

DAFTAR PUSTAKA

- Akhtar, I., Javad, S., Yousaf, Z., Iqbal, S., & Jabeen, K. (2019). Microwave assisted extraction of phytochemicals an efficient and modern approach for botanicals and pharmaceuticals. *Pakistan Journal of Pharmaceutical Sciences*, 32(1), 223–230.
- Alam, G., Wahyuono, S., Ganjar, I. G., Hakim, L., Timmerman, H., Verpoorte, R., & Wahyuonó, S. (2002). Tracheospasmodic Activity of Viteosin-A and Vitexicarpin Isolated from *Vitex trifolia*. *Planta Med*, 68, 1047–1049.
- Alara, O. R., Abdurahman, N. H., & Olalere, O. A. (2018). Optimization of microwave-assisted extraction of flavonoids and antioxidants from *Vernonia amygdalina* leaf using response surface methodology. *Food and Bioprocess Processing*, 107, 36–48. <https://doi.org/10.1016/j.fbp.2017.10.007>
- Annamalai, P., & Thangam, E. B. (2022). *Vitex trifolia* L. modulates inflammatory mediators via down-regulation of the NF- κ B signaling pathway in carrageenan-induced acute inflammation in experimental rats. *Journal of Ethnopharmacology*, 298. <https://doi.org/10.1016/j.jep.2022.115583>
- Assaw, S., Mazlan, N. W., Rosli, N. L., Azmi, M. A. H. M., Wahid, M. E. A., & Ahmad, W. A. N. W. (2023). the Effect of Vitexicarpin From *Vitex Rotundifolia* on Lipopolysaccharides and Carrageenan Induced Acute Inflammation. *Journal of Sustainability Science and Management*, 18(3), 24–34. <https://doi.org/10.46754/jssm.2023.03.002>
- Azizul, N., Amir, W., Laili, N., Aniq, M., En, C., Wini, N., & Assaw, S. (2021). The coastal medicinal plant *Vitex rotundifolia*: a mini-review on its bioactive compounds and pharmacological activity. *Traditional Medicine Research*, 6(2), 11. <https://doi.org/10.53388/tmr20201128209>
- Bao, F., Tang, R., Cheng, L., Zhang, C., Qiu, C., Yuan, T., Zhu, L., Li, H., & Chen, L. (2018). Terpenoids from *Vitex trifolia* and their anti-inflammatory activities. In *Journal of Natural Medicines* (Vol. 72, Issue 2, pp. 570–575). Springer Tokyo. <https://doi.org/10.1007/s11418-018-1178-x>
- Chan, E. W. C., Wong, S. K., & Chan, H. T. (2018). Casticin from *Vitex* species: a short review on its anticancer and anti-inflammatory properties. *Journal of Integrative Medicine*, 16(3), 147–152. <https://doi.org/10.1016/j.joim.2018.03.001>
- Cui, Q., Liu, J. Z., Wang, L. T., Kang, Y. F., Meng, Y., Jiao, J., & Fu, Y. J. (2018). Sustainable deep eutectic solvents preparation and their efficiency in extraction and enrichment of main bioactive flavonoids from sea buckthorn leaves. *Journal of Cleaner Production*, 184, 826–835. <https://doi.org/10.1016/j.jclepro.2018.02.295>
- Dai, Y., Rozema, E., Verpoorte, R., & Choi, Y. H. (2016). Application of natural deep eutectic solvents to the extraction of anthocyanins from *Catharanthus roseus* with high extractability and stability replacing conventional organic solvents. *Journal of Chromatography A*, 1434, 50–56. <https://doi.org/10.1016/j.chroma.2016.01.037>
- Datu, K. A. T., Fitriani, N., & Ahmad, I. (2019). Pengaruh Penggunaan Metode Lactic Acid-Sucrose dengan Microwave Assisted Extraction (MAE) terhadap Polifenol Total dari Herba Suruhan (*Peperomia pellucida* (L.) Kunth). *Proceeding of Mulawarman Pharmaceuticals Conferences*, 10, 114–117. <https://doi.org/10.25026/mpc.v10i1.373>
- Du, G., Hong, W., Li, Z., Liu, Y., & Wang, C. (2023). Process optimization of deep eutectic solvent-based microwave-assisted extraction of flavonoids from *Ziziphi Spinosa* Semen using response surface methodology. *Food Science and Technology (Brazil)*, 43, 1–10. <https://doi.org/10.1590/fst.122622>
- Hasdar, M., Pangeran, J., & Km, D. (2021). Ekstraksi beras hitam sirampog berbantu gelombang mikro (microwave assisted extraction (mae)) extraction of black rice from sirampog using microwave assisted extraction (mae) method. 6(2), 49–53.



ović, N., Radan, M., Čujić-Nikolić, N., Mudrić, J., Lazarević, Z., & Šavikin, K. (2023). Eutectic solvents combined with cyclodextrins: A novel strategy for chokeberry extraction. *Food Chemistry*, 405. <https://doi.org/10.1016/j.foodchem.2022.134816>

, D., Rosicka-kaczmarek, J., Brzozowska, A., Grzegorzczak, A., & Kulbat-warycha, K. Influence of Microwave-Assisted Extraction on the Phenolic Compound Profile and Activities of Extracts from. 1–24.

- Le, X. D., Nguyen, M. C., Vu, D. H., Pham, M. Q., Pham, Q. L., Nguyen, Q. T., Nguyen, T. A., Pham, V. T., Bach, L. G., Van Nguyen, T., & Tran, Q. T. (2019). Optimization of microwave-assisted extraction of total phenolic and total flavonoid contents from fruits of *docynia indica* (Wall.) decne. using response surface methodology. *Processes*, 7(8). <https://doi.org/10.3390/PR7080485>
- Li, J., Han, Z., Zou, Y., & Yu, B. (2015). Efficient extraction of major catechins in *Camellia sinensis* leaves using green choline chloride-based deep eutectic solvents. *RSC Advances*, 5(114), 93937–93944. <https://doi.org/10.1039/C5RA15830C>
- Mohd Fuad, F., Mohd Nadzir, M., & Harun@Kamaruddin, A. (2021). Hydrophilic natural deep eutectic solvent: A review on physicochemical properties and extractability of bioactive compounds. *Journal of Molecular Liquids*, 339, 116923. <https://doi.org/10.1016/j.molliq.2021.116923>
- Mottaghipisheh, J., Kamali, M., Doustimotlagh, A. H., Nowroozadeh, M. H., Rasekh, F., Hashempur, M. H., & Iraj, A. (2024). A comprehensive review of ethnomedicinal approaches, phytochemical analysis, and pharmacological potential of *Vitex trifolia* L. *Frontiers in Pharmacology*, 15(March), 1–23. <https://doi.org/10.3389/fphar.2024.1322083>
- Oomen, W. W., Begines, P., Mustafa, N. R., Wilson, E. G., Verpoorte, R., & Choi, Y. H. (2020). Natural Deep Eutectic Solvent Extraction of Flavonoids of *Scutellaria baicalensis* as a Replacement for Conventional Organic Solvents. *Molecules*, 25(3), 1–11. <https://doi.org/10.3390/molecules25030617>
- Pan, C., Zhao, L., & Zhao, D. (2021). Microwave-assisted green extraction of antioxidant components from *Osmanthus fragrans* (Lour) flower using natural deep eutectic solvents. *Journal of Applied Research on Medicinal and Aromatic Plants*, 20, 100285. <https://doi.org/10.1016/j.jarmap.2020.100285>
- Peng, W., Wang, X., Wang, W., Wang, Y., Huang, J., Zhou, R., Bo, R., Liu, M., Yin, S., & Li, J. (2024). Comparison, optimization and antioxidant activity of ultrasound-assisted natural deep eutectic solvents extraction and traditional method: A greener route for extraction of flavonoid from *Moringa oleifera* Lam. leaves. *Ultrasonics Sonochemistry*, 109(May), 107003. <https://doi.org/10.1016/j.ultsonch.2024.107003>
- Puspita, F., Nurhidayati, I., Mellisani, B., Amelia Rachmawati Putri, F., Restu Prihadi, A., Studi Analisis Kimia, P., AKA Bogor, P., Pangeran Sogiri No, J., Baru, T., Utara, B., Bogor, K., Barat, J., & Studi Penjaminan Mutu Industri Pangan, P. (2023). Aplikasi Natural Deep Eutectic Solvent (NADES) Sebagai Green Solvent pada Ekstraksi Kafein dan Katekin dari Limbah Kulit Kopi. *Pharmaceutical and Biomedical Sciences Journal*, 5(1), 35–42. <https://doi.org/10.15408/pbsj.v5i1.32256>
- Rasul, A., Zhao, B.-J., Liu, J., Liu, B., Sun, J.-X., Li, J., & Li, X.-M. (2014). Molecular Mechanisms of Casticin Action: an Update on its Antitumor Functions. *Asian Pacific Journal of Cancer Prevention*, 15(21), 9049–9058. <https://doi.org/10.7314/APJCP.2014.15.21.9049>
- Ruesgas-Ramón, M., Figueroa-Espinoza, M. C., & Durand, E. (2017). Application of Deep Eutectic Solvents (DES) for Phenolic Compounds Extraction: Overview, Challenges, and Opportunities. *Journal of Agricultural and Food Chemistry*, 65(18), 3591–3601. <https://doi.org/10.1021/acs.jafc.7b01054>
- Santana, A. P. R., Mora-vargas, J. A., Guimarães, T. G. S., Amaral, C. D. B., Oliveira, A., & Gonzalez, M. H. (2019). Sustainable synthesis of natural deep eutectic solvents (NADES) by different methods. 293, 17–20. <https://doi.org/10.1016/j.molliq.2019.111452>
- Vo, T. P., Nguyen, T. H. P., Nguyen, V. K., Dang, T. C. T., Nguyen, L. G. K., Chung, T. Q., Vo, T. T. H., & Nguyen, D. Q. (2024). Extracting bioactive compounds and proteins from *Bacopa monnieri* using natural deep eutectic solvents. *PLoS ONE*, 19(3 March), 1–21. <https://doi.org/10.1371/journal.pone.0300969>
- Vo, T. P., Pham, T. V., Weina, K., Tran, T. N. H., Vo, L. T. V., Nguyen, P. T., Bui, T. L. H., Phan, T. H., & (2023). Green extraction of phenolics and flavonoids from black mulberry fruit using tectic solvents: optimization and surface morphology. *BMC Chemistry*, 17(1). <https://doi.org/10.1186/s13065-023-01041-x>
- n, L. J., Zheng, X., Gao, M. Z., Meng, Y., & Wang, W. (2019). Efficient extraction of Flos Sophorae Immaturus by tailored and sustainable deep eutectic solvent as media. *Journal of Pharmaceutical and Biomedical Analysis*, 170, 285–294. <https://doi.org/10.1016/j.jpba.2018.12.032>



- Wang, H., Ma, X., Cheng, Q., Wang, L., & Zhang, L. (2018). Deep Eutectic Solvent-Based Ultrahigh Pressure Extraction of Baicalin from *Scutellaria baicalensis* Georgi. *Molecules*, 23(12), 3233. <https://doi.org/10.3390/molecules23123233>
- Wee, H.-N., Neo, S.-Y., Singh, D., Yew, H.-C., Qiu, Z.-Y., Tsai, X.-R. C., How, S.-Y., Yip, K.-Y. C., Tan, C.-H., & Koh, H.-L. (2020). Effects of *Vitex trifolia* L. leaf extracts and phytoconstituents on cytokine production in human U937 macrophages. *BMC Complementary Medicine and Therapies*, 20(1), 91. <https://doi.org/10.1186/s12906-020-02884-w>
- Xia, G. H., Li, X. H., & Jiang, Y. hang. (2021). Deep eutectic solvents as green media for flavonoids extraction from the rhizomes of *Polygonatum odoratum*. *Alexandria Engineering Journal*, 60(2), 1991–2000. <https://doi.org/10.1016/j.aej.2020.12.008>
- Xu, F. X., Zhang, J. Y., Jin, J., Li, Z. G., She, Y. Bin, & Lee, M. R. (2021). Microwave-assisted natural deep eutectic solvents pretreatment followed by hydrodistillation coupled with gc-ms for analysis of essential oil from turmeric (*Curcuma longa* L.). *Journal of Oleo Science*, 70(10), 1481–1494. <https://doi.org/10.5650/jos.ess20368>
- Xu, M., Ran, L., Chen, N., Fan, X., Ren, D., & Yi, L. (2019). Polarity-dependent extraction of flavonoids from citrus peel waste using a tailor-made deep eutectic solvent. *Food Chemistry*, 297(January), 124970. <https://doi.org/10.1016/j.foodchem.2019.124970>
- Zain, M. S. C., Yeoh, J. X., Lee, S. Y., & Shaari, K. (2021). Physicochemical properties of choline chloride-based natural deep eutectic solvents (Nades) and their applicability for extracting oil palm flavonoids. *Sustainability (Switzerland)*, 13(23). <https://doi.org/10.3390/su132312981>
- Zhang, Y., Bian, S., Hu, J., Liu, G., Peng, S., Chen, H., Jiang, Z., Wang, T., Ye, Q., & Zhu, H. (2022). Natural Deep Eutectic Solvent-Based Microwave-Assisted Extraction of Total Flavonoid Compounds from Spent Sweet Potato (*Ipomoea batatas* L.) Leaves: Optimization and Antioxidant and Bacteriostatic Activity. *Molecules*, 27(18). <https://doi.org/10.3390/molecules27185985>

