

## DAFTAR PUSTAKA

- Adarsh Krishna, T. P., Baldev Edachery, and Sunil Athalathil. 2022. "Bakuchiol – a Natural Meroterpenoid: Structure, Isolation, Synthesis and Functionalization Approaches." *RSC Advances* 12(14):8815–32. doi: 10.1039/d1ra08771a.
- Agrawal, O. P., & Agrawal, S. (2012). An overview of new drug delivery system: microemulsion. *Asian J Pharm Sci Tech*, 2(1), 5-12.
- Akbar, S. (2020). *Cullen corylifolium* (L.) Medicus (Fabaceae/Leguminosae). In S. Akbar (Ed.), *Handbook of 200 Medicinal Plants: A Comprehensive Review of Their Traditional Medical Uses and Scientific Justifications* (pp. 749–759). Springer International Publishing. [https://doi.org/10.1007/978-3-030-16807-0\\_80](https://doi.org/10.1007/978-3-030-16807-0_80)
- Arinanti, M. (2018). Potensi senyawa antioksidan alami pada berbagai jenis kacang. *Ilmu Gizi Indonesia*, 1(2), 134-143.
- Arlene, A., & Ariono, D. (2013). Pengaruh Ukuran Biji dan Metode Praperlakuan Panas terhadap Ekstraksi Mekanik Minyak Kemiri. *Jurnal Teknik Kimia Indonesia*, 11(6), 275-282.
- Arthanari, S., & Periyasamy, P. (2020). Phenolic composition, antioxidant and anti-fibrotic effects of *Sesbania grandiflora* L. (Agastya) - An edible medicinal plant. *Ayu*, 41(4), 242–249. [https://doi.org/10.4103/ayu.AYU\\_198\\_19](https://doi.org/10.4103/ayu.AYU_198_19)
- Ayu, L. R., Aliwarga, L., & Adisasmito, S. (2024). Karakterisasi Asam Lemak dan Aktivitas Antioksidan Minyak Hasil Ekstraksi Biji Kelor. *Jurnal Teknik: Media Pengembangan Ilmu dan Aplikasi Teknik*, 23(1), 16-22.
- Bay, E. Y., & Topal, I. O. (2023). Aging skin and anti-aging strategies. *Exploratory Research and Hypothesis in Medicine*, 8(3), 269-279.
- Beckenbach, L., Baron, J. M., Merk, H. F., Löffler, H., & Amann, P. M. (2015). Retinoid treatment of skin diseases. *European Journal of Dermatology*, 25, 384-391.
- Biswas, P., Ghorai, M., Mishra, T., Gopalakrishnan, A. V., Roy, D., Mane, A. B., ... & Dey, A. (2022). *Piper longum* L.: A comprehensive review on traditional uses, phytochemistry, pharmacology, and health-promoting activities. *Phytotherapy Research*, 36(12), 4425-4476.
- Bondarenko A, Aizenman B, Zatula D, Bakina L, Kozhina I, Prykhodko V, Silina O, Meshcheryakov A (1977) *Psoralea drupacea* as a promising source of the antibiotic bakuchiol. *Rastit Res* 13:460–463
- Chaudhuri, R. K., and K. Bojanowski. 2014. "Bakuchiol: A Retinol-like Functional Compound Revealed by Gene Expression Profiling and Clinically Proven to Have Anti-Aging Effects." *International Journal of Cosmetic Science* 36(3):221–30. doi: 10.1111/ics.12117.

- Chen, Q., Wang, X., Yuan, X., Shi, J., Zhang, C., Yan, N., & Jing, C. (2021). Comparison of Phenolic and Flavonoid Compound Profiles and Antioxidant and  $\alpha$ -Glucosidase Inhibition Properties of Cultivated Soybean (*Glycine max*) and Wild Soybean (*Glycine soja*). *Plants (Basel, Switzerland)*, 10(4), 813. <https://doi.org/10.3390/plants10040813>
- Cho, B. A., Yoo, S. K., & Seo, J. S. (2018). Signatures of photo-aging and intrinsic aging in skin were revealed by transcriptome network analysis. *Aging (Albany NY)*, 10(7), 1609.
- Chopra, B., Dhingra, A. K., & Dhar, K. L. (2013). *Psoralea corylifolia* L.(Buguchi)—folklore to modern evidence. *Fitoterapia*, 90, 44-56.
- Damanhour, Z. A., & Ahmad, A. (2014). A review on therapeutic potential of *Piper nigrum* L. Black Pepper): The King of Spices. *Med. Aromat. Plants*, 3(3), 161.
- Dange, S., Jadhav, R., & Vikhe, S. (2022). Phytochemical and pharmacological review of *Sesbania grandiflora*. *Asian Journal of Pharmacy and Technology*, 12(1), 20-24.
- Dasuki. 1991. *Sistematika tumbuhan tinggi*. Bandung. ITB
- Departemen Kesehatan Republik Indonesia (Depkes RI). 2000. *Parameter Standar Umum Ekstrak Tumbuhan Obat*. Direktorat Jendral POM-Depkes RI. Jakarta
- Departemen Kesehatan Republik Indonesia (Depkes RI). 2020. *Farmakope Indonesia edisi VI*. Departemen Kesehatan Republik Indonesia. Jakarta: Kementerian Kesehatan Republik Indonesia
- Dhaliwal, S., Rybak, I., Ellis, S. R., Notay, M., Trivedi, M., Burney, W., Vaughn, A. R., Nguyen, M., Reiter, P., Bosanac, S., Yan, H., Foolad, N., & Sivamani, R. K. (2019). Prospective, randomized, double-blind assessment of topical bakuchiol and retinol for facial photoageing. *The British journal of dermatology*, 180(2), 289–296. <https://doi.org/10.1111/bjd.16918>
- Djajadisastra, J., Mun'im, A., Desi, N.P. (2009). Formulasi gel topikal dari ekstrak *Nerii folium* dalam sediaan antijerawat. *Jurnal Farmasi Indonesia*, 4(4), 210-216
- Djumidi dan J.R. Hutapea. 1992. Pembuatan ekstrak cabe jawa dengan beberapa cairan penyari dan penetapan ekstrak secara kromatografi lapis tipis. *Warta Tumbuhan Obat Indonesia* 1(3): 19-20.
- Draeos, Z. D., Gunt, H., Zeichner, J., & Levy, S. (2020). Clinical Evaluation of a Nature-Based Bakuchiol Anti-Aging Moisturizer for Sensitive Skin. *Journal of Drugs in Dermatology: JDD*, 19(12), 1181-1183.
- El-Beltagi, H. S., Mohamed, H., Hany, N., & Fawzi, E. (2018). Biological and Pharmacological Activities of Cowpea (*Vigna Unguiculata* L.) and Its Bioactive Components. <https://www.researchgate.net/publication/327364955>
- Fathy, I., Abd-Allah., Hamdy M. Dawaba., Ahmed, M. S., Ahmed., 2010, Preparation, characterization, and stability studies of piroxicam loaded microemulsions in topical formulations, *Drug Discoveries & Therapeutics*, 4(4):267-275

- Fitriani, E. W., Imelda, E., Kornelis, C., & Avanti, C. (2016). Karakterisasi dan Stabilitas Fisik Mikroemulsi Tipe A/M Dengan Berbagai Fase Minyak. *Pharmaceutical Sciences and Research*, 3(1), 31–44. <https://doi.org/10.7454/psr.v3i1.3221>
- Hait, M., Kashyap, N. K., Deepak, J., & Patel, A. (2020). Seclusion of bioactive components from flower of *Samanea saman*. *Plant Archives*, 20(1), 4581-4584.
- Hamka, Z., Arief, R., Noena, R., & Rataasya, A. P. A. (2022). Pengaruh Metode Maserasi Bertingkat Terhadap Nilai Rendemen Dan Profil Kramotografi Lapis Tipis (Klt) Ekstrak Daun Kemangi (*Ocimum Basilicum L.*). *Jurnal Kesehatan Yamasi Makassar*, 6(1), 154-162.
- Hesturini, R. J., Nurhayati, R., & Pramasari, N. (2023). Potential Analgesic of Ethanolic Extract Fruit and Seeds of Trembesi (*Samanea saman* (Jacq) Merr.) and Macroscopic Observations on the Gastric of Rats. *Jurnal Ilmiah Sains*, 77-88.
- Indrawati, A., Isnaeni, D., Baharuddin, S., & Luthfiah, N. (2022). Efektivitas Ekstrak Etanol Daun Turi (*Sesbania grandiflora* (L.) Pers.) Terhadap Pertumbuhan *Pseudomonas aeruginosa* dan *Staphylococcus aureus*. *Lambung Farmasi: Jurnal Ilmu Kefarmasian*, 3(2), 231-240.
- Iskandar, B., Sidabutar S.E., Leny, 2021, Formulasi dan Evaluasi Lotion Ekstrak Alpukat (*Persea americana*) sebagai Pelembab Kulit, *Jurnal Islamic Pharmacy*, 6(2); 36-45.
- Jadid, N., Arraniry, B. A., Hidayati, D., Purwani, K. I., Wikanta, W., Hartanti, S. R., & Rachman, R. Y. (2018). Proximate composition, nutritional values and phytochemical screening of *Piper retrofractum* vahl. fruits. *Asian Pacific Journal of Tropical Biomedicine*, 8(1), 37-43.
- Juliana, I., Fatmawati, A., Munir, M. A., Emelda, E., & Rahmawati, F. (2024). Pengaruh variasi konsentrasi terhadap uji sifat fisik dan stabilitas freeze-thaw cycling pada formula sediaan gel kombinasi ekstrak daun kelor dan ekstrak daun jeruk nipis. *Journal of Pharmaceutical and Sciences*, 26-34.
- Kahraman, E., Kaykın, M., Şahin Bektay, H., & Güngör, S. (2019). Recent advances on topical application of ceramides to restore barrier function of skin. *Cosmetics*, 6(3), 52.
- Krenisky, J. M., Luo, J., Reed, M. J., & Carney, J. R. (1999). Isolation and antihyperglycemic activity of bakuchiol from *Otholobium pubescens* (Fabaceae), a Peruvian medicinal plant used for the treatment of diabetes. *Biological and Pharmaceutical Bulletin*, 22(10), 1137-1140.
- Kerns ML, Chien AL, Kang S. Skin aging. Dalam: Kang S, Amagai M, Bruckner AL, Enk AH, Margolis DJ, McMichael AJ, et al, editor. *Fitzpatrick's dermatology*. Edisi ke-9. New York: McGraw Hill; 2019. h.1779-91.
- Ketaren S. 1986. Pengantar Teknologi Minyak dan lemak Pangan. Universitas Indonesia, Jakarta.

- Ketaren, 2008, Pengantar Teknologi Minyak dan Lemak Pangan, ed 3, UI Press, Jakarta
- Khushboo, P. S., Jadhav, V. M., Kadam, V. J., & Sathe, N. S. (2010). *Psoralea corylifolia* Linn.—“Kushtanashini”. *Pharmacognosy reviews*, 4(7), 69.
- Kumar, V., Markovic, T., Emerald, M., & Dey, A. (2015). Herbs: Composition and dietary importance. In B. Caballero, P. Finglas, & F. Toldrá (Eds.), *Encyclopedia of food and health* (Vol. 3, pp. 332–337). Oxford: Academic Press.
- Lindawati, N. Y., & Ma'ruf, S. H. (2020). Penetapan kadar total flavonoid ekstrak etanol kacang merah (*Phaseolus vulgaris* L.) secara spektrofotometri visibel. *Jurnal Ilmiah Manuntung*, 6(1), 83-91.
- Lystvan, K., Belokurova, V., Sheludko, Y., Ingham, J. L., Prykhodko, V., Kishchenko, O., & Kuchuk, M. (2010). Production of bakuchiol by in vitro systems of *Psoralea drupacea* Bge. *Plant Cell, Tissue and Organ Culture (PCTOC)*, 101, 99-103.
- Munteanu, I. G., & Apetrei, C. (2021). Analytical Methods Used in Determining Antioxidant Activity: A Review. *International journal of molecular sciences*, 22(7), 3380. <https://doi.org/10.3390/ijms22073380>
- Murlistyarini, S., & Dani, A. A. (2022). Peran matriks metaloproteinase (MMP) pada proses photoaging. *Journal of Dermatology, Venereology and Aesthetic*, 3(1), 13-22.
- NAjih, Y. A., RAhma, D. N., NAIlufA, Y., & PRAssetYowAti, R. D. (2020). The effect of vegetable oil combination and surfactant PEG 7 glyceryl cocoate ratio on physical characteristics and physical stability of arbutin microemulsion. *Romanian Journal of PHARMACEUTICAL PRACTICE* | Vol. XIII, 52(3).
- Nizam, N. N., Mahmud, S., Ark, S. M. A., Kamruzzaman, M., & Hasan, M. K. (2023). Bakuchiol, a natural constituent and its pharmacological benefits. *F1000Research*, 12, 29. <https://doi.org/10.12688/f1000research.129072.2>
- Nurmalasari, E. Y., Luliana, S., & Wahdaningsih, S. (2019). Identifikasi senyawa fenol dan flavonoid dari berbagai bagian tanaman Senggani (*Melastoma malabathricum* L.) menggunakan metode kromatografi lapis tipis. *Jurnal Mahasiswa Farmasi Fakultas Kedokteran UNTAN*, 4(1).
- Ohno, O., Watabe, T., Nakamura, K., Kawagoshi, M., Uotsu, N., Chiba, T., ... & Uemura, D. (2010). Inhibitory effects of bakuchiol, bavachin, and isobavachalcone isolated from *Piper longum* on melanin production in B16 mouse melanoma cells. *Bioscience, biotechnology, and biochemistry*, 74(7), 1504-1506.
- Padley FB. 1984. New Development in Oils and Fats. *Chem.Ind.* 22, 788-792.
- Pamudji, J.S., Darijanto, S.T., dan Rosa, S., 2012, Formulasi dan Evaluasi Mikroemulsi Minyak dalam Air Betametason 17-Valerat, *Acta Pharmaceutica Indonesia*, 37(4); 146–152

- Patil, Pratiksha & Shah, Nisha. (2022). *Sesbania grandiflora* (L.) Pers. (Agati): its ethnobotanical knowledge, phytochemical studies, pharmacological aspects, and future prospects. *TMR Integrative Medicine*. 6. 22031. 10.53388/TMRIM202206031.
- Powthong, P., Jantrapanukorn, B., Thongmee, A., & Suntornthiticharoen, P. (2018). Screening of Antimicrobial Activities of the Endophytic Fungi Isolated from *Sesbania grandiflora* (L.) Pers.
- Qin, T., Liu, J., Bi, Y., Wang, Y., Liu, J., & Ding, G. (2023). Improved extraction efficiency of bakuchiol with antioxidant and whitening bioactivities from the seeds of *Psoralea corylifolia* L. *Science of Traditional Chinese Medicine*, 1(2), 123-128.
- Ramezani, M., Hosseinzadeh, H., Moradi, M., & Taghiabadi, E. (2011). Phototoxicity activity of *Psoralea drupacea* L. using *Atremia salina* bioassay system.
- Rao, G. V., Kavitha, K., Gopalakrishnan, M., & Mukhopadhyay, T. (2012). Isolation and characterization of a potent antimicrobial compound from *Aerva sanguinolenta* Blume: An alternative source of bakuchiol. *J Pharm Res*, 5(1), 174-6.
- Reich, E., & Blatter, A. (2005). THIN-LAYER chromatography | Instrumentation. *Encyclopedia of Analytical Science*, 91-99. <https://doi.org/10.1016/b0-12-369397-7/00621-x>
- Rodríguez, L., Plaza, A., Méndez, D., Carrasco, B., Tellería, F., Palomo, I., & Fuentes, E. (2022). Antioxidant capacity and antiplatelet activity of aqueous extracts of common bean (*Phaseolus vulgaris* L.) obtained with microwave and ultrasound assisted extraction. *Plants*, 11(9), 1179.
- Salleh, W. M. N. H. W., & Ahmad, F. (2020). Phytopharmacological investigations of *Piper retrofractum* Vahl.–a review. *Agriculturae Conspectus Scientificus*, 85(3), 193-202.
- Salamah, N., & Widyasari, E. (2015). Aktivitas antioksidan ekstrak metanol daun kelengkeng (*Euphoria longan* (L) Steud.) dengan metode penangkapan radikal 2, 2'-difenil-1-pikrilhidrazil. *Pharmaciana*, 5(1), 25-34.
- Salman, S., Nanda, A. Y. D., Irawan, D. A. H., Wahyudi, N. Y., & Megrian, N. O. E. (2023). Perkembangan Uji Stabilitas Berdasarkan Parameter pada Sediaan Suspensi dengan Berbagai Bahan Aktif yang Berbeda. *Journal of Pharmaceutical and Sciences*, 633-639.
- Santos, P., Watkinson, A.C., Hadgraft, J., and Lane, M.E, 2008, Application of microemulsions in dermal and transdermal drug delivery. *Skin Pharmacol Physiol*, 21(5) : 246-59
- Sapitri, A., Asfianti, V., & Marbun, E. D. (2022). Pengelolaan Tanaman Herbal Menjadi Simplisia sebagai Obat Tradisional. *Jurnal Abdimas Mutiara*, 3(1), 94–102.
- Sarker, J., Ali, M. R., Khan, M. A., Rahman, M. M., Hossain, A. S., & Alam, A. K. (2019). The plant *Aerva sanguinolenta*: A review on traditional uses,

- phytoconstituents and pharmacological activities. *Pharmacognosy Reviews*, 13(26), 89.
- Sari, F., Hasanah, F., Kristianingsih, I., & Sukmana, A. (2022). Identifikasi Senyawa Metabolit Ekstrak Etanol Daun Beluntas (*Pluche Indica*) Secara Kualitatif Dengan Kromatografi Lapis Tipis. *Jurnal Sintesis: Penelitian Sains, Terapan dan Analisisnya*, 3(1), 1-7.
- Setiawan, E. (2018). Kandungan Flavonoid dan Serat *Sesbania grandiflora* pada Berbagai Umur Bunga dan Polong. *Jurnal Hortikultura Indonesia*, 9(2), 122-130.
- Shabrina, A., Pratiwi, A. R., & Muurukmihadi, M. (2020). Stabilitas Fisik Dan Antioksidan Mikroemulsi Minyak Nilam Dengan Variasi Tween 80 Dan PEG 400. *Media Farmasi*, 16(2), 185-192.
- Shalviri, A., Sharma, A., Patel, D., et al. (2011). Low-surfactant microemulsions for enhanced topical delivery of poorly soluble drugs. *Journal of Pharmacy & Pharmaceutical Sciences*, 14(3), 315 – 324
- Singh, R. J., Nelson, R. L., & Chung, G. (2007). Soybean (*Glycine max* (L.) Merr.). Genetic resources, chromosome engineering, and crop improvement. *Oilseed crops*, 4, 13-50.
- Staples, G. W., & Elevitch, C. R. (2006). *Samanea saman* (rain tree). Species profile for Pacific Island agroforestry.
- Subramani R, Lakshmanaswamy R: Complementary and Alternative Medicine and Breast Cancer. *Prog. Mol. Biol. Transl. Sci.* 2017 Jan 1; 151: 231–274.
- Sur, Kalyan, Anima Kispotta, Kumar Kashyap, Arup Kumar Das, Joyita Dutta, Milan Hait, Gourisankar Roymahapatra, Ritesh Jain, and Takashiro Akitsu. (2023). "Physicochemical, Phytochemical and Pharmacognostic Examination of *Samanea saman*." *ES Food & Agroforestry* 14 : 1011.
- Susilowati, E.P., Wahyuningsih, S.S. (2014). Optimasi sediaan salep yang mengandung eugenol dari isolasi minyak Cengkeh (*Eugenia caryophyllata* Thunb.). *Indonesian Journal On Medical Science*, 1, 2.
- Syamsul, E. S., Amanda, N. A., & Lestari, D. (2020). Perbandingan ekstrak lamur *Aquilaria malaccensis* dengan metode maserasi dan refluks. *Jurnal Riset Kefarmasian Indonesia*, 2(2), 97-104.
- Tobin, D. J. (2017). Introduction to skin aging. *Journal of tissue viability*, 26(1), 37-46.
- Talegaonkar, S., Azeem, A., Ahmad, F.J., et al. (2008). Microemulsions: A Novel Approach to Enhanced Drug Delivery. *Recent Patents on Drug Delivery & Formulation*, 2, 238-257
- Wagner, H., S. B. (1996). *Plant Drug Analysis; A Thin Layer Chromatography Atlas*. 2nd Edition. Berlin Heidelberg: Springer
- Waqas, M. K., Akhtar, N., Mustafa, R., Jamshaid, M., Khan, H. M., & Murtaza, G. (2015). Dermatological and cosmeceutical benefits of *Glycine max* (soybean) and its active components. *Acta poloniae pharmaceutica*, 72(1), 3–11.

- Worku, A., & Sahu, O. (2017). Significance of fermentation process on biochemical properties of *Phaseolus vulgaris* (red beans). *Biotechnology Reports*, 16, 5-11.
- Yousef, H., Alhajj, M., Fakoya, A. O., & Sharma, S. (2024). Anatomy, Skin (Integument), Epidermis. In *StatPearls*. StatPearls Publishing.
- Zaheer, M., Ahmed, S., & Hassan, M. M. (2020). *Vigna unguiculata* (L.) Walp. (Papilionaceae): A review of medicinal uses, Phytochemistry and pharmacology. ~ 1149 ~ *Journal of Pharmacognosy and Phytochemistry*, 9(1). <https://www.feedipedia.org/node/232>,
- Zarai, Z., Boujelbene, E., Salem, N. B., Gargouri, Y., & Sayari, A. (2013). Antioxidant and antimicrobial activities of various solvent extracts, piperine and piperic acid from *Piper nigrum*. *Lwt-Food science and technology*, 50(2), 634-641.
- Zaveri, M., Khandhar, A., Patel, S., & Patel, A. (2010). Chemistry and pharmacology of *Piper longum* L. *International journal of pharmaceutical sciences review and research*, 5(1), 67-76.
- Zuo, G., Wang, Z., Quispe, Y. N. G., Hwang, S. H., Kim, H. Y., Kang, B. G., & Lim, S. S. (2019). Target guided isolation of potential tyrosinase inhibitors from *Otholobium pubescens* (Poir.) JW Grimes by ultrafiltration, high-speed countercurrent chromatography and preparative HPLC. *Industrial Crops and Products*, 134, 195-205.