209	7	,200 <sup>*</sup>	,897	7	,312
	Carbon	,188	7	,200 <sup>*</sup>	,913	7	,420
	Carbon Pewangi	,214	7	,200 <sup>*</sup>	,943	7	,666

a. Lilliefors Significance Correction

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

#### ANOVA

##### Diameter

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	754,754	3	251,585	18,682	,000
Within Groups	323,192	24	13,466		
Total	1077,946	27			

##### Diameter

##### Duncan<sup>a</sup>

Kelompok	N	Subset for alpha = 0.05		
		1	2	3
Pewangi	7	19,9643		
Carbon Pewangi	7		24,0214	
Carbon	7			31,5200
Kontrol	7			32,3871
Sig.		1,000	1,000	,662

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 7,000.

#### Lampiran 4. Hasil Uji SPSS Jumlah Sel Radang

Kelompok		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Limfosit	Kontrol	,157	7	,200*	,979	7	,954
	Pewangi	,184	7	,200*	,925	7	,509
	Karbon Aktif	,190	7	,200*	,964	7	,849
	Karbon Pewangi	,266	7	,145	,817	7	,060
PMN	Kontrol	,291	7	,075	,873	7	,195
	Pewangi	,224	7	,200*	,908	7	,380
	Karbon Aktif	,264	7	,149	,887	7	,262
	Karbon Pewangi	,195	7	,200*	,922	7	,489
SelPlasma	Kontrol	,214	7	,200*	,896	7	,310
	Pewangi	,153	7	,200*	,970	7	,897
	Karbon Aktif	,258	7	,174	,818	7	,062
	Karbon Pewangi	,200	7	,200*	,891	7	,282
Eosinofil	Kontrol	,153	7	,200*	,952	7	,744
	Pewangi	,194	7	,200*	,945	7	,684
	Karbon Aktif	,204	7	,200*	,875	7	,204
	Karbon Pewangi	,214	7	,200*	,896	7	,310
Histiosit	Kontrol	,214	7	,200*	,932	7	,570
	Pewangi	,241	7	,200*	,937	7	,609
	Karbon Aktif	,267	7	,140	,894	7	,294
	Karbon Pewangi	,108	7	,200*	,978	7	,949

a. Lilliefors Significance Correction

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

## ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Limfosit	Between Groups	1484,679	3	494,893	3,520	,030
	Within Groups	3374,000	24	140,583		
	Total	4858,679	27			
PMN	Between Groups	364,143	3	121,381	10,963	,000
	Within Groups	265,714	24	11,071		
	Total	629,857	27			
Plasma	Between Groups	86,964	3	28,988	6,374	,002
	Within Groups	109,143	24	4,548		
	Total	196,107	27			
Eosinofil	Between Groups	896,964	3	298,988	11,011	,000
	Within Groups	651,714	24	27,155		
	Total	1548,679	27			
Histiosit	Between Groups	27,857	3	9,286	3,250	,039
	Within Groups	68,571	24	2,857		
	Total	96,429	27			

## Limfosit

Duncan<sup>a</sup>

Kelompok	N	Subset for alpha = 0.05	
		1	2
Kontrol	7	4,71	
Karbon Aktif	7	9,00	
Karbon Pewangi	7	17,14	17,14
Pewangi	7		23,57
Sig.		,075	,321

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 7,000.

## PMN

Duncan<sup>a</sup>

Kelompok	N	Subset for alpha = 0.05	
		1	2
Karbon Aktif	7	1,43	



Kontrol	7	3,43	
Karbon Pewangi	7		8,71
Pewangi	7		10,14
Sig.		,272	,430

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 7,000.

#### Plasma

Duncan<sup>a</sup>

Kelompok	N	Subset for alpha = 0.05	
		1	2
Karbon Aktif	7	1,86	
Kontrol	7	2,00	
Karbon Pewangi	7		5,14
Pewangi	7		5,71
Sig.		,901	,621

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 7,000.

#### Eosinofil

Duncan<sup>a</sup>

Kelompok	N	Subset for alpha = 0.05	
		1	2
Karbon Aktif	7	3,00	
Kontrol	7	3,57	
Karbon Pewangi	7	6,00	
Pewangi	7		17,00
Sig.		,320	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 7,000.

#### Histosit

Duncan<sup>a</sup>

Kelompok	N	Subset for alpha = 0.05	
		1	2
Kontrol	7	3,00	
Karbon Aktif	7	3,86	3,86
Karbon Pewangi	7		5,00
Pewangi	7		5,57
Sig.		,352	,084

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 7,000.

## Lampiran 5. Penilaian Kadar Formaldehida Pewangi Ruangan



### LAPORAN HASIL UJI

No. Sertifikat : 00836/01/LPPT/VI/2014

No. Pengujian : 14050100836

#### Informasi Pelanggan

Nama : Rr. Yuningtyaswari, S.Si., M. Kes.

Tanggal Penerimaan : 22 Mei 2014

Alamat : Fakultas Kedokteran UMY

Tanggal Pengujian : 23 Mei 2014

#### Hasil Pengujian

##### 1. Pewangi Ruang (G1)

Parameter Uji	Hasil	Satuan	Metode
Formaldehide	0,33	ppm	Spektrofotometri UV-vis

##### 2. Pewangi Ruang (G2)

Parameter Uji	Hasil	Satuan	Metode
Formaldehide	0,41	ppm	Spektrofotometri UV-vis

##### 3. Pewangi Ruang (G3)

Parameter Uji	Hasil	Satuan	Metode
Formaldehide	0,28	ppm	Spektrofotometri UV-vis

##### 4. Pewangi Ruang (M)

Parameter Uji	Hasil	Satuan	Metode
Formaldehide	0,62	ppm	Spektrofotometri UV-vis



Yogyakarta, 3 Juni 2014  
Manajer Teknik,

Dr. Abdul Rohman, M.Si., Apt.



Fakultas Kedokteran dan Ilmu Kesehatan  
Universitas Muhammadiyah Yogyakarta

**KETERANGAN  
KELAYAKAN ETIKA PENELITIAN**

Nomor : 454/EP-FKIK-UMY/XII/2016

Komisi Etika Penelitian Fakultas Kedokteran dan Ilmu Kesehatan Universitas Muhammadiyah Yogyakarta yang terdiri atas :

1. Prof. dr.H. Djauhar Ismail, Sp.A(K)., Ph.D.
2. Prof.Dr.dr.H. Soewito A, Sp.THT-KL
3. drg. Ana Medawati, M.Kes
4. drh. Tri Wulandari, M.Kes
5. Dr. dr. Titeik Hidayati, M. Kes
6. Dr. dr. Tri Wahyuliati, Sp. S., M. Kes
7. Titih Huriah, Ns., M. Kep., Sp. Kom
8. Dr. drg. Tita Ratya Utari, Sp. Ort
9. Sabtanti Harimurti, Ph. D., Apt
10. Dr. dr. Arlina Dewi, MMR
11. Dra. Irma Risdiyana, Apt., MPH
12. dr. Inayati Habib, Sp. MK., M. Kes

Telah mengkaji permohonan kelayakan etika penelitian yang diajukan oleh :

**Nama Peneliti** : Oriza Malta Damayanti  
**NIM** : 20130310017  
**Judul Penelitian** : Pengaruh Penggunaan Karbon Aktif Terhadap Gambaran Histologi Pulmo *Rattus norvegicus* yang Diinduksi Oleh Pewangi Ruang  
**Pada Tanggal** : 11 Desember 2016  
**Dengan Hasil** : Layak Etik

Demikian surat keterangan ini diberikan untuk dapat digunakan sebagaimana mestinya.

Yogyakarta, 15 Desember 2016

Sekretaris,  
  
Dr. dr. Titeik Hidayati, M. Kes

Kampus:

Jl. Lingkar Selatan, Tamantirto, Kasihan, Bantul, Yogyakarta 55183  
Telp. (0274) 387656 ext. 213, 7491350 Fax. (0274) 387656

*Muda mendunia*

**Lampiran 7. Foto – foto selama Kegiatan**

