

DAFTAR PUSTAKA

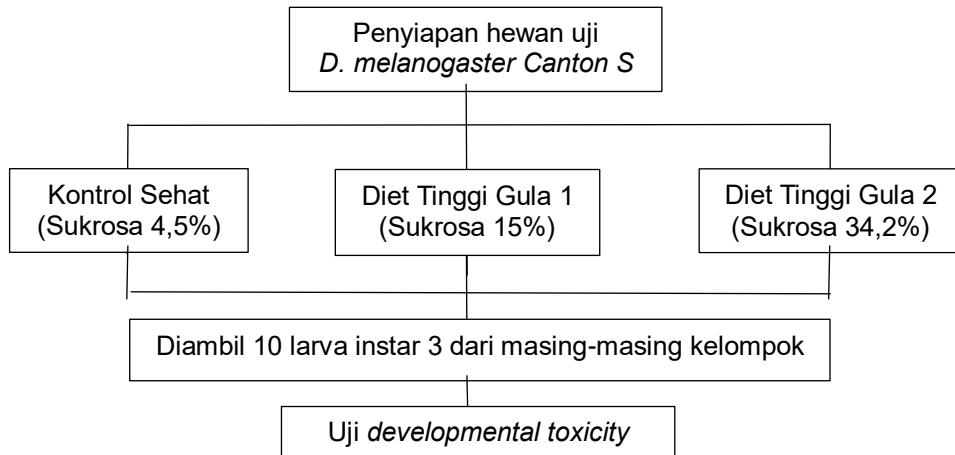
- Alexandra, F. D., Frethernety, A., Trinovita, E., Fatmari., & Ysrafil. (2023). *Inventaris Tanaman Obat Antihiperglykemia Pada Lahan Gambut Sebagai Terapi Komplementer*. Klaten: PT. Nas Media Indonesia.
- Ambion. (2012). pureLink® RNA Mini Kit. Carlsbad, CA USA. <https://www.thermofisher.com/order/catalog/product/12183018A>. Diakses pada 20 Desember 2023.
- Asfa, N., Widianto, A. S., Pratama, M. K. A., Rosa, R. A., Mu'arif, A., Yulianty, R., & Nainu, F. (2023). Curcumin-mediated gene expression changes in *Drosophila melanogaster*. *Pharmacy Education*, 23(2), 84–91. <https://doi.org/10.46542/pe.2023.232.8491>
- Galicia-Garcia, U., Benito-Vicente, A., Jebari, S., Larrea-Sebal, A., Siddiqi, H., Uribe, K. B., Ostolaza, H., & Martín, C. (2020). Pathophysiology of type 2 diabetes mellitus. *International Journal of Molecular Sciences*, 21(17), 1–34. <https://doi.org/10.3390/ijms21176275>
- Hanif Sayyed, U. M., & Mahalakshmi, R. (2022). Mitochondrial protein translocation machinery: From TOM structural biogenesis to functional regulation. *Journal of Biological Chemistry*, 298(5), 101870. <https://doi.org/10.1016/j.jbc.2022.101870>
- Kopel, J., Bhutia, Y., D., Sivaprakasam, S., & Ganapathy, V. (2021). Consequences of NaCT/SLC13A5.mINDY deficiency: good versus evil, separated only by the blood-brain barrier. *Biochemical Journal*, 478, 463-486. <https://doi.org/10.1042/BCJ20200877>
- Lee, E. G., Chen, S., Leong, L., Tulloch, J., & Yu, C. E. (2021). Tomm40 rna transcription in alzheimer's disease brain and its implication in mitochondrial dysfunction. *Genes*, 12(6), 1–19. <https://doi.org/10.3390/genes12060871>
- Lourido, F., Quenti, D., Salgado-Canales, D., & Tobar, N. (2021). Domeless receptor loss in fat body tissue reverts insulin resistance induced by a high-sugar diet in *Drosophila melanogaster*. *Scientific Reports*, 11(1), 1–13. <https://doi.org/10.1038/s41598-021-82944-4>
- Mishra, D., Kannan, K., Meadows, K., Macro, J., Li, M., Frankel, S., & Rogina, B. (2021). INDY—From Flies to Worms, Mice, Rats, Non-Human Primates, and Humans. *Frontiers in Aging*, 2(December), 1–11. <https://doi.org/10.3389/fragi.2021.782162>
- Musselman, L. P., Fink, J. L., & Baranski, T. J. (2019). Similar effects of high-fructose and high-glucose feeding in a *Drosophila* model of obesity and diabetes. *PLoS ONE*, 14(5), 1–13. <https://doi.org/10.1371/journal.pone.0217096>
- Nainu, F. (2018). Review: Penggunaan *Drosophila melanogaster* Sebagai Organisme Model Dalam Penemuan Obat. *Jurnal Farmasi Galenika (Galenika Journal of Pharmacy) (e-Journal)*, 4(1), 50–67. <https://doi.org/10.22487/j24428744.2018.v4.i1.9969>

- Ojo, O. A., Ibrahim, H. S., Rotimi, D. E., Ogunlakin, A. D., & Ojo, A. B. (2023). Diabetes mellitus: From molecular mechanism to pathophysiology and pharmacology. *Medicine in Novel Technology and Devices*, 19(February), 100247. <https://doi.org/10.1016/j.medntd.2023.100247>
- Panchal, K., & Tiwari, A. (2017). Drosophila melanogaster "A Potential Model Organism" For Identification Of Pharmacological Properties Of Plants/Plant-Derived Components. *ELSEVIER*. 89. 1331-1345.
- Rogers, R. P., & Rogina, B. (2014). Increased mitochondrial biogenesis preserves intestinal stem cell homeostasis and contributes to longevity in Indy mutant flies. *Aging*, 6(4), 335–350. <https://doi.org/10.18632/aging.100658>
- Rogina, B. (2017). INDY-A new link to metabolic regulation in animals and humans. *Frontiers in Genetics*, 8(MAY), 4–10. <https://doi.org/10.3389/fgene.2017.00066>
- Rogina, B., & Helfand, S. L. (2013). Indy Mutations and Drosophila Longevity. *Frontiers in Genetics*, 4(April), 1–8. <https://doi.org/10.3389/fgene.2013.00047>
- Rosa, R. A., Latada, N. P., Asbah, A., Mu'arif, A., Yulianty, R., & Nainu, F. (2021). Eksplorasi efek etanol terhadap survival dan status imunitas Drosophila melanogaster. *JFIOnline | Print ISSN 1412-1107 | e-ISSN 2355-696X*, 13(2), 146–153. <https://doi.org/10.35617/jfionline.v13i2.85>
- Tennessen, J. M., Barry, W. E., Cox, J., & Thummel, C. S. (2014). Methods for studying metabolism in Drosophila. *Methods*, 68(1), 105–115. <https://doi.org/10.1016/j.ymeth.2014.02.034>
- Tosur, M., Viau-Colindres, J., Astudillo, M., Redondo, M. J., & Lyons, S. K. (2020). Medication-induced hyperglycemia: Pediatric perspective. *BMJ Open Diabetes Research and Care*, 8(1), 1–11. <https://doi.org/10.1136/bmjdrc-2019-000801>
- Xiao, X., Wei, J., Zhang, W., Jiao, B., Liao, X., Pan, C., Liu, X., Yan, X., Tang, B., Zhang, Y., Wang, D., Xing, W., Liao, W., & Shen, L. (2019). TOMM40 polymorphism is associated with resting-state functional MRI results in patients with Alzheimer's disease. *NeuroReport*, 30(16), 1068–1073. <https://doi.org/10.1097/WNR.0000000000001297>
- Younes, S., Al-Sulaiti, A., Nasser, E. A. A., Najjar, H., & Kamareddine, L. (2020). Drosophila as a Model Organism in Host–Pathogen Interaction Studies. *Frontiers in Cellular and Infection Microbiology*, 10(June), 1–16. <https://doi.org/10.3389/fcimb.2020.00214>

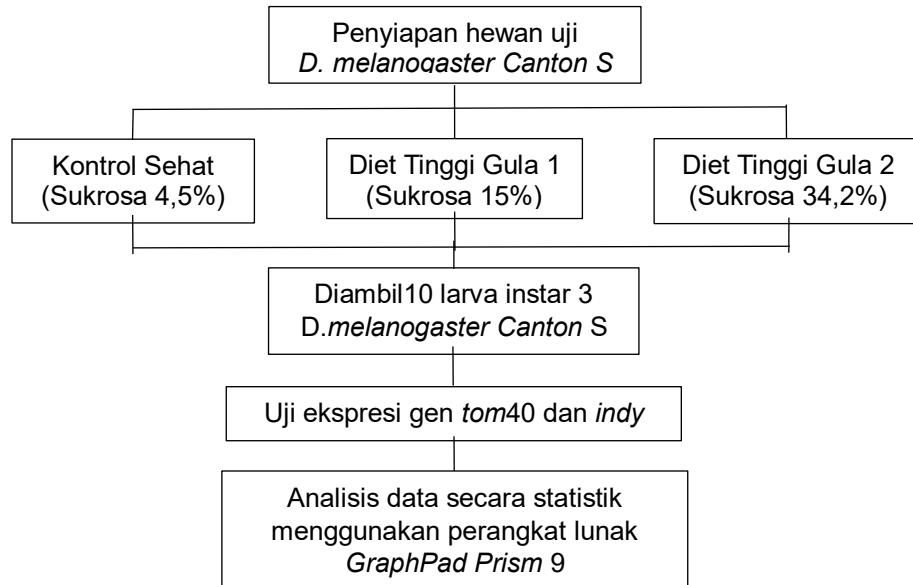
LAMPIRAN

Lampiran 1. Skema kerja

Lampiran 1.1 Skema kerja uji *developmental toxicity*



Lampiran 1.2 Skema Kerja Analisis Molekuler



Lampiran 2. Data statistika

Lampiran 2.1 Uji *developmental toxicity*

Tabel 3. Hasil one-way anova *developmental toxicity* larva menjadi pupa

ANOVA summary	Value
F	1,000
P Value	0,4219
P Value Summary	ns
Significant diff. among means (P < 0,05)	No
R squared	0,2500

Tabel 4. Hasil Tukey's Multiple Comparisons *developmental toxicity* larva menjadi pupa

Tukey's Multiple Comparisons Test	Mean Diff.	Summary	Adjusted P Value
Kontrol vs. DTG 1	0,000	ns	>0,9999
Kontrol vs. DTG 2	3,333	ns	0,4827
DTG 1 vs. DTG 2	3,333	ns	0,4827

Tabel 5. Hasil one-way anova *developmental toxicity* pupa menjadi lalat dewasa

ANOVA summary	Value
F	1,300
P Value	0,3396
P Value Summary	ns
Significant diff. among means (P < 0,05)	No
R squared	0,3023

Tabel 6. Hasil Tukey's Multiple Comparisons *developmental toxicity* pupa menjadi lalat dewasa

Tukey's Multiple Comparisons Test	Mean Diff.	Summary	Adjusted P Value
Kontrol vs. DTG 1	10,00	ns	0,5153
Kontrol vs. DTG 2	13,33	ns	0,3356
DTG 1 vs. DTG 2	3,333	ns	0,9217

Lampiran 2.2 Analisis ekspresi gen *tom40*

Tabel 7. Hasil one-way anova ekspresi gen *tom40*

ANOVA summary	Value
F	11,36
P Value	0,0398
P Value Summary	*
Significant diff. among means ($P < 0,05$)	Yes
R squared	0,8834

Tabel 8. Hasil Tukey's Multiple Comparisons ekspresi gen *tom40*

Tukey's Multiple Comparisons Test	Mean Diff.	Summary	Adjusted P Value
Kontrol vs. DTG 1	0,04650	ns	0,0633
Kontrol vs. DTG 2	0,05350	*	0,0441
DTG 1 vs. DTG 2	0,007000	ns	0,8427

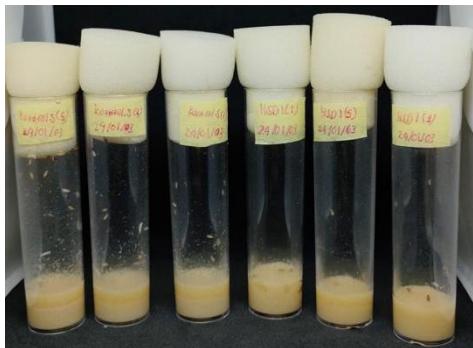
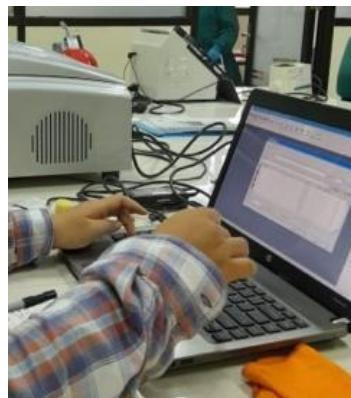
Lampiran 2.3 Analisis ekspresi gen *indy*

Tabel 9. Hasil one-way anova ekspresi gen *indy*

ANOVA summary	Value
F	5,099
P Value	0,1084
P Value Summary	ns
Significant diff. among means ($P < 0,05$)	No
R squared	0,7727

Tabel 10. Hasil Tukey's Multiple Comparisons ekspresi gen *indy*

Tukey's Multiple Comparisons Test	Mean Diff.	Summary	Adjusted P Value
Kontrol vs. DTG 1	0,3100	ns	0,1000
Kontrol vs. DTG 2	0,1150	ns	0,5427
DTG 1 vs. DTG 2	-0,1950	ns	0,2619

Lampiran 3. Dokumen penelitian**Gambar 5. Penyiapan hewan uji****Gambar 6. Pengamatan developmental toxicity****Gambar 7. Proses isolasi RNA****Gambar 8. Preparasi analisis qRT-PCR****Gambar 9. Proses analisis qRT-PCR**