

## DAFTAR PUSTAKA

- Abd-elgawad, A. M., Gendy, A. E. G. El., Assaeed, A. M., Al-rowaily, S. L., Alharthi, A. S., Mohamed, T. A., Nassar, M.I., Dewir Y.H., & Elshamy A. I. 2021. Phytotoxic Effects of Plant Essential Oils : A Systematic Review and Structure-Activity Relationship Based on Chemometric Analyses. *Plants.* 10(36). DOI: <https://doi.org/10.3390/plants10010036>
- Aeni, S. N., & Setiawan, S. R. D. 2022. 5 Varietas Buah Duku Unggulan di Indonesia, Apa Saja?. *Kompas.com.* Diakses 8 Juni 2024. <https://agri.kompas.com/>
- Alghamdi, S., Migdadi, H., Alghamdi S., El-harty E.H., Khan M., El-harty E.H., Ammar M., Farooq M., & Afzal M. 2018. Phytochemical Profiling of Soybean Soybean (*Glycine ( L .) Merr .*) Genotypes Using GC-MS Analysis. Di dalam: *Phytochemicals - Source of Antioxidants and Role in Disease Prevention.* IntechOpen.
- Angalammal, P., Sivakumari K., Rajesh S., & Shyamala D.K. 2022. 2-Carbamyl-9-[Beta-D-Ribofuranosyl] hypoxanthine from Rambutan fruit as potential inhibitor of apoptotic proteins:In silico molecular docking approach. *Int. J. Zool. Appl. Biosci.* 7(6S):1–6. DOI:10.55126/ijzab.2022.v07.i06.sp002.
- Anjarsari, L.D., Aditiyarini D., & Guntoro. 2020. Potency of Super Red Dragon Fruit Flesh Extract (*Hylocereus costaricensis*) in Herbal Lipstick as Colorant, Antioxidant and Antibacterial. *Sciscitatio.* 1(1):23–33. DOI:10.21460/sciscitatio.3.
- Antonio-Gutiérrez O., Alvízar-Martínez J.A., Solano R., Vásquez-López A., Hernández-Valladolid S.L., Lustre-Sánchez H., Flores-Moctezuma H.E., de Jesús de Luna-Santillana E, & Lagunez-Rivera L. 2023. Microwave-Assisted Hydrodistillation of Essential Oil from *Plectranthus amboinicus*: Evaluation of Its Antifungal Effect and Chemical Composition. *Life.* 13(2). DOI:10.3390/life13020528
- Asfaw, M.D. 2022. Chemical composition of olive stems essential oil from Ethiopia. *J. Plant Sci. Phytopathol.* 6(2):057–061. DOI:10.29328/journal.jpst.1001075.
- Azkiyah, D. F. & Tohari. 2019. Pengaruh Ketinggian Tempat terhadap Pertumbuhan, Hasil dan Kandungan Steviol Glikosida pada Tanaman Stevia (*Stevia rebaudiana*). *Vegetalika.* 8(1): 1-12.
- Badan Pusat Statistik. 2022. Produksi Tanaman Buah-buahan 2022. [www.bps.go.id](http://www.bps.go.id): Diakses pada tanggal 25 Oktober 2023.
- Basaid, K., Chebli B., Bouharroud R., Furze J.N., de Oliveira A.L, & Mayad E.H. 2020. Chemical Characterization of Essential Oils of *Senecio glaucus* ssp. *Coronopifolius* (Maire) Alexander and *Ridolfia segetum* (L.) Moris Growing in Morocco. *J. Essent. Oil-Bearing Plants.* 23(5):918–930. DOI:10.1080/0972060X.2020.1818634.

- Benali, T., Lemhadri. A., Harboul, K., Chtibi, H., Khabbach, A., Jadouali, S. M., Quesada-Romero, L., Louahlia, S., Hammani K., Ghaleb A., Learn-Han Lee, Bouyahya, A., Rusu, M. E., & Akhazzane, M. 2023. Chemical Profiling and Biological Properties of Essential Oils of *Lavandula stoechas* L. Collected from Three Moroccan Sites: In Vitro and In Silico Investigations. *Plants*. 12:1413. <https://doi.org/10.3390/plants12061413>
- Bolade, O.P., Williams A.B., & Benson N.U. 2021. Dataset on analytical characterization of bioactive components from *Azadirachta indica*, *Canna indica*, *Magnifera indica* and *Moringa oleifera* leaf extracts and their applications in nanoparticles biosynthesis. *Data Br.* 38:107407. DOI:10.1016/j.dib.2021.107407.
- Buzón-Durán, L., Sánchez-Hernández E., Sánchez-Báscones M., García-González M.C., Hernández-Navarro S., Correa-Guimarães A., & Martín-Ramos P. 2023. A Coating Based on Bioactive Compounds from *Streptomyces* spp. and Chitosan Oligomers to Control *Botrytis cinerea* Preserves the Quality and Improves the Shelf Life of Table Grapes. *Plants*. 12(3). DOI:10.3390/plants12030577.
- Chairunnissa, S., Wartini, N. M., & Suhendra, L. (2019). Pengaruh Suhu dan Waktu Maserasi terhadap Karakteristik Ekstrak Daun Bidara (*Ziziphus mauritiana* L.) sebagai Sumber Saponin. *Jurnal Rekayasa Dan Manajemen Agroindustri*. 7(4): 551.
- Chakira, A., Garcia, C., Soria, C., Minier, J., & Chillet, M. 2022. Effect of Flower Development Stages on the Dynamics of Volatile Compounds in Ylang-Ylang (*Cananga odorata*) Essential Oil. *Horticulturae*. 8:986. <https://doi.org/10.3390/horticulturae8110986>
- Chen, Z., Liu Q., Zhao Z., Bai B., Sun Z., Cai L., Fu Y., Ma Y., Wang Q., & Xi G. 2021. Effect of hydroxyl on antioxidant properties of 2,3-dihydro-3,5-dihydroxy-6-methyl-4: H -pyran-4-one to scavenge free radicals. *RSC Adv.* 11(55):34456–34461. DOI:10.1039/d1ra06317k.
- Chhajed, S., Misra B.B., Tello N., & Chen S. 2019. Chemodiversity of the Glucosinolate-Myrosinase System at the Single Cell Type Resolution. *Front. Plant Sci.* 10(May). doi:10.3389/fpls.2019.00618.
- Chinedu, I., Friday O.U., Kayode A.A., Chukwuma S.E., Ifeoma J.O., Caleb J.N., & Chigozie J.A. 2019. Chemical composition of *Cyperus esculentus* nut and *Phoenix dactylifera* fruit. *African J. Biotechnol.* 18(19):408–415. DOI:10.5897/ajb2018.16551.
- Chong, J., Pierrel M.A., Atanassova R., Werck-Reichhart D., Fritig B., & Saindrenan P. 2001. Free and Conjugated Benzoic Acid in Tobacco Plants and Cell Cultures. Induced Accumulation Upon Elicitation of Defense Responses and Role As Salicylic Acid Precursors. *Plant Physiol.* 125(1):318–328. DOI:10.1104/pp.125.1.318.

- Damanik, D. D. P., Surbakti, N., & Hasibuan, R. 2014. Ekstraksi Katekin dari Daun Gambir (*Uncaria gambir roxb*) Dengan Metode Maserasi. *Jurnal Teknik Kimia USU*. 3 (2): 10-14.
- Dartagnan, C. H. D. 2022. Optimasi Ukuran Partikel, Konsentrasi, Dan Rasio Solven Dalam Ekstraksi Fukosantin, Polifenol, Dan Antioksidan Pada *Sargassum sp.* Dengan *Ultrasound Assisted Extraction*. *Tesis*. Universitas Katolik Soegijapranata. Semarang.
- Dekebo, A., Kashiwagi, T., Tebayashi S.I., & Kim C.S. 2007. Nitrogenous ovipositional deterrents in the leaves of sweet pepper (*Capsicum annuum*) at the mature stage against the leafminer, *Liriomyza trifolii* (Burgess). *Biosci. Biotechnol. Biochem.* 71(2):421–426. DOI:10.1271/bbb.60482
- Dechakhamphu, A., Wongchum N., Chumroenphat T., Tanomtong A., Pinlaor S., & Siriamornpun S. 2023. In Vitro and In Vivo Evaluation for Antioxidant and Anti-Diabetic Properties of *Cyperus rotundus* L. Kombucha. *Foods*. 12(22):1–15. DOI:10.3390/foods12224059.
- Deng H., He R., Huang R., Pang C., Ma Y., Xia H., Liang D., Liao L., Xiong B., & Wang X., 2022. Optimization of a static headspace GC-MS method and its application in metabolic fingerprinting of the leaf volatiles of 42 citrus cultivars. *Front. Plant Sci.* 13(December):1–11. DOI:10.3389/fpls.2022.1050289
- Doorandishan, M., Gholami, M., Ebrahimi, P., & Jassbi, A. R. Sphatulenol as the most abundant component of essential oil of *Moluccella aucheri* (Boiss.) Scheen. 2021. *Nat. Volatiles & Essent. Oils.* 8(2): 37-41. DOI: 10.37929/nveo.817562
- Elsherif D.E, Safhi F.A, Khalifa A.M & Ragab G.A. 2024. Upregulated synthesis and production of bioactive compounds in *Lotus arabicus* L. by in vitro feeding with dried powder of date palm seeds. *BMC Plant Biol.* 24(1):1–13. DOI:10.1186/s12870-024-04919-7
- Eltayeb, A. A., & Ismaeel H. U. 2014. Extraction of *Cyperus Rotundus* Rhizomes Oil, Identification of Chemical Constituents and Evaluation of Antimicrobial Activity of the Oil in North Kordofan State. *International Journal of Advanced Research in Chemical Science (IJARCS)*. 1(09):18-29.
- Farias D., de Mélo A.H.F, da Silva M.F, Bevílqua GC, Ribeiro DG, Goldbeck R, Forte MBS, & Maugeri-Filho F. 2022. New biotechnological opportunities for C5 sugars from lignocellulosic materials. *Bioresour. Technol. Reports.* 17. DOI:10.1016/j.biteb.2022.100956.
- Flora, S. J. 2009. Structural, Chemical and Biological Aspects of Antioxidants for Startegies Against Metal and Metalloid Exposure. *Oxidative Medicine and Cellar Longevity*. 2 (4): 191-206.
- Frolov NA, & Vereshchagin AN. 2023. Piperidine Derivatives: Recent Advances in Synthesis and Pharmacological Applications. *Int. J. Mol. Sci.* 24(3). DOI:10.3390/ijms24032937.

- Gamal El-Din M.I., Youssef F.S., Altyar A.E., & Ashour M.L. 2022. GC/MS Analyses of the Essential Oils Obtained from Different *Jatropha* Species, Their Discrimination Using Chemometric Analysis and Assessment of Their Antibacterial and Anti-Biofilm Activities. *Plants.* 11:1268. DOI:<https://doi.org/10.3390/plants11091268>.
- Gharari Z., Bagheri K., & Sharafi A. 2022. Chemical Composition of Methanolic Extracts of *Scutellaria orientalis* L.: Digitoxin and Neocurdione Detection by Gas Chromatography/Mass Spectrometry. *Pharm. Biomed. Res.* DOI:10.18502/pbr.v8i1.9388.
- Gift C.P., Bernard G., Peter G.M., Inyani J. L. L.S, Mercy J., & James H.O. 2024. *Solanum aculeastrum* Dunal berries: Phytochemical profiling and GC-MS analysis of methanolic extract and n-hexane, dichloromethane, ethyl acetate and n-butanol fractions. *Int. J. Sci. Res. Arch.* 11(1):1933–1958. DOI:10.30574/ijsra.2024.11.1.0250.
- Ghosh G., Panda P., Rath M., Pal A., Sharma T., & Das D. 2015. GC-MS analysis of bioactive compounds in the methanol extract of *Clerodendrum viscosum* leaves. *Pharmacognosy Res.* 7(1):110–113. DOI:10.4103/0974-8490.147223.
- Göttlinger T., & Lohaus G. 2024. Origin and Function of Amino Acids in Nectar and Nectaries of Pitcairnia Species with Particular Emphasis on Alanine. *Plants.* 13(24). DOI:<https://doi.org/10.3390/plants13010023>.
- Guerrero A., Guerrero E., Cartuche L., Cumbicus N., & Morocho V. 2023. Chemical Profiling of *Hedyosmum cumbalense* and *Hedyosmum spectabile* (Chloranthaceae) Essential Oils, and Their Antimicrobial, Antioxidant, and Anticholinesterase Properties. *Plants.* 12(39). DOI:<https://doi.org/10.3390/plants12010039>.
- Hamdan, D. Phd., & El-Shazly, A. Prof., PhD. 2014. The Chemical Constituents of Egyptian Citrus Species. An Examination of The Volatile Oil and Light Petroleum Fraction of Rought Lemon (*Citrus jambahiri* Lush.) Leaf. *European Scientific Journal.* 10(15):1857-7881.
- Haag F., Hoffmann S., & Krautwurst D. 2021. Key Food Furanones Furaneol and Sotolone Specifically Activate Distinct Odorant Receptors. *J. Agric. Food Chem.* 69(37):10999–11005. DOI:10.1021/acs.jafc.1c03314
- Hesham H. A. Rassem, Abdurahman H., & Nour R.M.Y. 2024. GC-MS analysis of bioactive constituents of Hibiscus flower. *Aust. J. Basic Appl. Sci.* 11(3):91.
- Hidayat S, Abu Bakar MS, & Phusunti N. 2019. Pyrolysis Of Alang – Alang (*Imperata cilindrica*) As Bioenergy Source In Banten Province Indonesia. *J. Kebijak. Pembang. Drh.* 3(1):60–79.
- Hill CB, & Roessner U. 2013. *Metabolic Profiling of Plants by GC-MS*. First Edit. Wiley-VCH Verlag GmbH & Co. KGaA.
- Hin N., Duvall B., Ferraris D., Alt J., Thomas A.G., Rais R., Rojas C., Wu Y.,

- Wozniak K.M., & Slusher B.S. 2015. 6-Hydroxy-1,2,4-triazine-3,5(2H,4H)-dione Derivatives as Novel d -Amino Acid Oxidase Inhibitors. *J. Med. Chem.* 58(18):7258–7272. DOI:10.1021/acs.jmedchem.5b00482.
- Hu Z., Dai T., Li L., Liu P., & Liu X. 2019. Use of GC-MS based metabolic fingerprinting for fast exploration of fungicide modes of action. *BMC Microbiol.* 19(1):1–10. DOI:10.1186/s12866-019-1508-5.
- Ishida M., Kakizaki T., Ohara T., & Morimitsu Y. 2011. Development of a simple and rapid extraction method of glucosinolates from radish roots. *Breed. Sci.* 61(2):208–211. DOI:10.1270/jsbbs.61.208.
- Jang D., Lee J., Eom S.H., Lee S.M., Gil J., Lim H Bin, & Hyun T.K. 2016. Composition , antioxidant and antimicrobial activities of *Eleutherococcus senticosus* fruit extracts. *J. Appl. Pharm. Sci. Vol.* 6(03):125–130. DOI:10.7324/JAPS.2016.60322.
- Juliani, Yuliana, N. D., Budijanto, S., Wijaya, C. H., & Khatib, A. 2012. Senyawa Inhibitor α-Glukosidase dan Antioksidan dari Kumis Kucing Dengan Pendekatan Metabolomik Berbasis FTIR. *Jurnal Teknologi dan Industri Pangan.* 27(1): 17-30.
- Kanagathara N., Sivakumar N., Gayathri K., Krishnan P., Renganathan N.G., Gunasekaran S., & Anbalagan G. 2013. Growth and Characterization of 2, 4, 6 Triamino-1, 3, 5 Triazine – An Organic Single Crystal. *Proc Indian Natn Sci Acad.* 79(3):467–472. DOI:10.1016/S1369-7021(11)70168-7
- Klein-Júnior, L. C., Recalde-Gil M. A., Passos C dos S., de Bitencourt F. G., Salton J., Danielli L. J., Bordignon S. A de L., & Henriques A. T. 2016. The Monoamine Oxidase Inhibitory Activity of Essential Oils Obtained from Peperomia Ruiz. & Pav. (Piperaceae) Species and Their Chemical Composition. *Pharm. Biol.* 54(6): 1071–1076. DOI:10.1080/0972060X.2016.1181576
- Kitainda V., & Jez J.M. 2021. Structural studies of aliphatic glucosinolate chain-elongation enzymes. *Antioxidants.* 10(9). DOI:10.3390/antiox10091500.
- Krishnamoorthy K, & Subramaniam P. 2014. Phytochemical Profiling of Leaf, Stem, and Tuber Parts of *Solena amplexicaulis* (Lam.) Gandhi Using GC-MS . *Int. Sch. Res. Not.* 2014:1–13. DOI:10.1155/2014/567409.
- Kusuma A.V.C., Chozin M.A., & Guntoro DD. 2017. Phenolic Compounds from Shoots and Tubers of Grasshoppers (*Cyperus rotundus* L.) at Various Ages of Growth and Their Effect on the Germination of Broadleaf Weeds. *J. Agron. Indones. (Indonesian J. Agron.)* 45(1):100–107. DOI:10.24831/jai.v45i1.11842
- Kryrychenko O.V. 2020. Symbiotic productivity of phyto-bacterial systems under the action of n-acetyl-d-glucosamine on diazotrophic microorganisms. *Biotechnol. Acta V.* 13(1):15–29. DOI: <https://doi.org/10.15407/biotech13.01.005>

- Lii, J. M., Lin, P. H., Yao, Q. & Chen, C. 2010. Chemical and Molecular Mechanism of Antioxidants: Experimental Approaches and Model Systems. *Journal of Cellular and Molecular Medicine*. 14 (4): 840-860.
- Liu X., Zhang Y., Wu M., Ma Z., & Cao H. 2020. Color discrimination and gas chromatography-mass spectrometry fingerprint based on chemometrics analysis for the quality evaluation of *Schizonepetae Spica*. *PLoS One*. 15(1):1–15. DOI:10.1371/journal.pone.0227235.
- Liu J., Chen C., Wan X., Yao G., Bao S., Wang F., Wang K., & Song T. 2022. Identification of the sesquiterpene synthase AcTPS1 and high production of (–)-germacrene D in metabolically engineered *Saccharomyces cerevisiae*. *Microb. Cell Fact.* 21(89):1–15. DOI:10.1186/s12934-022-01814-4.
- Mariska, I. 2013. Metabolit Sekunder: Jalur Pembentukan dan Kegunaannya. Bogor. BB Biogen Press.
- Mayanti, T. 2009. Kandungan Kimia dan Bioaktivitas Tanaman Duku. Bandung. Unpad Press: 1-10.
- McCormick D. 2018. Characterisation of Vanilla Extracts Based on Sensory Properties and Chemical Composition. Massey University, New Zealand.
- Mina, M. 2023. Analisis Senyawa Metabolit Sekunder dari Ekstrak Metanol Daun Paria Gunung (*Cardiospermum halicacabum* L) Berdasarkan Perbedaan Habitat. *Skripsi*. Universitas Islam Negeri Ar-Raniry. Darussalam, Banda Aceh.
- Molla Yitayeh M, & Monie Wassihun A. 2022. s. *Biochem. Res. Int.* 2022(4900917). DOI:10.1155/2022/4900917
- Noge K., & Becerra J.X. 2009. Germacrene D, A Common Sesquiterpene in the Genus Bursera (Burseraceae). *Molecules*. 14:5289–5297. DOI:10.3390/molecules14125289.
- Novrianto, M. A., Wibowo, M. A., & Ardiningsih, P. 2016. Karakterisasi Senyawa Fitosterol dari Ekstrak Daun Soma (*Ploiarium alternifolium* Melch) dengan Metode 1H-NMR. *Jurnal Kimia Khatulistiwa*. 6 (4):69-74.
- Novrianto, J. 2024. Efisiensi Metode Isolasi Minyak Atsiri dan Ekstrak Sereh Wangi (*Cymbopogon nardus* L.) serta Korelasinya Sebagai Agen Antibakteri Melalui Pendekatan Metabolomik. *Skripsi*. Universitas Islam Negeri Syarif Hidayatullah. Jakarta.
- Nuraida, D. 2012. Pemuliaan Tanaman Cepat dan Tepat Melalui Pendekatan Marka Molekuler. *Jurnal Biologi*. 2 (2): 97-103.
- Obaidullah A.J., Alanazi M.M., Alsaif N.A., Alanazi A.S., Albassam H., Az A., Alwassil O.I, Alqahtani A.M, & Tareq A.M. 2022. Network Pharmacology- and Molecular Docking-Based Identification of Potential Phytochemicals from *Argyreia capitiformis* in the Treatment of Inflammation. *Evidence-based Complement. Altern. Med.*:1–22. DOI:10.1155/2022/8037488.

- Okada H., Fukushi E., Yamamori A., Kawazoe N., Onodera S., Kawabata J., & Shiomi N. 2009. Structural analysis of three novel trisaccharides isolated from the fermented beverage of plant extracts. *Chem. Cent. J.* 3(1). DOI:10.1186/1752-153X-3-8.
- Okechukwu V.U., Onyekwere Eze S., Omokpariola D.O., & Okereke J.C. 2021. Evaluation of phytochemical constituents of Methanol extract of *Moringa oleifera* Lam. whole leaf by Gas Chromatography-Mass Spectrometry and Fourier transform infrared spectroscopy analysis. *World News Nat. Sci.* 37(April):18–30.
- Oleksak P., Gonda J., Nepovimova E., Kuca K., & Musilek K. 2020. The oxazolomycin family: A review of current knowledge. *RSC Adv.* 10(67):40745–40794. DOI:10.1039/d0ra08396h.
- Ololade Z, Olawore N, & IA O. 2013. Phytochemistry and Therapeutic Potentials of the Seed Essential Oil of *Eucalyptus maculata* Hook from Nigeria. *Org. Chem. Curr. Res.* 2(1):1–7. DOI:10.4172/2161-0401.1000114.
- Oso B, Boligon A, & Oladiji A. 2018. Metabolomic profiling of ethanolic extracts of the fruit of *Xylopia aethiopica* (Dunal) a. rich using gas chromatography and high-performance liquid chromatography techniques. *J. Pharmacogn. Phytochem.* 7(1):2083–2090.
- Pagare, S., Bhatia, M., Tripathi, N., Pagare, S. & Bansal, Y.K. 2015. Secondary Metabolites of Plants and Their Role: Overview. *Curr. Trends Biotechnal Pharm.* 9 (3): 293-304.
- Pais A.L, Li X, & (Jenny) Xiang Q.Y. 2018. Discovering variation of secondary metabolite diversity and its relationship with disease resistance in *Cornus florida* L. *Ecol. Evol.* 8(11):5619–5636. DOI:10.1002/ece3.4090.
- Parthasarathy A, Savka MA, Hudson AO. 2019. The synthesis and role of β-alanine in plants. *Front. Plant Sci.* 10(July). DOI:10.3389/fpls.2019.00921.
- Patel M.K, Pandey S, Kumar M, Haque M.I, Pal S, & Yadav N.S. 2021. Plants metabolome study: Emerging tools and techniques. *Plants.* 10(11):1–24. DOI:10.3390/plants10112409.
- Pehino, A., Fatimawali & Suoth, E. J. 2021. Uji Aktivitas Antibakteri Ekstrak Biji Buah Duku *Lansium domesticum* terhadap Bakteri *Staphylococcus aureus* dan *Escherichia coli*. *Pharmacon.* 10 (02): 818-824.
- Paksoy, Y. M., Diraz E, Di̇grak M, Tutar E, & Karaman S. 2016. Essential oil composition and antimicrobial activity of two endemic *Kundmannia* SCOP. species from Turkey. *Ind. Crops Prod.* 79:39–46. DOI:10.1016/j.indcrop.2015.10.027.
- Phaniendra, A., Jestadi, D. B. & Periyasamy, L. 2015. Free Radicals Properties Sources Targets, and Their Implication in Various Diseases. *Indian Journal of Clinical Biochemistry.* 30 (1): 11-26.

- Ponnu J, Wahl V, & Schmid M. 2011. Trehalose-6-phosphate : connecting plant metabolism and development. *Front. Plant Sci.* 2(November):1–6. DOI:10.3389/fpls.2011.00070.
- Purnama, H., Sutadi, A., Widiatmaka, & Gandasasmita, K. 2010. Karakteristik Lahan pada Pertanaman Duku (*Lansium domesticum* Corr) di Provinsi Jambi. *Jurnal Ilmu Tanah dan Lingkungan*. 12 (2):18-24.
- Radhi W.N, & Khashan K.T. 2022. Evaluation of *Punica granatum* L. fruits extracts as anti-fungus infecting Iraqi wheat crop *Triticum aestivum* (L.). *Int. J. Health Sci. (Qassim)*. 6(March):2984–2996. DOI:10.53730/ijhs.v6ns3.6248.
- Ragasa, C. Y., Labrador, P., & Rideout, J. A. 2006. Antimicrobial Terpenoids from *Lansium domesticum*. *The Philippine Agricultural Scientist*. 89 (1): 101-105.
- Rahayu, S. N. 2019. Isolasi Minyak Atsiri dari Temulawak (*Curcuma xanthorrhiza*) dan Identifikasi Bioaktif dengan Menggunakan GCMS. *Skripsi*. Institut Kesehatan Helvetia. Medan.
- Rahmi, U., Manjang, Y., & Santoni, A. 2013. Profil Fitokimia Metabolit Sekunder dan Uji Aktivitas Antioksidan Tanaman Jeruk Purut (*Citrus hystrix* DC) dan Jeruk Bali (*Citrus maxima* (Burm.f.) Merr). *Jurnal Kimia Unand*. 2 (2):109-114.
- Ramadinata, F. 2014. Analisis Efisiensi Pemasaran Duku Lampung Melalui Pendekatan Serba Fungsi di Kabupaten Lampung Selatan. *Skripsi*. Universitas Lampung. Bandar Lampung.
- Rashad Y.M, Al Tami M.S, & Abdalla S.A. 2023. Eliciting transcriptomic and antioxidant defensive responses against Rhizoctonia root rot of sorghum using the endophyte Aspergillus oryzae YRA3. *Sci. Rep.* 13(1):1–11. DOI:10.1038/s41598-023-46696-7.
- Rawat P, Chauhan V, Chaudhary J, Singh C, & Chauhan N. 2022. Antibacterial, antioxidant, and phytochemical analysis of *Piper longum* fruit extracts against multi-drug resistant non-typhoidal *Salmonella* strains in vitro. *J. Appl. Nat. Sci.* 14(4):1225–1239. DOI:10.31018/jans.v14i4.3774.
- Riyadi S.A, Naini A.A, & Supratman U. 2023. Sesquiterpenoids from Meliaceae Family and Their Biological Activities. *Molecules*. 28(4874). DOI:<https://doi.org/10.3390/molecules28124874> Academic.
- Salin M.L, Campbell W.H, & Black C.C. 1973. Oxaloacetate as the Hill oxidant in mesophyll cells of plants possessing the C4 dicarboxylic acid cycle of leaf photosynthesis. *Proc. Natl. Acad. Sci. U. S. A.* 70(12 II):3730–3734. DOI:10.1073/pnas.70.12.3730.
- Salleh W.M.N.H.W, Khamis S. 2021. Essential Oil Composition of *Garcinia nigrolineata* Planch. ex T. Anderson (Clusiaceae). *Agric. Conspec. Sci.* 86(4):375–378.

- Saputra, C. 2017. Efektifitas Kulit dan Biji Buah Duku (*Lancium domesticum* Corr.) Sebagai Ovisida terhadap Nyamuk *Aedes aegepti*. Skripsi. Institut Agama Islam Negeri Raden Intan Lampung. Lampung.
- Schepetkin IA, Özek G, Özek T, Kirpotina LN, Khlebnikov AI, Quinn MT. 2021. Chemical Composition and Immunomodulatory Activity of Essential Oils from *Rhododendron albiflorum*. *Molecules*. 26(3652):1–20.
- Schwab W. 2013. Natural 4-hydroxy-2,5-dimethyl-3(2h)-furanone (furaneol®). *Molecules*. 18(6):6936–6951.doi:10.3390/molecules18066936.
- Sedijani P. 2015. Peran Trehalose Metabolisme Sepanjang Masa Kehidupan Tanaman. *J. Biol. Trop.* 15(2):156–170
- Senaratna T., Merritt D., Dixon K., Bunn E., Touchell D., & Sivasithamparam K. 2003. Benzoic acid may act as the functional group in salicylic acid and derivatives in the induction of multiple stress tolerance in plants. *Plant Growth Regul.* 39(1):77–81. DOI:10.1023/A:1021865029762.
- Seyfried C, & Granvogl M. 2019. Characterization of the Key Aroma Compounds in Two Commercial Dark Chocolates with High Cocoa Contents by Means of the Sensomics Approach. *J. Agric. Food Chem.* 67(20):5827–5837. DOI:10.1021/acs.jafc.8b06183.
- Shahrajabian M.H, Sun W, & Cheng Q. 2021. A review of chemical constituents, traditional and modern pharmacology of fig (*Ficus carica* L.), a super fruit with medical astonishing characteristics. *Polish J. Agron.*(44):22–29. DOI:10.26114/pja.iung.452.2021.452.04.
- Sharma S, Chaurasia S, Dinday S, Srivastava G, Singh A. 2024. High - level biosynthesis of enantiopure germacrene D in yeast. *Appl. Microbiol. Biotechnol.* 108(50):1–18. DOI:10.1007/s00253-023-12885-7.
- Shkondrov, A., Ivanora, A., Kondeva Burdina, M., & Krasteva, I. 2023. Essential oil in *Phlomis tuberosa*. *Pharmacia*. 70(1): 61–65. DOI 10.3897/pharmacia.70.e97050.
- Sinaga, F. A 2017. Stres Oksidatif dan Aktivitas Antioksidan Pada Aktivitas Fisik Maksimal. *Generasi Kampus*: 9(2).
- Siregar T.N, Wahyuni S.R.I, & BSutriana A. 2024. Phytocomponents analysis and antioxidant activity of Malacca fruit extract (*Phyllanthus emblica*) using three different solvents. *Biodiversitas*. 25(5):1911–1919. DOI:10.13057/biodiv/d250507.
- Song P., Zhang X., Wang S., Xu W., & Wei F. 2023. Advances in the synthesis of  $\beta$ -alanine. *Front. Bioeng. Biotechnol.* 11:1283129. DOI:10.3389/fbioe.2023.1283129.
- Soraya C., Alibasyah Z.M., Nazar M., & Gani B.A. 2022. Chemical Constituents of *Moringa oleifera* Leaves of Ethanol Extract and its Cytotoxicity against *Enterococcus faecalis* of Root Canal Isolate. *Res. J. Pharm. Technol.* 15(8):3523–3530. DOI:10.52711/0974-360X.2022.00591.

- Surburg H, & Panten J. 2006. *Common Fragrance and Flavor Materials*. 5th Ed. WILEY-VCH Verlag GmbH & Co.KGaA
- Supriatna dan Suparwoto. 2009. Teknologi Pembibitan Duku dan Prospek Pengembangannya. *Jurnal Litbang Pertanian*. 29 (1): 19–24.
- Suprapto, S., & Kairudin, N. M. 2007. Variasi Genetik, Heritabilitas, Tindak Gen dan Kemajuan Genetik Kedelai (*Glycine max* Merrill) Pada Ultisol. *Jurnal Ilmu-Ilmu Pertanian Indonesia*. 9 (2): 183-190.
- Taher, M., Amri, M. S., Susanti, D., Kudos, M. B. A., Nor, N. F. A. MD & Syukri, Y. 2020. Medicinal Uses, Phytochemistry, and Pharmacological Properties of *Piper aduncum* L. *Sains Malaysiana*. 49(8):1829-1851. DOI. <http://dx.doi.org/10.17576/jsm-2020-4908-07>
- Taopan, K. H. 2022. Profil Senyawa Metabolit Sekunder Dalam Minyak Atsiri Daun Jeruk dari Beberapa Jenis Jeruk yang Tumbuh di Pulau Timor. *Skripsi*. Universitas Katolik Widya Mandira. Kupang.
- Thamrin, M., Ruchjaniningsih & M. B. Nappu. 2013. Perubahan Iklim dan Antisipasi Teknologi dalam Pengelolaan Tanaman Jagung Lahan Kering. *Seminar Nasional Serelia*. Balai Pengkajian Teknologi Pertanian Sulawesi Selatan. Makassar.
- Thomas, G., Withall, D. & Birkett, M. 2020. Harnessing microbial volatiles to replace pesticides and fertilizers. *Microbial Biotechnology*. 13(5), 1366–1376. DOI:10.1111/1751-7915.13645
- Thomson M.J., Stevanin T.M., & Moir J.W.B. 2008. *Measuring Nitric Oxide Metabolism in the Pathogen Neisseria meningitidis*. Volume ke-437. Elsevier Masson SAS.
- Tiburcio A.F, & Alcázar R. 2018. Potential applications of polyamines in agriculture and plant biotechnology. *Methods Mol. Biol.* 1694:489–508. DOI:10.1007/978-1-4939-7398-9\_40.
- To'bungan N., & Jati W.N. 2022. Larvicidal activity of Knobweed (*Hyptis capitata*) leaves ethanolic extract and fraction against *Culex quinquefasciatus*. *Biog. J. Ilm. Biol.* 10(2):236–243. DOI:10.24252/bio.v10i2.31825.
- Todorova V., Ivanov K., & Ivanova S. 2022. Comparison between the biological active compounds in plants with adaptogenic properties (*Rhaponticum carthamoides*, *Lepidium meyenii*, *Eleutherococcus senticosus* and *Panax ginseng*). *Plants*. 11(1). DOI:10.3390/plants11010064.
- Tourabi M., Nouioura G., Touijer H., Baghouz A., Ghouizi, Asmae E.C., Bakour M., Ousaaid M., Almaary D., Khalid S.N., Hiba-Allah Bourhia, Mohammed Farid, Khalouki L.B, & Derwich E. 2023. Antioxidant, Antimicrobial, and Insecticidal Properties of Chemically Characterized Essential Oils Extracted from *Mentha longifolia*: In Vitro and In Silico Analysis. *Plants*. 12(3783.). DOI:<https://doi.org/10.3390/plants12213783>.

- Ulloa del Carpio N, Alvarado-Corella D, Quiñones-Laveriano D.M, Araya-Sibaja A, Vega-Baudrit J, Monagas-Juan M, Navarro-Hoyos M, & Villar-López M. 2024. Exploring the chemical and pharmacological variability of *Lepidium meyenii*: a comprehensive review of the effects of maca. *Front. Pharmacol.* 15(February):1–22. DOI:10.3389/fphar.2024.1360422.
- Welly, Y., Arifin, B & Afrizal. 2013. Aktivitas Antioksidan dan Isolasi Senyawa Metabolit Sekunder dari Kulit Batang Srikaya (*Annona squamosa* Linn). *Jurnal Kimia Unand.* 2 (02):9-16.
- Weni, H. W. S. 2015. Studi Penyakit-Penyakit yang Menyerang Akar, Batang, Daun dan Buah pada Tanaman Duku Komering (*Lansium domesticum* Corr). *Skripsi.* Universitas Sriwijaya. Sumatera Selatan.
- Widyastuti, Y. E. & Regina, K. 2000. Duku, Jenis dan Budaya. Penebar Swadaya Jakarta.
- Widhalm J.R., & Dudareva N. 2015. A familiar ring to it: Biosynthesis of plant benzoic acids. *Mol. Plant.* 8(1):83–97. DOI:10.1016/j.molp.2014.12.001.
- Wijaya, A. C. M. 2017. Aktivitas Antibakteri Ekstrak Daun Duku (*Lansium domesticum* Corr Var duku Hasskl) terhadap *Staphylococcus aureus* dan *Pseudomonas aeruginosa*. *Skripsi.* Universitas Atma Jaya Yogyakarta. Yogyakarta.
- Wonorahardjo S, Sari D.P, Salsabila A, Estiyawati E, Yuliani D, Wijaya A.R, Suharti S, Kusumaningrum I.K, Maharani CA, Noviyanti TA. 2023. Physicochemical Changes and Role of Analytical Chemistry in Black Garlic (*Allium sativum* L.) Processing. *Makara J. Sci.* 27(2):148–159. DOI:10.7454/mss.v27i2.1333.
- Wu Y.Y, Shao W Bin, Zhu J.J, Long ZQ, Liu L.W, Wang P.Y, Li Z, & Yang S. 2019. Novel 1,3,4-Oxadiazole-2-carbohydrazides as Prospective Agricultural Antifungal Agents Potentially Targeting Succinate Dehydrogenase. *J. Agric. Food Chem.* 67(50):13892–13903. DOI:10.1021/acs.jafc.9b05942.
- Wu M., Northen T.R, & Ding Y. 2023. Stressing the importance of plant specialized metabolites: omics-based approaches for discovering specialized metabolism in plant stress responses. *Front. Plant Sci.* 14(November):1–17. DOI:10.3389/fpls.2023.1272363.
- Xiang C.P, Shi Y.N, Liu F.F, Li H.Z, Zhang Y.J, Yang CR, & Xu M. 2016. A survey of the chemical compounds of piper spp. (piperaceae) and their biological activities. *Nat. Prod. Commun.* 11(9):1403–1408. DOI:10.1177/1934578x1601100948.
- Yapp, D. T. T & Yap, S. Y. 2003. *Lansium domesticum*: Skin and Leaf Extracts of This Fruit Tree Interrupt The Lifecycle of *Plasmodium falciparum*, and Are Active Towards a Chloroquine-resistant Strain of The Parasite (T9) In Vitro. *Journal of Ethnopharmacology.* 85 (1): 145–150.

- Yashin, A., Yashin, Y., Xia, X. & Nemzer, B. 2017. Antioxidant Activity of Spicies and Their Impacts on Human Helath : Review. *Antioxidant.* 6 (3): 70-87.
- Yelliantty Y, Kartasasmita R.E, Surantaatmadja S.I, & Rukayadi Y. 2022. Identification of chemical constituents from fruit of *Antidesma bunius* by GC-MS and HPLC-DAD-ESI-MS. *Food Sci. Technol.* 42. DOI:10.1590/fst.61320.
- Yelwa A. S., & Ibrahim, S. L. 2022. Investigation of the influence of catalysts on the production of furfural and its derivatives from the leaves of *Psidum guajava* (Myrtaceae). *Int. J. Sci. Technol. Res. Arch.* 2(1):033–036.doi:10.53771/ijstra.2022.2.1.0058.
- Yuli, A., Susanti, Bahri S, & Yunianti R. 2019. Isolation of Terpenoid Compound From NutSeg (*Cyperus rotundus* L.) as Anticancer. Volume ke-0. Universitas Lampung.
- Zhang W., Guo S., Wang Y., Tu H., Yu L., Zhao Z., Wang Z., & Wu J. 2022. Novel tri fluoromethylpyridine piperazine derivatives as potential plant activators. *Front. Plant Sci.* 13:1086057. DOI:10.3389/fpls.2022.1086057.
- Zhong Y., Jia Z., Zhou H., Zhang D., Li G., & Yu J. 2023. Comparative Analysis of Volatile Compounds from Four Radish Microgreen Cultivars Based on Ultrasonic Cell Disruption and HS-SPME/GC–MS. *Int. J. Mol. Sci.* 24(19). DOI:10.3390/ijms241914988.