DAFTAR PUSTAKA

Alirezaei, M., Kheradmand, A., Salahi, P., & Azizi, A. (2018). Olive Leaves Extract Effects on Sperm Quality Following Experimentally-Induced Diabetes in Rats. *Iranian Journal of Veterinary Medicine*, *12*(4), 335–346. https://doi.org/10.22059/ijvm.2018.253715.1004884

Anggraioto, yustinus U., R. Susanti, Yuniastuti, A., Lisdiana, WH, N., Habibah, N. A., & Bintari, S. H. (2018). *Metabolit Sekunder dari Tanaman : Aplikasi dan Produksi*.

Ani, M., Astuti, E. D., Nardina, E. A., Hurtabarat, J., Sebtalesy, C. Y., Maryani, S., Yani, D. P., Argaheni, N. B., Jannah, R., Mahmud, A., Winarsih, & Azizah, N. (2021). *Biologi Reproduksi dan Mikrobiologi* (A. Karim, Ed.). Yayasan Kita Menulis.

Arundani, P., I'tishom, R., & Purwanto, B. (2021). Pemberian Ekstrak Rumput Kebar (Biophytum petersianum Klotszch) terhadap Viabilitas Spermatozoa Mencit (Mus musculus) Diabetes Melitus. *Oceana Biomedicina Journal*, *4*(1).

Asadi, N., Bahmani, M., Kheradmand, A., & Rafieian-Kopaei, M. (2017). The Impact of Oxidative Stress on Testicular Function and the Role of Antioxidants in Improving it: A Review. *Journal of clinical and diagnostic research : JCDR*, *11*(5), IE01–IE05. https://doi.org/10.7860/JCDR/2017/23927.9886

Badan Pengawas Obat dan Makanan (BPOM). (2021). *Pedoman Farmakodinamik Praklinik Obat Tradisional*. Badan Pengawas Obat dan Makanan (BPOM).

Barret, K. E., Barman, S. M., Brooks, H. L., & Yuan, J. (2019). *Review of Medical Physiology* (26 ed.).

Buanasari, Sugiyo, W., & Chyntia Apriyanti, A. (2018). Aktivitas Antioksidan Ekstrak Etanol Daun Asam Jawa (Tamarindus indica L) dengan Metode DPPH. *Jurnal Farmasi & Sains Indonesia*, *1*(1), 19–24.

de la Rosa, L. A., Moreno-Escamilla, J. O., Rodrigo-García, J., & Alvarez-Parrilla, E. (2018). Phenolic compounds. Dalam *Postharvest Physiology and Biochemistry of Fruits and Vegetables* (hlm. 253–271). Elsevier. https://doi.org/10.1016/B978-0-12-813278-4.00012-9

Dhindsa, S., Ghanim, H., Batra, M., & Dandona, P. (2018). Hypogonadotropic Hypogonadism in Men with Diabesity. *Diabetes Care*, *41*(7), 1516–1525. https://doi.org/10.2337/dc17-2510

Elgazar, A. F. (2019). Potential Protective Roles of Tamarind Fruit Pulp Aqueous Extract Against Hyperglycemic and Testicular Toxicity in Alloxan Induced-Diabetic Male Rats. *Journal of the College of Specific Education for Educational and Specific Studies*, *2*(10), 37–58. https://doi.org/10.21608/SJSE.2022.120347.1140

Elisma, Rahman, H., & Lestari, U. (2020). PPM Pemberdayaan Masyarakat Dalam Pengolahan Tanaman Obat Sebagai Obat Tradisional di Desa Mendalo Indah Jambi Luar Kota. *Selaparang. Jurnal Pengabdian Masyarakat Berkemajuan*, *4*.

Fajarwati, I., Solihin, D. D., Wresdiyati, T., & Batubara, I. (2023). Administration of alloxan and streptozotocin in Sprague Dawley rats and the challenges in producing diabetes model. *IOP Conference Series: Earth and Environmental Science*, *1174*(1). https://doi.org/10.1088/1755-1315/1174/1/012035

Faradiba, A., Gunadi, A., & Praharani, D. (2016). Daya Antibakteri Infusa Daun Asam Jawa (Tamarindus indica Linn) terhadap Streptococcus mutans. *Jurnal Pustaka Keseharan*, *4*.

Fauziah, C., Hasanah, U., Irsyad, N. S., Pribadi, I., Setiawan, R. P., & Wahyuni, Y. P. (2023). Analisis Motilitas dan Morfologi Spermatozoa Pria perokok Usia 18-24 tahun. *Majalah Kedokteran Andalas*, *46*, 79–87.

Fauziyah, N. (2019). *Sampling dan Besar Sampel Bidang Kesehatan Masyarakat dan Klinis*. Politeknik Kesehatan Kemenkes Bandung.

Fedail, J. S., Ahmed, A. A., Musa, H. H., Ismail, E., Sifaldin, A. Z., & Musa, T. H. (2016). Gum arabic improves semen quality and oxidative stress capacity in alloxan induced diabetes rats. *Asian Pacific Journal of Reproduction*, *5*(5), 434–441. https://doi.org/10.1016/j.apjr.2016.07.014

Fikayuniar, L. (2022). *Fitokimia*. Penerbit NEM.

Gurung, P., Yetiskul, E., & Jialal, I. (2024). *Physiology, Male Reproductive System*. StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK538429/

Hall, J. E., & Hall, M. E. (2021). *Textbook of Medical Physiology* (14 ed.). Elsevier.

Hoang-Thi, A.-P., Dang-Thi, A.-T., Phan-Van, S., Nguyen-Ba, T., Truong-Thi, P.-L., Le-Minh, T., Nguyen-Vu, Q.-H., & Nguyen-Thanh, T. (2022). The Impact of High Ambient Temperature on Human Sperm Parameters: A Meta-Analysis. *Iran J Public Health*, *51*(4), 710–723.

Huang, R., Chen, J., Guo, B., Jiang, C., & Sun, W. (2024). Diabetes-induced male infertility: potential mechanisms and treatment options. Dalam *Molecular Medicine* (Vol. 30, Nomor 1). BioMed Central Ltd. https://doi.org/10.1186/s10020-023-00771-x

Ighodaro, O. M., Adeosun, A. M., & Akinloye, O. A. (2017). Alloxan-Induced Diabetes, A Common Model for Evaluating The Glycemic-Control Potential of Therapeutic Compounds and Plants Extracts in Experimental Studies. Dalam *Medicina (Lithuania)* (Vol. 53, Nomor 6, hlm. 365–374). Elsevier B.V. https://doi.org/10.1016/j.medici.2018.02.001

International Diabetes Federation. (2021). *IDF Diabetes Atlas 10th edition*. www.diabetesatlas.org

Kaltsas, A. (2023). Oxidative Stress and Male Infertility: The Protective Role of Antioxidants. Dalam *Medicina (Lithuania)* (Vol. 59, Nomor 10). Multidisciplinary Digital Publishing Institute (MDPI). https://doi.org/10.3390/medicina59101769

Koeppen, B. M., & Stanton, B. A. (2018). *Berne and Levy Physiology* (7 ed.). Elsevier.

Kottaisamy, C. P. D., Raj, D. S., Kumar, V. P., & Sankaran, U. (2021). Experimental animal models for diabetes and its related complications—a review. Dalam *Laboratory Animal Research* (Vol. 37, Nomor 1). BioMed Central Ltd. https://doi.org/10.1186/s42826-021-00101-4

Lotti, F., & Maggi, M. (2023). Effects of diabetes mellitus on sperm quality and fertility outcomes: Clinical evidence. *Andrology*, *11*(2), 399–416. https://doi.org/10.1111/andr.13342

Maiti, R., Karak, P., Misra, D. S., & Ghosh, D. (2017). Diabetes-induced testicular dysfunction correction by hydromethanolic extract of Tamarindus indica Linn. seed in male albino rat. *International Journal of Green Pharmacy*, *11*(4), 789. https://doi.org/10.22377/ijgp.v11i04.1360

Mapira Tendayi, H., Ndayisenga, J., Nyiramahirwe, S., Mukanshuti, J., Karenzi, V., Rutayisire, R., & Nshutiyimana, J. C. (2020). Relationship Between Sperm Quality and Male Reproductive Hormones Among Male Partners with Fertility Complications: Attending CHUB. *Rwanda Journal of Medicine and Health Sciences*, *3*(3), 315–328. https://doi.org/10.4314/rjmhs.v3i3.4

Mbaye, A. I., Gueye, P. M., Dior Fall, A., Kane, M. O., Diatta Badji, K., Sarr, A., Diattara, D., & Bassene, E. (2017). Antioxidative activity of Tamarindus indica L. extract and chemical fractions. *African*

Journal of Biochemistry Research , *11*(2), 6–11. https://doi.org/10.5897/AJBR2016.0896

Mouri, Mi., & Badireddy, M. (2024). *Hyperglycemia*. StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK430900/

Naru, R. A., Febriani, H., & Syukriah. (2023). Pengaruh Pemberian Ekstrak Etanol Daun Asam Jawa (Tamarindus indica L.)Terhadap Profil Lipid Tikus Putih (Rattus norvegicus) yang Diinduksi Minyak Jelantah. *Journal of Biology Education, Science & Technology*, *6*, 515. https://doi.org/https://doi.org/10.30743/best.v6i1.6994

Nishimura, H., & L'Hernault, S. W. (2017). Spermatogenesis. *Current Biology*, *27*(18), R988–R994. https://doi.org/10.1016/j.cub.2017.07.067

Normasari, R., Fauzi, M. I., & Aziz, A. M. (2021). The Protection Effect Of Methanol Extract From Asam Jawa Seed On Testicular Tissue Damage Induced By Aluminium Chloride (AlCL3). *Journal of Agromedicine and Medical Sciences*, *7*(1), 16–21. https://doi.org/10.19184/ams.v7i1.19645

Oduwole, O. O., Peltoketo, H., & Huhtaniemi, I. T. (2018). Role of Follicle-Stimulating Hormone in Spermatogenesis. *Frontiers in Endocrinology*, *9*. https://doi.org/10.3389/fendo.2018.00763

Permatasari, S., Handayani, S., & Widayati, R. (2023). *Mekanisme Infertilitas Pria*. PT. Nas Media Indonesia.

Prakoso, L. O., Yusmaini, H., Thadeus, M. S., & Wiyono, S. (2017). Perbedaan efek ekstrak buah naga merah (Hylocereus polyrhizus) dan ekstrak buah naga putih (Hylocereus undatus) terhadap kadar kolesterol total tikus putih (Rattus norvegicus). *Jurnal Gizi dan Pangan*, *12*(3), 195–202. https://doi.org/10.25182/jgp.2017.12.3.195-202

Prastika, Z., Susilowati, S., Agustono, B., Safitri, E., Fikri, F., & Prastiya, R. A. (2018). Motilitas dan Viabilitas Spermatozoa Sapi Rambon di Desa Kemiren Banyuwangi. *Jurnal Medik Veteriner*, *1*(2), 38–42. http://journal.unair.ac.id

Prawitasari, D. S. (2019). Diabetes Melitus dan Antioksidan. *Jurnal Kesehatan dan Kedokteran*, *1*(1), 48–52.

Qamar, A. Y., Naveed, M. I., Raza, S., Fang, X., Roy, P. K., Bang, S., Tanga, B. M., Saadeldin, I. M., Lee, S., & Cho, J. (2023). Role of antioxidants in fertility preservation of sperm - A narrative review. *Animal Bioscience*, *36*(3), 385–403. https://doi.org/10.5713/ab.22.0325

Rana, M., & Sharma, P. (2018). Proximate and Phytochemical Screening of The Seed and Pulp of Tamarind indica. *Journal of Medicinal Plants Studies*, *6*(2), 115–115.

Rini, C., Putri, H., Anatomi, B., Kedokteran, F., Wijaya, U., & Surabaya, K. (2014). Potensi dan Pemanfaatan Tamarindus indica dalam Berbagai Terapi. Dalam *Ilmiah Kedokteran* (Vol. 3).

Riset Kesehatan Dasar. (2018). *Hasil Utama Riskesdas*.

Sherwood, L. (2016). *Human Physiology From Cells to Systems* (9 ed.). Cengage Learning.

Silalahi, M. (2020). Bioaktivitas Asam Jawa (Tamarindus indica) dan Pemanfaatannya. *Florea : Jurnal Biologi dan Pembelajarannya*, *7*(2), 85–91. https://doi.org/10.25273/florea.v7i2.7323

Simanjuntak, E. J., & Zulham, Z. (2020). Superoksida Dismutase (SOD) dan Radikal Bebas. *Jurnal Keperawatan dan Fisioterapi (JKF)*, *2*(2), 124–129. https://doi.org/10.35451/jkf.v2i2.342

Siyanti, A., Fitriani, N., & Narsa, A. C. (2019). Uji Aktivitas Antioksidan Ekstrak Etanol Kulit Alpukat (Persea amricana Milll.) terhadap Perendaman DPPH. *Proceeding of Mulawarman Pharmaceuticals Conferences*.

Sookying, S., Duangjai, A., Saokaew, S., & Phisalprapa, P. (2022). *Botanical aspects, phytochemicals, and toxicity of Tamarindus indica leaf and a systematic review of antioxidant capacities of T. indica leaf extracts*. https://doi.org/10.3389/fnut.2022.977015

Tortora, G. J., & Derrickson, B. (2017). *Principles of Anatomy and Physiology* (15 ed.). John Wiley & Sons.

Wahyuwardani, S., Noor, S. M., & Bakrie, B. (2020). Animal Welfare Ethics in Research and Testing: Implementation and its Barrier. *Indonesian Bulletin of Animal and Veterinary Sciences*, *30*(4), 211. https://doi.org/10.14334/wartazoa.v30i4.2529

Wati, D. P., Ilyas, S., & Yurnadi. (2024). *Prinsip Dasar Tikus sebagai Model Penelitian*. USU Press.

WHO. (2021). *WHO laboratory manual for the examination and processing of human semen* (Sixth Edition).

Wiyandani, A. M. (2016). Pengaruh Ekstrak Daun Asam Jawa (Tamarindus indica L.) terhadap Kadar Gula Darah Mencit (Mus musculus L.) sebagai Buku Ilmiah Populer [Tugas Akhir]. Dalam *[Tugas Akhir]*. Universitas Jember.

Yan, L. J. (2014). Pathogenesis of Chronic Hyperglycemia: From Reductive Stress to Oxidative Stress. *Journal of Diabetes Research*, *2014*. https://doi.org/10.1155/2014/137919

Zhou, J., Chen, L., Li, J., Li, H., Hong, Z., Xie, M., Chen, S., Yao, B., & Drevet, J. R. (2015). The Semen pH Affects Sperm Motility and Capacitation. *PLoS ONE*, *10*(7). https://doi.org/10.1371/journal.pone.0132974