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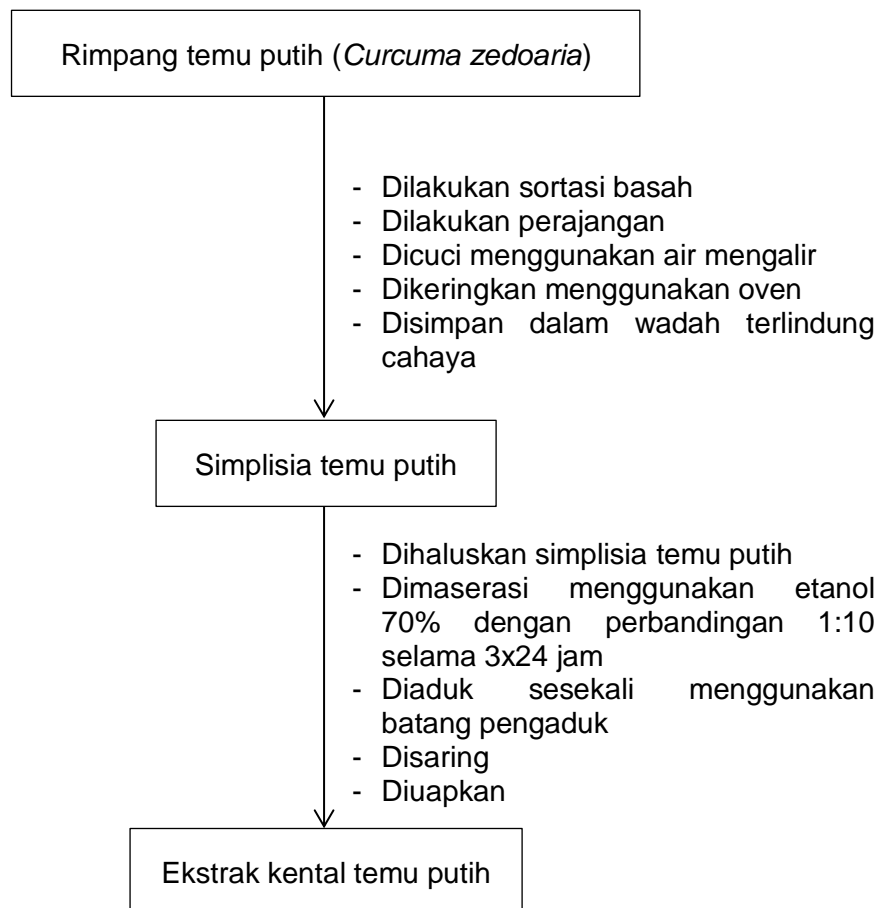
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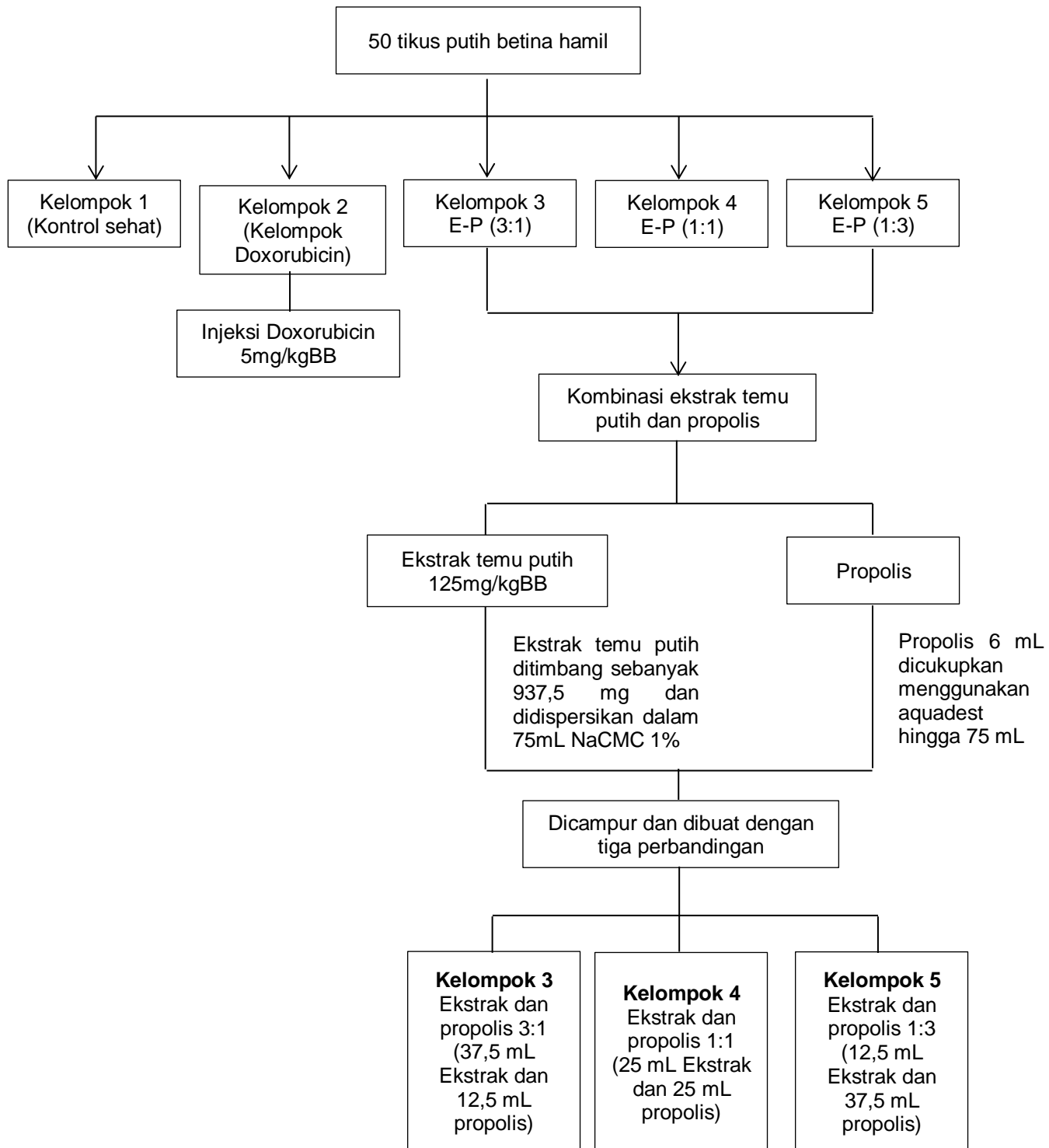


## LAMPIRAN

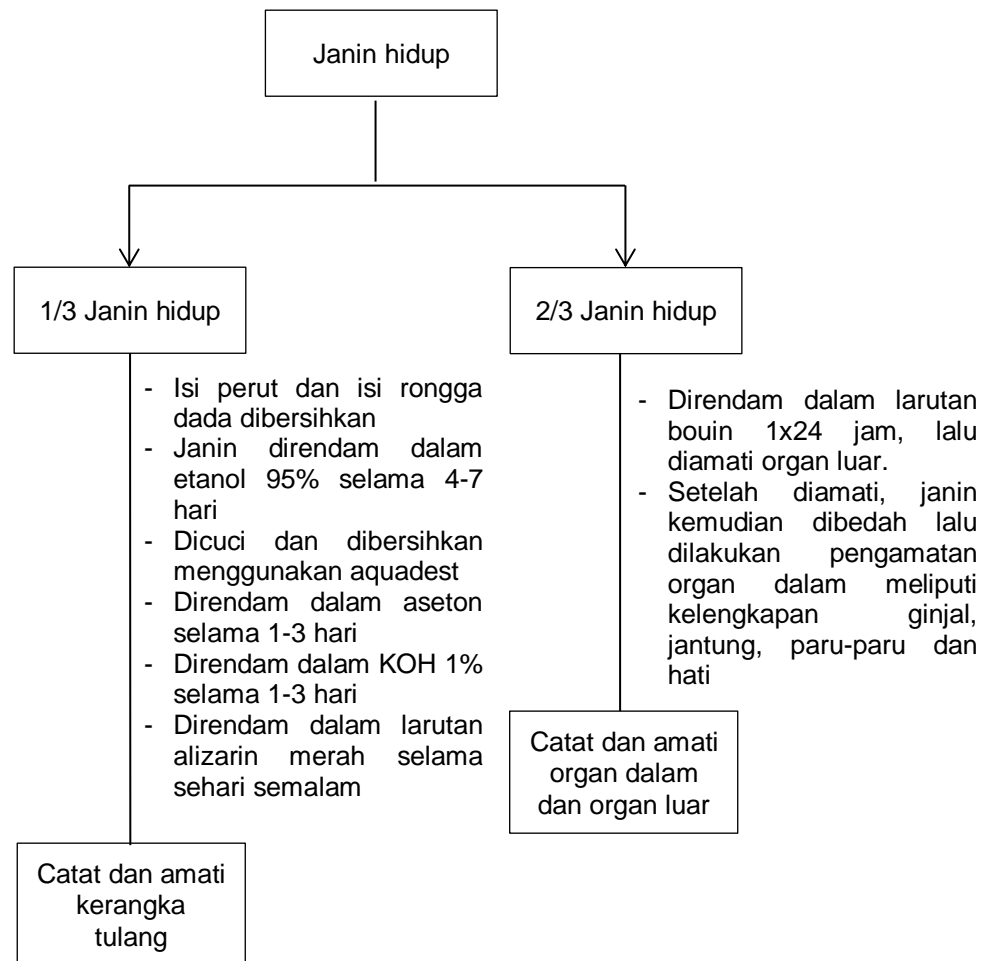
### Lampiran 1. Skema kerja pembuatan ekstrak etanol temu putih (*Curcuma zedoaria*)



## Lampiran 2. Skema kerja rancangan penelitian



### Lampiran 3. Skema kerja uji teratogenik



#### Lampiran 4. Perhitungan Dosis

- a. Perhitungan dosis doxorubicin

Dosis doxorubicin = 5mg/kgBB = 5mg/1000gBB

$$\text{Untuk tikus 200g} = \frac{5\text{mg}}{1000\text{g}} \times \frac{x\text{ mg}}{200\text{g}} = 1\text{ mg}$$

- b. Pembuatan NaCMC 1%

1% = 1 g zat terlarut dalam 100 mL zat pelarut

NaCMC 1% = 1 g NaCMC dalam 100 mL aquadest

- c. Perhitungan dosis ekstrak

Dosis ekstrak = 125mg/kgBB = 125mg/1000gBB

$$\text{Untuk tikus 200g (2ml)} = \frac{125\text{mg}}{1000\text{g}} \times \frac{x\text{ mg}}{200\text{g}} = 25\text{ mg}$$

$$\frac{25\text{ mg}}{x} \times 100\text{ ml} = 1250\text{ mg}/100\text{ml} = 937,5\text{ mg}/75\text{ml}$$

$$3 : 1 = \frac{937,5\text{mg}}{75\text{ ml}} \times 37,5\text{ ml} = 468,75\text{ mg}$$

$$1 : 1 = \frac{937,5\text{mg}}{75\text{ ml}} \times 25\text{ ml} = 312,5\text{ mg}$$

$$1 : 3 = \frac{937,5\text{mg}}{75\text{ ml}} \times 12,5\text{ ml} = 156,25\text{ mg}$$

- d. Perhitungan dosis propolis

900mg propolis dalam 75mL aquadest

$$3 : 1 = \frac{900\text{ mg}}{75\text{ ml}} \times 12,5\text{ ml} = 150\text{ mg}$$

$$1 : 1 = \frac{900\text{ mg}}{75\text{ ml}} \times 25\text{ ml} = 300\text{ mg}$$

$$1 : 3 = \frac{900\text{ mg}}{75\text{ ml}} \times 37,5\text{ ml} = 450\text{ mg}$$

#### Lampiran 5. Perhitungan %Rendemen

$$\% \text{ Rendemen} = \frac{\text{Bobot ekstrak yang diperoleh (gram)}}{\text{Bobot simplisia kering (gram)}}$$

$$= \frac{46,07\text{ g}}{525,5\text{ g}} \times 100\%$$

$$= 8,766\%$$

## Lampiran 6. Hasil Pengamatan Fetus

### Pengamatan Jumlah Fetus

Tabel 8. Jumlah Fetus Tikus

Kelompok	Jumlah Induk	Jumlah janin	Janin resorpsi
K1	5	46	0
K2	5	0	0
K3	5	40	0
K4	5	41	0
K5	5	34	0

Keterangan, K1 = Kontrol Sehat, K2 = Injeksi doxorubicin 5mg/kgBB i.p, K3 = Kombinasi ekstrak temu putih dan propolis 1:3, K4 = Kombinasi ekstrak temu putih dan propolis 1:1, K5 = Kombinasi ekstrak temu putih dan propolis 3 :1

Tabel 9. Bobot Tikus saat perlakuan

Kelompok	Bobot awal	Bobot sebelum diberi perlakuan	Bobot sebelum dibedah
K1	102	154	201
	114	161	222
	105	155	215
	131	176	216
	145	181	209
K2	121	148	131
	113	151	126
	120	148	121
	117	138	120
	116	140	119
K3	114	140	207
	112	148	201
	99	127	220
	123	140	205
	105	142	209
K4	104	160	197
	102	160	205
	112	172	195
	114	156	204

	110	161	212
<b>K5</b>	120	188	211
	110	177	198
	124	168	201
	109	178	202
	119	151	220

Keterangan, K1 = Kontrol Sehat, K2 = Injeksi doxorubicin 5mg/kgBB i.p, K3 = Kombinasi ekstrak temu putih dan propolis 1:3, K4 = Kombinasi ekstrak temu putih dan propolis 1:1, K5 = Kombinasi ekstrak temu putih dan propolis 3 :1

## Lampiran 7. Analisis Statistik

**Tabel 10. Data Statistik Jumlah Fetus Tikus (Homogeneous subsets)**

Jumlah Fetus		
Tukey HSD <sup>a</sup>		
Kelompok Uji	N	Subset for alpha = 0.05 1
ETP:Propolis (3:1)	5	6.8000
ETP:Propolis (1:3)	5	8.0000
ETP:Propolis (1:1)	5	8.2000
Kontrol Sehat	5	9.2000
Sig.		.061

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

**Tabel 11. Data Statistik Jumlah Fetus Tikus (One Way ANOVA)**

ANOVA					
Jumlah Fetus					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	14.550	3	4.850	2.553	.092
Within Groups	30.400	16	1.900		
Total	44.950	19			

**Tabel 12. Data Statistik Jumlah Fetus Tikus (Post Hoc Tests)**

### Multiple Comparisons

Dependent Variable: Jumlah Fetus

Tukey HSD

(I) Kelompok Uji	(J) Kelompok Uji	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol Sehat	ETP:Propolis (1:3)	1.20000	.87178	.531	-1.2942	3.6942
	ETP:Propolis (1:1)	1.00000	.87178	.667	-1.4942	3.4942
	ETP:Propolis (3:1)	2.40000	.87178	.061	-.0942	4.8942
ETP:Propolis (1:3)	Kontrol Sehat	-1.20000	.87178	.531	-3.6942	1.2942
	ETP:Propolis (1:1)	-.20000	.87178	.996	-2.6942	2.2942
	ETP:Propolis (3:1)	1.20000	.87178	.531	-1.2942	3.6942
ETP:Propolis (1:1)	Kontrol Sehat	-1.00000	.87178	.667	-3.4942	1.4942
	ETP:Propolis (1:3)	.20000	.87178	.996	-2.2942	2.6942
	ETP:Propolis (3:1)	1.40000	.87178	.403	-1.0942	3.8942
ETP:Propolis (3:1)	Kontrol Sehat	-2.40000	.87178	.061	-4.8942	.0942
	ETP:Propolis (1:3)	-1.20000	.87178	.531	-3.6942	1.2942
	ETP:Propolis (1:1)	-1.40000	.87178	.403	-3.8942	1.0942

**Tabel 13. Data Statistik Jumlah Panjang Fetus Tikus (Homogeneous subsets)**

### Panjang Fetus

Tukey HSD<sup>a</sup>

Kelompok Uji	N	Subset for alpha = 0.05 1
Kontrol Sehat	5	2.4864
ETP:Propolis (3:1)	5	2.5800
ETP:Propolis (1:1)	5	2.6260
ETP:Propolis (1:3)	5	2.6780
Sig.		.435

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

**Tabel 14. Data Statistik Jumlah Panjang Fetus Tikus (One Way ANOVA)**

**ANOVA**

Panjang Fetus

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.099	3	.033	.861	.481
Within Groups	.615	16	.038		
Total	.714	19			

**Tabel 15. Data Statistik Jumlah Panjang Fetus Tikus (Post Hoc Tests)**

**Multiple Comparisons**

Dependent Variable: Panjang Fetus

Tukey HSD

(I) Kelompok Uji	(J) Kelompok Uji	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol Sehat	ETP:Propolis (1:3)	-.19160	.12398	.435	-.5463	.1631
	ETP:Propolis (1:1)	-.13960	.12398	.679	-.4943	.2151
	ETP:Propolis (3:1)	-.09360	.12398	.873	-.4483	.2611
ETP:Propoli s (1:3)	Kontrol Sehat	.19160	.12398	.435	-.1631	.5463
	ETP:Propolis (1:1)	.05200	.12398	.974	-.3027	.4067
	ETP:Propolis (3:1)	.09800	.12398	.858	-.2567	.4527
ETP:Propoli s (1:1)	Kontrol Sehat	.13960	.12398	.679	-.2151	.4943
	ETP:Propolis (1:3)	-.05200	.12398	.974	-.4067	.3027
	ETP:Propolis (3:1)	.04600	.12398	.982	-.3087	.4007
ETP:Propoli s (3:1)	Kontrol Sehat	.09360	.12398	.873	-.2611	.4483
	ETP:Propolis (1:3)	-.09800	.12398	.858	-.4527	.2567
	ETP:Propolis (1:1)	-.04600	.12398	.982	-.4007	.3087

**Tabel 16. Data Statistik Jumlah Bobot Fetus Tikus (Homogeneous subsets)**

**Bobot Fetus**

Tukey HSD<sup>a</sup>

Kelompok Uji	N	Subset for alpha
		= 0.05
ETP:Propolis (3:1)	5	1 4.1980
ETP:Propolis (1:1)	5	1 4.2200



ETP:Propolis (1:3)	5	4.3360
Kontrol Sehat	5	4.6320
Sig.		.897

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

**Tabel 17. Data Statistik Jumlah Bobot Fetus Tikus (One Way ANOVA)**

### ANOVA

Bobot Fetus

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.598	3	.199	.205	.892
Within Groups	15.591	16	.974		
Total	16.189	19			

**Tabel 18. Data Statistik Jumlah Bobot Fetus Tikus (Post Hoc Tests)**

### Multiple Comparisons

Dependent Variable: Bobot Fetus

Tukey HSD

(I) Kelompok Uji	(J) Kelompok Uji	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol Sehat	ETP:Propolis (1:3)	.29600	.62432	.964	-1.4902	2.0822
	ETP:Propolis (1:1)	.41200	.62432	.911	-1.3742	2.1982
	ETP:Propolis (3:1)	.43400	.62432	.897	-1.3522	2.2202
ETP:Propolis (1:3)	Kontrol Sehat	-.29600	.62432	.964	-2.0822	1.4902
	ETP:Propolis (1:1)	.11600	.62432	.998	-1.6702	1.9022
	ETP:Propolis (3:1)	.13800	.62432	.996	-1.6482	1.9242
ETP:Propolis (1:1)	Kontrol Sehat	-.41200	.62432	.911	-2.1982	1.3742
	ETP:Propolis (1:3)	-.11600	.62432	.998	-1.9022	1.6702
	ETP:Propolis (3:1)	.02200	.62432	1.000	-1.7642	1.8082
ETP:Propolis (3:1)	Kontrol Sehat	-.43400	.62432	.897	-2.2202	1.3522
	ETP:Propolis (1:3)	-.13800	.62432	.996	-1.9242	1.6482
	ETP:Propolis (1:1)	-.02200	.62432	1.000	-1.8082	1.7642

## Lampiran 8. Dokumentasi Penelitian



**Gambar 6. Sampel rimpang temu putih (*Curcuma zedoaria* (Berg.) Roscoe)**



**Gambar 7. Perajangan simplisia**



**Gambar 8. Proses maserasi**



**Gambar 9. Proses penyaringan**



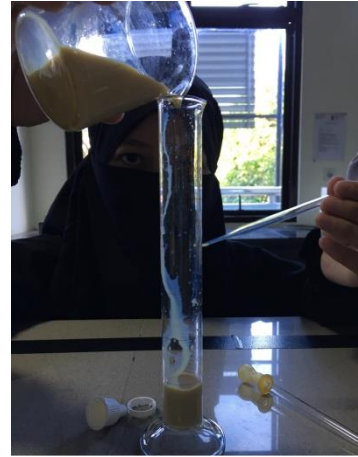
**Gambar 10. Ekstrak kental rimpang**



**Gambar 10. Pembuatan NaCMC 1%**



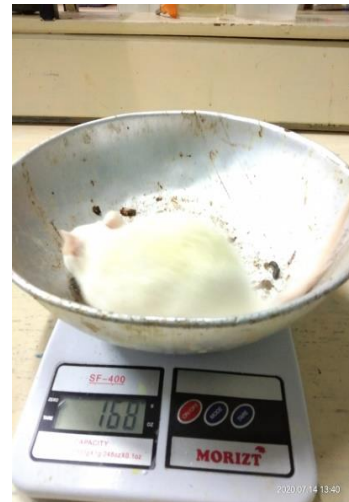
**Gambar 11. Pembuatan suspensi ekstrak temu putih**



**Gambar 12. Pembuatan kombinasi ekstrak temu putih dan propolis**



**Gambar 13. Kombinasi ekstrak temu putih dan propolis**



**Gambar 14. Penimbangan bobot induk tikus**

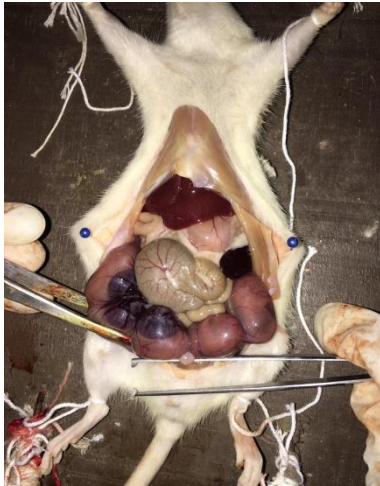


**Gambar 15. Pemberian doxorubicin secara intraperitoneal**



**Gambar 16. Pemberian kombinasi ekstrak temu putih dan propolis 1:3, 1:1, dan 3:1 secara peroral**





**Gambar 17.**Laparaktomi untuk pengambilan janin



**Gambar 18.** Pengamatan organ dalam dan organ luar fetus yang direndam larutan Bouin



**Gambar 19.** Pengukuran panjang fetus tikus



**Gambar 20.** Penimbangan bobot fetus tikus



**Gambar 21.** Fetus tikus direndam aseton



**Gambar 22.** Pengamatan kerangka fetus yang direndam larutan Alizarin 0,001%

## Lampiran 8. Dokumen Rekomendasi Persetujuan Etik



**REKOMENDASI PERSETUJUAN ETIK**  
 Nomor : 485/UN4.6.4.5.31/ PP36/ 2021

Tanggal: 28 Juli 2021

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH21060380	No Sponsor Protokol	
Peneliti Utama	<b>Islamiaty Burhanuddin</b>	Sponsor	
Judul Peneliti	Uji Teratogenik Kombinasi Ekstrak Temu Putih (Curcuma zedoaria (Berg.) Roscoe) dan Propolis pada Tikus		
No Versi Protokol	2	Tanggal Versi	<b>11 Juli 2021</b>
No Versi PSP		Tanggal Versi	
Tempat Penelitian	<b>Fakultas Farmasi Universitas Hasanuddin Makassar</b>		
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal	Masa Berlaku <b>28 Juli 2021</b> sampai <b>28 Juli 2022</b>	Frekuensi review lanjutan
Ketua Komisi Etik Penelitian Kesehatan FKUH	Nama <b>Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)</b>	Tanda tangan	
Sekretaris Komisi Etik Penelitian Kesehatan FKUH	Nama <b>dr. Agusalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)</b>	Tanda tangan	

**Kewajiban Peneliti Utama:**

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Laporan SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari protokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan