

## DAFTAR PUSTAKA

- Afifah, N., Budi Riyanta, A., Amananti, W., Article, R., Kunci, K., Maserasi, W., Fitokimia, S., Mangga, D., & Manis, H. (2023). Pengaruh Waktu Maserasi Terhadap Hasil Skrining Fitokimia Pada Ekstrak Daun Mangga Harum Manis (*Mangifera indica* L.). *Jurnal Crystal: Publikasi Penelitian Kimia Dan Terapannya*, 5(1), 54–61.
- Agustinus, I'tishom, R., & Pramesti, M. D. (2018). *Biologi Reproduksi Pria*. Pusat Penerbitan dan Percetakan Universitas Airlangga (AUP).
- Alqurna, N. M., & Al-Alami, Z. M. (2023). Worldwide sperm quality variations between 2000 and 2020: a scoping review. In *Middle East Fertility Society Journal* (Vol. 28, Issue 1). Springer Science and Business Media Deutschland GmbH. <https://doi.org/10.1186/s43043-023-00159-1>
- Amelia, L., & Rahmanisa, S. (2019). Evaluasi dan Manajemen Infertilitas Pria. In *JIMKI* (Vol. 7, Issue 2).
- Andilala, A., Safriana, S., & Gunwan, M. (2023). The Effectiveness of Kersen Leaf Extracts (*Muntingia calabura* L.) on Cutting Wounds Infected with *Staphylococcus Aureus* Bacteria. *Haya: The Saudi Journal of Life Sciences*, 8(1), 9–18. <https://doi.org/10.36348/sjls.2023.v08i01.002>
- Andlib, N., Sajad, M., Kumar, R., & Thakur, S. C. (2023). Abnormalities in sex hormones and sexual dysfunction in males with diabetes mellitus: A mechanistic insight. *Acta Histochemica*, 125(1), 151974. <https://doi.org/10.1016/J.ACTHIS.2022.151974>
- Anggraeni Putri, P., Chatri, M., & Advinda, L. (2022). Characteristics of Saponin Secondary Metabolite Compounds in Plants Karakteristik Saponin Senyawa Metabolit Sekunder pada Tumbuhan. *Jurnal Jamu Indonesia*, 7(2), 50–55.
- Awuy, F. D., Purwanto, D. S., & Mewo, Y. M. (2021). Pengaruh Pemberian Vitamin C Terhadap Kualitas Spermatozoa Yang Terpapar Asap Rokok.

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- Barkabi-Zanjani, S., Ghorbanzadeh, V., Aslani, M., Ghalibafsabbaghi, A., & Chodari, L. (2020). Diabetes mellitus and the impairment of male reproductive function: Possible signaling pathways. In *Diabetes and Metabolic Syndrome: Clinical Research and Reviews* (Vol. 14, Issue 5, pp. 1307–1314). Elsevier Ltd. <https://doi.org/10.1016/j.dsx.2020.07.031>
- Barrett, K. E., Barman, S. M., Brooks, H. L., & Yuan, J. (2019). *Ganong's Review of Medical Physiology 26th Edition* (26th ed.). McGraw-Hill Education.
- Condorelli, R. A., Vignera, S. La, Mongioi, L. M., Alamo, A., & Calogero, A. E. (2018). Diabetes mellitus and infertility: Different pathophysiological effects in type 1 and type 2 on sperm function. *Frontiers in Endocrinology*, 9(MAY). <https://doi.org/10.3389/fendo.2018.00268>
- Eroschenko, V. P. (2017). *diFiore's Atlas of Histology with Functional Correlations, 13th edition* (13th ed.). Wolters Kluwer.
- Fakhruzy, Kasim, A., Asben, A., & Anwar, A. (2020). Review: Optimalisasi Metode Maserasi untuk Ekstraksi Tanin Rendemen Tinggi. *Menara Ilmu*, XIV(2), 38–41.
- Furman, B. L. (2021). Streptozotocin-Induced Diabetic Models in Mice and Rats. *Current Protocols*, 1(4). <https://doi.org/10.1002/cpz1.78>
- Gurung, P., Yetiskul, E., & Jialal, I. (2023). *Physiology, Male Reproductive System*.
- Hall, J. E., & Guyton, A. C. (2019). *Guyton and Hall Textbook of Medical Physiology 13th Edition* (12th ed.). ELSEVIER.
- Hanin, N. N. F., & Pratiwi, R. (2017). Kandungan Fenolik, Flavonoid dan Aktivitas Antioksidan Ekstrak Daun Paku Laut (*Acrostichum aureum* L.) Fertil dan Steril di Kawasan Mangrove Kulon Progo, Yogyakarta. *Journal of Tropical Biodiversity and Biotechnology*, 2(2), 51. <https://doi.org/10.22146/jtbb.29819>

- Harahap, S. (2023). Alkaloid and Flavonoid Phytochemical Screening on Balakka Leaves (*Phyllanthus Emblica* L.). *Formosa Journal of Science and Technology*, 2(8), 2069–2082. <https://doi.org/10.55927/fjst.v2i8.5691>
- Huang, R., Chen, J., Guo, B., Jiang, C., & Sun, W. (2024a). Diabetes-induced male infertility: potential mechanisms and treatment options. *Molecular Medicine*, 30(1). <https://doi.org/10.1186/s10020-023-00771-x>
- Huang, R., Chen, J., Guo, B., Jiang, C., & Sun, W. (2024b). Diabetes-induced male infertility: potential mechanisms and treatment options. *Molecular Medicine*, 30(1). <https://doi.org/10.1186/s10020-023-00771-x>
- International Diabetes Federation. (2021). *IDF Diabetes Atlas 10th Edition*. [www.diabetesatlas.org](http://www.diabetesatlas.org)
- Izazi, F., Krisnamurti, A., & Wardhana, A. S. (2024). Standardisasi Ekstrak Etanol 70% *Gelidium zollingeri* WatuUlo Jember. *Journal of Herbal, Clinical and Pharmaceutical Science (HERCLIPS)*, 5(02), 154. <https://doi.org/10.30587/herclips.v5i02.7413>
- Liga, S., Paul, C., & Péter, F. (2023). Flavonoids: Overview of Biosynthesis, Biological Activity, and Current Extraction Techniques. In *Plants* (Vol. 12, Issue 14). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/plants12142732>
- Mahmood, N. D., Nasir, N. L. M., Rofiee, M. S., Tohid, S. F. M., Ching, S. M., Teh, L. K., Salleh, M. Z., & Zakaria, Z. A. (2014). *Muntingia calabura*: A review of its traditional uses, chemical properties, and pharmacological observations. *Pharmaceutical Biology*, 52(12), 1598–1623. <https://doi.org/10.3109/13880209.2014.908397>
- Maisarah, M., Chatri, M., & Advinda, L. (2023). Characteristics and Functions of Alkaloid Compounds as Antifungals in Plants Karakteristik dan Fungsi Senyawa Alkaloid sebagai Antifungi pada Tumbuhan. *Serambi Biologi*, 8(2), 231–236.

- Marieb, E. N., & Hoehn, K. (2022). *Human anatomy & Physiology 12th edition* (10th ed.). Pearson.
- Mbaya, J. K., Nsonizau, D. M. P., Nsolani, N. M., & Mbuy, T. Z. (2023). Blood Glucose Reference Interval in *Mus musculus* Mice. *OALib*, *10*(06), 1–5. <https://doi.org/10.4236/oalib.1109988>
- McCann, S., & Wise, E. (2017). *Anatomy Coloring Book*. Simon and Schuster.
- Munawaroh, H. (2017). *Suhu Permukaan Daun dan Iklim Mikro Hutan Kota Cijantung Jakarta Timur*. Institut Pertanian Bogor.
- Mutammimah, S., Supriyanto, S., & Mu'tamar, M. F. F. (2022). Aktivitas Antioksidan dan Antibakteri Ekstrak Daun Kersen (*Muntingia Calabura L*) dengan Metode Microwave Assisted Extraction. *Rekayasa*, *15*(1), 21–28. <https://doi.org/10.21107/rekayasa.v15i1.13229>
- Mutiarahmi, C. N., Hartady, T., & Lesmana, R. (2021). Use of Mice As Experimental Animals in Laboratories That Refer to The Principles of Animal Welfare: A Literature Review. *Indonesia Medicus Veterinus*, *10*(1), 134–145. <https://doi.org/10.19087/imv.2020.10.1.134>
- Nahdi, A. M. T. A., John, A., & Raza, H. (2017). Elucidation of Molecular Mechanisms of Streptozotocin-Induced Oxidative Stress, Apoptosis, and Mitochondrial Dysfunction in Rin-5F Pancreatic  $\beta$  -Cells. *Oxidative Medicine and Cellular Longevity*. <https://doi.org/10.1155/2017/7054272>
- National Center for Biotechnology Information. (2024). *Compound Summary for CID 29327, Streptozocin*.
- Nawir, A. I., Anna Nur Afifah, C., Sulandjari, S., & Handajani, S. (2021). Pemanfaatan Daun Kersen (*Muntingia calabura L.*) Menjadi Teh Herbal. *Jurnal Tata Boga*, *10*(1), 1–11. <https://ejournal.unesa.ac.id/index.php/jurnal-tata-boga/>
- Nugroho, R. A. (2018). *Mengenal Mencit Sebagai Hewan Laboratorium* (A. H. Khanz, Ed.). Mulawarman University Press.

- Nuraini, D., Wahab, H., Hasanah, U., Harfiani, E., & Thadeus, M. S. (2025). The Effect of Moringa Leaf Extract Administration on Sperm Morphology and Blood Glucose Reduction in Alloxan Induced Sprague Dawley Rats. *Jurnal Biologi*, 18(1), 114–121. <https://doi.org/10.15408/kauniah.v18i1.37286>
- Obukohwo, O. M., Kingsley, N. E., Rume, R. A., & Victor, E. (2021). The Concept of Male Reproductive Anatomy. *Male Reproductive Anatomy*. <https://doi.org/10.5772/intechopen.99742>
- Pemerintah Provinsi DKI Jakarta. (2009). *Status Lingkungan Hidup Daerah Provinsi DKI Jakarta Tahun 2009*.
- Perkumpulan Endokrinologi Indonesia. (2021). *Pedoman Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 Dewasa di Indonesia*.
- Puspitasari, M., Rochana, A., Widjastuti, T., Raya Bandung Sumedang, J. K., & Jatinangor, K. (2023). Potential Antioxidant Activity Ethanol Extract of Old and Young Leaves of *Euphorbia hirta* Linn. *Jurnal Ilmiah Farmako Bahari*, 14(2), 136–144. [www.journal.uniga.ac.id](http://www.journal.uniga.ac.id)
- Rejeki, P. S., Putri, E. A. C., & Prasetya, R. E. (2018). *Ovariektomi Pada Tikus dan Mencit* (N. L. Pratiwi, Ed.). Airlangga University Press.
- Rinata, E., & Widowati, H. (2020). *BUKU AJAR GENETIKA DAN BIOLOGI REPRODUKSI*. UMSIDA Press.
- Safitri, L., Nofita, & Tutik. (2023). Hubungan Kadar Tanin dengan Aktivitas Antioksidan Pada Kulit Buah Kakao (*Theobroma cacao* L.) yang Tumbuh di Dataran Rendah dan Dataran Tinggi. *Jurnal Farmasi Malahayati*, 6(1), 52–62.
- Salsabila, A., Harfiani, E., & Nugraha, Y. (2021). The effectivities of anti-diabetic of *Chromolaena odorata* L. In lowering blood sugar level: A systematic review. In *IOP Conference Series: Earth and Environmental Science* (Vol. 913, Issue 1). IOP Publishing Ltd. <https://doi.org/10.1088/1755-1315/913/1/012092>

- Sharma, A., Minhas, S., Dhillo, W. S., & Jayasena, C. N. (2021). Male infertility due to testicular disorders. In *Journal of Clinical Endocrinology and Metabolism* (Vol. 106, Issue 2, pp. E442–E459). Endocrine Society. <https://doi.org/10.1210/clinem/dgaa781>
- Sherwood, L. (2016). *Human Physiology: From Cells to System 9th edition*.
- Shi, G. J., Li, Z. M., Zheng, J., Chen, J., Han, X. X., Wu, J., Li, G. Y., Chang, Q., Li, Y. X., & Yu, J. Q. (2017). Diabetes associated with male reproductive system damages: Onset of presentation, pathophysiological mechanisms and drug intervention. In *Biomedicine and Pharmacotherapy* (Vol. 90, pp. 562–574). Elsevier Masson SAS. <https://doi.org/10.1016/j.biopha.2017.03.074>
- Sumarni, S., Sadino, A., & Sumiwi, S. A. (2022). Literature Review: Chemical Content and Pharmacological Activity of Kersen Leaf (*Muntingia calabura* L.). *Jurnal Farmasi Sains Dan Praktis*, 13–20. <https://doi.org/10.31603/pharmacy.v8i1.3802>
- Sunder, M., & Leslie, S. W. (2022). *Semen Analysis*.
- Taslim, N. A., Sutisna, N., Nurkolis, F., Qhabibi, F. R., Kurniawan, R., & Mayulu, N. (2023). Dietary supplementation of *Muntingia calabura* leaves ameliorates reactive oxygen species and malondialdehyde levels: clinical study on alloxan-induced hyperglycemic rats. *Clinical Nutrition Open Science*, 48, 87–96. <https://doi.org/10.1016/j.nutos.2023.03.004>
- Tortora, G. J., & Derrickson, B. (2018). *Principles of Anatomy and Physiology 15th Edition* (14th ed.). Wiley.
- Wardaningrum, R. Y., Susilo, J., & Dyahariesti, N. (2019). *Perbandingan Aktivitas Antioksidan Ekstrak Etanol Terpurifikasi Ubi Jalar Ungu (*Ipomoeae batatas* L.) dengan Vitamin E*.
- World Health Organization. (2021). *WHO laboratory manual for the examination and processing of human semen Sixth Edition*.
- World Organisation for Animal Health. (2024). *Animal welfare: a vital asset for a more sustainable world*.