

DAFTAR PUSTAKA

- Achmad, A., Regar, D. N., dan Harwoko, H. 2016. Efektivitas Ekstrak Buah Pare (*Momordica charantia*) dan Buncis (*Phaseolus vulgaris*) untuk Penurunan Kadar Glukosa darah dan AUC (*Area Under Curve*) Tikus. *Pharmaceutical Journal of Indonesia*, 2(1): 25-29.
- Adriani. A. 2018. Prediksi senyawa Bioaktif Dari Tanaman Sanrego (Lunasia Amara Blanco) Sebagai Inhibitor Enzim Siklookksigenase-2 (Cox-2) Melalui Pendekatan Molecular Docking. *Jurnal Ilmiah Pena*. 1(1): 9-10.
- Aini, W. 2023. *Effect of Mentawai Taro (*Colocasia esculenta*, L.) Corm on Blood Sugar and Histopathologi Pankreas in Diabetic Mice*. Skripsi. Sarjana Biologi FMIPA Universitas Andalas. Padang.
- Ait, L., Sellami, S., Rais, H., Aziz, F., Aghraz, A., Bekkouche, K., Markouk, M. dan Larhsini, M. 2019. Antidiabetic potential of *Caralluma europaea* against alloxan-induced diabetes in mice. *Saudi Journal of Biological Sciences*, 26(6): 1171–1178.
- Akrom, A., Harjanti, P. D., dan Armansyah, T. 2014. Efek Hipoglikemik Ekstrak Etanol Umbi Ketela Rambat (*Ipomoea batatas* P) (eeukr) pada Mencit Swiss yang Diinduksi Aloksan. *Pharmaçiana*, 4(1): 65-76.
- Al-Ishaq, R. K., Abotaleb, M., Kubatka, P., Kajo, K., dan Büsselberg, D. 2019. Flavonoids and their anti-diabetic effects: Cellular mechanisms and effects to improve blood sugar levels. *Biomolecules*, 9(9).
- Alkandahri, M. Y., Nisriadi, L. dan Salim, E. 2016. Secondary metabolites and antioxidant activity of methanol extract of *Castanopsis costata* Leaves. *Pharmacol Clin Pharm Res*, 1(3): 98-102.
- Alquier, T., Poitout, V. 2018. Considerations and guidelines for mouse metabolic phenotyping in diabetes research. *Diabetologia*, 61(3): 526-538.
- American Diabetes Association (ADA). 2015. Diabetes Management Guidelines AIC Diagnosis/NDEI. www.ndei.org. 16 Juli 2024.
- Anand, A., Sharma, N., dan Khurana, N. 2017. Prediction of Activity Spectra of Substances Assisted Prediction of Biological Activity Spectra of Potential Anti-Alzheimer's Phytoconstituents. *Asian Journal of Pharmaceutical and Clinical Research*. 10(22159): 13-14.

- Anaya-Isaza, A. dan Zequera-Diaz, M. 2022. Detection of Diabetes Mellitus with Deep Learning and Data Augmentation Techniques on Foot Thermography. *IEEE Access*, 10: 59564–59591.
- Angirekula, S. Atti, L. dan Atti, S. 2018. Estimation of serum MDA (Malondialdehyde) in various morphological types and clinical stages of age related (senile cataract). *International Journal of Advances in Medicine*, 5(3): 674-680.
- Arjadi, F. dan Susatyo, P. 2010. Regenerasi Sel Pulau Langerhans Pada Tikus Putih (*Rattus norvegicus*) Diabetes yang Diberi Rebusan Daging Mahkota Dewa (*Phaleria macrocarp* (Scheff.) Boerl.). *Sains Medika*, 2 (2): 117-126.
- Athiyah, A. 2015. *Formulasi dan Evaluasi Fisik Mikroemulsi yang Mengandung Ekstrak Umbi Talas Jepang (Colocasta esculenta (L.) Schott var antiquorum) Sebagai Anti-Aging*. Skripsi. Fakultas Kedokteran, Universitas Islam, Jakarta.
- Bajaj, S. dan Khan, A. 2012. Antioxidants and diabetes. *Indian Journal of Endocrinology and Metabolism*, 16.
- Banday, M. Z., Sameer, A. S. dan Nissar, S. 2020. Pathophysiology of diabetes: An overview. *Avicenna Journal of Medicine*, 10(4): 174–188.
- Beger, H. G., Washaw, A. L., Hruban, R. H., Buchler, M.W., Lerch, M. M., Neoptolemos, J. P., Shimosegawa, T., Whitcomb, D. C. dan Groß, C. 2018. *The Pancreas: An Integrated Textbook of Basic Science, Medicine, and Surgery, Third Edition*. United State: Wiley-Blackwell.
- Bhattacharya, S., Manna, P., Gachhui, R. dan Sil, P. C. 2011. Dsaccharic acid-1,4-lactone ameliorates alloxaninduced diabetes mellitus and oxidative stress in rats through inhibiting pancreatic beta-cells from apoptosis via mitochondrial dependent pathway. *Toxicology and Applied Pharmacology*, 257(2): 272-283.
- Bhattacharya, S., Maji, U., Khan, G. A., Das, R., Sinha, A. K., Ghosh, C. dan Maiti, S. 2019. Antidiabetic Role of a Novel Protein from Garlic Via NO in Expression of Glut-4/Insulin in Liver of Alloxan Induced Diabetic Mice. *Biomedicine and Pharmacotherapy*, 111: 1302–1314.
- Budianto, R. E., Linawati, N. M., Arijana, I. G. K. N., Wahyuniari, I. A. I., dan Wiryanan, I. G. N. S. 2022. Potensi Senyawa Fitokimia pada Tumbuhan dalam Menurunkan Kadar Glukosa Darah pada Diabetes Melitus. *Jurnal Sains Dan Kesehatan*, 4(5): 548–556.
- Buraerah, H. 2010. Analisis Faktor Risiko Diabetes Melitus tipe 2 di Puskesmas Tanrutedong, Sidennreg Rappan. *Jurnal Ilmiah Nasional*, 35: 4.

- Burks, D. J. dan White, M. F. 2001. IRS proteins and beta-cell function. *Diabetes*, 50 (1): S140–S145.
- Chikhi, I., Allali, H., Dib, M. E. A., Medjdoub, H. dan Tabti, B. Antidiabetic activity of aqueous leaf extract of *Atriplex halimus L* (Chenopodiaceae) in streptozotocin-induced diabetic rats. *Asian Pacific Journal of Tropical Disease*. 2014; 4(3): 181–184. 30.
- Coskum, O., Kanter, Korkaz, A. dan Oter, S. 2004. Quercetin, A Flavonoid Antioksidant, Prevent and Protects Streptozotocin Induced Oxidative Stress and Beta Cell Damage in Rat Pancreas. Turkey: Pharmacological research Academic press.
- Dalimartha, S. 2006. *Atlas Tumbuhan Obat Indonesia Jilid 4*. Jakarta: Puspa Swara.
- Dey, P., Saha, M. R., Chowdhuri, S. R., Sen, A., Sarkar, M. P., Haldar, B. dan Chaudhuri, T. K. 2015. Assessment of anti-diabetic activity of an ethnopharmacological plant *Nerium oleander* through alloxan induced diabetes in mice. *Journal of Ethnopharmacology*, 161: 128-137.
- Dewi, M., Indra, W., dan Noor, W. 2011. Ekstrak bawang putih (*Allium sativum*) dan ekspresi insulin serta derajat insulitis pankreas tikus sprague-dawley yang diinduksi streptozotocin. *Media Medika Indonesia*, 45(2):105-112.
- Dipa, I. P. A. W., Sudatri, N. W. dan Wiratmini, N. I. 2015. Efektivitas ekstrak daun sukun (*Artocarpus communis* forst.) dalam menurunkan kadar glukosa darah dan mempertahankan jumlah sperma pada tikus (*Rattus norvegicus* L.). *Jurnal Simbiosis*, 3(1): 317- 321.
- Dossena, S. dan Marino A., 2021. Cellular Oxidative Stress. *Antioxidants*, 10: 399.
- Du, X., Li, Y., Xia, Y., Ai, S., Liang, J., Sang, P., dan Ji, X. 2016. Insights into Protein – Ligand Interactions: Mechanisms, Model, and Methods. *Int. J. Mol. Sci.*, 17(144): 1–34.
- Diwedi, P., Diwedi, J., Patel, D., Desai, S. dan Meshram, D. 2016. Phytochemical analysis and assessment of in vitro urolithiatic activity of *Colocasia* leaves. *J Med Plant Stud*, 4(6): 43–47.
- Etsassala, N. G. E. R., Badmus, J. A. Marnewick, J. L., Egleyeh, S., Iwuoha, E. I., Nchu, F., Hussein, A. A. 2022. Alpha-Glucosidase and Alpha-Amylase Inhibitory Activities, Molecular Docking, and Antioxidant Capacities of *Plectranthus ecklonii* Constituents. *Antioxidants*, 11: 378.
- Faqiha, A. F. 2021. *Studi In Silico Senyawa Nitazoxanide Dan Arbidol Sebagai Antivirus Sars-Cov-2 terhadap Reseptor NSP5 (7BQY DAN 2GZ7) dan*

ACE2 (3D0G dan 1R4L). Skripsi. Farmasi Fakultas Kedokteran dan Ilmu Kesehatan. Universitas Islam Negeri Maulana Malik Ibrahim Malang.

- Februyani, N. dan Zuhriyah, A. 2022. Perbandingan Kadar Senyawa Antioksidan Pada Umbi Porang (*Amorphophallus muelleri*), Umbi Talas (*Colocasia esculenta*), Dan Gembili (*Dioscorea esculenta*) dengan Menggunakan Metode DPPH. *Media Bina Ilmiah*, 17(3): 451-456.
- Fithriani, D., Amini, S. dan Melanic, S. 2015. Uji Fitokimia, Kandungan Total Chlorella Fenol dan Aktivitas Antioksidan Mikroalga Spirulina Sp. dan Nannochloropsis Sp. *JPB Kelautan dan Perikanan*. 10(2):101-109.
- Frimayanti, N., Lukman, A., dan Nathania, L. 2021. Studi Molecular Docking Senyawa 1,5-Benzothiazepine Sebagai Inhibitor Dengue SDEN-2 NS2B / NS3 Serine Protease. *Chempublish Journal*, 6(1): 54–62.
- Ghani, U. 2015. Re-exploring promising α -glucosidase inhibitors for potential development into oral anti-diabetic drugs: Finding needle in the haystack. *European Journal of Medicinal Chemistry*, 103: 133–162.
- Ghorbani, A. 2017. Mechanisms of antidiabetic effects of flavonoid rutin. *Biomedicine & Pharmacotherapy Journal*, 96: 305-312.
- Haeusler, R.A., McGraw, T. E. dan Accili, D. 2018. Biochemical and cellular properties of insulin receptor signalling. *Nat. Rev. Mol. Cell Biol*, 19: 31–44.
- Hartati, B. S. dan Prana, T. K. 2003. Analisis Kadar Pati dan Serat Kasar Tepung Beberapa Kultivar Talas (*Colocasia esculenta L. Schott*). *Nature Indonesia*, 6 (1): 29-33.
- Hasibuan, M. S., Yasni, S., Bintang, M., dan Ranti, A. S. 2016. Antihyperglycemic Activity of *Piper crocotum* Leaves and *Cinnamomum burmanii* Bark Mixture Extract in Streptozotocin-Induced Diabetic Rat. *J math fund Sci*, 48(11):1605-1612.
- Heffer, M., Ivić, V. dan Scitovski, R. 2020. Parameter Identification in The Mathematical Model of Glucose and Insulin Tolerance Test - The Mathematical Markers of Diabetes. *Croatian Operational Research Review*, 11: 121-133.
- Heuzé, V., Tran, G., Hassoun, P. dan Renaudeau, D. 2015. Taro (*Colocasia esculenta*). Feedipedia, a programme by INRA, CIRAD, AFZ and FAO. Accessed from: <https://www.feedipedia.org/ node/537>. Diakses pada 01 Maret 2024.

- Hidayat, B., Ramadani, R. V., Rudijanto, A., Soewondo, P., Suastika, K., dan Siu Ng, J. Y. (2022). Direct Medical Cost of Type 2 Diabetes Mellitus and Its Associated Complications in Indonesia. *Value in Health Regional Issues*, 28: 82–89.
- Hirwanto, S. D. 2022. *Efek Talas Mentawai (Colocasia esculenta; Araceae) dalam Pakan Berlemak Tinggi Terhadap Indikator Obesitas dan Kadar Lipid Plasma pada Mencit*. Skripsi Sarjana Biologi FMIPA Universitas Andalas. Padang.
- Horii, S., Fukase, H., Matsuo, T., Kameda, Y., Asano, N., dan Matsui, K. 1986. Synthesis and alpha-D-glucosidase inhibitory activity of N-substituted valiolamine derivatives as potential oral antidiabetic agents. *Journal of Medicinal Chemistry*, 29: 1038–1046.
- International Diabetes Federation. IDF Diabetes Atlas. 9th ed. International Diabetes Federation: Brussels, Belgium; 2019. <https://www.diabetesatlas.org/>. Diakses 18 Februari 2024.
- Islam, M. H., Mostafa, M. N., dan Rahmatullah, M. 2018. Antihyperglycemic Activity of Methanolic Extracts of Corms of *Colocasia esculenta* Var Esculenta. *European Journal of Pharmaceutical and Medical Research*, 5(3): 129-132.
- Isnaini, N. dan Ratnasari, R. 2018. Faktor Risiko Mempengaruhi Kejadian Diabetes Tipe Dua. *Jurnal Keperawatan Dan Kebidanan Aisyah*, 14(1): 59-68.
- Ito, F., Sono, Y. dan Ito, T. 2019. Measurement and clinical significance of lipid peroxidation as a biomarker of oxidative stress: oxidative stress in diabetes, atherosclerosis, and chronic inflammation. *MDPI*, 8 (3): 72.
- Jin, H. J., Lee, J. H., Kim, D. H., Kim, K. T., Lee, G. W., Choi, S. J. Chang, P. S., dan Paik, H. D. 2015. Antioxidative and nitric oxide scavenging activity of branched-chain amino acids. *Food Sci. Biotechnol.* 24(4): 1555-1558.
- Judith, A., Eduard, A., Veronica, J., Ariana, S., Alba, C., Sabrina, T., Virginia, H., Jesús, R., José, C., Segovia, S., Juan, A., Bueren, B. dan Fatima, B. 2008. IGF-I mediates regeneration of endocrine pancreas by increasing beta cell replication through cell cycle protein modulation in mice. *Diabetologia*, 51(10):1862-1872.
- Johan, H. 2017. *Karakterisasi Morfologi Tanaman Talas (Colocasia) Asal Kecamatan Siberut Tengah Kepulauan Mentawai*. Skripsi Sarjana Agroekoteknologi Fakultas Pertanian Universitas Andalas. Padang.

- Karmila, A. 2013. *Efek Pemberian Teripang Pasir (Holothuria scabra J.) Terhadap Profil Imunohistokimia Antioksidan Supeoksida Dismutase (SOD) pada Pankreas Tikus Diabetes*. Skripsi Sarjana Kedokteran Hewan IPB, Bogor.
- Kehrer, J. P. dan Klotz, L. O. 2015. Free radicals and related reactive species as mediators of tissue injury and disease: Implications for health. *Crit. Rev. Toxicol.*, 45: 765–798.
- Khan, T., Dixit, S., Rumana, A., Raza, S., Azad, I., Joshi, S., dan Khan, A. R. 2017. Molecular Docking, PASS Analysis, Bioactivity Score Prediction Synthesis, Characterization, and Biological Activity Evaluation of a Functionalized 2- Butone Thiosemicarbazone Ligand and Its Complexes. *J. Chem. Biol.*, 10: 91- 104.
- Kiani, F., Naz, M. S. G., Sayehmiri, F., Sayehmiri, K. dan Zali, H. 2017. The risk factors of gestational diabetes mellitus: A systematic review and meta-analysis study. *International Journal of Women's Health and Reproduction Sciences*, 5(4): 253–263.
- Krinsley, J. S dan Preiser, J. 2015. Time in blood glucose range 70 to 140 mg/dl >80% is strongly associated with increased survival in non-diabetic critically ill adults. *Critical Care*, 19:179.
- Kumar, K. N., Katkuri, S. dan Ramyacharitha, R. 2018. A study to assess prevalence of diabetes mellitus and its associated risk factors among adult residents of rural khammmam. *Int J Community Med Public Health*, 5(4): 1360-1365.
- Kwan, D. P., dan Susanto, R. 2022. Science Midwifery Prevalence and Characteristics of Gestational Diabetes Mellitus at X Hospital West Jakarta for The Period Of. *Science Midwifery*, 10(4).
- Latifi, E., Mohammadvour, A. A., Fathi, H. B. dan Nourani, H. 2019. Antidiabetic and Antihyperlipidemic Effects of Ethanolic Ferula AssaFoetida Oleo-Gum-Resin Extract in Streptozotocin-Induced Diabetic Wistar Rats. *Biomedicine & Pharmacotherapy*, 110: 197–202.
- Lee, J. S., Kim, S. H., Jun, D. W., Han, J. H., Jang, E. C., Park, J. Y., Son, B. K., Kim, S. H., Jo, Y. J., Park, Y. S. dan Kim, Y. S. 2009. Clinical Implications of Fatty Pancreas: Correlations Between Fatty Pancreas and Metabolic Syndrome. *World J Gastroenterol*, 15(15): 1869-1875.
- Lena, A. P., Utami, T. P. dan Hurit, H. E. 2020. Uji Aktifitas dan Karakteristik Amilum Umbi. *Archive Pharmacia*, 2(1): 55-63.
- Lenzen, S. 2008. The Mechanisms of Alloxan- and Streptozotocin-Induced Diabetes. *Diabetologia*, 51: 216–226.

- Li, H. M., Hwang, S. H., Kang, B. G., Hong, J. S., Lim, S. S. 2014. Inhibitory effects of Colocasia esculenta (L.) Schott constituents on aldose reductase. *Molecules*. 2014. 19(9): 13212-13224.
- Madsen, A. N., Hansen, G., Paulsen, S. J., Lykkegaard, K., Christensen, M. T., Hansen, H. S., Fosgerau, K. dan Vrang, N. 2010. Long-Term Characterization of The Diet-Induced Obese and Diet-Resistant Rat Model: A Polygenic Rat Model Mimicking the Human Obesity Syndrome. *Journal of Endocrinology*, 206: 287–296.
- Maejima, Y., Rita, R. S., Santoso, P., Aoyama, M., Hiraoka, Y., Nishimori, K., Gantulga, D., Shimomura, K. dan Yada, T. 2015. Nasal Oxytocin A Diabetes Mellitus inistration Reduces Food Intake without Affecting Locomotor Activity and Glycemia with c-Fos Induction in Limited Brain Areas. *Neuroendocrinology*, 101: 35–44.
- Maideliza, T., Taufiq, A. dan Amelia, A. 2018. Genetic Diversity of Cultivated Taro by Mentawai's Indigenous Community in Indonesia. *Scholars Acad Journal of Bioscience*, 1(18).
- Maratirrosyidah, R. dan Estiasih, T. 2015. Uji Antioksidan Senyawa Bioaktif UmbiUmbian Lokal. *Jurnal Pangandaran Industri*, 3(2): 594-603.
- Markus, S., Steffl, M. dan Amselgruber, W. M. 2005. Cell-type specific expression of IGF-1R in porcine islet cells. *Growth Hormone & Igf Research*, 15(1):33-38.
- Martemucci, G., Costagliola, C., Mariano, M., D'andrea, L., Napolitano, P. dan D'Alessandro, A. G. 2022. Free Radical Properties, Source and Targets, Antioxidant Consumption and Health. *Oxygen*, 2: 48–78.
- Martin, M. B. R. dan Witchel, S. F. 2012. Handbook of Growth and Growth Monitoring in Health and Disease: Growth and the Insulin-Like Growth Factor-1 Receptor (IGF1R). Springer.
- Marrazzo, G., Ignazio Barbagallo, F., Michele Malaguarnera, D., Alessandro Frigola, N. dan Volti, G.L. 2014. Role of dietary and endogenous antioxidants in diabetes. *Crit. Rev. Food Sci. Nutr.*, 54: 1599-1616.
- Meng, X.-Y., Zhang, H.-X., Mezei, M., dan Cui, M. 2011. Molecular Docking: A powerful approach for structure-based drug discovery. *Curr Comput Aided Drug*, 7(2): 146–157.
- Mudgal, J., Shetty, P., Reddy, N. D., Akhila, H. S., Gourishetti, K., Mathew, G., Nayak, P. G., et al. 2016. In vivo Evaluation of Two Thiazolidin-4-one Derivatives in High Sucrose Diet Fed Pre-Diabetic Mice and Their

- Modulatory Effect on AMPK, Akt and p38 MAP Kinase in L6 Cells. *Frontiers in Pharmacology*, 7(381),3.
- Muhtadi, M., Primarianti, A. U. dan Sujono, T. A. 2015. Antidiabetic activity of Durian (*Durio zibethinus* Murr.) and Rambutan (*Nephelium lappaceum* L.) fruit peels in alloxan diabetic rats. *Procedia Food Sci*, 3:255-61.
- Mujumdar, A. dan Vaidehi, V. 2019. Diabetes Prediction using Machine Learning Algorithms. *Procedia Computer Science*, 165: 292–299.
- Murugi, N. J., Piero, N. M., Mwiti, K.C., Joseph, N. N. J., Mwaniki. E. N., Wilson, N. M., Gathumbi, D. dan Karuri, G. P. 2012 Hypoglycemic effects of Caesalpinia volkensii on alloxan-induced diabetic mice. *Asian Journal of Pharmaceutical and Clinical Research*, 5(2): 69-74.
- Muqsita, V., Sakinah, E. N. dan Santosa, A. 2015. Efek Ekstrak Etanol Kayu Manis (*Cinnamomum burmannii*) terhadap Kadar MDA Ginjal pada Tikus Wistar Hiperglikemi. *E-Jurnal Pustaka Kesehatan*, 3(2): 235-238
- Nubatonis, D. C., Ndaong, N. A. dan Selan, Y. N. 2019. Pengaruh Pemberian Ekstrak Etanol Daun Sambiloto (*Andrographis paniculata* Nees) terhadap Histopatologi Pankreas Mencit (*Mus musculus*) Diabetes Melitus (DM) Tipe I. *Jurnal Kajian Veteriner*, 3(1): 31-40.
- Nugroho, A. E. 2006. Patologi dan mekanisme aksi diabetogenik. *Biodiversitas*, 7(4): 378-382.
- Nugroho, S. A. 2021. *Anatomi Fisiologi Sistem Endokrin*. Fakultas Kesehatan Universitas Nurul Jadid.
- Ogunyemi, O. M., Gyebi, G. A., Saheed, A., Paul, J., Nwaneri-Chidozie, V., Olorundare, O., Adebayo, J., Koketsu, M., Aljarba, N., Alkahtani, S., Batisha, G. E. dan Olaiya, C. O. 2022. Inhibition mechanism of alpha-amylase, a diabetes target, by a steroidial pregnane and pregnane glycosides derived from *Gongronema latifolium* Benth. *Front Mol Biosci*, 9: 866719.
- Olli, T., Pentikäinen., Pekka, A. dan Postila. 2021. Negative Image-Based Rescoring: Using Cavity Information to Improve Docking Screening. *Methods of Molecular Biology*, 2266: 141-154.
- Pangribowo, S. 2020. *Tetap Produktif, Atasi dan Cegah Diabetes Melitus*. InfoDATIN: Jakarta Selatan.
- Park, C. J. dan Han, J. S. 2015. Hypoglycemic Effect of Jicama (*Pachyrhizus erosus*) Extract on Streptozotocin-Induced Diabetic Mice. *Prev. Nutr. FoodSci*, 20(2): 88-93.

- Park, C. J., Lee, H. A. dan Han, J. S. 2016. Jicama (*Pachyrhizus erosus*) Extract Increases Insulin Sensitivity and Regulates Hepatic Glucose in C57BL/Ksj db/db Mice. *J. Clin. Biochem Nutr*, 58(1): 56-63.
- Prajapati, R., Kalariya, M., Umbarkar, R., Parmar, S. dan Sheth, N. *Colocasia esculenta*: A Potent Indigenous Plant. 2011. *International Journal of Nutrition, Pharmacology, Biological Diseases*, 1(2): 90-96.
- Prameswari, O. M., dan Widjanarko, S. M. 2014. Uji efek ekstrak air daun pandan wangi terhadap penurunan kadar glukosa darah dan histopatologi tikus diabetes mellitus. *Jurnal Pangan dan Agroindustri*, 2(2): 16-27.
- Prana, S. M. 2007. Studi Biologi Pembungan pada Talas (*Colocasia esculenta* (L.) Schott.) *Jurnal Biodiversitas*, 8(1): 63-66.
- Pratoko, D.K. 2012. Molecular Docking Senyawa Fitokimia Piper longum terhadap Reseptor Sikloksigenase-2 sebagai Antiinflamasi. *Chemistry Progress*, 5(1): 31-36.
- Purnamasari, D., Waspadji, S., Adam, J. M., Rudijanto, A., dan Tahapary, D. 2013. *Indonesian Clinical Practice Guidelines for Diabetes in Pregnancy*. 28(1).
- Purwaningsih, I., Yuanti, J. dan Ratnawati, G. J. 2022. Uji Aktivitas Antioksidan Ekstrak Etanol Umbi Talas (*Colocasia Esculenta* (L) Schott) Metode Dpph (2,2-Diphenyl-1-Picrylhydrazil). *Jurnal Laboratorium Khatulistiwa*, 4(1): 13-21.
- Purwanto, D.S., Susanti, H., dan Sugihartini, N. 2021. Molecular Docking as Potential Anti-Inflamed Quersetin of Moringa Leaf (*Moringa oleifera* L.) with Autodek-Vina. *Jurnal Ilmiah Manusia dan Kesehatan*, 4(2): 309-313.
- Rahayu, A. dan Rodiani, R. 2016. Efek Diabetes Melitus Gestasional terhadap Kelahiran Bayi Makrosomia. *MOJORITY*, 5(4).
- Rahmadanti, E. 2022. *Efek Serat Beberapa Tanaman Umbi dan Rimpang dalam Pakan Berlemak Tinggi terhadap Glukosa darah dan Kadar Insulin pada Mencit (Mus musculus)*. Skripsi Sarjana Biologi FMIPA Universitas Andalas. Padang.
- Rahman, M. S., Hossain, K. S., Das, S., Kundu, S., Adegoke, E. O., Rahman, M. A., Hannan, M. A., Uddin, M. J., dan Pang, M. G. 2021. Role of insulin in health and disease: An update. In *International Journal of Molecular Sciences*, 22(12).
- Ramadhan, R., Phuwapraisirisan, P., Amirta, R., Darmawan, M. F. B., Ul-Haqm, K., Kusuma, I. W., Suwito, H., Abdulgani, N., Mukhdlior, A. dan Saparwadi,

- S. 2022. The potency of selected ethnomedicinal plants from East Kalimantan, Indonesia as antidiabetic agents and free-radical scavengers. *Biodiversitas*, 23(4): 2225-2230.
- Ramadhani, V. 2023. *Efek Sediaan Umbi Talas Mentawai (Colocasia esculenta L., Araceae) Terhadap Struktur dan Fungsi Ginjal pada Mencit Putih Diabetes Melitus*. Skripsi Sarjana Biologi FMIPA Universitas Andalas. Padang.
- Reyad-ul-Ferdous, M., Arman, M. S. I., Tanvir, M. M. I., Sumi, S., Siddique, K. M. M. R., Billah, M. M. dan Islam, M. S. 2015. Biologically potential for pharmacological and phytochemicals of medicinal plants of Colocasia esculenta: a comprehensive review. *Am J Clin Exp Med*, 3(5–1): 7–11.
- Röder, P. V., Wu, B., Liu, Y., dan Han, W. 2016. Pancreatic regulation of glucose homeostasis. *Experimental & molecular medicine*, 48.
- Rohilla, A. dan Ali, S. 2012. Alloxan induced diabetes: Mechanisms and effects. *International Journal of Research in Pharmaceutical and Biomedical Sciences*, 3(2): 819-823.
- Ronkainen, J., Huusko, T. J., Soininen, R., Mondini, E., Cinti, F., Makela, K. A., Kovalainen, M., Herzig, K. H., Jarvelin, M. R., Sebert, S., Savolainen, M. J., dan Salonumri, T. 2015. Fat Mass and Obesity-Associated Gene Fto Affects the Dietary Response in Mice White Adipose Tissue. *Scie. Report*, 5: 9233.
- Rose, P.W., Prlic, A., Bi, C., Bluhm, W.F., Christie, C.H., Dutta, S., Gree, R. K., Goodsell, D.S., Westbrook, J.D., Wo, J., Young, J., Zardecki, C., Berman, H.m., Bourne, P.E., dan Burley, S. K. 2015. The RCSB Protein Data Bank: Views of Structural Biology for Basic and Applied Research and Education. *Nucleic Acids Research*. 43(D1): D345-D356.
- Sakaguchi, K., Takeda, K., Maeda, M., Ogawa1, W., Sato, T. Okada, S., Ohnishi, Y., Nakajima, H. dan Kashiwagi, A. 2016. Glucose area under the curve during oral glucose tolerance test as an index of glucose intolerance. *Diabetol Int*, 7:53-58.
- Saltiel, A. R. 2021. Insulin signaling in health and disease. *J. Clin. Investigig*, 131: e142241.
- Sanad, F. A., Ahmed, S. F. dan ElTantawy, W. H. 2022. Antidiabetic and hypolipidemic potentials of Solidago virgaurea extract in alloxan-induced diabetes type 1. *Archives of Physiology and Biochemistry*, 128(3): 716-723.

- Santoso, P., Maliza, R., Rahayu, R. dan Amelia, A. 2020. Pancreoprotective Effect of Jicama (*Pachyrhizus erosus*, Fabaceae) Fiber against High-Sugar Diet in Mice. *J Med Sci*, 8(A): 326-332.
- Santoso, P. 2021. *Serat Bengkuang sebagai Anti Penyakit Metabolik*. Padang: Andalas University Press.
- Santoso, P. 2022. *Ragam Khasiat Serat Pangan*. Jogjakarta: Penerbit Karya Bakti Makmur (KBM) Indonesia.
- Shaye, K., Amir, T., Shlomo, S. dan Yechezkel, S. 2012. Fasting glucose levels within the high normal range predict cardiovascular outcome. *Am Heart J*, 164(1): 111-116.
- Sinata, N. dan Arifin, H. 2016. Antidiabetes dari Fraksi Air Daun Karamunting (*Rhodomyrtus tomentosa* (Ait.) Hassk.) Terhadap Kadar Glukosa Darah Mencit Diabetes. *Jurnal sains farmasi & klinis*, 3(1): 72-78.
- Sindhi, V., Gupta, V., Sharma, K., Bhatnagar, S., Kumari, R. dan Dhaka, N. 2013. Potential applications of antioxidants—A review. *J. Pharm*, 7: 828-835.
- Siregar, A. A. 2013. *Efek Ekstrak Etanol Daun Sirih Merah (EESDM) Terhadap Penurunan Kadar Gula Darah Serta Gambaran Histologi Pankreas Mencit (Mus musculus L) Diabetes*. Tesis. Fakultas Kedokteran Universitas Sumatra Utara. Medan.
- Sobia, K., Javaid, M. A., Ahmad, M. S., Rehmatullah, Q., Hina, G., Iram, B., Pervaiz, A., Farhana, A., Nyla, J. dan Gulnaz, M. 2016. Assessments of phytochemicals and hypoglycemic activity of leaves extracts of *Carica papaya* in diabetic mice. *Journal of Pharmaceutical Sciences and Research*, 7(9): 1000-1008.
- Soeatumadi, D. W., Rosandi, R., Saraswati, M. R., Sibarani, R. P., dan Tarigan, W. O. 2023. Clinicodemographic Profile and Outcomes of Type 2 Diabetes Mellitus in the Indonesian Cohort of DISCOVER: A 3-Year Prospective Cohort Study. *Journal of the ASEAN Federation of Endocrine Societies*, 38(1): 68–74.
- Soegondo S, Soewondo P, Subekti I. 2004. *Penatalaksanaan Diabetes Mellitus Terpadu*. Fakultas Kedokteran Universitas Indonesia 4 th ed.
- Solikhah, T. I., Wijaya, T. A., Salsabila, Pavita, D. A., Asdiyanta, A. N. dan Hamongan, J. M. 2022. Histopathological Pancreas Analysis of *Hylocereus polyrhizus* Peel Ethanolic Extract on Alloxan Induced Diabetic Mice. *Journal of Drug Delivery & Therapeutics*, 2(5): 149-152.

- Stanhope, L. K., Schwarz, M. J., Keim, L. N., et al. 2009. Consuming Fructose-Sweetened, Not Glucosesweetened, Beverages Increase Visceral Adiposity and Lipids and Decrease Insulin Sensitivity In Overweight/Obsese Humans. *J Clin Invest*, 119(5):1322-1334.
- Stanzione, F., Giangreco, I., dan Cole, J. C. 2021. Use Of Molecular Docking Computational Tools in Drug Discovery. *In Progress in Medicinal Chemistry*, 60.
- Sudhakar, P., Thenmozhi, V., Srivignesh, S., dan Dhanalakshmi, M. 2020. *Colocasia esculenta* (L.) Schott: Pharmacognostic and Pharmacological Review. *J of Pharmacognosy and Phytochemistry*. 9(4): 1382-1386.
- Sun, F., Wang, H., Wang, H., Xia, X., dan Kong, B. 2021. Impacts of pH and temperature on the conformation of a protease from *Pediococcus pentosaceus* R1 isolated from Harbin dry sausage. *LWT*, 142: 111056.
- Suryani, N., Endang, T. dan Aulanni'am. 2013. Pengaruh Ekstrak Metanol Biji Mahoni Terhadap Peningkatan Kadar Insulin, Penurunan Ekspresi TNF- α dan Perbaikan Jaringan Pankreas Tikus Diabetes. *Jurnal Kedokteran Brawijaya*, 27(3).
- Suryowati, T. 2015. *Efek Ekstrak Daun Torbangun (Coleus amboinicus Lour) Terhadap Stres Oksidatif Tikus Diabetes*. Disertasi Doktor Sekolah Pascasarjana IPB, Bogor.
- Tan, E. I. A., Irfannuddin, I. dan Murti, K. 2019. Pengaruh Diet Ketogenik Terhadap Proliferasi dan Ketahanan Sel pada Jaringan Pankreas. *Jambi Medical Journal*, 7(1): 102-116.
- Tan, L., H., Kwoh, C. K. dan Mu, Y. 2024. RmsdXNA: RMSD prediction of nucleic acid-ligand docking poses using machine-learning method. *Briefings in Bioinformatics*, 25(3): bbae166.
- Tandi, J., Sudar, C. P., Mutahharah, A., dan Mulyani, S. 2021. Uji Efek Ekstrak Etanol Umbi Talas (*Colocasia esculenta* (L) Schott) Terhadap Penurunan Kadar Glukosa, Ureum dan Kreatinin Tikus Putih Jantan (*Rattus novergicus*) yang di Induksi Streptozotocin, *Jurnal Mandala Pharmacon Indonesia*, 7(2).
- Tang, J., Dunshea, F. R. dan Suleria, H. A. R. 2019. LC-ESI-QTOF/MS Characterization of Phenolic Compounds from Medicinal Plants (Hops and Juniper Berries) and Their Antioxidant Activity. *Foods*, 9(7).

- Tanoey, J. dan Becher, H. 2021. Diabetes prevalence and risk factors of early-onset adult diabetes: results from the Indonesian family life survey. *Global Health Action*, 14(1).
- Tiwari, A. dan Sakshi, S. 2022. Bioinformatics- Computational Approaches in Drug Designing. *Bioinformatics*, 13: 207-217.
- Truscheit, E., Frommer, W., Junge, B., Müller, L., Schmidt, D. D. dan Wingender, W. 2010. Chemistry and biochemistry of microbial α -Glucosidase inhibitors. *Angewandte Chemie International Edition in English*, 20: 744–761.
- Tundis, R., Loizzo, M. R., dan Menichini, F. 2010. Natural products as α -amylase and α -glucosidase inhibitors and their hypoglycaemic potential in the treatment of diabetes: An update. *Mini Reviews in Medicinal Chemistry*, 10: 315–331.
- Vinué, Á. dan Navarro, H. G. 2015. Glucose and Insulin Tolerance Tests in the Mouse. *Methods Mol Biol.* 1339: 247-54.
- Vocadlo, D. J., dan Davies, G. J. 2008. Mechanistic insights into glycosidase chemistry. *Current Opinion in Chemical Biology*, 12: 539–555
- Widyaputri, F., Lim, L. L., Utami, T. P., Harti, A. P., Agni, A. N., Nurdiati, D. S., Widayanti, T. W., Supanji, Wardhana, F. S., Prayogo, M. E., dan Sasongko, M. B. 2022. Prevalence of diabetes in pregnancy and microvascular complications in native Indonesian women: The Jogjakarta diabetic retinopathy initiatives in pregnancy (Jog-DRIP). *PLoS ONE*, 17.
- Wilcox, G. 2005. Insulin and insulin resistance. *Clin Biochem Rev.* 26(2): 19-39.
- Yi, X., Dong, M., Guo, N., Tian, J., Lei, P., Wang, S., Yang, Y., dan Shi, Y. 2023. Flavonoids improve type 2 diabetes mellitus and its complications: a review. *Frontiers in Nutrition*, 10.
- Zakaria, Z. A., Mahmood, N. D., Omar, M. H., Taher, M. dan Basirt, R. 2019. Methanol extract of Muntingia calabura leaves attenuates CCl₄-induced liver injury: possible synergistic action of flavonoids and volatile bioactive compounds on endogenous defence system. *Pharmaceutical biology*, 57 (1): 335-344.
- Zhou, W., Wei, L., Xiao, T., Lai, C., Peng, M., Xu, L., Luo, X., Deng, S., dan Zhang, F. 2017. Diabetogenic Agent Alloxan is A Proteasome Inhibitor. *Biochemical and Biophysical Research Communications*, 488: 400-406.