DAFTAR PUSTAKA

Abou Assi, Reem & Darwis, Yusrida & M. Abdulbaqi, Ibrahim & Ali Khan, Arshad & Lim, Vuanghao & Laghari, Madeeha. (2015). *Morinda citrifolia* (Noni): A comprehensive review on its industrial uses, pharmacological activities, and clinical trials. *Arabian Journal of Chemistry*. 26. https://doi.org/10.1016/j.arabjc.2015.06.018

Alkorashy A. I., Doghish A. S., Abulsoud A. I., Ewees M. G., Abdelghany T. M., Elshafey M. M., et al. (2020). Effect of scopoletin on phagocytic activity of U937-derived human macrophages: insights from transcriptomic analysis. *Genomics*. 112 (5), 3518–3524. https://doi.org/10.1016/j.ygeno.2020.03.022

Antika L., Meilawati L., Dewi R., Tasfiyati A., Septama A. (2023). Scopoletin: anticancer potential and mechanism of action. *Asian Pac. J. Trop. Biomed.* 13 (1), 1. https://doi.org/10.4103/2221-1691.367685

Ali, M., Kenganora, M., & Manjula, S. N. (2016). Health benefits of *Morinda citrifolia* (Noni): A review. *Pharmacognosy Journal*, *8*(4). https://phcogj.com/article/173

Antika, Lucia & Tasfiyati, Aprilia Nur & Hikmat, Hikmat & Septama, Abdi. (2022). Scopoletin: A review of its source, biosynthesis, methods of extraction, and pharmacological activities. *Zeitschrift für Naturforschung* C. 306-308. https://doi.org/10.1515/znc-2021-0193

Armenia. Hidayat, R., Meiliani., Yuliandra, Y. (2019). Blood Pressure Lowwering Effect of Scopoletin on Oxidative Stress-associated Hypertensive Rats. *Journal of Research in Pharmacy*. 23(2) : 258. https://doi.org/10.12991/jrp.2019.131 249mille

Asmarani, I. (2022). Pengujian Parameter Optimum Ekstraksi secara Sonikasi terhadap Kadar Kumarin pada Buah Mengkudu (*Morinda citrifolia* L.). Skripsi. Makassar : Universitas Hasanuddin.

Baggieri M., Gioacchini S., Borgonovo G., Catinella G., Marchi A., Picone P., et al. (2023). Antiviral, virucidal and antioxidant properties of Artemisia annua against SARS-CoV-2. *Biomed. Pharmacother.* 168. 115682. https://doi.org/1016/j.biopha.2023.115682

Bitwell, C., Indra, S. S., Luke, C., Kakoma, M. K. (2023). A review of modern and conventional extraction techniques and their applications for extracting phytochemicals from plants. *Scientific African.* 19:10. https://doi.org/10.1016/j.sciaf.2023.e01585

Cheng, A.S., Cheng, H., Chang, T.L. (2012). Scopoletin attenuates allergy by inhibiting Th2 cytokines production in EL-4 T cells. *Food Funct.* 3(8):886-90. https://doi: 10.1039/c2fo30054k.

Dong, M.W. (2019). *HPLC and UPLC for Practicing Scientist 2nd Edition.* London : John Wiley.

Dussossoy, E., Brat, P., Bony, E., Boudard, F., Poucheret, P., Mertz, C., Giaimis, J., Michel, A., (2011). Characterization, anti-oxidative and anti-inflammatory effects of Costa Rican noni juice (*Morinda citrifolia*). *J. Ethnopharmacol.* 133 (1), 108–115. DOI: 10.1016/j.jep.2010.08.063

ıntı, A., Perwitasari, S.D.N. and Nurhasanah, S., 2022. Optimasi ɛringan Terhadap Aktivitas Antioksidan Bunga Telang (*Clitoria* ɛnggunakan Metode Respon Permukaan. *Jurnal Teknologi* l), pp.9-22.

iningsih, Wiwin & Manobi, J.D.Y. (2021). Review of Scopoletin: ʏsis Process, and Pharmacological Activity. *Biointerface Research* ɔplied *Chemistry.* 11. 12006-12019. 10.33263/BRIAC114.1200612019

Gandjar, I. G., Rohman, A. (2007). *Kimia Analisis Farmasi.* Yogyakarta : Pustaka Pelajar.

Gulyas-Szpisjak, N., Al-Tayawi, A., Horvathy, Zs. H., Lazlo, Z., Kertesz, S., Hodur, C. (2023). Methods for experimental design, central composite design and the Box–Behnken design, to optimise operational parameters: A review. *Acta Alimentaria.* 4 : 521. https://doi.org/10.1556/066.2023.00235

Harborne, J.B. (1998). *Phytochemical Methods : A Guide to Modern Techniques of Plant Analysis 3rd Edition*. Germany : Thompson Publishing.

Harmita. (2004). Petunjuk Pelaksanaan Validasi Metode dan Cara Perhitungannya. *Majalah Ilmu Kefarmasian.* 1(3) : 117-135.

Hasanah, F., Siregar, N. C., Gunawan, A., Sujono., Aviana, T. (2020). Pengaruh Jenis Pelarut terhadap Hasil Ekstraksi Senyawa Skopoletin Ubi Jalar Ungu (*Ipomoea batatas* L.). *Warta IHP.* 37(1) : 74-82.

Hensen, S., Bjergaard, S. P., Rasmussen, K. (2012). *Introduction to Pharmaceutical Chemical Analysis.* New York : John Wiley & Sons, Ltd.

Kementrian Kesehatan RI. 2017. *Farmakope Herbal Indonesia* Edisi II. Jakarta : Kementrian Kesehatan Republik Indonesia.

Kementrian Kesehatan RI. 2020. *Farmakope Indonesia* Edisi VI. Jakarta : Kementrian Kesehatan Republik Indonesia.

Liu J, Li C, Ding G, Quan W. 2021. Artificial Intelligence Assisted Ultrasonic Extraction of Total Flavonoids from *Rosa sterilis*. *Molecules.* 23;26(13):3835. doi: 10.3390/molecules26133835. PMID: 34201870; PMCID: PMC8270336.

Lv, L., Chen, H., Ho, C. T.,Sang, S.(2011). Chemical components of the roots of Noni (*Morinda citrifolia*) and their cytotoxic effects. *Fitoterapia.* 82(4) : 704-708. https://doi.org/10.1016/j.fitote.2011.02.008

Mandal, S., Mandal, V., Das, AK. (2015). *Essential of Botanical Extraction*. London: Elsivier

Meyer, V. R. (2004). *Practical High-Performance Liquid Chromatography 4th Edition.* Switzerland: John Wiley and Sons, Ltd.

Myers, R. H., Montgomery, D. C., Anderson-cook, C. M. (2009). *Response Surface Methodology Process and Product Optimization using Design Experiments 3rd Edition*. Canada: John Wiley & Sons Inc.

Palu, A.K., Kim, A.H., West, B.J., Deng, S., Jensen, J., White, L., (2008). The effects of *Morinda citrifolia* L. (noni) on the immune system: Its molecular mechanisms of action. *J. Ethnopharmacol*. 115 (3), 502–506. http://dx.doi.org/10.1016/j.jep.2007.10.023.

Ponphaiboon J, Krongrawa W, Aung WW, Chinatangkul N, Limmatvapirat S, Limmatvapirat C.(2023). Advances in Natural Product Extraction Techniques, Electrospun Fiber Fabrication, and the Integration of Experimental Design: A Comprehensive Review. *Molecules.* 28(13): 7. https://doi.org/10.3390/molecules28135163

Ramdhani, A. (2022*). Penentuan Parameter Optimum Proses Ekstraksi Buah Mengkudu (Morinda citrifolia* L.*) secara Sonikasi berdasarkan Kadar Kumarin Totalnya*. Skripsi. Makassar : Universitas Hasanuddin.

nalisis farmasi dengan kromatografi cair. Indonesia: UGM Press.

ar & Afizal, Mohamed & Amin, Mohamed. (2015). Overview on the *face Methodology* (RSM) in Extraction Processes. *Journal of e & Process Engineering* (JASPE). 2. 8-17.

a, P. S., Rahmawati. 2022. *Ultrasound-assisted Extraction* as od to Enhanced Extraction of Bioactive Compund. *3rd International co-Innovation in Science, Engineering and Technology Vol. 22.* dx.doi.org/10.11594/nstp.2022.2729

Sam-Ang P., Phanumartwiwath A., Liana D., Sureram S., Hongmanee P., Kittakoop P. (2023). UHPLC-QQQ-MS and RP-HPLC detection of bioactive alizarin and scopoletin metabolites from *Morinda citrifolia* root extracts and their antitubercular, antibacterial, and antioxidant activities. *ACS Omega* 8 (32), 29615–29624. https://doi.org/10.1021/acsomega.3c03656

Shen S, Yang J, Shen Y, Tang Z, Chen M. (2017). Determination of scopoletin, rutin, and quercetin in noni (*Morinda citrifolia*) fruit powder by ultrasonic extraction coupled with high performance liquid chromatography. *Food Sci.* ;38:191–6.

Shen, Lipeng & Pang, Shuixiu & Zhong, Mingming & Sun, Yufan & Qayum, Abdul & Yuxuan, Liu & Rashid, Arif & Xu, Baoguo & Liang, Qiufang & Ma, Haile & Ren, Xiaofeng. (2023). A comprehensive review of Ultrasonic assisted extraction (UAE) for bioactive components: principles, advantages, equipment, and combined technologies. *Ultrasonics Sonochemistry.* 101. https://doi.org/106646. 10.1016/j.ultsonch.2023.106646

Shivananda Nayak, B., Marshall, Julien R., Isitor, Godwin, Adogwa, Andrew, 2011. Hypoglycemic and hepatoprotective activity of fermented fruit juice of *Morinda citrifolia* (Noni) in diabetic rats. Evidence-Based Complement. Altern. Med. 2011, 1–5. https://doi.org/10.1155/2011/875293

Spangenberg, Bernd & Poole, Colin & Weins, Christel. (2010). *Theoretical Basis of Thin Layer Chromatography (TLC)*. 10.1007/978-3-642-10729-0_2.

Srikanth, J., & Muralidharan, P. (2009). Antiulcer activity of *Morinda citrifolia* Linn fruit extract. J*ournal of Scientific Research.* 23;1(2):345-52.

Tasfiyati, A. N., Antika, L.D., Dewi, R.T., Septama, A.W., Sabarudin, A., Ernawati T. (2022). An experimental design approach for the optimization of scopoletin extraction from *Morinda citrifolia* L. using accelerated solvent extraction. *Talanta*. 1;238(Pt 1):123010. doi: https://doi.org/10.1016/j.talanta.2021.123010

Tasfiyati, Aprilia Nur & Antika, Lucia & Septama, Abdi & Hikmat, Hikmat & Kurniawan, Hendris & Ariani, Novita. (2023). A validated HPLC-DAD method and comparison of different extraction techniques for analysis of scopoletin in noni-based products. *Kuwait Journal of Science*. 50. https://doi.org/10.1016/j.kjs.2023.02.023.

Tatke, Pratima & Rajan, Megha. (2014). Comparison of Conventional and Novel Extraction Techniques for the Extraction of Scopoletin from Convolvulus Pluricaulis. *Indian Journal Of Pharmaceutical Education And Research.* 48. 27-31. https://doi.org/10.5530/ijper.48.1.5

Wahyuni, S., Yunita, I., Sundari, U. Y., Pagalla, D. B., Alpian. 2024. *Ekstraksi Bahan Alam.* Jakarta : CV Gita Lentera.

Wang, C.Y., Ng, C.C., Su, H., Tzeng, W.S., Shyu, Y.T., 2009. Probiotic potential of noni juice fermented with lactic acid bacteria and bifidobacteria. *Int. J. Food Sci. Nutr*. 60 (Suppl. 6), 98–106. http://dx.doi.org/10.1080/09637480902755095.

Zhang, Q. W., Lin, G. L., Ye, W.C. 2018. Techniques for Extraction and Isolation of Natural Products : a comprehensive review. *Chin Med.* 13 -20.

Zin, M. Z., Hamid, A. A., Osman, A., Saari, N., Misran, A. (2007). Isolation and Identification of Antioxidative Compound From Fruit of Mengkudu (*Morinda* *Internasional Journal of Food Properties*. 10 : 363-4. g/0.1080/10942910601052723

A. A., Osman, A. (2002). Antioxidative activity of extracts from *orinda citrifolia* L.) root, fruit and leaf. *Food Chemistry.* 78 : 231. I0.1016/S0308-8146(01)00402-2.