

## DAFTAR PUSTAKA

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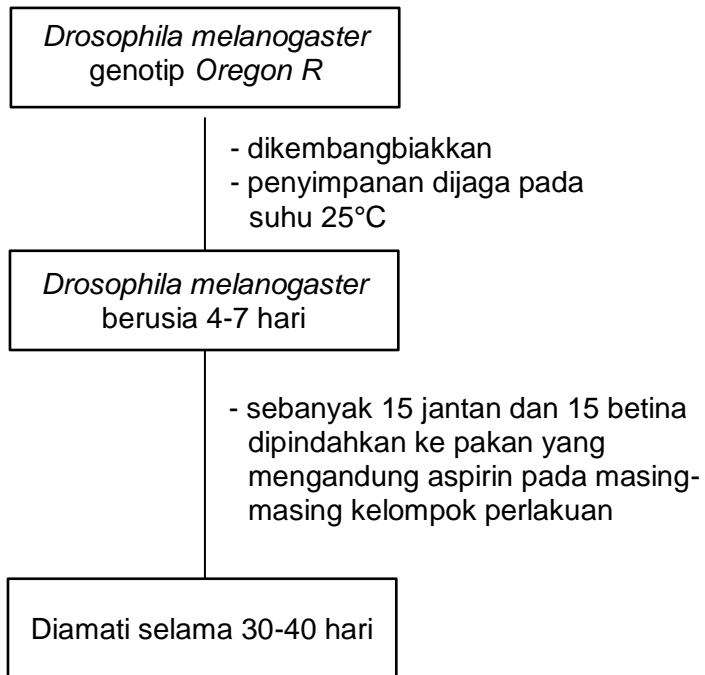
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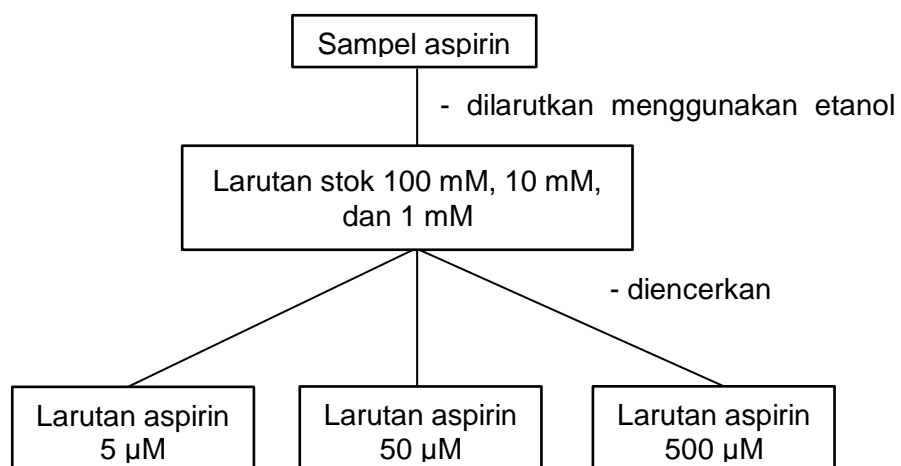
## LAMPIRAN

### Lampiran 1. Skema Kerja

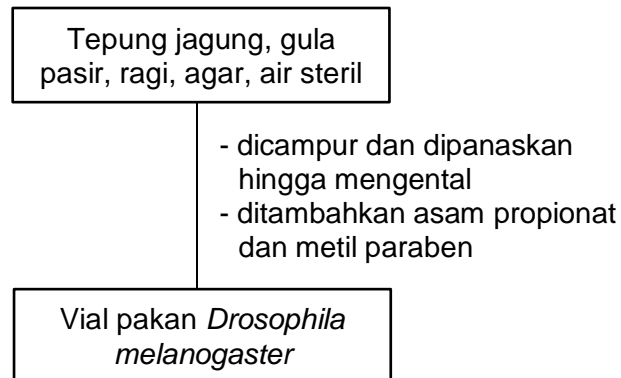
#### Lampiran 1.1. Penyiapan Hewan Uji



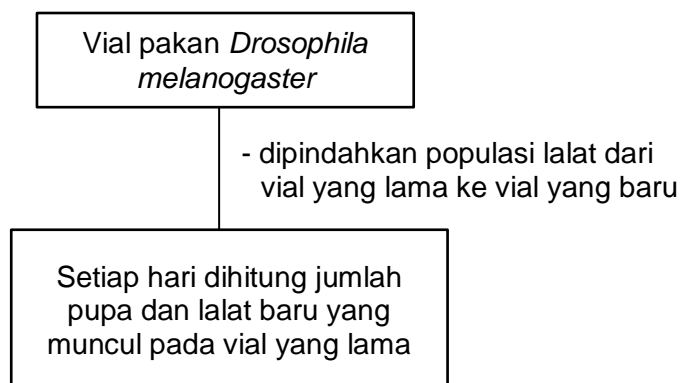
#### Lampiran 1.2. Penyiapan Sampel



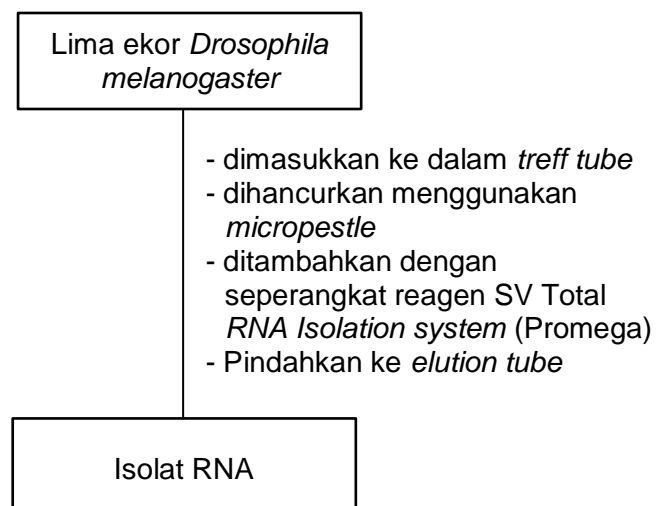
### Lampiran 1.3. Penyiapan Pakan



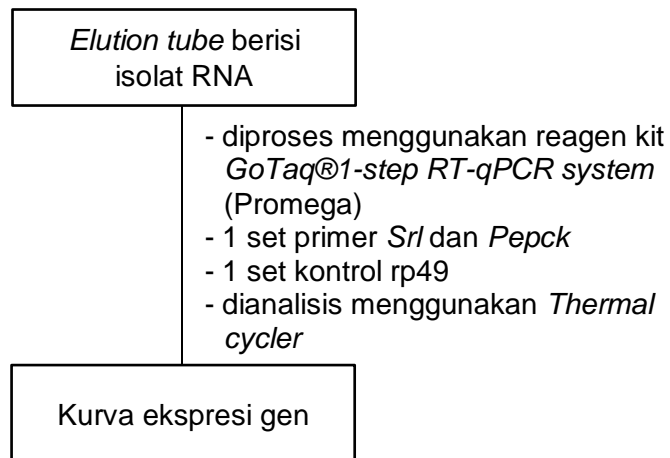
### Lampiran 1.4. Uji Reproduksi



### Lampiran 1.5. Penyiapan Sampel RNA



## Lampiran 1.6. Pengujian dengan PCR



## Lampiran 2. Perhitungan

### Lampiran 2.1. Perhitungan Pengenceran Aspirin

Pembuatan larutan stok (Aspirin 100 mM) :

$$M = \frac{m}{MR} \times \frac{1000}{ml}$$

$$M = \frac{m}{180,16} \times \frac{1000}{25 \text{ ml}}$$

$$0,1 = \frac{1000 \text{ m}}{4504}$$

$$m = 0,4504 \text{ gram}$$

Dibuat pengenceran dengan konsentrasi 10 mM :

$$M1 \times V1 = M2 \times V2$$

$$100 \times V1 = 10 \times 5 \text{ ml}$$

$$V1 = \frac{10 \times 5}{100}$$

$V1 = 0,5 \text{ mL} \Rightarrow 500 \mu\text{L}$  (dicuplik dari 100  $\mu\text{M}$  lalu ad 5 mL etanol 96%)

Dibuat pengenceran dengan konsentrasi 1 mM :

$$M1 \times V1 = M2 \times V2$$

$$100 \times V1 = 1 \times 5 \text{ ml}$$

$$V1 = \frac{1 \times 5}{100}$$

$$V1 = 0,05 \text{ mL} \Rightarrow 50 \text{ } \mu\text{L} \text{ (dicuplik dari } 100 \text{ } \mu\text{M lal ad } 5 \text{ mL etanol } 96\%)$$

### **Lampiran 2.2. Perhitungan Aspirin + Pakan**

Dibuat aspirin konsentrasi 500  $\mu\text{M}$  dalam pakan dari larutan aspirin 100 mM.

$$500 \text{ } \mu\text{M} = 500 \times 10^{-3} \text{ mM}$$

$$M1 \times V1 = M2 \times V2$$

$$100 \times V1 = 500 \times 10^{-3} \times 5$$

$$V1 = 25 \times 10^{-3} \text{ mL}$$

$$V1 = 25 \text{ } \mu\text{L} \text{ (dicuplik dari } 100 \text{ mM lal ad } 5 \text{ mL pakan)}$$

Dibuat aspirin konsentrasi 50  $\mu\text{M}$  dalam pakan dari larutan aspirin 10 mM.

$$50 \text{ } \mu\text{M} = 50 \times 10^{-3} \text{ mM}$$

$$M1 \times V1 = M2 \times V2$$

$$10 \times V1 = 50 \times 10^{-3} \times 5$$

$$V1 = 25 \times 10^{-3} \text{ mL}$$

$$V1 = 25 \text{ } \mu\text{L} \text{ (dicuplik dari } 10 \text{ mM lal ad } 5 \text{ mL pakan)}$$

Dibuat aspirin konsentrasi 5  $\mu\text{M}$  dalam pakan dari larutan aspirin 1 mM.

$$5 \text{ } \mu\text{M} = 5 \times 10^{-3} \text{ mM}$$

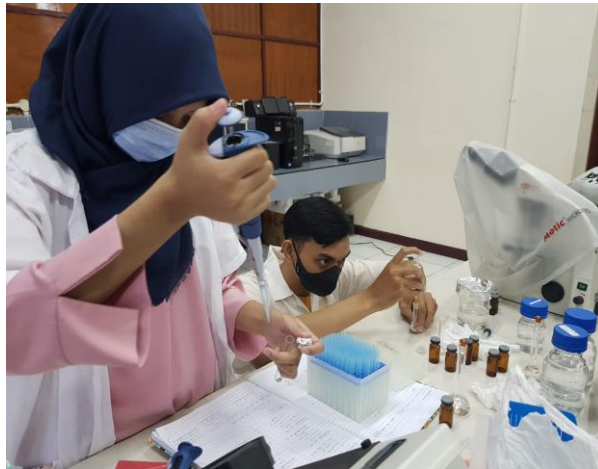
$$M1 \times V1 = M2 \times V2$$

$$1 \times V1 = 5 \times 10^{-3} \times 5$$

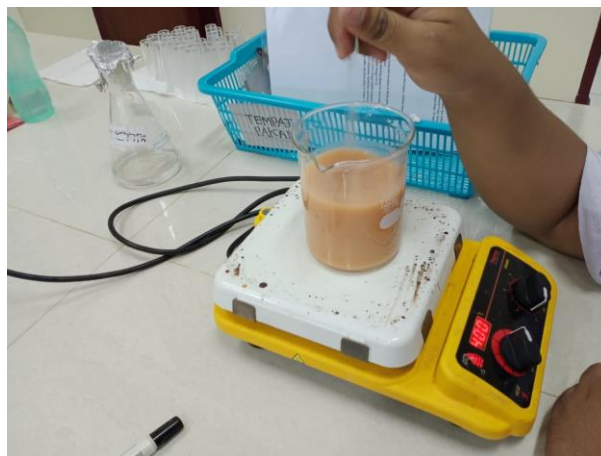
$$V1 = 25 \times 10^{-3} \text{ mL}$$

$$V1 = 25 \text{ } \mu\text{L} \text{ (dicuplik dari } 1 \text{ mM lal ad } 5 \text{ mL pakan)}$$

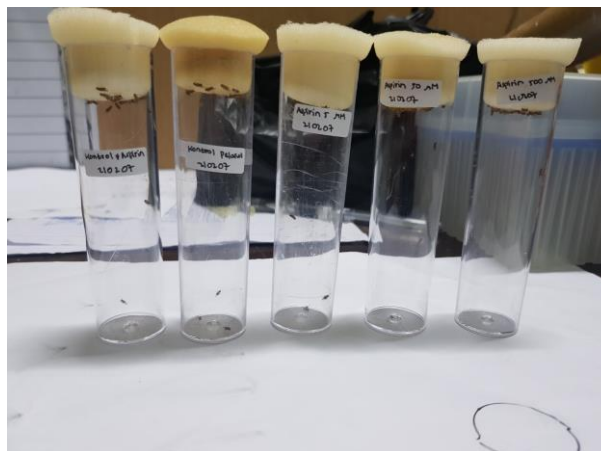
### Lampiran 3. Gambar Penelitian



Gambar 15. Pembuatan larutan aspirin



Gambar 16. Pembuatan Pakan *Drosophila melanogaster*



Gambar 17. Sampel lalat yang akan dilanjutkan ke tahap isolasi RNA





Gambar 18. Tahap isolasi RNA



Gambar 19. Rangkaian alat untuk PCR

#### Lampiran 4. Data Primer

**Tabel 2. Pengamatan jumlah pupa**

Kelompok perlakuan	Jumlah Pupa		
	Replikasi 1	Replikasi 2	Replikasi 3
Kontrol pelarut	58	65	60
5 $\mu$ M	59	74	78
50 $\mu$ M	86	71	75
500 $\mu$ M	79	74	60

**Tabel 3. Pengamatan jumlah anak lalat**

Kelompok perlakuan	Jumlah Anak Lalat		
	Replikasi 1	Replikasi 2	Replikasi 3
Kontrol pelarut	29	63	55
5 $\mu$ M	40	66	83
50 $\mu$ M	42	69	74
500 $\mu$ M	36	73	79

## Lampiran 5. Analisis Statistik

### Lampiran 5.1. *One way anova* data jumlah pupa

ANOVA summary

F	2.008
<b>P value</b>	<b>0.1915</b>
<b>P value summary</b>	<b>Ns</b>
<b>Significant diff. among means (P &lt; 0.05)?</b>	<b>No</b>
R squared	0.4295

### Lampiran 5.2. Analisis *Post hoc* (Tukey) data jumlah pupa

Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Summary	Adjusted P Value
Kontrol Pelarut vs. Aspirin 5 $\mu$ M	-9.333	-30.84 to 12.18	<b>Ns</b>	<b>0.5385</b>
Kontrol Pelarut vs. Aspirin 50 $\mu$ M	-16.33	-37.84 to 5.175	<b>Ns</b>	<b>0.1478</b>
Kontrol Pelarut vs. Aspirin 500 $\mu$ M	-10	-31.51 to 11.51	<b>Ns</b>	<b>0.4858</b>
Aspirin 5 $\mu$ M vs. Aspirin 50 $\mu$ M	-7	-28.51 to 14.51	<b>Ns</b>	<b>0.7311</b>
Aspirin 5 $\mu$ M vs. Aspirin 500 $\mu$ M	-0.6667	-22.18 to 20.84	<b>Ns</b>	<b>0.9996</b>
Aspirin 50 $\mu$ M vs. Aspirin 500 $\mu$ M	6.333	-15.18 to 27.84	<b>Ns</b>	<b>0.7837</b>

### Lampiran 5.3. *One way anova* data jumlah anak lalat

ANOVA summary

F	0.3363
<b>P value</b>	<b>0.7998</b>
<b>P value summary</b>	<b>Ns</b>
<b>Significant diff. among means (P &lt; 0.05)?</b>	<b>No</b>
R squared	0.112

### Lampiran 5.4. Analisis *Post hoc* (Tukey) data jumlah anak lalat

Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Summary	Adjusted P Value
Kontrol Pelarut vs. Aspirin 5 $\mu$ M	-14	-66.68 to 38.68	<b>ns</b>	<b>0.8291</b>
Kontrol Pelarut vs. Aspirin 50 $\mu$ M	-12.67	-65.35 to 40.01	<b>ns</b>	<b>0.8658</b>
Kontrol Pelarut vs. Aspirin 500 $\mu$ M	-13.67	-66.35 to 39.01	<b>ns</b>	<b>0.8386</b>
Aspirin 5 $\mu$ M vs. Aspirin 50 $\mu$ M	1.333	-51.35 to 54.01	<b>ns</b>	<b>0.9998</b>
Aspirin 5 $\mu$ M vs. Aspirin 500 $\mu$ M	0.3333	-52.35 to 53.01	<b>ns</b>	<b>&gt;0.9999</b>
Aspirin 50 $\mu$ M vs. Aspirin 500 $\mu$ M	-1	-53.68 to 51.68	<b>ns</b>	<b>&gt;0.9999</b>

**Lampiran 5.5. One way anova data ekspresi gen *srl***

ANOVA summary

F	17.63
<b>P value</b>	<b>0.0007</b>
<b>P value summary</b>	<b>***</b>
<b>Significant diff. among means (P &lt; 0.05)?</b>	<b>Yes</b>
R squared	0.8686

**Lampiran 5.6. Analisis *Post hoc* (Tukey) data ekspresi gen *srl***

Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Summary	Adjusted P Value
Kontrol Pelarut vs. Aspirin 5 uM	-0.407	-0.6372 to -0.1768	**	<b>0.0021</b>
Kontrol Pelarut vs. Aspirin 50 uM	-0.3597	-0.5898 to -0.1295	**	<b>0.0046</b>
Kontrol Pelarut vs. Aspirin 500 uM	-0.4793	-0.7095 to -0.2492	***	<b>0.0007</b>
Aspirin 5 uM vs. Aspirin 50 uM	0.04733	-0.1828 to 0.2775	ns	<b>0.9096</b>
Aspirin 5 uM vs. Aspirin 500 uM	-0.07233	-0.3025 to 0.1578	ns	<b>0.7504</b>
Aspirin 50 uM vs. Aspirin 500 uM	-0.1197	-0.3498 to 0.1105	ns	<b>0.3991</b>

**Lampiran 5.7. One way anova data ekspresi gen *pepck***

ANOVA summary

F	10.4
<b>P value</b>	<b>0.0039</b>
<b>P value summary</b>	<b>**</b>
<b>Significant diff. among means (P &lt; 0.05)?</b>	<b>Yes</b>
R squared	0.796

**Lampiran 5.8. Analisis *Post hoc* (Tukey) data ekspresi gen *pepck***

Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Summary	Adjusted P Value
Kontrol Pelarut vs. Aspirin 5 uM	0.009963	-0.2702 to 0.2901	ns	<b>0.9994</b>
Kontrol Pelarut vs. Aspirin 50 uM	-0.1541	-0.4342 to 0.1261	ns	<b>0.3561</b>
Kontrol Pelarut vs. Aspirin 500 uM	-0.4177	-0.6979 to -0.1376	**	<b>0.0061</b>
Aspirin 5 uM vs. Aspirin 50 uM	-0.164	-0.4442 to 0.1161	ns	<b>0.3095</b>
Aspirin 5 uM vs. Aspirin 500 uM	-0.4277	-0.7078 to -0.1476	**	<b>0.0053</b>
Aspirin 50 uM vs. Aspirin 500 uM	-0.2637	-0.5438 to 0.01647	ns	<b>0.0652</b>