DAFTAR PUSTAKA

Abdelkader, N. F., Eitah, H. E., Maklad, Y. A., Gamaleldin, A. A., Badawi, M. A., and Kenawy, S. A. 2020. New combination therapy of gliclazide and quercetin for protection against STZ-induced diabetic rats. Life sciences, 247 (21), 117458-117463. doi.org/10.1016/j.lfs.2020.117458

Agustina, W., Nurhamidah, & Handayani, D. (2017). Skrining Fitokimia dan Aktivitas Antioksidan Beberapa Fraksi dari Kulit Batang Jarak (Ricinus communis L.). Jurnal Pendidikan dan Ilmu Kimia, 1(2), 117-122.

Ahmed, A., Riaz, L., Huda, N., Khan, F. A., and Parveen, N. 2025. Assessing the cytotoxicity of Carica Papaya Leaves (Red Lady Variety) on Artemia Salina: Implications for Clinical Toxicology. Annals Of Abbasi Shaheed Hospital And Karachi Medical & Dental College, 30(3), 172-177. doi.org/10.58397/5j24sc29

Ajayi, O. S., Balogun, O. S., Olawuni, I. J., October, N., Adigun, R., and Akinlade, I. G. 2021. Alpha Amylase Inhibition and Antioxidant Activities of Bicyclic Diterpenoid Lactones from A. paniculata. Tropical Journal of Natural Product Research (TJNPR), 5(6), 1110-1117. doi.org/10.26538/tjnpr/v5i6.22

Ali, M., Hassan, M., Ansari, S. A., Alkahtani, H. M., Al-Rasheed, L. S., & Ansari, S. A. 2024. Quercetin and kaempferol as multi-targeting antidiabetic agents against mouse model of chemically induced type 2 diabetes. Pharmaceuticals, 17(6), 757-763. doi.org/10.3390/ph17060757

Aprillia, P., and Safitri, C. I. N. H. 2020. Uji aktivitas antidiabetes kombinasi ekstrak herba sambiloto dan daun sirih hijau pada mencit. In Prosiding SNPBS (Seminar Nasional Pendidikan Biologi dan Saintek) (pp. 553-561).

Azhagu M. S., Ra, S., and Jb, S. 2021. In-vitro anticancer activity of phyto-pharmacological and GC-MS analysis of bioactive compounds presents in Avicennia marina leaves ethanolic extract against Hep-G2 cell line. Bull. Env. Pharmacol. Life Sci, 10, 249-257.

Batiha, G. E. S., Beshbishy, A. M., Ikram, M., Mulla, Z. S., El-Hack, M. E. A., Taha, A. E., et al. 2020. The pharmacological activity, biochemical properties, and pharmacokinetics of the major natural polyphenolic flavonoid: quercetin. Foods, 9(3), 374-376. doi:10.3390/foods9030374

Bhat, I.U.H.B. and Bhat, R., 2021, Quercetin: A Bioactive Compound Imparting Cardiovascular and Neuroprotective Benefits: Scope for Exploring Fresh Produce, Their Wastes, and By-Products, Biology, 10(7), 1-34. doi.org/10.3390/biology10070586

Cahya, N. R. D., Abdulkadir, W. S., and Hasan, H. 2022. Uji Toksisitas Ekstrak Etanol Kulit Terong Ungu (Solanum melongena L.) Menggunakan Metode Brine

Shrimp Lethality Test (BSLT). Journal Syifa Sciences and Clinical Research, 4(1), 1-5. doi.org/10.37311/jsscr.v4i1.13630

Chanioti, S., Katsouli, M., & Tzia, C. 2021. Novel processes for the extraction of phenolic compounds from olive pomace and their protection by encapsulation. Molecules, 26(6), 1781-1785.

Chau, T. P., Devanesan, S., Ayub, R., and Perumal, K. 2024. Identification and characterization of major bioactive compounds from A. paniculata (Burm. f.) extracts showed multi-biomedical applications. Environmental Research, 242, 117763. doi.org/10.1016/j.envres.2023.117763

Chellian, J., Mak, K. K., Chellappan, D. K., Krishnappa, P., and Pichika, M. R. 2022. Quercetin and metformin synergistically reverse endothelial dysfunction in the isolated aorta of streptozotocin-nicotinamide-induced diabetic rats. Scientific reports, 12(1), 21393-21395. doi.org/10.1038/s41598-022-25739-5

Chen, X., Li, H., Zhang, B., and Deng, Z. 2021. The synergistic and antagonistic antioxidant interactions of dietary phytochemical combinations. Critical Reviews in Food Science and Nutrition, 5(1), 1-21. doi.org/10.1080/10408398.2021.1888693

Daniel, I. E., and Ibok, E. N. 2020. Toxicological evaluation of different extracts of A. paniculata. South Asian Research Journal of Natural Products, 2(4), 1-10.

Duarte, D., and Vale, N. 2022. Evaluation of synergism in drug combinations and reference models for future orientations in oncology. Current Research in Pharmacology and Drug Discovery, 3, 100110. doi.org/10.1016/j.crphar.2022.100110

Eitah, H. E., Maklad, Y. A., Abdelkader, N. F., El Din, A. A. G., Badawi, M. A., and Kenawy, S. A. 2019. Modulating impacts of quercetin/sitagliptin combination on streptozotocin-induced diabetes melitus in rats. Toxicology and applied pharmacology, 365, 30-40. doi.org/10.1016/j.taap.2018.12.011

Eraky, S. M., Ramadan, N. M., and Abo El-Magd, N. F. 2022. Antidiabetic effects of quercetin and liraglutide combination through modulation of TXNIP/IRS-1/PI3K pathway. Cell biochemistry and function, 40(1), 90-102. doi.org/10.1002/cbf.3678

Fauziyah, R., Widyasanti, A., and Rosalinda, S. 2022. Perbedaan Metode Ekstraksi terhadap Kadar Sisa Pelarut dan Rendemen Total Ekstrak Bunga Telang (Clitoria ternatea L.). Kimia Padjadjaran, 1(1), 18-25.

Fitrianingsih, S. P., Maulana, I. T., Choesrina, R., Dwiputri, D., and Apriliani, R. 2016. Uji aktivitas penghambatan alfa amilase ekstrak daun tithonia diversifolia secara in vitro. Prosiding SNaPP: Kesehatan (Kedokteran, Kebidanan, Keperawatan, Farmasi, Psikologi), 2(1), 108-115.

González-Serrano, D.J., Hadidi, M., Varcheh, M., Jelyani, A.Z.; Moreno, A., and Lorenzo, J.M. 2022. Bioactive Peptide Fractions from Collagen Hydrolysate of Common Carp Fish Byproduct: Antioxidant and Functional Properties. Antioxidants, 11 (1), 509-512. doi.org/10.3390/antiox11030509

Günal-Köroğlu, D., Catalkaya, G., Yusufoğlu, B., Kezer, G., Esatbeyoglu, T., Abd El-Aty, A. M., et al. 2025. Quercetin: Potential antidiabetic effects through enzyme inhibition and starch digestibility. Food Safety and Health, 3(1), 9-22. doi.org/10.1002/fsh3.12066

Hariharan, T., Vasan, P., and Murthy, T. R. 2021. Phytochemical analysis of A. paniculata whole plant powder.

Hartini, Y. S., Setyaningsih, D., Chang, M. J. V., and Nugrahanti, M. C. I. A. 2021. IAI CONFERENCE: Sambiloto (A. paniculata Nees.) leaf extract activity as an α-Amylase enzyme inhibitor. Pharmacy Education, 21(2), 305-308. doi.org/10.46542/pe.2021.212.305308

Hasibuan, A. S., Edrianto, V., & Purba, N. 2020. Skrining fitokimia ekstrak etanol umbi bawang merah (Allium cepa L.). Jurnal Farmasimed (JFM), 2(2), 45-49. doi.org/10.35451/jfm.v2i2.357

Hendrawati, A., and Sulistyoningrum, E. 2025. Effect of Quercetin and Glibenclamide Combination on PPAR-γ and Oxidative Stress: A Study on Cardiac Tissue of Diabetic Animal Model. IIUM Medical Journal Malaysia, 24 (3), 24-29. doi.org/10.31436/imjm.v24i03.2723

Huang, M., Xiao, Q., Li, Y., Ahmad, M., Tang, J., Liao, Q., et al. 2024. Inhibition of α-amylase activity by quercetin via multi-spectroscopic and molecular docking approaches. Food Bioscience, 61, 104951. doi.org/10.1016/j.fbio.2024.104951

Illing, I., Safitri, W., and Erfiana, E. 2017. Uji fitokimia ekstrak buah dengen. Dinamika, 8(1), 66-84.

Indonesia, D. R. 2008. Farmakope Herbal Indonesia. Edisi I. Jakarta: Departemen Kesehatan RI.

Kalaivani, C. S., Sathish, S. S., Janakiraman, N., and Johnson, M. 2012. GC-MS studies on A. paniculata (Burm. f.) Wall. ex Nees-a medicinally important plant. Int. J. Med. Arom. Plants, 2(1), 69-74.

Karmilah, Musdalipah, Daud, N. S., Reymon, & Fauziah, Y. 2021. Identification of sea urchin gonads chemical compounds using thin-layer chromatography from Bokory island, Southeast Sulawesi. Journal of Physics: Conference Series, 1899(1), 12050-12053. doi.org/10.1088/1742-6596/1899/1/012050

Kartikasari, D., Rahman, I. R., and Ridha, A. 2022. Uji fitokimia pada daun kesum (Polygonum minus Huds.) dari Kalimantan Barat. Jurnal Insan Farmasi Indonesia, 5(1), 35-42. doi.org/10.36387/jifi.v5i1.912

Kumar, S., Ratha, K.K., Jaiswal, S., Rao, M.M. and Acharya, R., 2024, Exploring the Potential of A. paniculata and its Bioactive Compounds in the Management of Liver Diseases: A Comprehensive Food Chemistry Perspective, Food Chemistry Advances, 4(100674), 1-12. doi.org/10.1016/j.focha.2024.100674

Kusmiyati, M., Sudaryat, Y., Rismiarti, Z., and Sari, E. D. 2023. Uji Aktivitas Ekstrak Daun dan Buah Belimbing Wuluh (Averrhoa Bilimbi) sebagai Antidiabetes Melalui Inhibisi α-Amilase. Jurnal Riset Kesehatan Poltekkes Depkes Bandung, 15(1), 163-171. doi.org/10.34011/juriskesbdg.v15i1.2118

Lee, S., Lee, D. K., Jeon, S., Kim, S. H., Jeong, J., Kim, J. S., Cho, J. H., Park, H., and Cho, W. S. 2021. Combination effect of nanoparticles on the acute pulmonary inflammogenic potential: additive effect and antagonistic effect. Nanotoxicology, 15(2), 276-288. doi.org/10.1080/17435390.2020.1862336

Lestari, H. P., Hastiana, Y., Sumah, A. S. W., & Hidayat, S. 2025. Klasifikasi Tanaman Obat. Deepublish.

Liu, S., Li, R., Qian, J., Sun, J., Li, G., Shen, J., et al. 2020. Combination therapy of doxorubicin and quercetin on multidrug-resistant breast cancer and their sequential delivery by reduction-sensitive hyaluronic acid-based conjugate/d-α-tocopheryl poly (ethylene glycol) 1000 succinate mixed micelles. Molecular pharmaceutics, 17(4), 1415-1427. doi.org/10.1021/acs.molpharmaceut.0c00138

Lukito, E. W., Iswantini, D., Antariksa, B., Rafi, M., and Wahyudi, S. T. 2024. Screening and identification of metabolites from sambiloto (A. paniculata) ethanol extract for pro-inflammatory cytokines inhibitory through in silico and in vitro approaches. Pharmacogn J. 2024, 16(1), 131-140. doi.org/10.5530/pj.2024.16.18

Malik, Z., Parveen, R., Parveen, B., Zahiruddin, S., Aasif Khan, M., Khan, A, et al., 2021, Anticancer Potential of Andrographolide from A. paniculata (Burm.f.) Nees and its Mechanisms of Action. Journal of Ethnopharmacology, 272(113936): 1-16. doi.org/10.1016/j.jep.2021.113936

Mansourizadeh, F., Alberti, D., Bitonto, V., Tripepi, M., Sepehri, H., Khoee, S., et al. 2020. Efficient synergistic combination effect of Quercetin with Curcumin on breast cancer cell apoptosis through their loading into Apo ferritin cavity. Colloids and Surfaces B: Biointerfaces, 191, 110982. doi.org/10.1016/j.colsurfb.2020.110982

Meila, O., and Noraini, N. 2017. Uji Aktivitas Antidiabetes dari Ekstrak Metanol Buah Kiwi (Actinidia Deliciosa) melalui Penghambatan Aktivitas α-Glukosidase: Antidiabetic Activity Of Kiwi Fruit (Actinidia Deliciosa) Extract Through Inhibition Of α-Glucosidase Activity. Jurnal Farmasi Galenika, 3(2), 295792. doi.org/10.22487/j24428744.0.v0.i0.8814

Meyer, B. N., Ferrigni, N. R., Putnam, J. E., Jacobsen, L. B., Nichols, D. E. J., and McLaughlin, J. L. 1982. Brine shrimp: a convenient general bioassay for

active plant constituents. Planta medica, 45 (5), 31-34. doi.org/ 10.1055/s-2007-971236

Nasiro, S., Anjulita, R., Setiawan, E., Afriyandi, A., and Situmeang, B. 2023. Potensi Nanoemulsi Ekstrak Daun Pirdot (Saurauia vulkani) dalam Meningkatkan Aktivasi Enzim Alpha-Amilase sebagai Alternatif Terapi Diabetes Melitus. Jurnal Beta Kimia, 3(2), 67-74. doi.org/10.35508/jbk.v3i2.15164

Novitasari, N. D. 2015. Potensi Aktivitas Antikanker Kombinasi Ektrak Herba Sambiloto (A. paniculata Nees.) Dengan 5 Fluorouracil Terhadap Sel Kanker Hela, Sel Kanker Widr, Dan Sel Kanker T47d Secara In Vitro. Doctoral dissertation. Universitas Airlangga.

Nugroho, A. E., Andrie, M., Susilowati, R., Nurrochmad, A., Lukitaningsih, E., and Pramono, S. 2011. Ethanolic extracts of A. paniculata (Burm. F.) Nees and its active compound, Andrographolide, decrease the expression of glucose transporters (glut 4) in high fuctose-fat fed rats. International Journal of Phytomedicine, 3(4), 486-497. doi.org/10.5138/IJPM.V3I4.423

Nuraeni, Y., and Darwiati, W. 2021. Utilization of plant secondary metabolites as botanical pesticides in forest plant pests. Jurnal Galam, 2(1), 1-15. doi.org/10.20886/glm.2021.2.1.1-15

Nurjannah, I., Mustariani, B. A. A., and Suryani, N. 2022. Skrining fitokimia dan uji antibakteri ekstrak kombinasi daun jeruk purut (citrus hystrix) dan kelor (moringa oleifera l.) Sebagai zat aktif pada sabun antibakteri: phytochemical screening and antibacterial test combination of kaffir lime leaves (citrus hystrix) and moringa leaves (moringa oliefera l.) Extracts as active substances in antibacterial soap. SPIN Jurnal kimia & Pendidikan Kimia, 4(1), 23-36. doi.org/10.20414/spin.v4i1.4801

Nurzaman, F., Djajadisastra, J., and Elya, B. 2018. Identifikasi kandungan saponin dalam ekstrak kamboja merah (Plumeria rubra L.) dan daya surfaktan dalam sediaan kosmetik. Jurnal Kefarmasian Indonesia, 85-93. doi.org/10.22435/jki.v8i2.325

Pabita, O. T., & Wijaya, I. 2019. Skrining Fitokimia dan Aktivitas Antioksidan Ekstrak Metanol Kayu Batang Mentawa (Artocarpus anisophyllus Miq.) Phytochemical Screening and Antioxidant Activities of Methanol Extract of Mentawa Wood (Artocarpus anisophyllus Miq.). Jurnal Kimia FMIPA UNMUL. 57-61.

Pal, A., and Tripathi, A. 2020. Toxicological and behavioral study of two potential antibacterial agents: 4-chloromercuribenzoic acid and quercetin on Swiss-albino mice. Drug and chemical toxicology, 43(6), 645-655. doi.org/10.1080/01480545.2018.1517774

Pawarti, N., Iqbal, M., Ramdini, D. A., and Yuliyanda, C. 2023. Pengaruh metode ekstraksi terhadap persen rendemen dan kadar fenolik ekstrak tanaman

yang berpotensi sebagai antioksidan. Medical Profession Journal of Lampung, 13(4), 590-593. doi.org/10.53089/medula.v13i4.774

Prasetiyo, A., Martati, T., & Saputra, P. W. 2024. In silico study of bioactive compounds in herba sambiloto (Andrographis paniculata Burm. F. Nees) as HIV-1 reverse transcriptase inhibitor. Jurnal Jamu Indonesia, 9(2), 95-105.

Putra, I. M. W. A., Fakhrudin, N., Nurrochmad, A., and Wahyuono, S. 2022. Antidiabetic activity of Coccinia grandis (L.) Voigt: Bioactive constituents, mechanisms of action, and synergistic effects. Journal of applied pharmaceutical science, 12(1), 041-054. doi.org/10.7324/japs.2021.120103

Rachmawati, F. M. 2014. Potensi Aktivitas Antikanker Kombinasi Fraksi Etil Asetat Herba Sambiloto (A. paniculata Nees.) Dengan Vinkristin Terhadap Sel T47d, Sel Hela, Dan Sel Widr In Vitro. Doctoral dissertation. Universitas Airlangga.

Ramadhani, A. 2014. Potensi Aktivitas Antikanker Kombinasi Ekstrak Herba Sambiloto (A. paniculata Nees.) dengan Doksorubisin terhadap Sel Kanker HeLa, Sel Kanker WiDr, dan Sel Kanker T47D secara In Vitro. Doctoral dissertation. Universitas Airlangga.

Raut, B. K., Upadhyaya, S. R., Bashyal, J., and Parajuli, N. 2023. In silico and in vitro analyses to repurpose quercetin as a human pancreatic α-amylase inhibitor. ACS omega, 8(46), 43617-43631. doi.org/10.1021/acsomega.3c05082

Rasyid, M. I., Yuliani, H., and Angraeni, L. 2020. Toxicity test LC50 of pineung nyen teusalee Seeds (Areca catechu) extract by brine shrimp lethality test (BSLT) Methode. In IOP Conference Series: Earth and Environmental Science (Vol. 515, No. 1, p. 012052). IOP Publishing. doi.org/10.1088/1755-1315/515/1/012052

Rieser, M. J., Gu, Z. M., Fang, X. P., Zeng, L., Wood, K. V., and McLaughlin, J. L. 1996). Five novel mono-tetrahydrofuran ring acetogenins from the seeds of Annona muricata. Journal of Natural products, 59(2), 100-108. doi.org/10.1021/np960037q

Rodrigues, M. J., Oliveira, M., Neves, V., Ovelheiro, A., Pereira, C. A., Neng, N. R., et al. 2019. Coupling sea lavender (Limonium algarvense Erben) and green tea (Camellia sinensis (L.) Kuntze) to produce an innovative herbal beverage with enhanced enzymatic inhibitory properties. South African Journal of Botany, 120, 87-94. doi.org/10.1016/j.sajb.2017.12.003

Rubianti, I., Azmin, N., and Nasir, M. 2022. Analisis Skrining Fitokimia Ekstrak Etanol Daun Golka (Ageratum conyziodes) Sebagai Tumbuhan Obat Tradisional Masyarakat Bima. JUSTER: Jurnal Sains dan terapan, 1(2), 7-12. doi.org/10.55784/juster.v1i2.67

Rudiana, T., and Indriatmoko, D. D. 2021. Aktivitas Antioksidan Kombinasi Ekstrak Etanol Daun Salam (Syzygium Polyanthum) Dan Daun Kelor (Moringa Oleifera). Majalah Farmasi dan Farmakologi, 25(1), 20-22. doi.org/10.20956/mff.v25i1.12377

Rusman, A., Nugroho, A. E., Pramono, S., Herman, H., Faisal, M., Junaidin, J., and Haeruddin, H. 2023. Karakterisasi Ekstrak Sambiloto (Andrographis panicullata Burn (f) Ness) dan Pegagan (Centella asiatica (l) Urban): Characterization Extract Sambiloto (Andrographis panicullata Burn (f) Ness) and Pegagan (Centella asiatica (l) Urban). Jurnal Sains dan Kesehatan, 5(2), 164-171. doi.org/10.30872/jsk.v5i2.p164-171

Saeedi-Boroujeni, A., and Mahmoudian-Sani, M. R. 2021. Anti-inflammatory potential of Quercetin in COVID-19 treatment. Journal of Inflammation, 18, 1-9. doi.org/10.1186/s12950-021-00268-6

Safutri, W., Dwiningrum, R., Pratiwi, M., and Mawarni, I. 2024. Uji Aktivitas Antibakteri Kombinasi Ekstrak Jahe Dan Ekstrak Lengkuas Merah Terhadap Bakteri Staphylococcus Aureus. Jurnal Kesehatan Bakti Tunas Husada: Jurnal Ilmu-ilmu Keperawatan, Analis Kesehatan dan Farmasi, 24(2), 28-36. doi.org/10.36465/jkbth.v24i2.1394

Sukardiman, N. I. D. N. 2012. Pengembangan fitofarmaka untuk antikanker kolon dengan basis formula campuran. Skripsi. Universitas Airlangga

Sulistyarini, I., Sari, D. A., and Wicaksono, T. A. 2020. Skrining fitokimia senyawa metabolit sekunder batang buah naga (Hylocereus polyrhizus). Cendekia Eksakta, 5(1), 1-7.

Taïlé, J., Arcambal, A., Clerc, P., Gauvin-Bialecki, A., and Gonthier, M.P. 2020. Medicinal Plant Polyphenols Attenuate Oxidative Stress and Improve Inflammatory and Vasoactive Markers in Cerebral Endothelial Cells during Hyperglycemic Condition. Antioxidants, 9, 573. doi.org/10.3390/antiox9070573

Thakur, A.K., Chatterjee, S.S. and Kumar, V., 2015, Adaptogenic potential of Andrographolide: An active principle of the king of bitters (A. paniculata), Journal of Traditional and Complementary Medicine, 5(2015), 42-50. doi.org/10.1016/j.jtcme.2014.10.002

Üst, Ö., Yalçin, E., Çavuşoğlu, K., & Özkan, B. 2024. LC–MS/MS, GC–MS and molecular docking analysis for phytochemical fingerprint and bioactivity of Beta vulgaris L. Scientific Reports, 14(1), 7491.

Wahyudi, D., Raharjo, D., and Wardani, T. S. 2022. Penetapan kadar flavonoid dan uji aktivitas penghambat enzim alfa-amilaseekstrak etanol dan fraksi akar kersen (Muntingia calabura L.) secara in vitro. Duta Pharma Journal, 2(2), 67-79.