

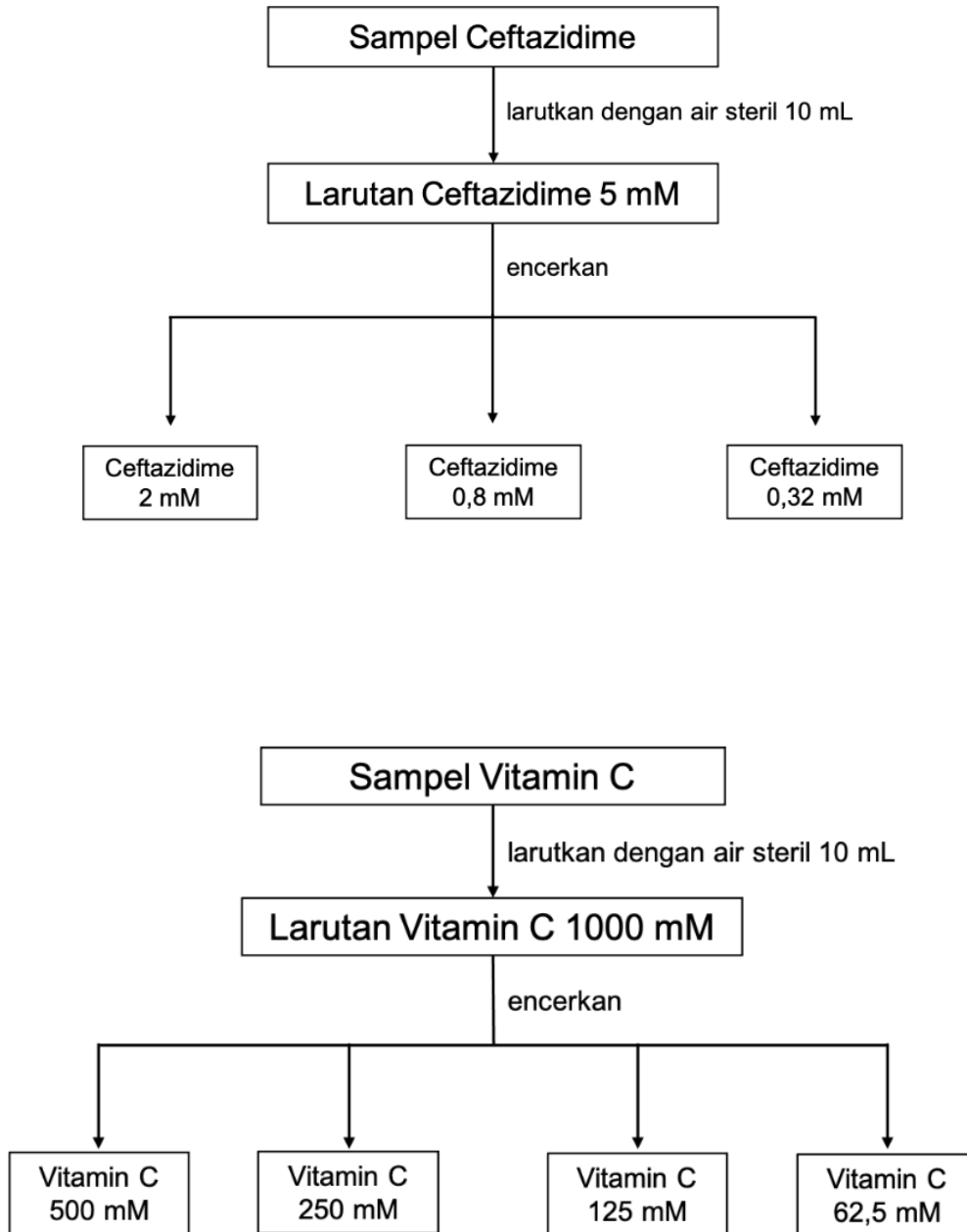
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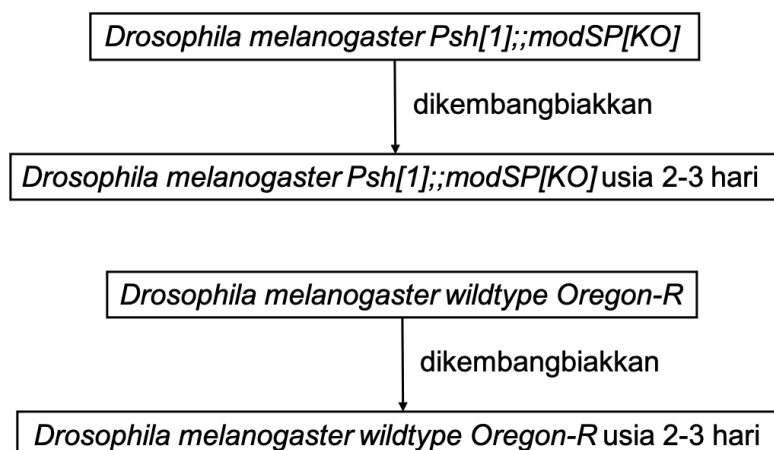
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LAMPIRAN

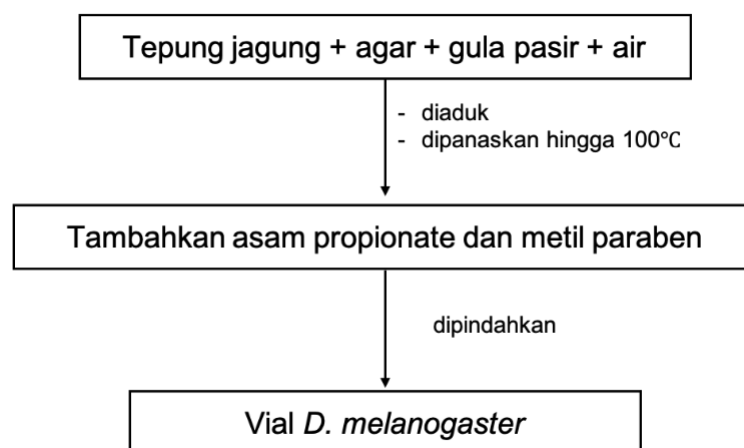
Lampiran 1. Penyiapan Sampel



Lampiran 2. Penyiapan Hewan Uji

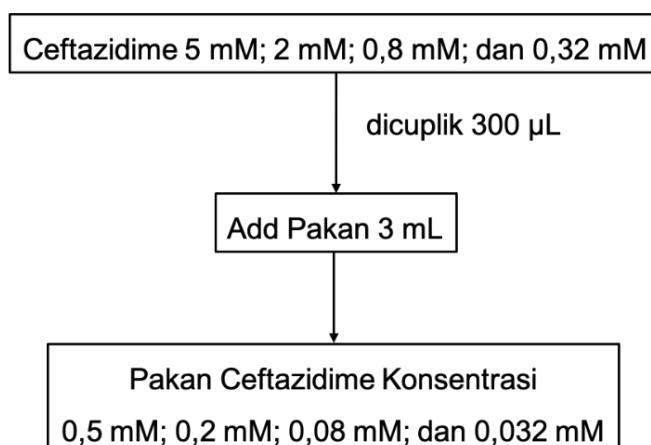


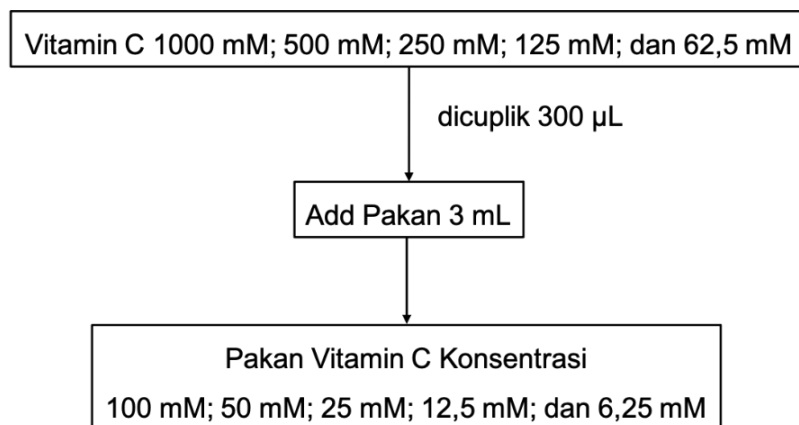
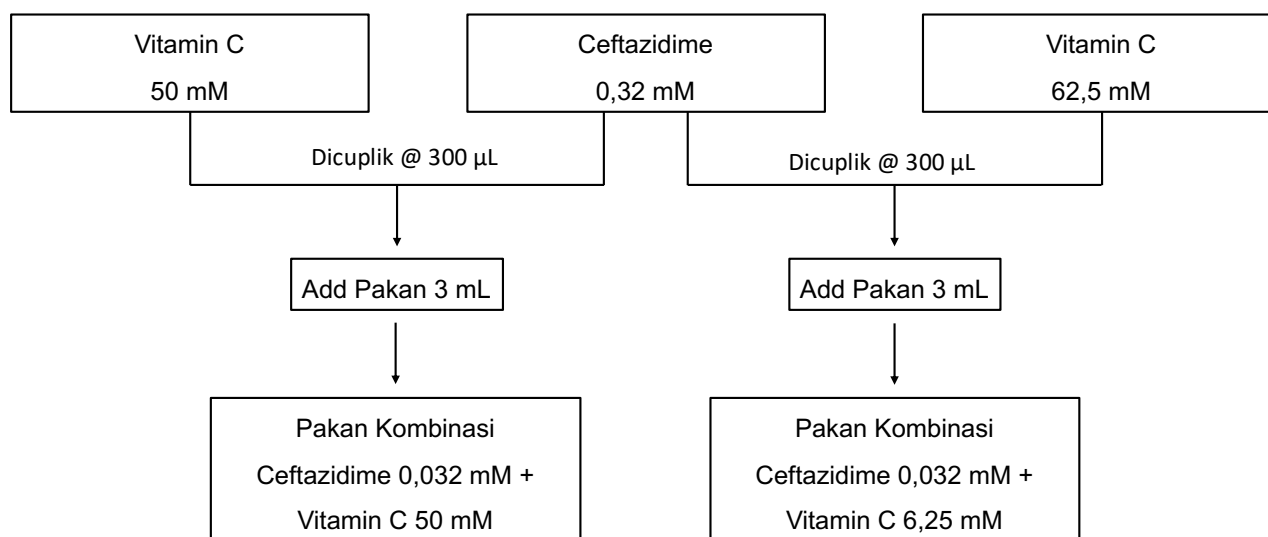
Lampiran 3. Pembuatan Pakan



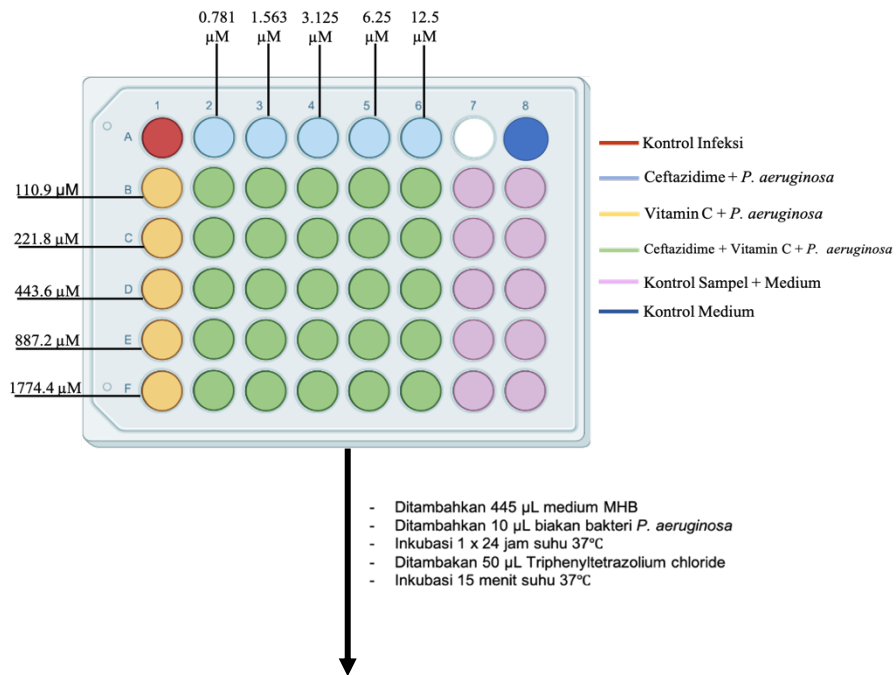
Lampiran 4. Penyiapan Pakan Pengujian

A. Sampel Ceftazidime

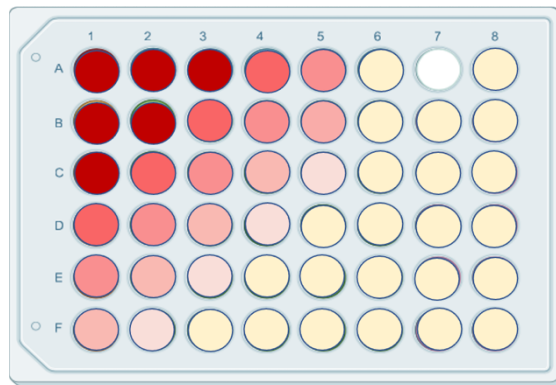


B. Sampel Vitamin C**C. Sampel Kombinasi Ceftazidime dan Vitamin C**

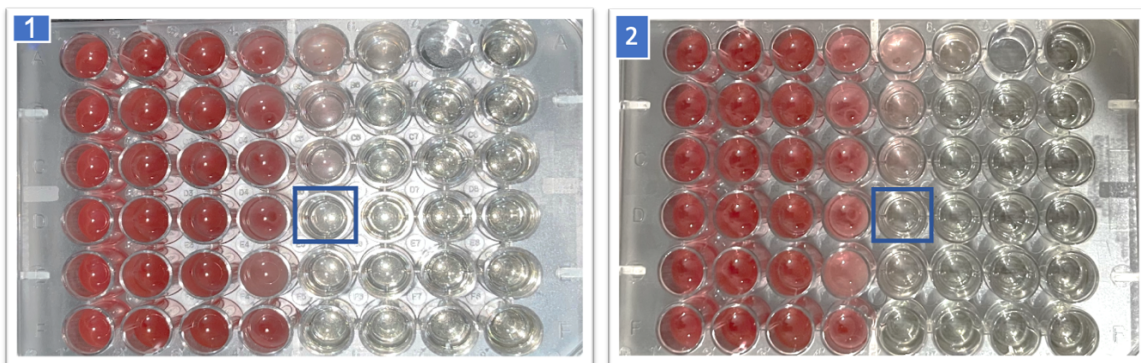
Lampiran 5. Uji Penentuan Konsentrasi Hambat Minimum



Diamati perubahan warna



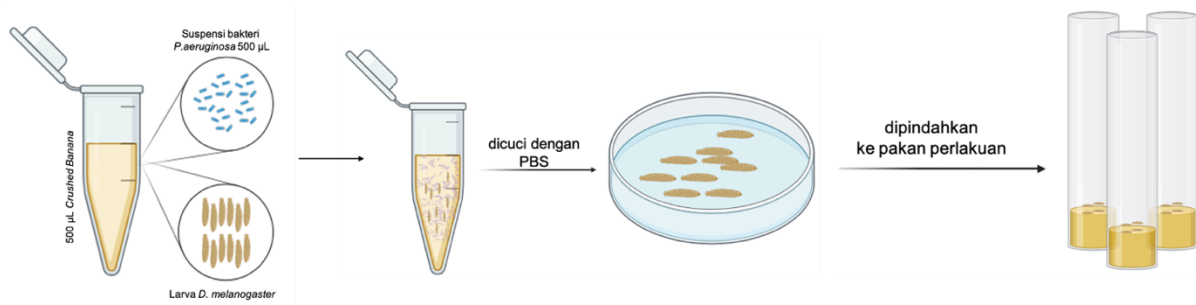
Lampiran 6. Hasil Uji Penentuan Konsentrasi Hambat Minimum



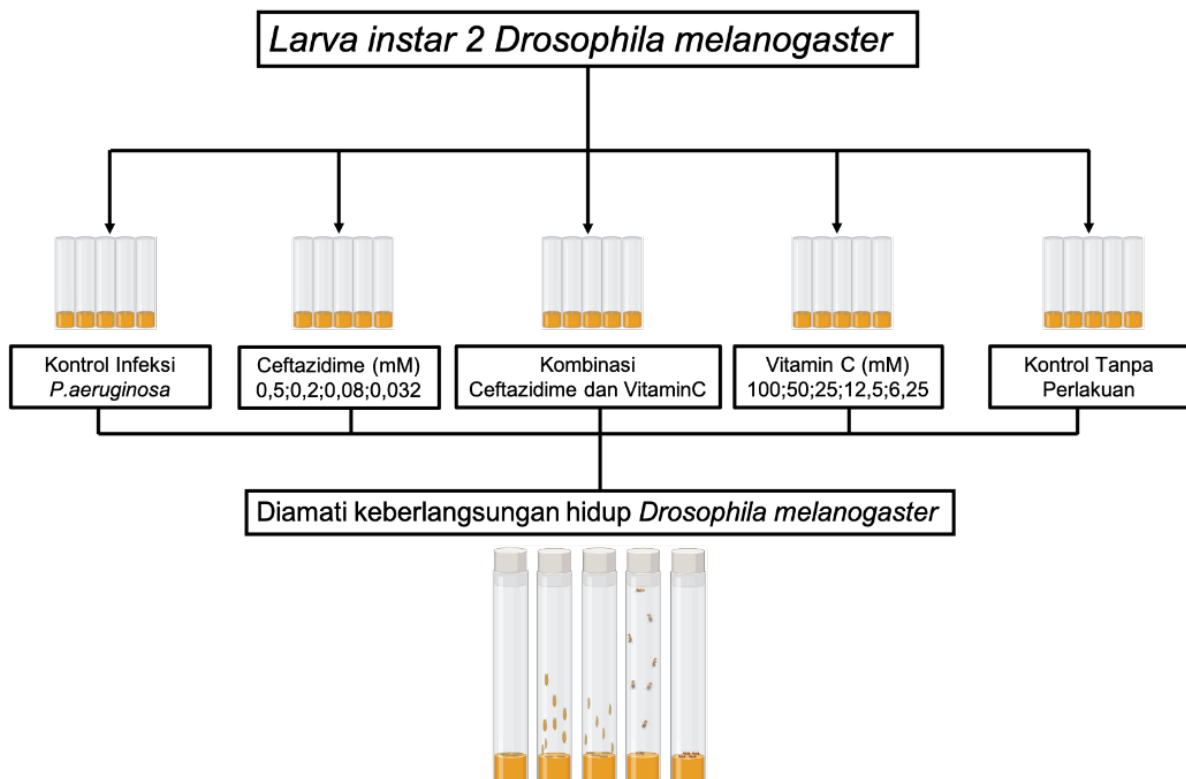
— KHM kombinasi ceftazidime dengan vitamin C Replikasi 1 dan Replikasi 2

Gambar 5. Hasil uji aktivitas antibakteri kombinasi Ceftazidime dengan Vitamin C.

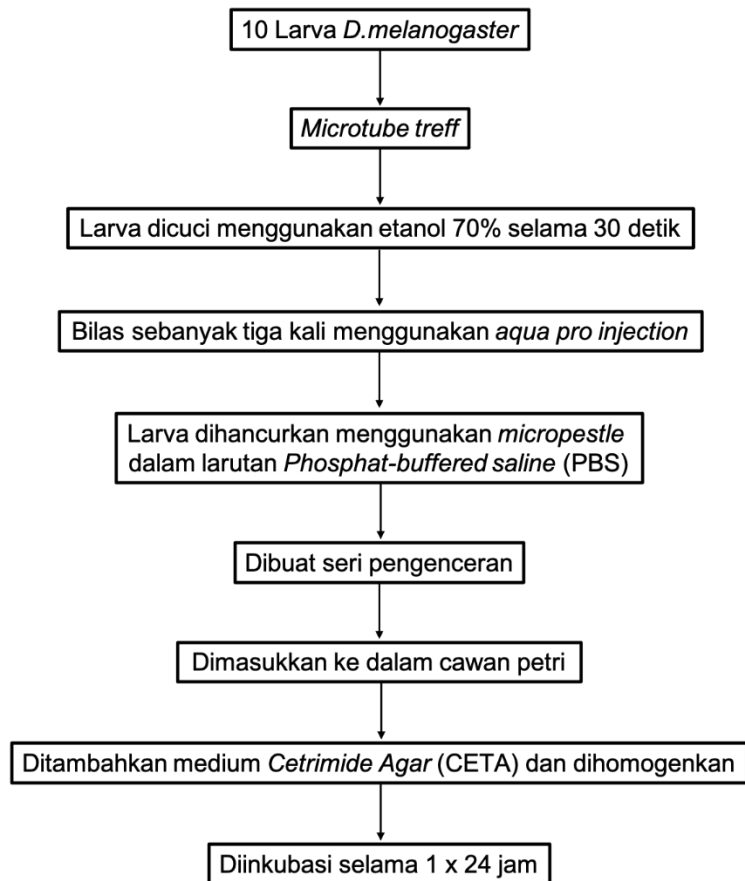
Lampiran 7. Penyiapan infeksi *P. aeruginosa* pada larva *D. melanogaster*



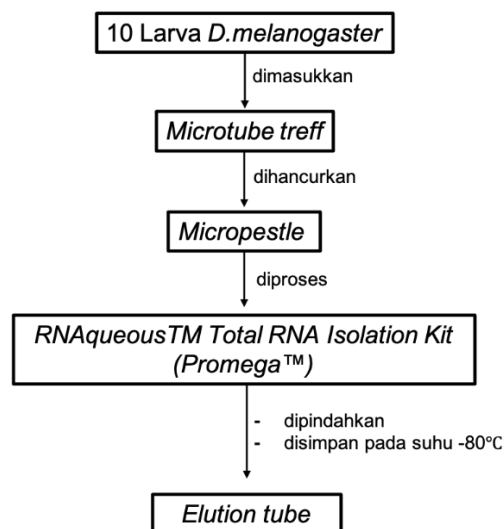
Lampiran 8. Uji Survival



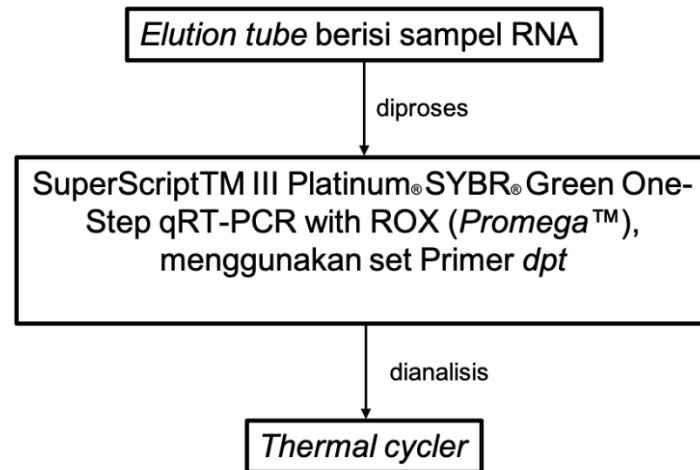
Lampiran 9. Uji *Colony Forming Unit*



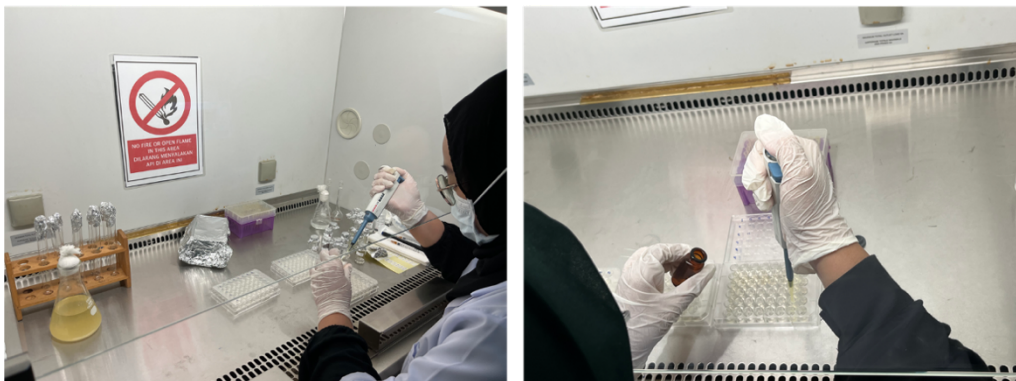
Lampiran 10. Penyiapan Sampel RNA



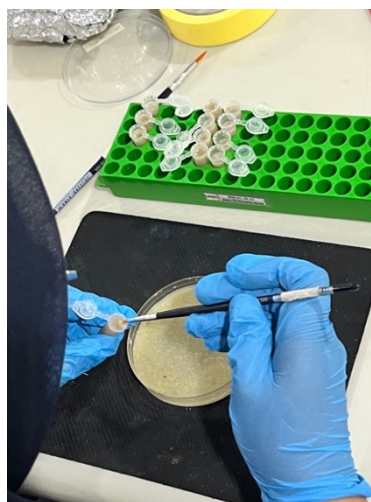
Lampiran 11. Analisis Ekspresi Gen



Lampiran 12. Gambar Penelitian



Gambar 6. Uji Konsentrasi Hambat Minimum (KHM)



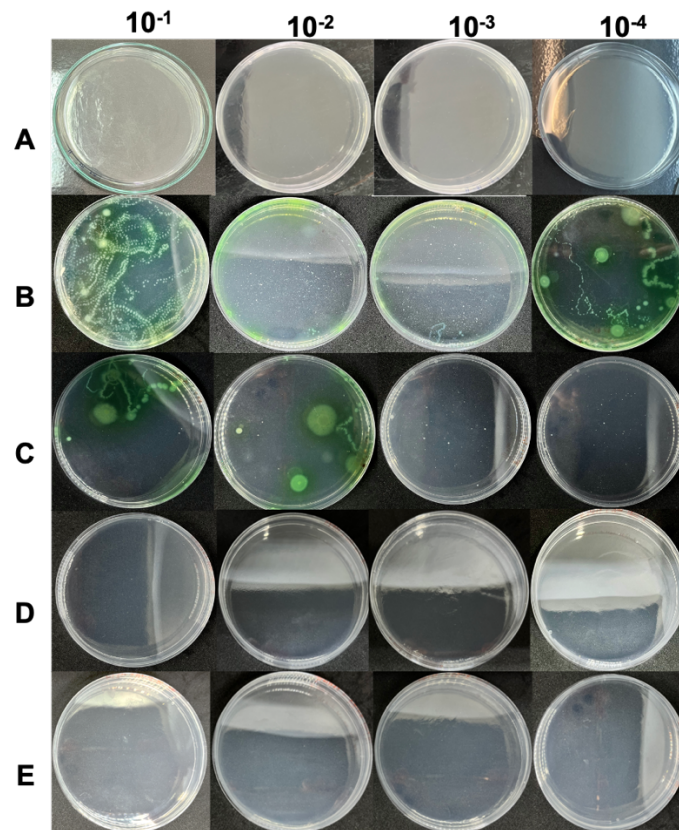
Gambar 7. Proses Infeksi *P.aeruginosa* pada larva *D. melanogaster*



Gambar 8. Uji Survival



Gambar 9. Uji Colony Forming Unit



Gambar 10. Kultur bakteri *P.aeruginosa* pada larva *D.melanogaster* dalam medium Cetrimide Agar (CETA). Kontrol Tanpa Perlakuan (A); Kontrol Infeksi (B); Ceftazidime 0,032 mM (C); Kombinasi Ceftazidime 0,032 mM dan Vitamin C 50 mM (D); Kombinasi Ceftazidime 0,032 mM dan Vitamin C 6,25mM (E).



Gambar 11. Isolasi RNA dan Running RT-qPCR

Lampiran 13. Data Statistik

Tabel 2. Hasil One way ANOVA Uji Survival Ceftazidime Tunggal

Tukey's multiple comparisons test	Mean Diff	95,00% CI of diff	Summary	Adjusted P Value
KTP vs. Kontrol Infeksi	53,33	22,60 to 84,07	***	0,0007
KTP vs. Ceftazidime 0.5 mM	20,83	-7,916 to 49,58	ns	0,224
KTP vs. Ceftazidime 0.2 mM	23,33	-7,401 to 54,07	ns	0,1882
KTP vs. Ceftazidime 0.08 mM	36,67	5,933 to 67,40	*	0,0162
KTP vs. Ceftazidime 0.032 mM	36,67	5,933 to 67,40	*	0,0162
Kontrol Infeksi vs. Ceftazidime 0.5 mM	-32,5	-61,25 to -3,751	*	0,0234
Kontrol Infeksi vs. Ceftazidime 0.2 mM	-30	-60,73 to 0,7341	ns	0,0574
Kontrol Infeksi vs. Ceftazidime 0.08 mM	-16,67	-47,40 to 14,07	ns	0,4988
Kontrol Infeksi vs. Ceftazidime 0.032 mM	-16,67	-47,40 to 14,07	ns	0,4988
Ceftazidime 0.5 mM vs. Ceftazidime 0.2 mM	2,5	-26,25 to 31,25	ns	0,9997
Ceftazidime 0.5 mM vs. Ceftazidime 0.08 mM	15,83	-12,92 to 44,58	ns	0,4832
Ceftazidime 0.5 mM vs. Ceftazidime 0.032 mM	15,83	-12,92 to 44,58	ns	0,4832
Ceftazidime 0.2 mM vs. Ceftazidime 0.08 mM	13,33	-17,40 to 44,07	ns	0,7051
Ceftazidime 0.2 mM vs. Ceftazidime 0.032 mM	13,33	-17,40 to 44,07	ns	0,7051
Ceftazidime 0.08 mM vs. Ceftazidime 0.032 mM	0	-30,73 to 30,73	ns	>0,9999

Tabel 3. Hasil One way ANOVA Uji Survival Vitamin C Tunggal

Tukey's multiple comparisons test	Mean Diff	95,00% CI of diff	Summary	Adjusted P Value
KTP vs. Kontrol Infeksi	53,33	22,92 to 83,74	***	0,0004
KTP vs. Vi. C 100 mM	28,33	-0,1114 to 56,78	ns	0,0513
KTP vs. Vi. C 50 mM	15,83	-12,61 to 44,28	ns	0,5273
KTP vs. Vi. C 25 mM	36,67	6,258 to 67,08	*	0,0132
KTP vs. Vi. C 12.5 mM	40	9,591 to 70,41	**	0,0064
KTP vs. Vi. C 6.25 mM	53,33	22,92 to 83,74	***	0,0004
Kontrol Infeksi vs. Vi. C 100 mM	-25	-53,44 to 3,445	ns	0,1052
Kontrol Infeksi vs. Vi. C 50 mM	-37,5	-65,94 to -9,055	**	0,0063
Kontrol Infeksi vs. Vi. C 25 mM	-16,67	-47,08 to 13,74	ns	0,5441
Kontrol Infeksi vs. Vi. C 12.5 mM	-13,33	-43,74 to 17,08	ns	0,7576
Kontrol Infeksi vs. Vi. C 6.25 mM	0	-30,41 to 30,41	ns	>0,9999
Vi. C 100 mM vs. Vi. C 50 mM	-12,5	-38,83 to 13,83	ns	0,6895
Vi. C 100 mM vs. Vi. C 25 mM	8,333	-20,11 to 36,78	ns	0,9509
Vi. C 100 mM vs. Vi. C 12.5 mM	11,67	-16,78 to 40,11	ns	0,8069
Vi. C 100 mM vs. Vi. C 6.25 mM	25	-3,445 to 53,44	ns	0,1052
Vi. C 50 mM vs. Vi. C 25 mM	20,83	-7,611 to 49,28	ns	0,2389
Vi. C 50 mM vs. Vi. C 12.5 mM	24,17	-4,278 to 52,61	ns	0,125
Vi. C 50 mM vs. Vi. C 6.25 mM	37,5	9,055 to 65,94	**	0,0063
Vi. C 25 mM vs. Vi. C 12.5 mM	3,333	-27,08 to 33,74	ns	0,9997
Vi. C 25 mM vs. Vi. C 6.25 mM	16,67	-13,74 to 47,08	ns	0,5441
Vi. C 12.5 mM vs. Vi. C 6.25 mM	13,33	-17,08 to 43,74	ns	0,7576

Tabel 4. Hasil One way ANOVA Ceftazidime kombinasi Vitamin C

Tukey's multiple comparisons test	Mean Diff	95,00% CI of diff	Summary	Adjusted P Value
Kontrol Infeksi vs. KTP	-50,00	-71,06 to -28,94	****	<0,0001
Kontrol Infeksi vs. Ceftazidime 0.032 mM	-16,67	-39,19 to 5,852	ns	0,1879
Kontrol Infeksi vs. Ceftazidime 0.032 mM + Vitamin C 50 mM	-26,67	-49,19 to -4,148	*	0,0189
Kontrol Infeksi vs. Ceftazidime 0.032 mM + Vitamin C 6,25 mM	-43,33	-65,85 to -20,81	***	0,0005
KTP vs. Ceftazidime 0.032 mM	33,33	12,27 to 54,40	**	0,0025
KTP vs. Ceftazidime 0.032 mM + Vitamin C 50 mM	23,33	2,269 to 44,40	*	0,0283
KTP vs. Ceftazidime 0.032 mM + Vitamin C 6,25 mM	6,667	-14,40 to 27,73	ns	0,8395
Ceftazidime 0.032 mM vs. Ceftazidime 0.032 mM + Vitamin C 50 mM	-10,00	-32,52 to 12,52	ns	0,6193
Ceftazidime 0.032 mM vs. Ceftazidime 0.032 mM + Vitamin C 6,25 mM	-26,67	-49,19 to -4,148	*	0,0189
Ceftazidime 0.032 mM + Vitamin C 50 mM vs. Ceftazidime 0.032 mM + Vitamin C 6,25 mM	-16,67	-39,19 to 5,852	ns	0,1879

Tabel 5. Perhitungan jumlah koloni bakteri *P. aeruginosa*

Kelompok	Pengenceran				ALT	
	10 ⁻¹	10 ⁻²	10 ⁻³	10 ⁻⁴		Rerata
Kontrol Infeksi	TBUD	TBUD	280	28	2,80 x 10 ⁵	7,41 x 10 ⁵
	TBUD	TBUD	273	97	2,73 x 10 ⁵	
	TBUD	TBUD	312	167	1,67 x 10 ⁶	
Kontrol Tanpa Perlakuan	0	0	0	0	0	0
	0	0	0	0	0	
	0	0	0	0	0	
Ceftazidime 0,032 mM	169	24	2	0	1,69 x 10 ³	1.07 x 10 ³
	82	16	0	0	8,2 x 10 ²	
	70	19	0	0	7,0 x 10 ²	
Ceftazidime 0,032 mM + Vitamin C 50 mM	0	0	0	0	0	0
	0	0	0	0	0	
	0	0	0	0	0	
Ceftazidime 0,032 mM + Vitamin C 6,25 mM	0	0	0	0	0	0
	0	0	0	0	0	
	0	0	0	0	0	

Keterangan: Tidak Bisa Untuk Dihitung (TBUD)

Tabel 6. Hasil Analisis Ekspresi Gen *Dpt*

A. Unpaired t-Test Analisis Ekspresi Gen *Dpt*

Table Analyzed Column B vs. Column A	Analisis Ekspresi Gen <i>Dpt</i> Kontrol Kontrol Infeksi vs, KTP
Unpaired t-Test	
P value	0,1034
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=2,863, df=2

B. Hasil One way ANNOVA Ekspresi gen *Dpt* sampel

Tukey's multiple comparisons test	Mean Diff, 95,00% CI of diff,	Summary	Adjusted P Value
Kontrol Infeksi vs. Ceftazidime 0.032 mM	0,5753 0,02148 to 1,129	*	0,0442
Kontrol Infeksi vs. Ceftazidime 0.032 mM + Vit C 50 mM	0,9510 0,3971 to 1,505	**	0,0076
Kontrol Infeksi vs. Ceftazidime 0.032 mM + Vit C 6,25 mM	-0,3717 -0,9255 to 0,1822	ns	0,1595
Ceftazidime 0.032 mM vs. Ceftazidime 0.032 mM + Vit C 50 mM	0,3757 -0,1782 to 0,9295	ns	0,1552
Ceftazidime 0.032 mM vs. Ceftazidime 0.032 mM + Vit C 6,25 mM	-0,9470 -1,501 to -0,3931	**	0,0077
Ceftazidime 0.032 mM + Vit C 50 mM vs. Ceftazidime 0.032 mM + Vit C 6,25 mM	-1,323 -1,876 to -0,7688	**	0,0022