

DAFTAR PUSTAKA

- Abdul-Aziz Ahmed, A., & Jaber, G. N. (2022). Active vitiligo vulgaris following the administration of the Oxford–AstraZeneca (AZD1222) vaccine against SARS-CoV-2. *Our Dermatology Online*, 13(2), 219–220. <https://doi.org/10.7241/ourd.20222.27>
- Afonso, A. C., Oliveira, D., Saavedra, M. J., Borges, A., & Simões, M. (2021). Biofilms in diabetic foot ulcers: Impact, risk factors and control strategies. In *International Journal of Molecular Sciences* (Vol. 22, Issue 15). MDPI. <https://doi.org/10.3390/ijms22158278>.
- Alhajj M, Zubair M, Farhana A. Enzyme-Linked Immunosorbent Assay. [Updated 2023 Apr 23]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. (2024). Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK555922/>
- Angelini, A., Trial, J. A., Ortiz-Urbina, J., & Cieslik, K. A. (2020). Mechanosensing dysregulation in the fibroblast: A hallmark of the ageing heart. In *Ageing Research Reviews* (Vol. 63). Elsevier Ireland Ltd. <https://doi.org/10.1016/j.arr.2020.101150>
- Ashcroft, G. S., Yang, X., Glick, A. B., Weinstein, M., Letterio, J. L., Mizel, D. E., Anzano, M., Greenwell-Wild, T., Wahl, S. M., Deng, C., & Roberts, A. B. (1999). Mice lacking Smad3 show accelerated wound healing and an impaired local inflammatory response. *Nature Cell Biology*, 1(5), 260–266. <https://doi.org/10.1038/12971>
- Aspan and Ruslan. (2010). Acuan Sediaan Herbal, Vol. 5, Ed. 1, Badan POM, Jakarta.
- Bagalkotkar, G., Sagineedu, S. R., Saad, M. S., & Stanslas, J. (2010). Phytochemicals from *Phyllanthus niruri* Linn. and their pharmacological properties: a review. *Journal of Pharmacy and Pharmacology*, 58(12), 1559–1570. <https://doi.org/10.1211/jpp.58.12.0001>
- Bielajew, B. J., Hu, J. C., & Athanasiou, K. A. (2020). Collagen: quantification, biomechanics and role of minor subtypes in cartilage. In *Nature Reviews Materials* (Vol. 5, Issue 10, pp. 730–747). Nature Research. <https://doi.org/10.1038/s41578-020-0213-1>
- Bose Mazumdar Ghosh, A., Banerjee, A., & Chattopadhyay, S. (2022). An insight into the potent medicinal plant *Phyllanthus amarus* Schum. and Thonn. *The Nucleus: an international journal of cytology and allied topics*, 65(3), 437–472. <https://doi.org/10.1007/s13237-022-00409-z>
- Barbul, A. (2008). The Journal of Nutrition 7th Amino Acid Assessment Workshop. In *J. Nutr* (Vol. 138)(10):2021S-2024S. Doi: 10.1093/jn/138.10.2021S. PMID: 18806118.
- Barrientos, S., Stojadinovic, O., Golinko, M. S., Brem, H., & Tomic-Canic, M. (2008). Growth factors and cytokines in wound healing. *Wound repair and regeneration: official publication of the Wound Healing*

- Society [and] the European Tissue Repair Society*, 16(5), 585–601. <https://doi.org/10.1111/j.1524-475X.2008.00410.x>.
- Bielajew, B. J., Hu, J. C., & Athanasiou, K. A. (2020). Collagen: quantification, biomechanics and role of minor subtypes in cartilage. In *Nature Reviews Materials* (Vol. 5, Issue 10, pp. 730–747). Nature Research. <https://doi.org/10.1038/s41578-020-0213-1>
- Bonte, F., Dumas, M., Chaudagne, C., & Meybeck, A. (1994). Influence of Asiatic acid, madecassic acid, and asiaticoside on human collagen I synthesis. *Planta medica*, 60(2), 133–135. <https://doi.org/10.1055/s-2006-959434>.
- Bose M Ghosh, Banerjee A, Chattopadhyay S. An insight into the potent medicinal plant *Phyllanthus amarus* Schum. And Thonn. Nucleus. 2022; 65: 437–472). [Online]. Available: <https://doi.org/10.1007/s13237-022-00409-z>.
- Britto EJ, Nezwek TA, Popowicz P.. Wound Dressings. [Updated 2023 May 18]. In: StatPearls. Treasure Island (FL): StatPearls Publishing; 2023 Jan. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK470199/>.
- Brunauer, A., Verboket, R. D., Kainz, D. M., von Stetten, F., & Früh, S. M. (2021). Rapid detection of pathogens in wound exudate via nucleic acid lateral flow immunoassay. *Biosensors*, 11(3). <https://doi.org/10.3390/bios11030074>.
- Burgess, J. L., Wyant, W. A., Abujamra, B. A., Kirsner, R. S., & Jozic, I. (2021). Diabetic wound-healing science. In *Medicina (Lithuania)* (Vol. 57, Issue 10). MDPI. <https://doi.org/10.3390/medicina57101072>
- Campos AC, Groth AK, Branco AB. Assessment and nutritional aspects of wound healing. *Curr Opin Clin Nutr Metab Care*. (2008). May;11(3):281-8. Doi: 10.1097/MCO.0b013e3282fdb35a. PMID: 18403925. <https://doi.org/10.1097/MCO.0b013e3282fdb35a>.
- Cavallo, I., Sivori, F., Mastrofrancesco, A., Abril, E., Pontone, M., di Domenico, E. G., & Pimpinelli, F. (2024). Bacterial Biofilm in Chronic Wounds and Possible Therapeutic Approaches. In *Biology* (Vol. 13, Issue 2). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/biology13020109>
- Chandana G, Manasa R, Vishwanath S, Shekhara Naik R, Mahesh MS. (2021). Antimicrobial activity of *Phyllanthus niruri* (Chanka piedra). *IP Journal of Nutrition, Metabolism and Health Science*, 3(4), 103–108. <https://doi.org/10.18231/j.ijnmhs.2020.021>
- Chen, S., Saeed, A. F. U. H., Liu, Q., Jiang, Q., Xu, H., Xiao, G. G., Rao, L., & Duo, Y. (2023). Macrophages in immunoregulation and therapeutics. In *Signal Transduction and Targeted Therapy* (Vol. 8, Issue 1). Springer Nature. <https://doi.org/10.1038/s41392-023-01452-1>

- Chen, S., Saeed, A. F. U. H., Liu, Q., Jiang, Q., Xu, H., Xiao, G. G., Rao, L., & Duo, Y. (2023). Macrophages in immunoregulation and therapeutics. In *Signal Transduction and Targeted Therapy* (Vol. 8, Issue 1). Springer Nature. <https://doi.org/10.1038/s41392-023-01452-1>
- Christyanita P Ekasari, Widyarti S, Sutiman B Sumitro. The Analysis of Antioxidant Activity and Capacity of Boiled and Infused Indonesian Herbals. Tropical J Nat Prod Research (TJNPR). 2023; 7(1):2152-6. [Online]. Available: <http://www.doi.org/10.26538/tjnpr/v7i1.9>
- Crowe, M. J., Doetschman, T., & Greenhalgh, D. G. (2000). Delayed wound healing in immunodeficient TGF-beta 1 knockout mice. *The Journal of Investigative Dermatology*, 115(1), 3–11. <https://doi.org/10.1046/j.1523-1747.2000.00010.x>
- Cialdai, F., Risaliti, C., & Monici, M. (2022). Role of fibroblasts in wound healing and tissue remodeling on Earth and in space. In *Frontiers in Bioengineering and Biotechnology* (Vol. 10). Frontiers Media S.A. <https://doi.org/10.3389/fbioe.2022.958381>
- Crowe, M. J., Doetschman, T., & Greenhalgh, D. G. (2000). Delayed wound healing in immunodeficient TGF-beta 1 knockout mice. *The Journal of Investigative Dermatology*, 115(1), 3–11. <https://doi.org/10.1046/j.1523-1747.2000.00010.x>
- Darby, I., Skalli, O., & Gabiani, G. (1990). Alpha-smooth muscle actin is transiently expressed by myofibroblasts during experimental wound healing. *Laboratory investigation; a journal of technical methods and pathology*, 63(1), 21–29.
- DeCoursey, T. E. (2016). The intimate and controversial relationship between voltage-gated proton channels and the phagocyte NADPH oxidase. In *Immunological Reviews* (Vol. 273, Issue 1, pp. 194–218). Blackwell Publishing Ltd. <https://doi.org/10.1111/imr.12437>
- Depkes RI. (2014). *Farmakope Indonesia V*. Jakarta: Depkes RI.
- Didar, U., Sekhon, S., & Gupta, A. sen. (2017). *Platelets and Platelet-inspired Biomaterials Technologies in Wound-healing Applications*. <http://pubs.acs.org>
- Dira., Tobat S.R, Fendri S.T.J., Wardi S.E. (2018). Pengaruh Pemberian Alfa Mangostin Terhadap Kadar Hidroksiprolin Pada Hari Ke-10 Sesudah Luka Pada Tikus Putih Jantan. Scientia : Jurnal Farmasi dan Kesehatan. 8. 15. 10.36434/scientia.v8i1.143.
- D'souza OJ, Pinto JP, Shettar AK, Narasagoudr SS, Masti SP, Chougale RB. Biofunctionalisation of chitosan/gelatin composite films reinforced *Phyllanthus niruri* extract for wound healing application. *Surf and Interfaces*. 2023; 43(Part A): 103567. ISSN 2468-0230. [Online]. Available: <https://doi.org/10.1016/j.surfin.2023.103567>
- Ekasari, ChristyanitaP., Widyarti, S., & Sumitro, S. B. (2023). The Analysis of Antioxidant Activity and Capacity of Boiled and Infused Indonesian Herbals: <http://www.doi.org/10.26538/tjnpr/v7i1.9>.

- Tropical Journal of Natural Product Research (TJNPR)*, 7(1), 2152–2156. Retrieved from <https://www.tjnpr.org/index.php/home/article/view/1529>
- El Ayadi, A., Jay, J. W., & Prasai, A. (2020). Current approaches targeting the wound healing phases to attenuate fibrosis and scarring. In *International Journal of Molecular Sciences* (Vol. 21, Issue 3). MDPI AG. <https://doi.org/10.3390/ijms21031105>.
- Ellis, S., Lin, E. J., & Tartar, D. (2018). Immunology of Wound Healing. In *Current Dermatology Reports* (Vol. 7, Issue 4, pp. 350–358). Current Medicine Group LLC 1. <https://doi.org/10.1007/s13671-018-0234-9>
- Eming, S. A., Martin, P., & Tomic-Canic, M. (2014). Wound repair and regeneration: Mechanisms, signalling, and translation. *Science Translational Medicine*, 6(265), 265sr6–265sr6. <https://doi.org/10.1126/scitranslmed.3009337>
- Firlar, I., Altunbek, M., McCarthy, C., Ramalingam, M., & Camci-Unal, G. (2022). Functional Hydrogels for Treatment of Chronic Wounds. In *Gels* (Vol. 8, Issue 2). MDPI. <https://doi.org/10.3390/gels8020127>
- Futosi, K., Fodor, S., & Mócsai, A. (2013). Neutrophil cell surface receptors and their intracellular signal transduction pathways. *International Immunopharmacology*, 17(3), 638–650. <https://doi.org/10.1016/j.intimp.2013.06.034>
- Grambow, E., Sorg, H., Sorg, C.G., & Strüder, D. (2021). Experimental Models to Study Skin Wound Healing with a Focus on Angiogenesis. *Medical Sciences*, 9, 1–10. <https://doi.org/10.3390/medsci9010001>
- Graves, N., Phillips, C. J., & Harding, K. (2022). A narrative review of the epidemiology and economics of chronic wounds. *British Journal of Dermatology*, 187(2), 141–148. <https://doi.org/10.1111/bjd.20692>
- Grubbs H, Manna B. Wound Physiology. [Updated 2023 May 16]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK518964/>
- Guest, J. F., Fuller, G. W., & Vowden, P. (2020). Cohort study evaluating the burden of wounds to the UK's National Health Service in 2017/2018: Update from 2012/2013. *BMJ Open*, 10(12). <https://doi.org/10.1136/bmjopen-2020-045253>.
- Gushiken LFS, Beserra FP, Bastos JK, Jackson CJ, Pellizzon CH. Cutaneous Wound Healing: An Update from Physiopathology to Current Therapies. *Life*. 2021; 11(7):665. <https://doi.org/10.3390/life11070665>.
- Hamidi, S. A., Tabatabaei Naeini, A., Oryan, A., Tabandeh, M. R., Tanideh, N., & Nazifi, S. (2017). Cutaneous Wound Healing after Topical Application of *Pistacia atlantica* Gel Formulation in Rats. *Turkish*

- journal of pharmaceutical sciences*, 14(1), 65–74.
<https://doi.org/10.4274/tjps.41713>
- Hariani, L. (2017). The Patterns Of Wound Around Healing Process Through Expression Analysis of EGF, VEGF, TGF1, Collagen Type 1, MMP 1 and Capillaries of Blood Vessel Which is Induced Adipose Derived Mesenchymal Stem Cells (ADMSCs) In Primary Wound. Disertasi. Surabaya: Ilmu Kedokteran Jenjang Doktor Universitas Airlangga.
- Harikrishnan, H., Jantan, I., Alagan, A., & Haque, M. A. (2020). Modulation of cell signalling pathways by Phyllanthus amarus and its major constituents: potential role in the prevention and treatment of inflammation and cancer. In *Inflammopharmacology* (Vol. 28, Issue 1). Springer. <https://doi.org/10.1007/s10787-019-00671-9>
- Harn, H. I., Chen, C. C., Wang, S. P., Lei, M., & Chuong, C. M. (2021). Tissue Mechanics in Haired Murine Skin: Potential Implications for Skin Aging. *Frontiers in cell and developmental biology*, 9, 635340. <https://doi.org/10.3389/fcell.2021.635340>
- Haq, FF. (2016). Pengaruh Luka Insisi Terhadap Perbandingan Kadar Tnfa Pada Tikus Putih (Rattus Norvegicus) Galur Wistar, Semarang: Fakultas Kedokteran Universitas Sultan Agung Semarang. Available at: http://repository.unissula.ac.id/5208/1/cover_1.pdf.
- Herman TF, Bordoni B. (2023) Wound Classification. Apr 24. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. PMID: 32119343.
- Hidanah, S., Koestanti Sabdoningrum, E., Chusniati, S., Rafif Khairullah, A., & Nayan, N. (2023). Effectiveness of Phyllanthus niruri and Andrographis paniculata Extracts on Egg Quality in Laying Hens with Avian Pathogenic Escherichia coli. *J Med Vet*, 6(3). <https://doi.org/10.20473/jmv.vol6.iss3.2023.4854>
- Hu, H. H., Chen, D. Q., Wang, Y. N., Feng, Y. L., Cao, G., Vaziri, N. D., & Zhao, Y. Y. (2018). New insights into TGF- β /Smad signaling in tissue fibrosis. In *Chemico-Biological Interactions* (Vol. 292, pp. 76–83). Elsevier Ireland Ltd. <https://doi.org/10.1016/j.cbi.2018.07.008>.
- Hutagalung MR, Perdanakusuma DS, Wulandari P. Effect of Topical H1-antihistamine on the level of Transforming growth factor beta (TGF- β) and Collagen of Acute wound in an animal model. *Res J Pharm Tech.* 2022 Aug; 15(8): 3559-3562. Doi: 10.52711/0974-360X.2022.00597.
- Ibrahim, N. I., Mohamed, I., Mohamed, N., Mohd Ramli, E. S., & Shuid, A. (2022). The effects of aqueous extract of Labisia Pumila (Blume) Fern.-Vill. Var. Alata on wound contraction, hydroxyproline content and histological assessments in superficial partial thickness of second-degree burn model. *Frontiers in Pharmacology*, 13. <https://doi.org/10.3389/fphar.2022.968664>

- Irwandi., Tobat S.R., Sari P.P. (2018). Uji Efek Analgetik Ekstrak Etanol Meniran (*Phyllanthus niruri* L) Pada Mencit Putih Jantan, *Jurnal Akademi Farmasi Prayoga*, 3(1).
- Ishihara, J., Ishihara, A., Starke, R. D., Peghaire, C. R., Smith, K. E., McKinnon, T. A. J., Tabata, Y., Sasaki, K., White, M. J. V., Fukunaga, K., Laffan, M. A., Lutolf, M. P., Randi, A. M., & Hubbell, J. A. (2019). The heparin-binding domain of von Willebrand factor binds to growth factors and promotes angiogenesis in wound healing. *Blood*, 133(24), 2559–2569. <https://doi.org/10.1182/blood.2019000510>.
- Jenny H & Philip G. (2022). *Journal of Wound Care*. Vol.31. No.5. Downloaded from magonlinelibrary.com by 140.213.200.105 on July 7, 2024.
- Jorch, S. K., & Kubes, P. (2017). An emerging role for neutrophil extracellular traps in noninfectious disease. In *Nature Medicine*. Vol. 23, Issue 3, pp. 279–287). Nature Publishing Group. <https://doi.org/10.1038/nm.4294>
- Karppinen SM, Heljasvaara R, Gullberg D, Tasanen K, Pihlajaniemi T. Toward understanding scarless skin wound healing and pathological scarring. *F1000Res*. (2019) Jun 5;8:F1000 Faculty Rev-787. doi: 10.12688/f1000research.18293.1. PMID: 31231509; PMCID: PMC6556993.
- Kaur, N., Kaur, B., & Sirhind, G. (2017). Phytochemistry and Pharmacology of *Phyllanthus niruri* L.: A Review. In *Phytotherapy Research* (Vol. 31, Issue 7, pp. 980–1004). John Wiley and Sons Ltd. <https://doi.org/10.1002/ptr.5825>
- Kovtun, A., Messerer, D. A. C., Scharffetter-Kochanek, K., Huber-Lang, M., & Ignatius, A. (2018). Neutrophils in tissue trauma of the skin, bone, and lung: Two sides of the same coin. In *Journal of Immunology Research* (Vol. 2018). Hindawi Limited. <https://doi.org/10.1155/2018/8173983>
- Kosnayani, A. S., Yunianto, A. E., Rizal, M. E. A., & Meylani, V. (2022). Analysis of Phytochemical Content and Antioxidant Activity in *Phyllanthus Niruri* Linn. By Different Methods. *International Journal of Design and Nature and Ecodynamics*, 17(5), 795–800. <https://doi.org/10.18280/ijdne.170519>
- Kulkarni, A. B., Huh, C. G., Becker, D., Geiser, A., Lyght, M., Flanders, K. C., Roberts, A. B., Sporn, M. B., Ward, J. M., & Karlsson, S. (1993). Transforming growth factor beta-1 null mutation in mice causes excessive inflammatory response and early death. *Proceedings of the National Academy of Sciences of the United States of America*, 90(2), 770–774. <https://doi.org/10.1073/pnas.90.2.770>
- Kumar, B., Vijayakumar, M., Govindarajan, R., & Pushpangadan, P. (2007). Ethnopharmacological approaches to wound healing-Exploring

- medicinal plants of India. In *Journal of Ethnopharmacology* (Vol. 114, Issue 2, pp. 103–113). <https://doi.org/10.1016/j.jep.2007.08.010>
- Krzyszczyk, P., Schloss, R., Palmer, A., & Berthiaume, F. (2018). The role of macrophages in acute and chronic wound healing and interventions to promote pro-wound healing phenotypes. In *Frontiers in Physiology* (Vol. 9, Issue MAY). Frontiers Media S.A. <https://doi.org/10.3389/fphys.2018.00419>
- Lee, K. Y. (2019). M1 and M2 polarization of macrophages: a mini review. *Medical Biological Science and Engineering*, 2(1), 1–5. <https://doi.org/10.30579/mbse.2019.2.1.1>
- Li, A. G., Wang, D., Feng, X. H., & Wang, X. J. (2004). Latent TGF-beta1 overexpression in keratinocytes results in a severe psoriasis-like skin disorder. *The EMBO journal*, 23(8), 1770–1781. <https://doi.org/10.1038/sj.emboj.7600183>
- Liu, Y., Ma, C., Tang, X., Liu, S., & Jin, Y. (2024). The impact of long-term antihypertensive treatment on wound healing after major non-cardiac surgery in patients with cardiovascular diseases: A meta-analysis. *International Wound Journal*, 21(4). <https://doi.org/10.1111/iwj.14858>
- Lodyga, M., & Hinz, B. (2020). TGF- β 1 - A truly transforming growth factor in fibrosis and immunity. In *Seminars in Cell and Developmental Biology* (Vol. 101, pp. 123–139). Elsevier Ltd. <https://doi.org/10.1016/j.semcdb.2019.12.010>
- Martin, P. (1997). Wound Healing-Aiming for Perfect Skin Regeneration. *Science*, 276(5309), 75–81. <https://doi.org/10.1126/science.276.5309.75>
- Martinez-Zapata, M. J., Martí-Carvajal, A. J., Solà, I., Expósito, J. A., Bolíbar, I., Rodríguez, L., & García, J. (2012). Autologous platelet-rich plasma for treating chronic wounds. In *Cochrane Database of Systematic Reviews*. John Wiley & Sons, Ltd. <https://doi.org/10.1002/14651858.cd006899.pub2>
- Mao, X., Wu, L. F., Guo, H. L., Chen, W. J., Cui, Y. P., Qi, Q., Li, S., Liang, W. Y., Yang, G. H., Shao, Y. Y., Zhu, D., She, G. M., You, Y., & Zhang, L. Z. (2016). The Genus Phyllanthus: An Ethnopharmacological, Phytochemical, and Pharmacological Review. In *Evidence-based Complementary and Alternative Medicine* (Vol. 2016). Hindawi Limited. <https://doi.org/10.1155/2016/7584952>
- Magaki, S., Hojat, S. A., Wei, B., So, A., & Yong, W. H. (2019). An Introduction to the Performance of Immunohistochemistry. *Methods in molecular biology* (Clifton, N.J.), 1897, 289–298. https://doi.org/10.1007/978-1-4939-8935-5_25
- Manoj KS and Ahmad MS. Phytochemical Profile of *Phyllanthus niruri* L and evaluation of its Potent Bioactive Compounds. Biosc. Biotech. Res. Comm. 2020; 13(3): 1545–1551. [Online]. Available: <http://dx.doi.org/10.21786/bbrc/13.3/82>.

- Marques, R., Lopes, M., Ramos, P., Neves-Amado, J., & Alves, P. (2023). Prognostic factors for delayed healing of complex wounds in adults: A scoping review. In *International Wound Journal* (Vol. 20, Issue 7, pp. 2869–2886). John Wiley and Sons Inc. <https://doi.org/10.1111/iwj.14128>
- Masson-Meyers, D. S., Andrade, T. A. M., Caetano, G. F., Guimaraes, F. R., Leite, M. N., Leite, S. N., & Fraude, M. A. C. (2020). Experimental models and methods for cutaneous wound healing assessment. In *International Journal of Experimental Pathology* (Vol. 101, Issues 1–2, pp. 21–37). Blackwell Publishing Ltd. <https://doi.org/10.1111/iep.12346>
- Mayrand, D., Laforce-Lavoie, A., Larochelle, S., Langlois, A., Genest, H., Roy, M., & Moulin, V. J. (2012). Angiogenic properties of myofibroblasts isolated from normal human skin wounds. *Angiogenesis*, 15(2), 199–212. <https://doi.org/10.1007/s10456-012-9253-5>.
- Meilani, R., Asra, R., & Rivai, H. (2020). Pharmacological of *Phyllanthus niruri* L.). World Journal of Pharmacy and Pharmaceutical Sciences. Reviewon Ethnopharmacology, 9(11). <https://doi.org/10.20959/wjpps202011-17721>
- Merlino, J., Gray, T., Beresford, R., Baskar, S. R., Gottlieb, T., & Birdsall, J. (2021). Wound infection caused by *Neisseria zoodegmatis*, a zoonotic pathogen: a case report. *Access Microbiology*, 3(3). <https://doi.org/10.1099/acmi.0.000196>
- Mescher, A. L. (2016). Junquiera's Basic Histology Text & Atlas. McGraw-Hill Education.
- Mescher A.L. (2021). *Junqueira's Basic Histology Text and Atlas, 16e*. McGraw Hill; Accessed July 07, 2024. <https://accessmedicine.mhmedical.com/content.aspx?bookid=3047§ionid=255088835>
- Meselhy MR, Abdel-Sattar OE, El-Mekkawy S, El-Desoky AM, Mohamed SO, Mohsen SM, Abdel-Sattar E, El-Halawany A. Preparation of Lignan-Rich Extract from the Aerial Parts of *Phyllanthus niruri* L Using Nonconventional Methods. *Molecules*. 2020 Mar 5; 25(5): 1179. Doi: 10.3390/molecules25051179. PMID: 32151037; PMCID: PMC7179407.
- [MIMS] Supplements & Adjuvant Therapy of *Phyllanthus niruri* extract. Diakses pada 1 Juli 2023 Pukul 20.00. Tersedia pada www.mims.com
- Moll, F., Walter, M., Rezende, F., Helfinger, V., Vasconez, E., de Oliveira, T., Greten, F. R., Olesch, C., Weigert, A., Radeke, H. H., & Schröder, K. (2018). NoxO1 controls the proliferation of colon epithelial cells. *Frontiers in Immunology*, 9(MAY). <https://doi.org/10.3389/fimmu.2018.00973>

- Mostafa R, Ahmed, S., Begum, M., Rahman, M., Begum, T., Ahmed, S., Tuhin, R., Das, M., Hossain, A., Sharma, M., & Begum, R. (2017). Evaluation of Anti-inflammatory and Gastric Anti-ulcer Activity of *Phyllanthus niruri* L. (Euphorbiaceae) Leaves in Experimental Rats. *BMC Complementary and Alternative Medicine*, 17. doi: 10.1186/s12906-017-1771-7. PMID: 28511679; PMCID: PMC5434621.
- Mumford, A. D., Frelinger, A. L., Gachet, C., Greselle, P., Noris, P., Harrison, P., & Mezzano, D. (2015). A review of platelet secretion assays for the diagnosis of inherited platelet secretion disorders. In *Thrombosis and Haemostasis* (Vol. 114, Issue 1, pp. 14–25). Schattauer GmbH. <https://doi.org/10.1160/TH14-11-0999>.
- Mustoe, T. A., O'Shaughnessy, K., & Kloeters, O. (2006). Chronic wound pathogenesis and current treatment strategies: a unifying hypothesis. *Plastic and reconstructive surgery*, 117(7 Suppl), 35S–41S. <https://doi.org/10.1097/01.prs.0000225431.63010.1b>
- Naderali, E., Khaki, A. A., Rad, J. S., Ali-Hemmati, A., Rahmati, M., & Charoudeh, H. N. (2018). Regulation and modulation of PTEN activity. *Molecular biology reports*, 45(6), 2869–2881. <https://doi.org/10.1007/s11033-018-4321-6>
- Navarro-González, J. F., & Mora-Fernández, C. (2008). The role of inflammatory cytokines in diabetic nephropathy. *Journal of the American Society of Nephrology: JASN*, 19(3), 433–442. <https://doi.org/10.1681/ASN.2007091048>
- Nicole Yi, Z. C & Julian V (2020). Dermatology: Handbook for medical students & junior doctors, British Association of Dermatologists Third Edition.
- Nyika, D. T., Khumalo, N. P., & Bayat, A. (2022). Genetics and Epigenetics of Keloids. *Advances in wound care*, 11(4), 192–201. <https://doi.org/10.1089/wound.2021.0094>
- O'Kane, S., & Ferguson, M. W. (1997). Transforming growth factor beta s and wound healing. *The international journal of biochemistry & cell biology*, 29(1), 63–78. [https://doi.org/10.1016/s1357-2725\(96\)00120-3](https://doi.org/10.1016/s1357-2725(96)00120-3)
- Okoli, C. O., Obidike, I. C., Ezike, A. C., Akah, P. A., & Salawu, O. A. (2011). Studies on the possible mechanisms of antidiabetic activity of extract of aerial parts of *Phyllanthus niruri*. *Pharmaceutical Biology*, 49(3), 248–255. <https://doi.org/10.3109/13880209.2010.501456>.
- Oshin J D'souza, Jennifer P Pinto, Arun K Shettar, Shivayogi S. Narasagoudr, Saraswati P Masti, Ravindra B. Chougale. Biofunctionalization of chitosan/gelatin composite films reinforced *Phyllanthus niruri* extract for wound healing application. *Surfaces and Interfaces*. 2023; 43(Part A): 103567. ISSN 2468-0230. [Online]. Available: <https://doi.org/10.1016/j.surfin.2023.103567>.

- Ozaki, Y., Sekita, S., Soedigdo, S., & Harada, M. (1989). Antiinflammatory effect of *Graptophyllum pictum* (L.) Griff. *Chemical & Pharmaceutical Bulletin*, 37(10), 2799–2802. <https://doi.org/10.1248/cpb.37.2799>
- Pakyari M, Farrokhi A, Maharlooei MK, Ghahary A. Critical Role of Transforming Growth Factor Beta in Different Phases of Wound Healing. *Adv Wound Care (New Rochelle)*. (2013). Jun;2(5):215-224. Doi: 10.1089/wound.2012.0406. PMID: 24527344; PMCID: PMC3857353.
- Pastar, I., Stojadinovic, O., Yin, N. C., Ramirez, H., Nusbaum, A. G., Sawaya, A., Patel, S. B., Khalid, L., Isseroff, R. R., & Tomic-Canic, M. (2014). Epithelialisation in Wound Healing: A Comprehensive Review. *Advances in wound care*, 3(7), 445–464. <https://doi.org/10.1089/wound.2013.0473>
- Pratibha Sharma, Samriti Faujdar. Potential of Herbal Plants in Wound Healing. *J Pharm Neg Res*. 2022; 3 (Special Issue 8). Doi: 10.47750/pnr.2022.13.S08.541
- Oktarina, D. R., Susilawati, Y., & Halimah, E. (2021). The Potential of *Phyllanthus* Genus Plants as Immunomodulatory and Anti Inflammatory. *Indonesian Journal of Biological Pharmacy* (Vol. 1, Issue 2).
- Pawitra Miranti. (2010). Pengolahan Jaringan Untuk Penelitian Hewan Coba. Media Medika Muda. Medical Faculty Of Diponegoro University.
- Psiberg (2022). UV-Vis Spectroscopy : Principle, Instrumentation, and Application. [Online]. Available: <https://psiberg.com/uv-vis-spectroscopy/>
- Radha P dan Saranya, J. (2020). In vitro antioxidant activity of *Phyllanthus niruri* leaf extracts. *Journal of Pharmacognosy and Phytochemistry*, 9(3), 198–201. www.phytojournal.com
- Raziyeva, K., Kim, Y., Zharkinbekov, Z., Kassymbek, K., Jimi, S., & Saparov, A. (2021). Immunology of acute and chronic wound healing. In *Biomolecules* (Vol. 11, Issue 5). MDPI AG. <https://doi.org/10.3390/biom11050700>
- Richardson M. (2004). Acute wounds: an overview of the physiological healing process. *Nursing Times*, 100(4), 50–53.
- Richardson, I. M., Calo, C. J., & Hind, L. E. (2021). Microphysiological Systems for Studying Cellular Crosstalk During the Neutrophil Response to Infection. In *Frontiers in Immunology* (Vol. 12). Frontiers Media S.A. <https://doi.org/10.3389/fimmu.2021.661537>
- Riset Kesehatan Dasar (Riskesdas). Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI. (2018).
- Robbins & Cotran. (2020). *Dasar Patologis penyakit* (10th ed.). Jakarta: Penerbit Buku Kedokteran (EGC). ISBN: 9780323531139; e-ISBN: 9780323609937.

- Robinson, R. T., & Gorham, J. D. (2007). TGF-beta 1 regulates antigen-specific CD4+ T cell responses in the periphery. *Journal of Immunology* (Baltimore, Md.: 1950), 179(1), 71–79. <https://doi.org/10.4049/jimmunol.179.1.71>
- Rodrigues, M., Kosaric, N., Bonham, C. A., & Gurtner, G. C. (2019). Wound Healing: A Cellular Perspective. *Physiol Rev*, 99, 665–706. <https://doi.org/10.1152/physrev.00067.2017.-Wound>.
- Rollando, R., Yuniati, Y., & Monica, E. (2023). Bioactive Potential of Cephalosporium sp. a Fungal Endophyte Isolated from *Phyllanthus niruri* L. *Tropical Journal of Natural Product Research*, 7(4), 2749–2755. <https://doi.org/10.26538/tjnpv7i4.13>.
- Sabdoningrum EK, Hidanah S, Ansori ANM, Fadholly A. Immunomodulatory and antioxidant activities of *Phyllanthus niruri* L Extract against the laying hens infected by *Escherichia coli*. Research J Pharm and Tech. 2020; 13(5): 2246-2250. Doi: 10.5958/0974-360X.2020.00404.7
- Samuelsson, G. (1999). Drugs of natural origin: a textbook of pharmacognosy.
- Shanbhag, T., Amuthan, A., Shenoy, S., & Sudhakar. (2010). Effect of *Phyllanthus niruri*. Linn on burn wound in rats. *Asian Pacific Journal of Tropical Medicine*, 3(2), 105–108. [https://doi.org/10.1016/S1995-7645\(10\)60045-4](https://doi.org/10.1016/S1995-7645(10)60045-4)
- Shapouri-Moghaddam, A., Mohammadian, S., Vazini, H., Taghadosi, M., Esmaeili, S. A., Mardani, F., Seifi, B., Mohammadi, A., Afshari, J. T., & Sahebkar, A. (2018). Macrophage plasticity, polarisation, and function in health and disease. In *Journal of Cellular Physiology* (Vol. 233, Issue 9, pp. 6425–6440). Wiley-Liss Inc. <https://doi.org/10.1002/jcp.26429>.
- Shruthy R, Sharda P, Priya N.K, Sreelatha H, Pramod K.J. (2021). Basic principles of immunohistochemistry and epithelial immunohistochemical markers. *IP Archives of Cytology and Histopathology Research*, 6(1), 1–6. <https://doi.org/10.18231/j.achr.2021.001>
- Shukla, Arti, Anamika M. Rasik and Bhola N. Dhawan (1999) *Asiaticoside-induced elevation of antioxidant levels in healing wounds. 1. Phytother Res.* 13(1): 50-54. Doi: 10.1002/(SICI)1099-1573(199902)13:1<50: AID-PTR368>3.0.CO;2-V. PMID: 10189951.
- Shull, M. M., Ormsby, I., Kier, A. B., Pawlowski, S., Diebold, R. J., Yin, M., Allen, R., Sidman, C., Proetzel, G., & Calvin, D. (1992). Targeted disruption of the mouse transforming growth factor-beta1 gene results in multifocal inflammatory disease. *Nature*, 359(6397), 693–699. <https://doi.org/10.1038/359693a0>
- Shukla, A., Rasik, A. M., & Dhawan, B. N. (1999). Asiaticoside-induced elevation of antioxidant levels in healing wounds. *Phytotherapy*

- research: PTR, 13(1), 50–54. [https://doi.org/10.1002/\(SICI\)1099-1573\(199902\)13:1<50::AID-PTR368>3.0.CO;2-V](https://doi.org/10.1002/(SICI)1099-1573(199902)13:1<50::AID-PTR368>3.0.CO;2-V).*
- Sibiya AM, Ramya AK, Vaseeharan B. Bioactive Molecules from *Phyllanthus Niruri* and Investigating their Effects against Diabetes. Recent Trends in Biochemistry, MedDocs eBook. 2022. Vol. 3. [Online]. Available: <http://meddocsonline.org/>.
- Sidik, Abubakar. 2009. Struktur dan Fungsi Protein Kolagen. *Jurnal Pelangi Ilmu* 5(2). (Vol. 2, Issue 5).
- Singh, S., Young, A., & McNaught, C. E. (2017). The physiology of wound healing. In *Surgery (United Kingdom)* (Vol. 35, Issue 9, pp. 473–477). <https://doi.org/10.1016/j.mpsur.2017.06.004>
- Spickett & Gavin, *Oxford Handbook of Clinical Immunology and Allergy*, 4 edn, Oxford Medical Handbooks (2019). online, Oxford Academic, 1 Sept.2019), <https://doi.org/10.1093/med/9780198789529.001.0001>, accessed 25 June 2024.
- Su, Y., & Richmond, A. (2015). Chemokine Regulation of Neutrophil Infiltration of Skin Wounds. *Advances in Wound Care*, 4(11), 631–640. <https://doi.org/10.1089/wound.2014.0559>
- Suhartati, T. (2017). Dasar-dasar Spektrofotometri UV-Vis dan Spektrofotometri Massa Untuk Penentuan Struktur Senyawa Organik. Penerbit AURA CV. Anugrah Utama Raharja. Bandar Lampung; Cetakan, Januari 2017.
- Sukmayati Alegantina, Herni Asih Setyorini, T. (2015). *Pengujian Mutu Dan Penetapan Kadar Filantin Pada Ekstrak Etanol Herba Meniran (Phyllanthus Niruri Linn)*. Bul Penerbit Kesehatan, 43(1), 11–16. 43. 10.22435/bpk.v43i1.3963.11-16.
- Supit, I.A., Pangemanan, D.H., & Marunduh, S.R. (2015). Profil Tumor Necrosis Factor (TNF- α) Berdasarkan Indeks Massa Tubuh (IMT) Pada Mahasiswa Fakultas Kedokteran UNSRAT Angkatan 2014.
- Tambunan, R., Swandiny, G., & Zaidan, S. (2019). Uji Aktivitas Antioksidan dari Ekstrak Etanol 70% Herba Meniran (*Phyllanthus niruri* L.) Terstandar. *Sainstech Farma: Jurnal Ilmu Kefarmasian*, 12(2), 60-64. <https://doi.org/https://doi.org/10.37277/sfj.v12i2.444>
- Tobat, S. R., Wahyuni, F. S., Yenny SW, Etriay MYH., Afrianti, R., & Rani, DN. (2024). Pengaruh Pemberian Salep Fraksi Etil Asetat Daun Meniran (*Phyllanthus ninuri* L.) Selama 5 Hari Terhadap Penyembuhan Luka Eksisi pada Tikus Putih Jantan. In *HEME : Health and Medical Journal*. 2024; 6(1). DOI: 10.33854/heme.v6i1.1481
- Tsegay, F., Elsherif, M., & Butt, H. (2022). Smart 3D Printed Hydrogel Skin Wound Bandages: A Review. In *Polymers* (Vol. 14, Issue 5). MDPI. <https://doi.org/10.3390/polym14051012>

- &119) Report for Country Development Cooperation Strategy (CDCS): 2020-2025.
- USDA Animal Care. US Department of Agriculture: Animal Welfare Act and Animal Welfare Regulations. 2022; [Online]. Available: <https://oacu.oir.nih.gov/animal-research-advisory-committee-arac-guidelines>
- Vaidyanathan, L. (2021). Growth factors in wound healing a review. In *Biomedical and Pharmacology Journal* (Vol. 14, Issue 3, pp. 1469–1480). Oriental Scientific Publishing Company. <https://doi.org/10.13005/bpj/2249>
- Van der Vliet, A., & Janssen-Heininger, Y. M. W. (2014). Hydrogen peroxide as a damage signal in tissue injury and inflammation: Murderer, mediator, or messenger? *Journal of Cellular Biochemistry*, 115(3), 427–435. <https://doi.org/10.1002/jcb.24683>
- Von Hundelshausen, P., Agten, S. M., Eckardt, V., Blanchet, X., Schmitt, M. M., Ippel, H., Neideck, C., Bidzhekov, K., Leberzammer, J., Wichapong, K., Faussner, A., Drechsler, M., Grommes, J., van Geffen, J. P., Li, H., Ortega-Gomez, A., Megens, R. T. A., Naumann, R., Dijkgraaf, I., Weber, C. (2017). *INFILAMMATION ON Chemokine interactome mapping enables tailored intervention in acute and chronic inflammation*. <http://stm.sciencemag.org/>
- Walsh, P. N., & Ahmad, S. S. (2002). Proteases in blood clotting. *Essays in biochemistry*, 38, 95–111. <https://doi.org/10.1042/bse0380095>
- Wilkinson HN, Hardman MJ. Wound healing: cellular mechanisms and pathological outcomes. *Open Biol*. 2020 Sep;10(9):200223. doi: 10.1098/rsob.200223. Epub 2020 Sep 30. PMID: 32993416; PMCID: PMC7536089.
- Xue, M., & Jackson, C. J. (2015). Extracellular Matrix Reorganization During Wound Healing and Its Impact on Abnormal Scarring. *Advances in Wound Care*, 4(3), 119–136. <https://doi.org/10.1089/wound.2013.0485>
- Zhenqi Z, Yujing B, Xun Z, Ruonan Z, Bin Y (2022). Examination of proline, hydroxyproline and pyroglutamic acid with different polar groups by terahertz spectroscopy, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Volume 267, <https://doi.org/10.1016/j.saa.2021.120539>.(<https://www.sciencedirect.com/science/article/pii/S1386142521011161>).
- Xiaolei D, Parisa K, Maria L, Sabine A. Eming. (2021).Regulation of the Wound Healing Response during Aging, *Journal of Investigative Dermatology*, Volume 141, Issue 4, Supplement, Pages 1063-1070, ISSN 0022-202X, <https://doi.org/10.1016/j.jid.2020.11.014>.