

DAFTAR PUSTAKA

- Abbas, A. (2020). Potensi Pangan Fungsional Dan Perannya Dalam Meningkatkan Kesehatan Manusia Yang Semakin Rentan—Mini Review. *Teknosains: Media Informasi Sains Dan Teknologi*, 14(2), 176–186. <https://doi.org/10.24252/teknosains.v14i2.14319>
- Afina, F. A. (2015). Pengaruh Kadar Asam Oleat Pada Sistem NLC Dengan Lipid Setil Alkohol : Asam Oleat Dibandingkan Dengan SLN Terhadap Laju Pelepasan APMS. *Skripsi*. Fakultas Farmasi Universitas Airlangga. Surabaya.
- Ahda, M., Jaswir, I., Khatib, A., Ahmed, Q. U., Mahfudh, N., Ardini, Y. D., Nurul, S., Syed, A., Anwar, M., Hernawan, H., Miyashita, K., & Salamatullah, A. M. (2023). *Phytochemical analysis , antioxidant , α - glucosidase inhibitory activity , and toxicity evaluation of Orthosiphon stamineus leaf extract*. *Scientific Reports*, 1–11. <https://doi.org/10.1038/s41598-023-43251-2>
- Al-kayyis, H. K., & Susanti, H. (2016). Perbandingan Metode *Somogyi-Nelson* Dan *Anthrone-Sulfat* Pada Penetapan Kadar Gula Pereduksi Dalam Umbi Cilembu (*Ipomea batatas* L.). *Journal of Pharmaceutical Sciences and Community*, 13(02), 81–89. <https://doi.org/10.24071/jpsc.2016.130206>
- Alusinsing, G., Bodhi, W. and Sudewi, S. (2014). Uji efektivitas kulit batang kayu manis (*cinnamomum burmanii*) terhadap penurunan kadar gula darah tikus putih jantan galur wistar (*rattus norvegicus*) yang diinduksi sukrosa, *PHARMACON Jurnal Ilmiah Farmasi – UNSRAT Agustus*, 3(3), pp. 2302–2493.
- Anggraini, D. D., Purwati, E., Ikhdha, C., & Hamidah, N. (2021). Formulasi Dan Stabilitas Mutu Fisik Ekstrak Kayu Manis (*Cinnamomum burmannii*) Sebagai Bedak Padat Antioksidan flavonoid dari kayu manis (*Cinnamomum burmanii*). 603–610.
- Anonim, (2019). *World Health Organization. Classification of diabetes mellitus 2019. World Health Organization*, Geneva
- Anonim, 2017. *Farmakope Herbal Indonesia Edisi II*. Jakarta: Kementerian Kesehatan Republik Indonesia.
- Anonim, 2021. *IDF Diabetes Atlas 10th 2021 10th Edition. International Diabetes Federation*.
- Apriani, R. (2012). ‘Uji Penghambatan Aktivitas α -Glukosidase dan Identifikasi Golongan Senyawa dari Fraksi yang Aktif pada Ekstrak Kulit Batang *Cinnamomum burmannii* (Nees & T.Nees) Blume’, pp. 1–102.
- Arifin, Sukmawati, A., Yuliana, Dewi, N., Rafi, Mohamad. (2019). Penapisan Aktivitas dan Identifikasi Gugus Fungsi Komponen Antidiabetes Tanaman dengan Pendekatan Metabolomik. <http://repository.ipb.ac.id/handle/123456789/97467>.
- Asmat U, Abad K, Ismail K (2016) *Diabetes mellitus and oxidative stress – A concise review*. *Saudi Pharm J* 24: 547- 553. doi: 10.1016/j.jsps.2015.03.013
- Azura Nst, S. L., Sutri, R., & Iriany. (2015). Pembuatan etil asetat dari hasil hidrolisis, fermentasi dan esterifikasi kulit pisang raja (*Musa paradisiaca* L.). 4(1), 1–6.

- Badaring, D. R., Sari, S. P. M., Nurhabiba, S., Wulan, W., & Lembang, S. A. R. (2020). Uji Ekstrak Daun Maja (*Aegle marmelos* L.) terhadap Pertumbuhan Bakteri *Escherichia coli* dan *Staphylococcus aureus*. *Indonesian Journal of Fundamental Sciences*, 6(1), 16. <https://doi.org/10.26858/ijfs.v6i1.13941>
- Banday, M.Z., Sameer, A.S. and Nissar, S. (2020). *Pathophysiology of diabetes: An overview*, *Avicenna Journal of Medicine*, 10(04), pp. 174–188. Available at: https://doi.org/10.4103/ajm.ajm_53_20.
- Basukala P, Jha B, Yadav BK, Shrestha PK (2018) *Determination of insulin resistance and beta-cell function using homeostatic model assessment in type 2 diabetic patients at diagnosis*. *J Diabetes Metab* 9: 790. doi: 10.4172/2155-6156.1000790
- Baynest HW (2015) *Classification, pathophysiology, diagnosis and management of diabetes mellitus*. *J Diabetes Metab* 6: 541. doi: 10.4172/2155-6156.1000541
- Berkat, Saraswati, L. D., & Muniroh, M. (2018). Faktor-Faktor Yang Berhubungan Dengan Kadar Gula Darah Pada Penderita Diabetes Melitus Tipe 2 Di Rsud K.R.M.T Wongsonegoro Semarang. *Jurnal Kesehatan Masyarakat (e-Journal)*, 6(1), 200–206.
- Bernardo M.A., Silva, M.L., Santos, A., Moncada, M.M., Brito, J., Proença, L., Singh, J., and Mesquita, M.F. (2015). *Research Article: Effect of Cinnamon Tea on Postprandial Glucose Concentration*. *Journal of Diabetes Research*. Volume 2015, 6 pages
- Bolla KN, Sri SKV, Varalakshmi KN. (2015). Diabetes mellitus and its prevention. *Int J Sci Technol Res* 4: 119-125
- Chandrika UG, Prasad Kumarab PA. (2015). Gotu Kola (*Centella asiatica*): *Nutritional Properties and Plausible Health Benefits*. *Adv Food Nutr Res*. 2015;76:125-57. doi: 10.1016/bs.afnr.2015.08.001. Epub 2015 Oct 1. PMID: 26602573.
- Crofts CAP, Zinn C, Wheldon MC, Schofield GM. (2015). *Hyperinsulinemia: A unifying theory of chronic disease? Diabetesity* 1: 34-43. doi: 10.15562/diabetesity.2015.19
- Dinas Kesehatan Daerah Istimewa Yogyakarta. (2020). Profil Kesehatan D.I Yogyakarta tahun 2020. Profil Kesehatan Daerah Istimewa Yogyakarta Tahun 2020, 76.
- Emilda. (2018). Efek Senyawa Bioaktif Kayu Manis (*Cinnamomum burmanii*) Terhadap Diabetes Melitus. *Jurnal Fitofarmaka Indonesia*, 5(1), 246–252.
- Ervina, M., Nawu, Y.E. and Esar, S.Y. (2016). *Comparison of in vitro antioxidant activity of infusion, extract and fractions of Indonesian Cinnamon (Cinnamomum burmannii) bark*, *International Food Research Journal*, 23(3), pp. 1346–1350.
- Fakhrzy, Kasim, A., Asben, A., & Anwar, A. (2020). *Review: Optimalisasi Metode Maserasi Untuk Ekstraksi Tanin Rendemen Tinggi*. *Menara Ilmu*, 14(2)(02), 38–41.
- Farazandeh, M., Mahmoudabady, M., Asghari, A. A., & Niazmand, S. (2022). *Diabetic cardiomyopathy was attenuated by cinnamon treatment through the inhibition of fibro-inflammatory response and ventricular hypertrophy*

- in diabetic rats. Journal of Food Biochemistry*, 46(8), e14206. <https://doi.org/10.1111/jfbc.14206>
- Farida, E. (2019). Aktivitas Antioksidan Dan Penghambatan A-Glukosidase Oleh Ekstrak Etanol Bakteri Asam Laktat Indigenus. *Jurnal Teknologi Dan Industri Pangan*, 30(1), 56–63. <https://doi.org/10.6066/jtip.2019.30.1.56>
- Hamidah, L. A., Rafsanjani, A., & Hariadi, P. (2022). Kombinasi Ekstrak Daun Pegagan (*Centella asiatica* L.) dengan Obat Anti Diabetik Oral (ADO) terhadap Penurunan Kadar Glukosa Darah Sewaktu pada Mencit. *Sinteza*, 2(1), 40–49. <https://doi.org/10.29408/sinteza.v2i1.4398>
- Hasfika, I., Erawati, S., & Sitorus, F. E. (2020). Pengaruh Senam Prolanis Terhadap Pengendalian Kadar Glukosa Darah dan Tekanan Darah Pada Pasien Diabetes Melitus Tipe II dan Hipertensi. *BEST Journal (Biology Education, Sains and Technology)*, 3(2), 184–190. <https://doi.org/10.30743/best.v3i2.3226>
- Idris, F. N., & Nadzir, M. M. (2021). *Comparative studies on different extraction methods of centella asiatica and extracts bioactive compounds effects on antimicrobial activities. Antibiotics*, 10(4). <https://doi.org/10.3390/antibiotics10040457>
- Janez A, Guja C, Mitrakou A, Lalic N, Tankova T, Czupryniak L, Tabak AG, Prazny M, Martinka E, Smircic-Duvnjak L (2020) *Insulin therapy in adults with type 1 diabetes mellitus: A narrative review. Diabetes Ther* 11: 387-409. doi: 10.1007/s13300-019-00743-7
- Karina, Indrayani Y, Sirait SM. (2016). Kadar Tanin Biji Pinang (*Areca catechu* L) Berdasarkan Lama Pemanasan dan Ukuran Serbuk. *Jurnal hutan lestari vol. 4 (1) : 119–127.*
- Khairina, A., & Yuanita, L. (2015). Pengaruh Variasi Lama Penyimpanan Umbi Bengkuang (*Pachyrhizus erosus*) Terhadap Kadar Glukosa Darah *Rattus norvegicus*. *UNESA Journal of Chemistry*, 4(1), 31–36. <https://doi.org/10.21776/ub.ijhn.2019.006.02.6>
- Khairurrizki, A., Rafsanjani, A., & Hariadi, P. (2022). Efek Sinergisme Ekstrak Daun Pegagan (*Centella asiatica* L.) dengan Obat Antidiabetik Oral terhadap Penurunan Kadar Glukosa Darah Puasa pada Mencit. *Sinteza*, 2(1), 19–28. <https://doi.org/10.29408/sinteza.v2i1.4385>
- Kharroubi AT, Darwish HM (2015) Diabetes mellitus: The epidemic of the century. *World J Diabetes* 6: 850-867. doi: 10.4239/wjd.v6.i6.850
- Koh, H. S. A., Lu, J., & Zhou, W. (2020). *Structural Dependence of Sulfated Polysaccharide for Diabetes Management: Fucoidan From Undaria pinnatifida Inhibiting α -Glucosidase More Strongly Than α -Amylase and Amyloglucosidase. Frontiers in Pharmacology*, 11(June), 1–9. <https://doi.org/10.3389/fphar.2020.00831>
- Kumar A, Mittal R, Naidu PS. (2017). *Insulin resistance: Recent advances in pathogenesis, molecular mechanisms and clinical relevance. EC Pharmacol Toxicol* 4: 244-262
- Kusumaningtyas, I.D., Fajariyah, S. and Utami, E.T. (2014) ‘Pengaruh Seduhan Kayu Manis (*Cinnamomum burmanii*) Terhadap Struktur Pankreas Mencit (*Mus musculus*) Strain Balb-C Diabetik The Effect of Cinnamon

- (*Cinnamomum burmanii*) Aqueous Extract on Pancreas Structure of Diabetic Mice (*Mus musculus*) Strain Balb-C', *Jurnal ILMU DASAR*, 15(2), pp. 69–73.
- Legiawati, L. (2021). *Centella asiatica* : alternative dry skin therapy in type 2 diabetes mellitus. *Journal of Thee Medical Sciences* (Berkala Ilmu Kedokteran), 53(3), 274–289. <https://doi.org/10.19106/jmedsci005303202108>
- Mardiyaningsih, A., & Aini, R. (n.d.). (2014). Pengembangan potensi ekstrak daun pandan (*pandanus amaryllifolius roxb*) sebagai agen antibakteri. 185–192.
- McGown, J. (2006). Diabetes Drug Produced by a Microbe in Out of Africa: Mysteries of Access and Benefit Sharing. Beth Burrows (ed). The Edmonds Institute. Washington. USA.
- Mihra, Jura, M.R, Ningsih, P. (2018). Analisis Kadar Tanin dalam Ekstrak Daun Mimba (*Azadirachta indica A.Juss*) dengan Pelarut Air dan Etanol. *J. Akademika Kim.* 7(4): 179- 184.
- Minarno, Budi, E., Muchtaromah, Bayyinatul, Fitriasari, Dewi, P., Mishima, Kenji, Suhargo, Listijani, Fajriyah, Nurul, E., Azmah, Risalatul, W., Jauzi, Muhammad. (2021). Pengembangan Pegagan (*Centella Asiatica* (L.) Urban) Sebagai Obat Antidiabetes Berbasis Nanoteknologi. <http://repository.uin-malang.ac.id/17384/>.
- Monton, C. *et al.* (2019) 'An optimization approach of dynamic maceration of *Centella asiatica* to obtain the highest content of four centelloids by response surface methodology', *Revista Brasileira de Farmacognosia*, 29(2), pp. 254–261. Available at: <https://doi.org/10.1016/j.bjp.2019.01.001>.
- Muhlshoh, A., Wasita, B., & Patriado Nuhriawangsa, A. M. (2019). *Antidiabetic effect of Centella asiatica extract (whole plant) in streptozotocin nicotinamide-induced diabetic rats.* *Jurnal Gizi Dan Dietetik Indonesia (Indonesian Journal of Nutrition and Dietetics)*, 6(1), 14. [https://doi.org/10.21927/ijnd.2018.6\(1\).14-22](https://doi.org/10.21927/ijnd.2018.6(1).14-22)
- Najib, A. (2018). Ekstraksi Senyawa Bahan Alam. August 2018, 35–42.
- National Geographic Indonesia. (2019). Kepunahan Biodiversitas Tertinggi, Indonesia Peringkat Ke-6. <https://nationalgeographic.grid.id/read/131833161/kepunahan-biodiversitas-tertinggi-indonesia-peringkat-ke-6> diunduh tanggal 25 Januari 2024 pukul 21.41
- Novendy, N., Budi, E., Kurniadi, B. A., Chananta, T. J., Lontoh, S. O., & Tirtasari, S. (2020). Efektivitas Pemberian Kayu Manis Dalam Penurunan Kadar Gula Darah Setelah 2 Jam Pemberian. *Jurnal Muara Sains, Teknologi, Kedokteran Dan Ilmu Kesehatan*, 4(2), 433. <https://doi.org/10.24912/jmstkik.v4i2.9029>
- Nugroho, A. W. (2017). Review: Konservasi Keanekaragaman Hayati Melalui Tanaman Obat Dalam Hutan Di Indonesia Dengan Teknologi Farmasi: Potensi dan Tantangan. *Jurnal Sains Dan Kesehatan*, 1(7), 377–383. <https://doi.org/10.25026/jsk.v1i7.71>

- Pamudji, J.S., Maulidin, R., Indriani, N. (2016). *Development of nanostructured lipid carrier formulation containing of retinyl palmitate. International Journal of Pharmacy and Pharmaceutical Sciences*, 8(2), 256-260.
- Paschou SA, Papadopoulou-Marketou N, Chrousos GP, Kanaka-Gantenbein C (2018) *On type 1 diabetes mellitus pathogenesis. Endocr Connect* 7: R38-R46. doi: 10.1530/EC-17-0347
- Pathak V, Pathak NM, O'Neill CL, GuduricFuchs J, Medina RJ (2019) *Therapies for type 1 diabetes: Current scenario and future perspectives. Clin Med Insights Endocrinol Diabetes* 12: 1179551419844521. doi:10.1177/1179551419844521
- Pindan, N. P., Saleh, C., & Magdaleni, A. R. (2021). Uji fitokimia dan uji aktivitas antioksidan ekstrak fraksi n-heksana, etil asetat dan etanol sisa dari daun sungkai (*peronema canescens jack.*) Dengan metode dpph.
- Prasanth, D. S. N. B. K., Murahari, M., Chandramohan, V., Panda, S. P., Atmakuri, L. R., & Guntupalli, C. (2021). *In silico identification of potential inhibitors from Cinnamon against main protease and spike glycoprotein of SARS CoV-2. Journal of Biomolecular Structure and Dynamics*, 39(13), 4618–4632. <https://doi.org/10.1080/07391102.2020.1779129>
- Pratama, Y., Sarjono, R. and Mulyani, N.S. (2015) 'Skrining Metabolit Sekunder Bakteri Endofit yang Berfungsi sebagai Antidiabetes dari Daun Mimba (*Azadirachta Indica*)'. *Jurnal Kimia Sains dan Aplikasi* 18 (2) (2015) : 73-78 *Jurnal Kimia Sains dan Aplikasi* 18 (2) (2015) : 73-78
- Pratiwi, N. Y., & Shafriani, N. R. (2022). Pengaruh Pemberian Ekstrak Pegagan (*Centella asiatica*) dan Ketapang (*Terminalia catappa*) terhadap Kadar Interleukin-6 pada Diabetes Melitus Tipe-2. *Journal of Noncommunicable Disease*, 2(1), 20. <https://doi.org/10.52365/jond.v2i1.410>
- Pratiwi, Y. H., Ratnayani, O., & Wirajan, I. N. (2018). Perbandingan Metode Uji Gula Pereduksi Dalam Penentuan Aktivitas -L-Arabinofuranosidase Dengan Substrat Janur Kelapa (*Cocos Nucifera*). 134–139.
- Punthakee Z, Goldenberg R, Katz P (2018) Definition, classification and diagnosis of diabetes, prediabetes and metabolic syndrome. *Can J Diabetes* 42: Suppl 1: S10–S15. doi: 10.1016/j.jcjd.2017.10.003
- Puruhita, T. K. A., Safitri, D. E., & Rahayu, N. S. (2022). Peran Nutrasetikal Dalam Tatalaksana Diabetes Melitus Tipe Ii: Mini Review. 7(2), 117–125. <https://doi.org/10.22236/argipa.v7i2.9411>
- Puspitasari, I.D. et al. (2024). Penghambatan Aktivitas α -Glukosidase Dari Ekstrak Metanol Bunga Bugenvil (*Bougainvillea Glabra Choisy*) Inhibition Of α - Glucosidase Activity From Methanol Extract Of Bugenvil (*Bougainvillea Glabra Choisy*) Flower', 9(1), Pp. 25–29.
- Qusti, S.Y., Abo-khatwa, A.N., Lahwa, M.A., & Qusti, S.Y. (2010). Screening Of Antioxidant Activity And Phenolic Content Of Selected Food Items Cited In The Holly Quran.
- Romadanu, R., Hanggita, S., & Lestari, S. D. (2014). Pengujian Aktivitas Antioksidan Ekstrak Bunga Lotus (*Nelumbo Nucifera*). *Jurnal Fishtech*, 3(1), 1–7. <https://doi.org/10.36706/fishtech.v3i1.3523>

- Roswiem, A.P., Anggriawan, M.B. and Nurcholis, W. (2015). Potensi Ekstrak Air Dan Etanol Kulit Batang Kayu Manis Padang (*Cinnamomum Burmanii*) Terhadap Aktivitas Enzim α -Glukosidase, *Jurnal Kedokteran YARSI*, 23(2), pp. 91–102. Available at: <http://academicjournal.yarsi.ac.id/ojs-2.4.6/index.php/jurnal-fk-yarsi/article/view/114>.
- Satheesan, J., Nehru, J., Botanic, T., Anith, K. N., Nehru, J., & Botanic, T. (2019). *Introduction of Root Colonization by Piriformospora Indica Leads to Enhanced Asiaticoside Production in Centella Asiatica*.
- Sun, H., Saeedi, P., Karuranga, S., Pinkepank, M., Ogurtsova, K., Duncan, B. B., Stein, C., Basit, A., Chan, J. C. N., Claude Mbanya, J., Pavkov, M. E., Ramachandaran, A., Wild, S. H., James, S., Herman, W. H., Zhang, P., Bommer, C., Kuo, S., Boyko, E. J., & Magliano, D. J. (2023). *Erratum to “IDF Diabetes Atlas: Global, regional and country-level diabetes prevalence estimates for 2021 and projections for 2045”* [Diabetes Res. Clin. Pract. 183 (2022) 109119] (*Diabetes Research and Clinical Practice* (2022) 183, (S0168822721004782), (10.1016/j.diabres.2021.109119)). *Diabetes Research and Clinical Practice*, 204(October), 110945. <https://doi.org/10.1016/j.diabres.2023.110945>
- Suwanto, Siti Nur Qomariah, I. N. (2020). Pemberian Infusa Kayu Manis (*Cinnamomun zeylanicum*) Mempengaruhi Kadar Glukosa Darah Pasien Diabetes Mellitus. *Journals of Ners Community*, 11(2), 246–256.
- Tulini, F.L. *et al.* (2016) ‘Development of solid lipid microparticles loaded with a proanthocyanidin-rich cinnamon extract (*Cinnamomum zeylanicum*): Potential for increasing antioxidant content in functional foods for diabetic population’, *Food Research International*, 85(July), pp. 10–18. Available at: <https://doi.org/10.1016/j.foodres.2016.04.006>.
- Tulung, G. L., Bodhi, W., & Siampa, J. P. (2021). Uji Efektivitas Ekstrak Etanol Daun Pegagan (*Centella Asiatica* (L.) Urban) Sebagai Antidiabetes Terhadap Tikus Putih Jantan (*Rattus Norvegicus*) Yang Diinduksi Alokasan. *Pharmacoin*, 10(1), 736. <https://doi.org/10.35799/pha.10.2021.32767>
- Udhiyati, A. (2017). Pengaruh Kombinasi Fraksi Tak Larut Etil Asetat Ekstrak Etanolik Herba Sambiloto (*Andrographidis Paniculatae Herbae*) Dan Pegagan (*Centellae Asiaticae Herbae*) Terhadap Aktivitas Sgpt Dan Histopatologi Hati Pada Tikus Diabetes Melitus Tipe 2 Terinduksi Streptozotosin. <https://etd.repository.ugm.ac.id/penelitian/detail/110990>.
- Vinolina, N. S., & Sigalingging, R. (2022). *Analyses of Bioactive Compounds of Pegagan (Centella Asiatica (L.) Urb) from Samosir – Indonesia Accession*. *Indonesian Journal of Agricultural Research*, 5(01), 42–49. <https://doi.org/10.32734/injar.v5i01.6797>
- Widodo, K. M. (2022). Aktivitas Antihiperqlikemi Fraksi Etil Asetat Ekstrak Pegagan (*Centella Asiatica*) Pada Ikan Zebra (*Danio Rerio*) Yang Diinduksi Alokasan. <https://dspace.uui.ac.id/handle/123456789/39387>.
- Wulandari, L., Nugraha, A. S., & Azhari, N. P. (2020). Penentuan Aktivitas Antioksidan dan Antidiabetes Ekstrak Daun Kepundung (*Baccaurea racemosa* Muell.Arg.) secara In Vitro. *Jurnal Sains Farmasi & Klinis*. 7(1):60. <https://doi.org/10.25077/jsfk.7.1.60-66.2020>.

- Yakhchali, M., Taghipour, Z., Mirabzadeh Ardakani, M., Alizadeh Vaghasloo, M., Vazirian, M., & Sadrai, S. (2021). *Cinnamon and its possible impact on COVID-19: The viewpoint of traditional and conventional medicine. Biomedicine & Pharmacotherapy*, 143, 112221. <https://doi.org/10.1016/j.biopha.2021.112221>.
- Yuniarto A, Selifiana N. (2018). Aktivitas Inhibisi Enzim Alfa-glukosidase dari Ekstrak Rimpang Bangle (*Zingiber cassumunar Roxb.*) secara In vitro. *MPI (Media Pharmaceutica aceutica Indonesiana)*, 2(1): 22-25. Doi: 10.24123/mipi.v2i1.1299