

DAFTAR PUSTAKA

- Aldi, Y., Khairiyah, H., Kasuma, N., Afriwardi, Banowo, A.S., 2019. The Effect of Noni Fruit Extract (*Morinda citrifolia* L.) in Gingivitis Patient. *Pharmacogn. J.* 11, 678–682.
- Basar, S., Uhlenhut, K., Petra, H., Schone, F., Westerndord, J., 2010. Analgesic and Antiinflammatory Activity of *Morinda citrifolia* L. (Noni) Fruit. *Phyther. Res.* 24, 39–41.
- Carrillo-López, A., Yahia, E.M., 2011. Noni (*Morinda citrifolia* L.). *Postharvest Biol. Technol. Trop. Subtrop. Fruits* 4.
- Chaturvedi, A.K., 2018. Extraction of nutraceuticals from plants by microwave assisted extraction. *Syst. Rev. Pharm.* 9, 31–35.
- Choi, S. Il, Kwon, H.Y., La, I.J., Jo, Y.H., Han, X., Men, X., Lee, S.J., Kim, Y.D., Seong, G.S., Lee, O.H., 2021. Development and validation of an analytical method for deacetylasperulosidic acid, asperulosidic acid, scopolin, asperuloside and scopoletin in fermented morinda citrifolia l. (noni). *Separations* 8.
- Endarini, L.H., 2016. *Farmakognosi dan Fitokimia*, I. ed. Kementrian Kesehatan Republik Indonesia, Jakarta Selatan.
- Firmansyah, A., Winingsih, W., Manobi, J.D.Y., 2021. Review of scopoletin: Isolation, analysis process, and pharmacological activity. *Biointerface Res. Appl. Chem.* 11, 12006–12019.
- Gandjar, I.G., Rohman, A., 2007. *Kimia Farmasi Analisis*. Pustaka Pelajar, Yogyakarta.
- Hanani, E., 2015. *Analisis Fitokimia*, Jakarta. ed. Penerbit Buku Kedokteran EGC.
- Hasanah, F., Siregar, N.C., Gunawan, A., Sujono, S., Aviana, T., 2020. Pengaruh Jenis Pelarut terhadap Hasil Ekstraksi Senyawa Skopoletin Ubi Jalar Ungu (*Ipomoea batatas* L.). *War. Ind. Has. Pertan.* 37, 74.
- Hijriansyah, L.O.A.H., Hermilasari, H., Subair, H., Irianto, I., Armyn, A.A.U., Hakim, S., 2020. Study in vitro and in silico on effectiveness noni fruit extract (*Morinda Citrifolia*) to reducing hypertension. *Canrea J. Food Technol. Nutr. Culin. J.* 3, 57–64.
- Indonesia, D.K.R., 2008. *Farmakope Herbal Indonesia*, Farmakope Herbal Indonesia. Departemen Kesehatan Republik Indonesia.
- Jain, P.K., Joshi, H., 2012. Coumarin: Chemical and pharmacological profile. *J. Appl. Pharm. Sci.* 2, 236–240.

- Joshi, H., Gajera, V., Katariya, A., 2021. Review On Scopoletin: A Phenolic Coumarin With Its Medicinal Properties 12, 3567–3580.
- Julianto, S.J., 2019. Fitokimia Tinjauan Metabolit Sekunder dan Skrining Fitokimia. Universitas Islam Indonesia, Yogyakarta.
- Khoerun, T., 2021. Perbandingan Profil Kimia Ekstrak Daun Dan Buah Mengkudu (*Morinda Citrifolia* L) Yang Dianalisis Menggunakan Hptlc Dengan Pendekatan Principal Component Analysis (PCA). Fak. Farm.
- Li, J., Wu, J., 2016. Scopolin, a glycoside form of the phytoalexin scopoletin, is likely involved in the resistance of *Nicotiana attenuata* against *Alternaria alternata*. *J. Plant Pathol.* 98.
- Luque de Castro, M.D., Priego-Capote, F., 2010. Soxhlet extraction: Past and present panacea. *J. Chromatogr. A* 1217, 2383–2389.
- Mahattanadul, S., Ridditid, W., Nima, S., Phdoongsombut, N., Ratanasuwon, P., Kasiwong, S., 2011. Effects of *Morinda citrifolia* aqueous fruit extract and its biomarker scopoletin on reflux esophagitis and gastric ulcer in rats. *J. Ethnopharmacol.* 134, 243–250.
- Marzuki, A., 2019. Kimia Analisis Farmasi, Ketiga. ed. CV.21COM, Makassar.
- Mehul, B., Kishor, D., Ajay, S., 2011. Isolation and structure elucidation of Scopoletin from *Ipomoea reniformis* (Convolvulaceae). *J. Appl. Pharm. Sci.* 2011, 138–144.
- Mohd Zin, Z., Abdul Hamid, A., Osman, A., Saari, N., Misran, A., 2007. Isolation and identification of antioxidative compound from fruit of mengkudu (*Morinda citrifolia* L.). *Int. J. Food Prop.* 10, 363–373.
- Muenmuang, C., Narasingha, M., Phusantisampan, T., Sriariyanun, M., 2017. Chemical profiling of *morinda citrifolia* extract from solvent and soxhlet extraction method. *ACM Int. Conf. Proceeding Ser. Part F1309*, 119–123.
- Muhamad, N., Muhmed, S.A., Yusoff, M.M., Gimbun, J., 2014. Influence of solvent polarity and conditions on extraction of antioxidant, flavonoids and phenolic content from *Averrhoa bilimbi*. *J. Food Sci. Eng.* 4, 255–260.
- Norma Ayunda, Merisa, . Z., Azizah, Z., Rivai, H., 2020. Review of Phytochemical and Pharmacological Activities of Noni (*Morinda citrifolia* L.). *Sch. Acad. J. Pharm.* 9, 340–346.
- Pan, R., Dai, Y., Gao, X., Xia, Y., 2009. Scopolin isolated from *Erycibe obtusifolia* Benth stems suppresses adjuvant-induced rat arthritis by

- inhibiting inflammation and angiogenesis. *Int. Immunopharmacol.* 9, 859–869.
- Pandiselvi, P., Manohar, M., Thaila, M., Sudha, A., 2019. Pharmacological Activity Of *Morinda citrifolia* L (Noni). *Pharmacol. Benefit Nat. Prod.* 213–237.
- Patel, K., Panchal, N., Ingle, P., 2019. Review of Extraction Techniques Extraction Methods: Microwave, Ultrasonic, Pressurized Fluid, Soxhlet Extraction, Etc. *Int. J. Adv. Res. Chem. Sci.* 6, 6–21.
- Potterat, O., Hamburger, M., 2007. *Morinda citrifolia* (Noni) fruit - Phytochemistry, pharmacology, safety. *Planta Med.* 73, 191–199.
- Rahmi, N., Salim, R., Miyono, M., Rizki, M.I., 2021. Pengaruh Jenis Pelarut Dan Metode Ekstraksi Terhadap Aktivitas Antibakteri Dan Penghambatan Radikal Bebas Ekstrak Kulit Kayu Bangkal (*Nuclea subdita*). *J. Penelit. Has. Hutan* 39, 13–26.
- Ramamoorthy, P.K., Bono, A., 2007. Antioxidant Activity, Total Phenolic and Flavonoid Content of *Morinda Citrifolia* Fruit Extracts From Various Extraction Processes. *J. Eng. Sci. Technol.* 2, 70–80.
- Rasul, M.G., 2018. Conventional Extraction Methods Use in Medicinal Plants, their Advantages and Disadvantages. *Int. J. Basic Sci. Appl. Comput.* 10–14.
- Reichardt, C., 2003. *Solvents and Solvent Effects in Organic Chemistry*, 3rd ed. Wiley-VCH, German.
- Riyanto, S., Abdul, R., 2014. Isolasi Skopoletin dari Buah Mengkudu (*Morinda citrifolia* L) dan Uji Aktivitas Antioksidannya. *Agritech J. Fak. Teknol. Pertan. UGM* 27, 107–111.
- Rustam, F., 2018. Penetapan Parameter Spesifik Dan Nonspesifik Simplisia Inti Biji Kemiri (*Aleurites Moluccana* (L.) Willd) Asal Sulawesi Selatan. Universitas Hasanuddin.
- Seidel, V., 2006. Initial and Bulk Extraction. *Nat. Prod. Isol.* 27–46.
- Sharma, Y., Venugopal, C.K., Hegde, R. V., Mokashi, A.N., 2014. Noni: A new medicinal plant for the tropics. *African J. Plant Sci.* 8, 243–247.
- Sholehah, D.N., 2010. Pengukuran Kandungan Skopoletin pada Beberapa Tingkat Kematangan Buah Mengkudu (*Morinda citrifolia* Linn) dengan Metode KLT Densitometri. *Agrovigor* 3, 1–9.
- Suhaenah, A., Nuryanti, S., 2017. Skrining Fitokimia Ekstrak Jamur Kancing. *Fitofarmaka Indones.* 4, 199–204.

- Tian, B., Qiao, Y. yun, Tian, Y. yu, Xie, K. chang, Li, D. wei, 2016. Effect of heat reflux extraction on the structure and composition of a high-volatile bituminous coal. *Appl. Therm. Eng.* 109, 560–568.
- Wang, R., Lu, W., Zhang, L., Sitong, W., Li, C., Liu, S., 2021. Solvents effect on phenolics, iridoids, antioxidant activity, antibacterial activity, and pancreatic lipase inhibition activity of noni (*Morinda citrifolia* L.) fruit extract. *El Sevier* 377.
- Wulandari, L., 2011. *Kromatografi Lapis Tipis*. PT. Taman Kampus Presindo, Jember.
- Zhang, Q.W., Lin, L.G., Ye, W.C., 2018. Techniques for extraction and isolation of natural products: A comprehensive review. *Chinese Med. (United Kingdom)* 13, 1–26.
- Zhang, Y.Q., Yang, Z.G., Ding, W., Luo, J.X., 2016. Synergistic inhibitory effect of scopoletin and bisdemethoxycurcumin on *Tetranychus cinnabarinus* (Boisduval) (Acari: Tetranychidae). *Zeitschrift fur Naturforsch. - Sect. C J. Biosci.* 71, 1–8.

LAMPIRAN

Lampiran 1. Skema Kerja Penelitian

