

DAFTAR PUSTAKA

- Abdullah, N., Ischak, N.I., Alio, L., Salimi, Y.K., Aman, L.O. and Kilo, A.K., 2025. Inhibis enzim α -glukosidase dan α -amilase dari ekstrak metanol daun buhu (*Garuga floribunda* Decne) sebagai antidiabetes. *Algoritma: Jurnal Matematika, Ilmu Pengetahuan Alam, Kebumian dan Angkasa*, 3(1), pp.114-130. DOI: <https://doi.org/10.62383/algoritma.v3i1.360>
- Akmal, M., Wadhwa, R., & Nishat, T. 2024. Alpha-glucosidase inhibitors. In *StatPearls*. StatPearls Publishing
- Alam, F., Shafique, Z., Amjad, S. T., and bin Asad, M. H. H., 2019. Enzymes Inhibitors from Natural Sources with Antidiabetic Activity: A Review. *Phytotherapy Research*, 33(1), pp.41–54. DOI: <https://doi.org/10.1002/ptr.6211>.
- Arsyad, R., Amin, A. and Waris, R., 2023. Teknik pembuatan dan nilai rendamen simplisia dan ekstrak etanol biji bagore (*Caesalpinia crista* l.) asal Polewali Mandar. *Makassar Natural Product Journal*, 1(3), pp.138-147. DOI: <https://journal.farmasi.umi.ac.id/index.php/mnpj>
- Artanti, A.N. and Mujahidah, F.S., 2021. Antibacterial activity test of ethanol extract and SAP of Betung bamboo shoot (*Dendrocalamus asper*) against *Klebsiella pneumoniae* and *Pseudomonas aeruginosa* Bacteria. *Journal of Biodiversity and Biotechnology*, 1(1), pp.11-16. DOI: <https://doi.org/10.20961/jbb.v1i1.50519>
- Aykul, S., & Martinez-Hackert, E. 2016. Determination of half-maximal inhibitory concentration using biosensor-based protein interaction analysis. *Analytical Biochemistry*, 508, pp. 97–103. DOI: <https://doi.org/10.1016/j.ab.2016.06.025>
- Babbar, N., Oberoi, H. S., Sandhu, S. K., & Bhargav, V. K. 2014. Influence of different solvents in extraction of phenolic compounds from vegetable residues and their evaluation as natural sources of antioxidants. *Journal of food science and technology*, 51(10), 2568–2575. DOI: <https://doi.org/10.1007/s13197-012-0754-4>
- Banerjee, P., Eckert, A.O., Schrey, A.K. & Preissner, R., 2018. ProTox-II: a webserver for the prediction of toxicity of chemicals. *Nucleic Acids Research*, 46(W1), pp.W257–W263. DOI: 10.1093/nar/gky318.
- Baroroh, U., Biotek, M., Muscifa, Z.S., Destiarani, W., Rohmatullah, F.G. and Yusuf, M., 2023. Molecular interaction analysis and visualization of protein-ligand docking using Biovia Discovery Studio Visualizer. *Indonesian Journal of Computational Biology (IJCB)*, 2(1), pp.22-30. DOI: <https://doi.org/10.24198/ijcb.v2i1.46322>
- Basnet, S., Ghimire, M. P., Lamichhane, T. R., Adhikari, R., & Adhikari, A. 2023. Identification of potential human pancreatic α -amylase inhibitors from natural products by molecular docking, MM/GBSA calculations, MD simulations, and ADMET analysis. *PloS one*, 18(3), e0275765. DOI: <https://doi.org/10.1371/journal.pone.0275765>
- Clark, L. G., Londoño, X., and Ruiz-Sanchez, E., 2015. Bamboo taxonomy and habitat, in Liese W, Köhl M (eds). *Bamboo The Plant and its Uses*. Springer International Publishing, Cham.

- Daina, A., Michielin, O. & Zoete, V., 2017. SwissADME: a free web tool to evaluate pharmacokinetics, drug-likeness and medicinal chemistry friendliness of small molecules. *Scientific Reports*, 7, 42717. DOI: 10.1038/srep42717.
- Daoud, N.E.H., Borah, P., Deb, P.K., Venugopala, K.N., Hourani, W., Alzweiri, M., Bardaweel, S.K. & Tiwari, V., 2021. ADMET profiling in drug discovery and development: Perspectives of *in silico*, *in vitro* and integrated approaches. *Current Drug Metabolism*, 22(7), pp.503–522. DOI: 10.2174/1389200222666210705122913.
- Dendrocalamus asper* (Schult.f.) Backer in GBIF Secretariat. 2023. GBIF Backbone Taxonomy. Checklist dataset <https://doi.org/10.15468/39omei> accessed via GBIF.org on 2025-04-14.
- Ergina, Nuryanti, S., and Pursitasari, P. I. 2014. Uji Kualitatif Senyawa Metabolit Sekunder pada Daun Palado (*Agave angustifolia*) yang diekstraksi dengan Pelarut Air dan Etanol. *Jurnal Akademika Kimia*. 3(3): 165–172.
- Fabresse, N. 2025. LC-HRMS: Benefits and limitations in clinical and forensic toxicology, *Toxicologie Analytique et Clinique*, 37(1), pp. S63-S64. DOI: <https://doi.org/10.1016/j.toxac.2024.11.010>.
- Firdiyani F, Agustini T. R, and Ma'ruf W. F, 2015. Ekstraksi senyawa bioaktif sebagai antioksidan alami *Spirulina platensis* segar dengan pelarut yang berbeda extraction of bioactive compounds as natural antioxidants from fresh *Spirulina platensis* using different solvents. *Jurnal Pengolahan Hasil Perikanan Indonesia*. 2015;18(1):28-37. DOI: 10.17844/jphpi.2015.18.1.28
- Gheda, S. F., Abo-Shady, A. M., Abdel-Karim, O. H., and Ismail, G. A., 2021. Antioxidant and Antihyperglycemic Activity of *Arthrospira Platensis* (*Spirulina platensis*) Methanolic Extract: In vitro and In vivo Study. *Egyptian Journal of Botany*, 61(1), pp.71–093. DOI: <https://doi.org/10.21608/ejbo.2020.27436.1482>.
- González-Montoya, M., Hernández-Ledesma, B., Mora-Escobedo, R., and Martínez-Villaluenga, C., 2018. Bioactive Peptides from Germinated Soybean with Antidiabetic Potential by Inhibition of Dipeptidyl Peptidase-IV, α -Amylase, and α -Glucosidase Enzymes. *International Journal of Molecular Sciences*, 19(10), 2883. DOI: <https://doi.org/10.3390/ijms19102883>.
- International Diabetes Federation (IDF). 2021. *IDF Diabetes Atlas (9th ed.)*. Brussels, Belgium: IDF.
- Laoufi, H., Benariba, N., Adjdir, S., and Djaziri, R., 2017. In vitro α -amylase and α -glucosidase Inhibitory Activity of *Ononis Angustissima* Extracts. *Journal of Applied Pharmaceutical Science*, 7(2), 191–198. DOI: <https://doi.org/10.7324/JAPS.2017.70227>.
- Lestari, L., Zulkarnain, Z., and Sijid A., 2021. Diabetes Melitus: Review Etiologi, Patofisiologi, Gejala, Penyebab, Cara Pemeriksaan, Cara Pengobatan dan Cara Pencegahan. In *Prosiding Seminar Nasional Biologi*. November 7(1), pp. 237-241. DOI: <https://doi.org/10.24252/psb.v7i1.24229>
- Li, K., Yao, F., Xue, Q., Fan, H., Yang, L., Li, X., Sun, L., & Liu, Y. 2018. Inhibitory effects against α -glucosidase and α -amylase of the flavonoids-rich extract from *Scutellaria baicalensis* shoots and interpretation of structure–activity relationship of its eight flavonoids by a refined assign-score method.

- BMC Chemistry*, 12, p.82. DOI: <https://doi.org/10.1186/s13065-018-0445-y>
- Lou, W., Chen, Y., Ma, H., GuiZhao, L., and BenGuo, L., 2018. Antioxidant and α -amylase inhibitory activities of tannic acid. *J Food Sci Technol*, 55(9), pp.3640–3646. DOI: <https://doi.org/10.1007/s13197-018-3292-x>
- Meila, O., & Noraini, N. (2017). Uji aktivitas antidiabetes dari ekstrak metanol buah kiwi (*Actinidia deliciosa*) melalui penghambatan aktivitas α -Glukosidase. *Jurnal Farmasi Galenika (Galenika Journal of Pharmacy) (e-Journal)*, 3(2), pp.132–137. DOI: 10.22487/j24428744. 2017.v3.i2.8814
- Mohammadi-Khanaposhtani, M., Rezaei, S., Khalifeh, R., Imanparast, S., Faramarzi, M. A., Bahadorikhalili, S., Safavi, M., Bandarian, F., Nasli Esfahani, E., Mahdavi, M., and Larijani, B., 2018. Design, Synthesis, Docking Study, α -glucosidase Inhibition, and Cytotoxic Activities of Acridine Linked to Thioacetamides as Novel Agents in Treatment of Type 2 Diabetes. *Bioorganic Chemistry*, 80, pp.288–295. DOI: <https://doi.org/10.1016/j.bioorg.2018.06.035>.
- Mulyono, N., Lay, B.W., Rahayu, S. and Yaprianti, I., 2012. Antibacterial activity of petung bamboo (*Dendrocalamus asper*) leaf extract against pathogenic *Escherichia coli* and their chemical identification. *International Journal of Pharmaceutical & Biological Archive*, 3(4), pp.770-778.
- Nasution, P.A., Batubara, R. & Surjanto, S., 2015. Tingkat Kekuatan Antioksidan Dan Kesukaan Masyarakat Terhadap Teh Daun Gaharu (*Aquilaria Malaccensis* Lamk) Berdasarkan Pohon Induksi Dan Non-induksi. *Peronema Forestry Science Journal*, 4(1), pp.10-21.
- Neves, R.P.P., Fernandes, P.A. & Ramos, M.J., 2022. Role of enzyme and active site conformational dynamics in the catalysis by α -amylase explored with QM/MM molecular dynamics. *Journal of Chemical Information and Modeling*, 62(15), pp.3638–3650. DOI: 10.1021/acs.jcim.2c00691.
- Nugraha, M.R. and Hasanah, A.N., 2018. Review artikel: Pengujian aktivitas antidiabetes. *Farmaka*, 16(3). DOI: <https://doi.org/10.24198/jf.v16i3.17298>
- Oyedemi, S. O., Oyedemi, B. O., Ijeh, I. I., Ohanyerem, P. E., Cooposamy, R. M., and Aiyegoro, O. A., 2017. Alpha-Amylase Inhibition and Antioxidative Capacity of Some Antidiabetic Plants Used by the Traditional Healers Nigeria. *The Scientific World Journal*, 2017, pp.1–11. DOI: <https://doi.org/10.1155/2017/3592491>.
- Padamani, E., Ngginak, J. and Lema, A.T., 2020. Analisis kandungan polifenol pada ekstrak tunas bambu betung (*Dendrocalamus asper*). *Bioma: Jurnal Biologi dan Pembelajaran Biologi*, 5(1), pp.52-65. DOI: <http://dx.doi.org/10.32528/bioma.v5i1.3688>
- Pandey, A.K. and Ojha, V., 2014. Precooking processing of bamboo shoots for removal of anti-nutrients. *Journal of Food Science and Technology*, 51(1), pp.43–50. DOI: 10.1007/s13197-011-0463-4.
- Pattarathitawat, P., Chinvongamorn, C. and Sansenya, S., 2021. Evaluation of cyanide content, volatile compounds profile, and biological properties of fresh and boiled sliced Thai bamboo shoot (*Dendrocalamus asper* Back.). *Preventive Nutrition and Food Science*, 26(1), pp.92–99. DOI: 10.3746/pnf.2021.26.1.92.
- Pujiarti, R., Suryani, S., Sunarta, S., Lukmandaru, G. and Purba, B., 2020. Extractive contents and DPPH-scavenging activities of Bamboo leaf extracts

- from *Gigantochloa atter*, *Dendrocalamus asper*, and *Gigantochloa verticillata*. *Taiwan J. For. Sci.*, 35, pp.1-12.
- Putri, P. A., Chatri, M., & Advinda, L. 2023. Karakteristik Saponin Senyawa Metabolit Sekunder pada Tumbuhan. *Jurnal Serambi Biologi*, 8(2), 252-256. <https://doi.org/10.24036/srmb.v8i2.207>
- Ravi, L., Sadhana, V., Jain, P., Godidhar Raghuram, S.K., Vaithilingam, M., Manjunathan, R., Krishnan, A.K. & Kesavan, M.P., 2024. In silico analysis reveals α -amylase inhibitory potential of Taraxerol (*Coccinia indica*) and Epoxywithanolide-1 (*Withania coagulans*): a possible way to control postprandial hyperglycemia-induced endothelial dysfunction and cardiovascular events. *In Silico Pharmacology*, 12(2), p.82. DOI: [10.1007/s40203-024-00257-6](https://doi.org/10.1007/s40203-024-00257-6)
- Rena, G., Hardie, D. G., & Pearson, E. R. 2017. The mechanisms of action of metformin. *Diabetologia*, 60(9), 1577–1585. <https://doi.org/10.1007/s00125-017-4342-z>
- Renganathan, S., Manokaran, S., Vasanthakumar, P., Singaravelu, U., Kim, P.-S., Kutzner, A. & Heese, K. 2021. Phytochemical profiling in conjunction with *in vitro* and *in silico* studies to identify human α -amylase inhibitors in *Leucaena leucocephala* (Lam.) De Wit for the treatment of diabetes mellitus. *ACS Omega*, 6(29): 19045–19057. DOI: [10.1021/acsomega.1c02350](https://doi.org/10.1021/acsomega.1c02350).
- Santia, N.P., Mambang, D.E.P., Lubis, M.S. and Rahayu, Y.P., 2023. Uji Sitotoksitas Ekstrak Etanol Daun Bambu (*Dendrocalamus asper* (Schult. F.) Backer) dengan Metode Brine Shrimp Lethality Test (BSLT). *FARMASAINKES: JURNAL FARMASI, SAINS, dan KESEHATAN*, 2(2), pp.224-234. DOI: <https://doi.org/10.32696/fjfsk.v2i2.1893>
- Setiani, E., Tjomiadi, C.E.F. and Manto, O.A.D., 2024. Gambaran Kualitas Hidup Pasien Diabetes Mellitus di Puskesmas Pekauman Banjarmasin. *Jurnal Keperawatan Suaka Insan (JKSI)*, 9(2), pp.149-155. DOI: <https://doi.org/10.51143/jksi.v9i2.682>
- Silvia, R., Wahyuni, W. T., Rohaeti, E., Aisyah, S., Septaningsih, D. A., Karomah, A. H., & Rafi, M. 2024. LC-HRMS-Based Metabolomics Approach Reveals Antioxidant Compounds from *Centella asiatica* Leaves Extracts. *Indonesian Journal of Chemistry*. 24 (6), pp. 1861 - 1869. DOI: <https://doi.org/10.22146/ijc.90782>
- Singh, R., Sindhu, J., Singh, D. & Kumar, P., 2025. Key molecular scaffolds in the development of clinically viable α -amylase inhibitors. *Future Medicinal Chemistry*, 17(3), pp.347–362. DOI: [10.1080/17568919.2025.2453421](https://doi.org/10.1080/17568919.2025.2453421)
- Syafrizayanti, S., Putri, A., Salim, M. and Kusnanda, A.J., 2023. Simulasi Inhibisi Aktivitas Enzim α -Amilase dan α -Glukosidase oleh Senyawa Bioaktif Mikroalga *Spirulina platensis*. *ALCHEMY Jurnal Penelitian Kimia*, 19(2), pp.223-233. DOI: [10.20961/alchemy.19.2.73120.223-233](https://doi.org/10.20961/alchemy.19.2.73120.223-233)
- Wells, G. C. B., Dipiro, T. J., Schwinghammer, L. T., and Dipiro, V. 2015. *Pharmacotherapy Handbook Ninth Edition*. New York: McGraw-Hill Education.
- Wibowo, S., Wardhani, S.K., Hidayati, L., Wijayanti, N., Matsuo, K., Costa, J., Nugraha, Y., Siregar, J.E. and Nuringtyas, T.R., 2024. Investigation of α -glucosidase and α -amylase inhibition for antidiabetic potential of agarwood

(*Aquilaria malaccensis*) leaves extract. *Biocatalysis and Agricultural Biotechnology*, 58, p.103152. DOI:
<https://doi.org/10.1016/j.bcab.2024.103152>