

DAFTAR PUSTAKA

- Abbas, M., Gururani, M. A., Ali, A., Bajwa, S., Hassan, R., Batool, S. W., Imam, M., & Wei, D. (2024). Antimicrobial Properties And Therapeutic Potential of Bioactive Compounds In *Nigella Sativa* : A Review. *Molecules*, 29(9414).
- Aguirre-Loredo, R. Y., Rodríguez-Hernández, A. I., Morales-Sánchez, E., Gómez-Aldapa, C. A., & Velazquez, G. (2016). Effect Of Equilibrium Moisture Content On Barrier, Mechanical, And Thermal Properties of Chitosan Films. *Food Chemistry*, 196, 560–566.
- Ahesan, A., Faruk, A., Gole, V. G., Dhumale, P. S., Dabhade, S. M., Doifode, D. S., Netkar, R. R., Kokate, S. P., Ambadkar, G. P., Ahean, A., & Faruk, A. (2026). Original Article Formulation And Evaluation of a Carbopol-Based Herbal Hydrogel Containing *Curcuma Longa* and *Nigella Sativa* Extracts With Antioxidant And Anti-Inflammatory Activities For Enhanced Wound Healing. *Biochem Cell Arch*, 26(1), 2024–2025.
- Ahmad, A., Husain, A., Mujeeb, M., Khan, S. A., Najmi, A. K., Siddique, N. A., Zoheir, A., & Anwar, F. (2013). Tinjauan Tentang Potensi Terapeutik *Nigella Sativa* : Tanaman Ajaib 3(431), 337–352.
- Alavi, M., Moetasam, M., & Morahem, Z. (2022). Aplikasi Antibakteri dan Penyembuhan Luka dari Kurkumin Dalam Skala Mikro dan Nano . Perancah Berbasis Kitosan , Selulosa , dan Kolagen. 67(2), 9–14.
- Alavi, T., Rezvanian, M., Ahmad, N., Mohamad, N., & Ng, S. F. 2019. Pluronic- F127 Composite Film Loaded With Erythromycin for Wound Application: Formulation, Physicomechanical And In Vitro Evaluations. *Drug Delivery And Translational Research*, 9(2), 508–519.
- Alberts, A., Moldoveanu, E., Niculescu, A., & Grumezescu, A. M. (2024). *Nigella Sativa* : A Comprehensive Review of Its Therapeutic Potential , Pharmacological Properties , And Clinical Applications.
- Andriani, G. M., Bartolomeu-Goncalves, G., Elisa, A., Morguette, B., & Yamauchi, L. M. (2023). Sifat Antibakteri Dan Penyembuhan Luka Dari Bahan Alami Terhadap Infeksi Luka *Staphylococcus Aureus*.
- Arora, M., Sehgal, V. K., & Sharma, S. R. (2007). Evaluation Of Quality Of Washed And Mechanically Polished Turmeric Rhizomes. *Journal Of Agricultural Engineering*, 44(2). <https://doi.org/10.52151/Jae2007442.1256>
- Athipornchai, A., & Klangmanee, K. (2021). A Rapid Determination of The Effective Antioxidant Agents Using Their Fe (III) Complexes. *Arabian Journal of Chemistry*, 14(3), 102986.
- Babu, M. (2020). Artikel Asli Penanganan Infeksi *Acinetobacter Baumannii* Pada Luka Bakar Dengan Bukti Sepsis. *Indian Journal Of Burns*. 30–34.
- Balouri, M., Sadiki, M., & Ibsouda, S. K. (2016). Methods For In Vitro Evaluating Antimicrobial Activity: A Review. *Journal Of Pharmaceutical Analysis*, 6(2), 71–79. <https://doi.org/10.1016/j.jpha.2015.11.005>

- Bigliardi, P.L., Alsagoff, S.A., El-Kafrawi, H.Y., Et Al. (2017). Povidone-Iodine In Wound Healing: A Review Of Current Concepts And Practices. *International Journal of Surgery*. 44, 260–268.
- Blazquez, M. D. I. Dan M. A. (2021). Minyak Atsiri Rimpang Curcuma Longa L.: Dari Ekstraksi Hingga Aplikasinya Di Bidang Pertanian Dan Pangan. Sebuah Tinjauan.
- Cedillo-Cortezano, M., Martinez-Cuevas, L. R., Escutia-Perez, S., & Petricevich, V. L. (2024). Use Of Medicinal Plants In The Process of Wound Healing : A Literature Review. *Pharmaceuticals*, 17(303).
- Dave, R. N., Susarla, R., Muzzio, F. J., Et Al. (2014). Systems And Procedures Enabling The Continuous Manufacture Of Uniform Polymer Films Containing Nano- And Microparticles (U.S. Patent No. US20140079784A1). United States Patent And Trademark Office
- Dede, K., Wiyanjana, F., Studi, P., Dokter, P., Kedokteran, F., Udayana, U., & Selang, S. (2019). Deteksi Gen Bap (Biofilm-Associated Protein) Isolat *Acinetobacter Baumannii* Sebagai Gen Pengkode Biofilm Di Rsup Sanglah Menggunakan Teknik PCR. 8(7).
- Dera, A. A., & Ahmad, I. (2021). Synergistic Efficacies Of Thymoquinone And Standard Antibiotics Against Multi-Drug Resistant Isolates. *Sudi Medical Journal*, 42(2).
- Escárcega-Galaz, A. A., Sánchez-Machado, D. I., López-Cervantes, J., & Sanches-Silva, A. (2018). Data In Brief Characterization Data of Chitosan-Based Fi Lms : Antimicrobial Activity , Thermal Analysis , Elementary Composition , Tensile Strength And Degree Crystallinity. *Data In Brief*, 21, 473–479. <https://doi.org/10.1016/j.dib.2018.09.121>
- Flowers, L. (2020). Mikrobiota Kulit : Menyeimbangkan Risiko Dan Manfaat. *Cell Host And Microbe*. 190–200.
- Fadhilla, A., Pramita, A., Dongoran, U. A., Dian, E., Marbun, S., Prayoga, A., Farmasi, P. S., Sari, U., & Indonesia, M. (2024). Standarisasi Simplisiadaun Keji Beling (*Strobilanthes Crispus*). *Central Publisher*, 2, 2604–2615.
- Fahiroh, J., Arifin, N., Devitri, R. W., Septiarini, R. T., Silvany, E., Maulidya, V., Maulidya, Y. E., Rahmawati, E. E., & Sabila, Z. (2025). Tinjauan Literatur : Efektivitas Maserasi Sebagai Metode Ekstraksi Fitokimia.
- Francis, A., Emmanuel, N., & G, E. C. (2015). Isolation of Alkaloid From A Medical Plant (A Case Study Of *Morinda Lucida*). *IOSR Journal Of Pharmacy And Biological Sciences*, 10(1), 5–7. <https://doi.org/10.9790/3008-10110507>
- Hajian, M., Mahmoodi, M., & Imani, R. 2017. In Vitro Assessment of Poly (Vinyl Alcohol) Film Incorporating Aloe Vera For Potential Application as A Wound Dressing. *Journal of Macromolecular Science*. 56(7), 435–450.
- Hamed, S. F., Edris, A. E., Chemistry, F., Industries, F., & Division, N. (2015). -Irradiation Effect on The Composition and Quality of Screw Pressed *Nigella Sativa* (Black Cumin). *Crude Oil During Storage*. 385(5), 373–385.
- Haq, A., Kumar, S., Mao, Y., Berthiaume, F., & Michniak-Kohn, B. (2020). Thymoquinone-Loaded Polymeric Films And Hydrogels for Bacterial Disinfection. *Biomedicine*, 8(386).

- Hardiningtyas, S. D., Wakabayashi, R., Ishiyama, R., Owada, Y., Goto, M., & Kamiya, N. (2019). Enhanced Potential Of Therapeutic Applications of Curcumin Using Solid-In-Water Nanodispersion Technique. *Journal of Chemical Engineering of Japan*, 52(1), 138–143.
- Hong, X., Wang, X., Xiang, X., Shen, S., Zhou, S., Dai, X., Hu, F., Guo, Y., Et Al. (2026). Evaluation of Sulbactam–Durlobactam Disk Diffusion and Broth Microdilution Methods for *Acinetobacter Baumannii*. *International Journal of Antimicrobial Agents*.
- Hossain, T. J. (2024). Methods For Screening and Evaluation of Antimicrobial Activity. *European Journal of Microbiology And Immunology*. 14(2), 97–115.
- Huchchannanavar, S., Ln, Y., & Sm, P. (2019). *The Black Seed Nigella Sativa : A Wonder Seed*. 7(3), 1320–1324.
- Ilicifolius, A., Putri, A. S., Sari, A. R., & Sidiq, A. W. (2024). Pengaruh Lama Maserasi Terhadap Senyawa Bioaktif Ekstrak Etanolik Teh Daun Daruju. *Jurnal Teknologi Pangan Dan Hasil Pertanian* 19(1), 37–43.
- Jaber, S. A., Saadh, M., & Obeid, M. A. (2023). The Effect Of Polymeric Films of Hydroxypropyl Methylcellulose (HPMC)/ Chitosan on Ofloxacin Release , Diffusion , and Biological Activity. *Polymer Engineering And Science*, May, 2871–2877. <https://doi.org/10.1002/pen.26411>
- Jacob, S., Boddu, S. H. S., Bhandare, R., Ahmad, S. S., & Nair, A. B. (2023). Orodispersible Films : Current Innovations And Emerging Trends. *Pharmaceutics*, 15(2753), 1–41.
- Jiang, X., Zhao, Y., & Hou, L. 2016. The Effect of Glycerol on Properties of Chitosan/Poly(Vinyl Alcohol) Films With AlCl₃·6H₂O Aqueous Solution as The Solvent For Chitosan. *Carbohydrate Polymers*. 135, 191–198.
- Kementerian Kesehatan Republik Indonesia. (2017). Farmakope Herbal Indonesia (Edisi II). Kementerian Kesehatan Republik Indonesia. ISBN 978-602-416-329-7
- Kheira, M., Boumediene, M., Aicha, T. T., & Pascal, S. (2023). Egyptian Journal of Chemistry. *Egyptian Journal of Chemistry*, 66(7), 283–295. <https://doi.org/10.21608/ejchem.2022.11586.5555>
- Kim, D., Nisha, I., Chan, M. D., Manalastas, T. M. S., Ii, R. S. C., Rey, J., Agueda, H. S., & Bitangcor, R. K. B. (2025). Optimization of Glutaraldehyde Concentration in Relation to Swelling Behavior of PVA-PEG- BTB Film Using Hybrid Genetic Metaheuristic Algorithm. *Scientific Reports*, 15(12582), 1–13.
- Kinoshita, H., Ingham, O. J., Ong, W. W., B.Beeler, A., & Jr, J. A. P. (2019). Tandem Processes Identified From Reaction Screening: Nucleophilic Addition to Aryl N-Phosphinylimines Employing La (III)-TFAA Activation Hidenori. 132(18), 6412–6418. <https://doi.org/10.1021/Ja100346w.tandem>
- Kmail, A., Said, O., & Saad, B. (2023). How Thymoquinone From *Nigella Sativa* Accelerates Wound Healing Through Multiple Mechanisms And Targets. *Current Issue In Molecular Biology*, 45, 9039–9059.
- Kramer, A., Dissemond, J., Kim, S. J., Et Al. (2015). Antiseptics and Wound Care: Povidone-

- Iodine. *Advances In Wound Care*, 4(9), 510–523.
- Luki', M., Panteli', I., & Savi'C, S. D. (2021). Towards Optimal pH of The Skin And Topical Formulations : From The Current State of The Art to Tailored Products. *Cosmetics*, 8(69).
- Mandal, M. D., & Mandal, S. (2017). Honey : Its Medicinal Property And Antibacterial Activity. 1(2), 154–160. [https://doi.org/10.1016/S2221-1691\(11\)60016-6](https://doi.org/10.1016/S2221-1691(11)60016-6)
- Moubareck, C. A., & Halat, D. H. (2020). Wawasan Tentang *Acinetobacter Baumannii*: Sebuah Tinjauan Tentang Sifat Mikrobiologis, Virulensi, Dan Resistensi Pada Patogen Nosokomial Yang Mengancam. <https://doi.org/10.3390/antibiotics9030119>
- Musso, Y. S., Salgado, P. R., & Mauri, A. N. (2017). Food Hydrocolloids Smart Edible Fi Lms Based on Gelatin And Curcumin. *Food Hydrocolloids*, 66, 8–15. <https://doi.org/10.1016/J.foodhyd.2016.11.007>
- Nassar, M. S. M., *Et Al.* (2019). Evaluation of Antibiotic Susceptibility Test Results: How Guilty a Laboratory Could Be. *Journal Of The Egyptian Public Health Association*. 94(1), Article 4.
- Pacyga, K., Pacyga, P., Topola, E., & Viscardi, S. (2024). Senyawa Bioaktif Dari Tanaman Sebagai Bahan Alami Agen Antimikroba Untuk Pengobatan Infeksi Luka. 1.
- Pasaribu, R. K. U., Iqbal, M., Rahayu, I. D., Afriyani, & Triyandi, R. (2025). Sains Medisina. *Sains Medisina*, 3(5), 275–279.
- Pebrinan, R. F., Marini, M., & Partiw, S. (2021). Pengaruh Perbedaan Metode Maserasi Dan Remaserasi Kulit Pisang Nangka (*Musa Paradisiaca L.*) Terhadap Penapisan Fitokimia. *Herbapharma: Journal Of Herb Farmacological*, 3(2), 89–95. doi: 10.55093/herbapharma.v3i2.196.
- Pratiwi, E. (2017). Perbandingan Metode Maserasi, Remaserasi, Perkolasi dan Reperkolasi dalam Ekstraksi Senyawa Aktif Andrograpolide dari Tanaman Sambiloto (*Andrographis Paniculata* (Burm.F.) Nees). (Skripsi). Institut Pertanian Bogor, Bogor.
- Pruteanu, M. A., Ungureanu, N., Vladut, V., Matache, M.-G., & Nitu, M. (2023). Contributions to The Optimization Of The Medicinal Plant Sorting Process Into Size Classes. *Agriculture*, 13(645), 1–19.
- Purwanti, E. (2017). Perbandingan Metode Maserasi, Remaserasi, Perkolasi dan Reperkolasi Dalam Ekstraksi Senyawa Aktif Andrographolide dari Tanaman Sambiloto (*Andrographis Paniculata* (Burm.F.) Nees).
- Ransom, E. M. (2020). *Disk Diffusion Testing. Antimicrobial Susceptibility Testing. Wiley. CLSI/EUCAST*
- Rayshan, A. M., Al-Rawi, Z. H., & Odhar, H. A. (2023). Introducing Larger Plate and Optimum Distribution Pattern in Microbiological Assay. *Research Journal of Pharmacy And Technology*, 16(1), 294–300. <https://doi.org/10.52711/0974-360X.2023.00053>
- Riski, D., Ridwanto, & Rani, Z. (2023). Open Access Article Isolasi Dan Identifikasi Kitosan dari Cangkang Kerang Bulu (*Anadara Antiquata*). 19(2).

- Riyadi, S. A., Abdullah, F. F., Fadhilah, F., & Assidiqiah, N. (2022). Anticancer Activity Of Curcuminoids Against B16-F10 Melanoma Cell Lines Aktivitas Antikanker Kurkuminoid Terhadap Sel Melanoma B16-F10.
- Safhi, A. Y., Siddique, W., Zaman, M., Sarfraz, R. M., Shafeeq, M., Rahman, U., Mahmood, A., Salawi, A., Sabei, F. Y., & Alsalmi, A. (2023). Statistically Optimized Polymeric Buccal Films of Eletriptan Hydrobromide And Itopride Hydrochloride : An In Vivo Pharmacokinetic Study. *Phaemaceuticals*, 16(1551).
- Safta, D. A., Iurian, S., & Moldovan, M. (2025). Optimization Of Film-Dressings Containing Herbal Extracts For Wound Care — A Quality By Design Approach. *Gels*, 11(322), 1–26.
- Sagar, P. K., Kashyap, S., Kurele, R., & Ahmed, M. W. (2024). Quality Assurance , Shelf Life , Stability Studies of ASU Herbal , *Medicinal Plants- Syzygium Aromaticum (Linn .) Merr LM Perry And W .* 13(4), 323–333.
- Sat, N. İ. G., & Genel, İ. V. A. L. (2025). *Nigella sativa L .: Aa Overview*. 49(1), 133–145. <https://doi.org/10.33483/jfpau.1504025>
- Savencu, I., Iurian, S., Porfire, A., Bogdan, C., & Tomuță, I. 2021. Review of Advances in Polymeric Wound Dressing Films. *Reactive And Functional Polymers*, 168(July).
- Sembiring, B. B., Fanani, M. Z., Jumiono, A., Pertanian, F., Djuanda, U., Pangan, M. T., & Djuanda, U. (2022). Pengaruh Teknologi Pengeringan Terhadap Mutu Simplisia Seledri. 4, 1–6.
- Shariati, A., Ghaznaviyrad, E., Dadmanesh, M., Komijani, M., & Nojoomi, F. (2021). Penelitian Tentang Sifat Antibakteri Dan Penyembuhan Luka Lisat Trombosit Terhadap Acinetobacter Baumannii dan Infeksi Luka Bakar Klebsiella Pneumoniae.
- Simpson, M. G. (2019). Identifikasi Tanaman. In *Plant Systematics* (3rd Ed., Pp. 625–630). Academic Press. <https://doi.org/10.1016/B978-0-12-812628-8.50015-8>
- Spangler, L. L., Torkelson, J. M., & Royal, J. S. (1990). Effects Of Solvent And Molecular Weight On Thickness And Surface Topography Of Spin-Coated Polymer Films. *Polymer Engineering & Science*, 30(11), 644–653. <https://doi.org/10.1002/pen.760301104>
- Sulistiawanti, N. L., Hairunnisa, Ningrum, N. W., & Fitriyanti, S. (2025). Review : Perbedaan Penggunaan Pelarut Terhadap Nilai Rendemen yang Dihasilkan Dengan Berbagai Metode Ekstraksi dalam Proses Ekstraksi. *Jurnal Ilmu Farmasi Dan Kesehatan*, 3, 213–232.
- Suproborini, A., Laksana, M. S. D., & Lisniawati. (2020). Potensi Ekstrak Etanol Daun Strobilanthes Crispus sebagai Antidiare Potential. 16(1).
- Susanto, N. C. A., Sawitri, A. H., & Muslimah, I. (2024). Pilis Patch Transdermal dari Rizoma Kunyit dan Biji Jintan Hitam untuk Pengobatan Berbasis Etnopharma Pilis. 11(November), 290–302.
- Tarzyńska, N., Śniarowski, P., & Bednarowicz, A. (2024). Review And Evaluation Of Commercially Available Wound Dressings. 32(6), 13–23. <https://doi.org/10.2478/ftce-2024-0038>

- Tekin, R., Dal, T., Bozkurt, F., & Deveci, Ö. (2018). Risk Factors For Nosocomial Burn Wound Infection Caused By Multidrug Resistant *Acinetobacter Baumannii*. 73–80. <https://doi.org/10.1097/bcr.0b013e31828a493f>
- Tian, W. W., Liu, L., Chen, P., Yu, D. M., Li, Q. M., Hua, H., & Zhao, J. N. (2025). *Curcuma longa* (Turmeric): From Traditional Applications to Modern Plant Medicine Research Hotspots. *Chinese Medicine*. <https://doi.org/10.1186/S13020-025-01115-Z>
- Toptanci, İ., Kiralan, M., Ketenoglu, O., & Ramadan, M. F. (2022). Effect of Light on The Oxidative Stability and Phthalate Levels of Black Cumin Oil-Corn Oil Blends In Plastic And Glass Bottling. *Journal of Oleo Science*, 649(5), 641–649.
- Tranggono IR, Latifah. (2007). Buku Pegangan Ilmu Pengetahuan Kosmetika. Jakarta: PT.Gramedia Pustaka Utama.
- Valizadeh, R., Zandi, M., Ganjloo, A., Dardmeh, N., Et Al. (2025). Electrospun Sage Seed Gum–Gelatin and Zein Fiber Composite Films: a Sustainable Bilayer System Enriched With Pomegranate Flower Extract. *International Journal Of Biological Macromolecules*.
- Vaseem, R. S., Cruz, A. D., Shetty, S., Vardhan, A., R, S. S., & Miriam, S. (2024). Sistem Penghantaran Obat Transdermal: Tinjauan Terfokus Tentang Metode Fisik untuk Meningkatkan Permeasi. 14(1), 67–85.
- Vidanapathirana, N. P., Subasinghe, S., Sunil, K., Ketippearachchi, K. G., Siriwardana, A. J. M. C. M., Bandusekara, B. S., Sciences, R., Lanka, S., & Lanka, S. (2022). Growth and Yield Performances of Turmeric (*Curcuma longa*) Grown in Dry Zone of Sri Lanka as Affected By Planting Space, Growing Media and Shade.
- Vilas, B. R., Ramdas, N. P., & Popat, J. C. (2025). A Comprehensive Review On Turmeric – *Curcuma Launga*. *International Research of Modernization in Engineering Technology and Science*, 07(12), 1322–1327.
- Wahyuni, R., Guswandi, G., & Rivai, H. (2017). Pengaruh Cara Pengeringan Dengan Oven, Kering Angin Dan Cahaya Matahari Langsung Terhadap Mutu Simplisia Herba Sambilo. *Agricultural And Food Sciences*.
- Wezenberg, S. J., Escudero-Adán, E., Benet-Buchholz, J., & Arjan, W. (2008). Colorimetric Discrimination Between Imperative Alkaloid Nuclei Mediated By a Bis-Salen Chromophore. *Organic Letters*.
- Wijaya, H., Novitasari, & Jubaidah, S. (2018). Rendemen Ekstrak Daun Rambai Laut. *Jurnal Ilmiah Manuntung*, 4(1), 79–83.
- Wiyati, E. P., Alfitroh, I., Hardini, T., & Medianah, A. (2025). Skrining Flavonoid dari Sari Buah Raspberry (*Rubus idaeus* L.) Dengan Metode Uji Warna. *Jurnal Review Pendidikan dan Pengajaran*, 8(2), 6764–6769.
- Yang, Q., Yuan, F., Xu, L., Yan, Q., Yang, Y., & Wu, D. (2019). an Update of Moisture Barrier Coating for Drug Delivery. *Pharmaceutics*, 11(436).
- Zahro, L., Cahyono, B., & Hastuti. (2009). Profil Tampilan Fisik Dan Kandungan Kurkuminoid Dari Simplisia Temulawak (*Curcuma Xanthorrhiza Roxb.*) pada Beberapa Metode

Pengeringan.

- Zatalini, D. F. (2023). Pengaruh Kombinasi Kitosan Dan Polivinil Alkohol Pada Sediaan Film Kitosan-Pva-Aloe Vera Terhadap Karakteristik Fisik Dan Aktivitas In Vivo Wound Healing
- Zatalini, D. F., Hendradi, E., & Sari, R. (2023). Pengaruh Kombinasi Kitosan dan Polivinil Alkohol Terhadap Sifat Fisika Karakteristik dan Sifat Mekanik Film Kitosan-PVA-Aloe Vera. 10, 151–161.
- Zhang, J., Cui, C., Chen, H., & Liu, J. (2014). Esterification of Free Fatty Acids in *Zanthoxylum Bungeanum* Seed Oil With Ethanol. *International Journal of Green Energy*, 11(8), 822–832.
- Zhang, Z., Han, S., Liu, P., Yang, X., Han, J., Wang, A., & Zhang, J. (2021). Healing Effects of Curcumin Nanoparticles in Deep Tissue Injury Mouse Model. *Current Drug Delivery*, 18(7), 1003–1013.
- Zheng, D., Huang, C., Huang, H., Zhao, Y., Khan, M. R. U., Zhao, H., & Huang, L. (2020). Antibacterial Mechanism of Curcumin: a Review. *Chemistry & Biodiversity*, 17(8), E2000171. <https://doi.org/10.1002/cbdv.202000171>