

## DAFTAR PUSTAKA

- Akira, S., Uematsu, S., & Takeuchi, O., 2006, Pathogen recognition and innate immunity, *Cell*, **124**(4), 783–801, <https://doi.org/10.1016/j.cell.2006.02.015>.
- Ansar, W., & Ghosh, S., 2016, Inflammation and Inflammatory Diseases, Markers, and Mediators: Role of CRP in Some Inflammatory Diseases, *Biology of C Reactive Protein in Health and Disease*, **4**(1), 67–107, [https://doi.org/10.1007/978-81-322-2680-2\\_4](https://doi.org/10.1007/978-81-322-2680-2_4).
- Asadi, Z., Ghazanfari, T., & Hatami, H., 2020, Anti-inflammatory effects of matricaria chamomilla extracts on BALB/c mice macrophages and lymphocytes, *Iranian Journal of Allergy, Asthma and Immunology*, **19**, 63–73, [https://doi.org/10.18502/ijaa.v19i\(s1.r1\).2862](https://doi.org/10.18502/ijaa.v19i(s1.r1).2862).
- Avelar-Freitas, B. A., Almeida, V. G., Pinto, M. C. X., Mourão, F. A. G., Massensini, A. R., Martins-Filho, O. A., Rocha-Vieira, E., & Brito-Melo, G. E. A., 2014, Trypan blue exclusion assay by flow cytometry, *Brazilian Journal of Medical and Biological Research*, **47**(4), 307–315, <https://doi.org/10.1590/1414-431X20143437>.
- Bashir, S., Sharma, Y., Elahi, A., & Khan, F., 2016, Macrophage polarization: the link between inflammation and related diseases, *Inflammation Research*, **65**(1), 1–11, <https://doi.org/10.1007/s00011-015-0874-1>.
- Billack, B., 2006, Macrophage Activation: Role of Toll-like Receptors, Nitric Oxide, and Nuclear Factor kappa B, *American Journal of Pharmaceutical Education*, **70**(5), 70–80, <https://doi.org/10.5688/aj7005102>.
- Bimakr, M., Ganjloo, A., Zarringhalami, S., & Ansarian, E., 2017, Ultrasound-assisted extraction of bioactive compounds from *Malva sylvestris* leaves and its comparison with agitated bed extraction technique, *Food Science and Biotechnology*, **26**(6), 1481–1490, <https://doi.org/10.1007/s10068-017-0229-5>.
- Biswas, S. K., Chittezhath, M., Shalova, I. N., & Lim, J. Y., 2012, Macrophage polarization and plasticity in health and disease, *Immunologic Research*, **53**(1), 11–24, <https://doi.org/10.1007/s12026-012-8291-9>.
- Biswas, S. K., Sica, A., & Lewis, C. E., 2008, Plasticity of Macrophage Function during Tumor Progression: Regulation by Distinct Molecular Mechanisms 1, *The Journal of Im-Munology*, **180**(1), 2011–2017, <https://doi.org/https://doi.org/10.4049/jimmunol.180.4.2011>.
- Caldito, N. G., 2023, Role of tumor necrosis factor-alpha in the central nervous system: a focus on autoimmune disorders, *Frontiers in Immunology*, **14**(1), 1–11, <https://doi.org/10.3389/fimmu.2023.1213448>.
- Cassado, A. A., D'Império Lima, M. R., & Bortoluci, K. R., 2015, Revisiting mouse peritoneal macrophages: Heterogeneity, development, and function, *Frontiers in Immunology*, **6**(225), 1–9, <https://doi.org/10.3389/fimmu.2015.00225>.

- Celis, R., Cuervo, A., Ramírez, J., & Cañete, J. D., 2019, Psoriatic synovitis: Singularity and potential clinical implications, *Frontiers in Medicine*, **6**(14), 1–7, <https://doi.org/10.3389/fmed.2019.00014>.
- Chemat, F., Rombaut, N., Sicaire, A. G., Meullemiestre, A., Fabiano-Tixier, A. S., & Abert-Vian, M., 2017, Ultrasound assisted extraction of food and natural products. Mechanisms, techniques, combinations, protocols and applications. A review, *Ultrasonics Sonochemistry*, **34**(1), 540–560, <https://doi.org/10.1016/j.ultsonch.2016.06.035>.
- Coussens, L. M., & Werb, Z., 2002, Inflammation and cancer, *Nature*, **420**(6917), 860–867, <https://doi.org/10.1038/nature01322>.
- Crowley, L. C., Marfell, B. J., Christensen, M. E., & Waterhouse, N. J., 2016, Measuring cell death by trypan blue uptake and light microscopy, *Cold Spring Harbor Protocols*, **2016**(7), 643–646, <https://doi.org/10.1101/pdb.prot087155>.
- Dalli, J., & Serhan, C. N., 2012, Specific lipid mediator signatures of human phagocytes: Microparticles stimulate macrophage efferocytosis and pro-resolving mediators, *Blood*, **120**(15), 60–72, <https://doi.org/10.1182/blood-2012-04-423525>.
- De, A., & Chattopadhyay, S., 2009, The variation in cytoplasmic distribution of mouse peritoneal macrophage during phagocytosis modulated by mangiferin, an immunomodulator, *Immunobiology*, **214**(5), 367–376, <https://doi.org/10.1016/j.imbio.2008.10.001>.
- Departemen Kesehatan RI, 1989, *Materia Medika Indonesia*, 5th ed., Departemen Kesehatan Republik Indonesia.
- Departemen Kesehatan RI, 2010, *Suplemen I Farmakope Herbal Indonesia*, 1st ed., Departemen Kesehatan Republik Indonesia.
- Departemen Kesehatan RI, 2017, *Farmakope Herbal Indonesia*, 2nd ed., Departemen Kesehatan Republik Indonesia.
- Divangahi, M., King, I. L., & Pernet, E., 2015, Alveolar macrophages and type I IFN in airway homeostasis and immunity, *Trends in Immunology*, **36**(5), 307–314, <https://doi.org/10.1016/j.it.2015.03.005>.
- Dong, Y., Dekens, D. W., De Deyn, P. P., Naudé, P. J. W., & Eisel, U. L. M., 2015, Targeting of tumor necrosis factor alpha receptors as a therapeutic strategy for neurodegenerative disorders, *Antibodies*, **4**(4), 369–408, <https://doi.org/10.3390/antib4040369>.
- Dunkhunthod, B., Talabnin, C., Murphy, M., Thumanu, K., Sittisart, P., Hengpratom, T., & Eumkeb, G., 2020, Intracellular ROS Scavenging and Anti-Inflammatory Activities of *Oroxylum indicum* Kurz (L.) Extract in LPS plus IFN- $\gamma$ -Activated RAW264.7 Macrophages, *Evidence-Based Complementary and Alternative Medicine*, **20**, <https://doi.org/10.1155/2020/7436920>.
- Farnsworth, N. R., 1966, Biological and Phytochemical Screening of Plants, *Journal Of Pharmaceutical Sciences*, **55**(3), 225–269, <https://doi.org/10.1002/jps.2600550302>.

- Garside, H., Stevens, A., Farrow, S., Normand, C., Houle, B., Berry, A., Maschera, B., & Ray, D., 2004, Glucocorticoid ligands specify different interactions with NF- $\kappa$ B by allosteric effects on the glucocorticoid receptor DNA binding domain, *Journal of Biological Chemistry*, **279**(48), 50050–50059, <https://doi.org/10.1074/jbc.M407309200>.
- Geissman, T., 1962, *The Chemistry of Flavonoid Compounds*, Pergamon Press.
- Germolec, D. R., Shipkowski, K. A., Frawley, R. P., & Evans, E., 2018, Markers of inflammation, *Methods in Molecular Biology*, **1803**(1), 57–79, [https://doi.org/10.1007/978-1-4939-8549-4\\_5](https://doi.org/10.1007/978-1-4939-8549-4_5).
- Goodwin, T. W., 1976, *Chemistry and Biochemistry of Plant Pigments*, 2nd ed., Academic Press.
- Gordon, S., & Taylor, P. R., 2005, Monocyte and macrophage heterogeneity, *Nature Reviews Immunology*, **5**(12), 953–964, <https://doi.org/10.1038/nri1733>.
- Hashimoto, D., Chow, A., Noizat, C., Teo, P., Beasley, M. B., Leboeuf, M., Becker, C. D., See, P., Price, J., Lucas, D., Greter, M., Mortha, A., Boyer, S. W., Forsberg, E. C., Tanaka, M., van Rooijen, N., García-Sastre, A., Stanley, E. R., Ginhoux, F., ... Merad, M., 2013, Tissue-resident macrophages self-maintain locally throughout adult life with minimal contribution from circulating monocytes, *Immunity*, **38**(4), 792–804, <https://doi.org/10.1016/j.immuni.2013.04.004>.
- Havsteen, B. H., 2002, The biochemistry and medical significance of the flavonoids, *Pharmacology & Therapeutics*, **96**(1), 67–202, [https://doi.org/10.1016/s0163-7258\(02\)00298-x](https://doi.org/10.1016/s0163-7258(02)00298-x).
- Hui, L., Pan, S., & Xu, X., 2022, Anti-inflammation Activity Evaluation of Apigenin-O-Glycosides and Apigenin-C-Glycosides, *Science and Technology of Food Industry*, **43**(13), 345–352, <https://doi.org/10.13386/j.issn1002-0306.2021100016>.
- Hutagalung, M. S. B., 2019, Phlebotrophic Effect of *Graptophyllum Pictum* (L.) Griff on Experimental Wistar Hemorrhoids, *Journal of Biomedicine and Translational Research*, **5**(1), 1–4, <https://doi.org/10.14710/jbtr.v5i1.3704>.
- Jang, D. I., Lee, A. H., Shin, H. Y., Song, H. R., Park, J. H., Kang, T. B., Lee, S. R., & Yang, S. H., 2021, The role of tumor necrosis factor alpha (Tnf- $\alpha$ ) in autoimmune disease and current tnf- $\alpha$  inhibitors in therapeutics, *International Journal of Molecular Sciences*, **22**(5), 1–16, <https://doi.org/10.3390/ijms22052719>.
- Karakaş, D., Ari, F., & Ulukaya, E., 2017, The MTT viability assay yields strikingly false-positive viabilities although the cells are killed by some plant extracts, *Turkish Journal of Biology*, **41**(6), 919–925, <https://doi.org/10.3906/biy-1703-104>.
- Kim, S. J., Um, J. Y., Hong, S. H., & Lee, J. Y., 2011, Anti-inflammatory activity of hyperoside through the suppression of nuclear factor- $\kappa$ B activation in mouse peritoneal macrophages, *American Journal of Chinese Medicine*, **39**(1), 171–181, <https://doi.org/10.1142/S0192415X11008737>.

- Kisrini, 1997, *Isolasi dan Identifikasi Flavonoid Daun Graptophyllum pictum* (L.) Griff. var. *lurido-sanguneum* Sims., Universitas Gadjah Mada
- Kuby, J., Goldsby, R. A., & Osborne, B. A., 2013, *Kuby Immunology*, 7th Edition, W.H. Freeman.
- Levin, A. D., Wildenberg, M. E., & van den Brink, G. R., 2016, Mechanism of action of anti-TNF therapy in inflammatory bowel disease, *Journal of Crohn's and Colitis*, **10**(8), 989–997, <https://doi.org/10.1093/ecco-jcc/jjw053>.
- Li, P., Yin, Z. Q., Li, S. L., Huang, X. J., Ye, W. C., & Zhang, Q. W., 2014, Simultaneous determination of eight flavonoids and pogostone in pogostemon cablin by high performance liquid chromatography, *Journal of Liquid Chromatography and Related Technologies*, **37**(12), 1771–1784, <https://doi.org/10.1080/10826076.2013.809545>.
- Liawruangrath, N., Teerawutgulrag, S., Santiarworn, A., Pyne, D. G., & Liawruangrath, S. G., 2017, Phytochemical screening, phenolic and flavonoid contents, antioxidant and cytotoxic activities of *Graptophyllum pictum* (L.) Griff, *Chiang Mai Journal of Science*, **44**(1), 193–202, <https://doi.org/10.4274/tjps.galenos.2023.95690>.
- Liga, S., Paul, C., & Péter, F., 2023, Flavonoids: Overview of Biosynthesis, Biological Activity, and Current Extraction Techniques, *Plants*, **12**(14), 1–25, <https://doi.org/10.3390/plants12142732>.
- Liu, T., Liu, F., Peng, L. W., Chang, L., & Jiang, Y. M., 2018, The peritoneal macrophages in inflammatory diseases and abdominal cancers, *Oncology Research*, **26**(5), 817–826, <https://doi.org/10.3727/096504017X15130753659625>.
- Liu, T., Zhang, L., Joo, D., & Sun, S. C., 2017, NF- $\kappa$ B signaling in inflammation, *Signal Transduction and Targeted Therapy*, **2**(2017), 1–9, <https://doi.org/10.1038/sigtrans.2017.23>.
- Lohsiriwat, V., 2012, Hemorrhoids: From basic pathophysiology to clinical management Varut Lohsiriwat, *World J Gastroenterol*, **18**(17), 2009–2017, <https://doi.org/10.3748/wjg.v18>.
- Longo-Sorbello, G. S. A., Say&m, G., Banerjee, D., & Bertino, J. R., 2006, *Cytotoxicity and Cell Growth Assays*,
- Mabry, T. J., Markham, K. R., & Thomas, M. B., 1970, *The Systematic Identification of Flavonoids*, pringer-verlag.
- Machado, A. P. D. F., Sumere, B. R., Mekar, C., Martinez, J., Bezerra, R. M. N., & Rostagno, M. A., 2019, Extraction of polyphenols and antioxidants from pomegranate peel using ultrasound: influence of temperature, frequency and operation mode, *International Journal of Food Science and Technology*, **54**(9), 2792–2801, <https://doi.org/10.1111/ijfs.14194>.
- Mahdi-Pour, B., Jothy, S. L., Latha, L. Y., Chen, Y., & Sasidharan, S., 2012, Antioxidant activity of methanol extracts of different parts of *Lantana camara*, *Asian Pacific Journal of Tropical Biomedicine*, **2**(12), 960–965, [https://doi.org/10.1016/S2221-1691\(13\)60007-6](https://doi.org/10.1016/S2221-1691(13)60007-6).

- Maiorino, L., Daßler-Plenker, J., Sun, L., & Egeblad, M., 2021, Innate Immunity and Cancer Pathophysiology, *Annual Review of Pathology: Mechanisms of Disease*, **17**, 425–457, <https://doi.org/10.1146/annurev-pathmechdis-032221-115501>.
- Majno, G., & Joris, I., 2004, *Cells, tissues, and disease: principles of general pathology*, Oxford University Press.
- Makkiyah, F., Rahmi, E. P., Revina, R., Susantiningsih, T., & Setyaningsih, Y., 2021, *Graptophyllum pictum* (L.) griff. (syn: *Justicia picta* linn.) and its effectiveness: A well-known indonesian plant, *Pharmacognosy Journal*, **13**(3), 835–838, <https://doi.org/10.5530/pj.2021.13.106>.
- Mamani-Matsuda, M., Kauss, T., Al-Kharrat, A., Rambert, J., Fawaz, F., Thiolat, D., Moynet, D., Coves, S., Malvy, D., & Mossalayi, M. D., 2006, Therapeutic and preventive properties of quercetin in experimental arthritis correlate with decreased macrophage inflammatory mediators, *Biochemical Pharmacology*, **72**(10), 1304–1310, <https://doi.org/10.1016/j.bcp.2006.08.001>.
- Medzhitov, R., & Janeway, C., 2000, Innate immune recognition: Mechanisms and pathways, *Immunological Reviews*, **173**(1), 89–97, <https://doi.org/10.1034/j.1600-065X.2000.917309.x>.
- Mogensen, T. H., Berg, R. S., Paludan, S. R., & Østergaard, L., 2008, Mechanisms of dexamethasone-mediated inhibition of toll-like receptor signaling induced by *Neisseria meningitidis* and *Streptococcus pneumoniae*, *Infection and Immunity*, **76**(1), 189–197, <https://doi.org/10.1128/IAI.00856-07>.
- Morikawa, K., Nonaka, M., Narahara, M., Torii, I., Kawaguchi, K., Yoshikawa, T., Kumazawa, Y., & Morikawa, S., 2003, Inhibitory effect of quercetin on carrageenan-induced inflammation in rats, *Life Sciences*, **74**(6), 709–721, <https://doi.org/10.1016/j.lfs.2003.06.036>.
- Murray, P. J., 2017, Macrophage Polarization, *Annual Review of Physiology*, **79**, 541–566, <https://doi.org/10.1146/annurev-physiol-022516-034339>.
- Nascentes, C. C., Korn, M., Sousa, C. S., & Arruda, M. A. Z., 2001, Use of Ultrasonic Baths for Analytical Applications: A New Approach for Optimisation Conditions, *J. Braz. Chem. Soc*, **12**(1), 57–63, <https://doi.org/10.1590/S0103-50532001000100008>.
- Newton, K., & Dixit, V. M., 2012, Signaling in innate immunity and inflammation, *Cold Spring Harbor Perspectives in Biology*, **4**(3), 1–20, <https://doi.org/10.1101/cshperspect.a006049>.
- Ocaña-Guzmán, R., Ramón-Luing, L. A., Rodríguez-Alvarado, M., Voss, T. D., Fuchs, T., & Chavez-Galan, L., 2022, Murine RAW Macrophages Are a Suitable Model to Study the CD3 Signaling in Myeloid Cells, *Cells*, **11**(10), 1–15, <https://doi.org/10.3390/cells11101635>.
- Ozaki, Y., Sekita, S., Soedigdo, S., & Harada, M., 1989, *Antiinflammatory Effect of Graptophyllum pictum* (L.) Griff, **37**(10), 2799–2802, <https://doi.org/10.1248/cpb.37.2799>.

- Panche, A. N., Diwan, A. D., & Chandra, S. R., 2016, Flavonoids: An overview, *Journal of Nutritional Science*, **5**(1), 1–15, <https://doi.org/10.1017/jns.2016.41>.
- Panigrahy, D., Gilligan, M. M., Serhan, C. N., & Kashfi, K., 2021, Resolution of inflammation: An organizing principle in biology and medicine, *Pharmacology and Therapeutics*, **227**(2021), 1–16, <https://doi.org/10.1016/j.pharmthera.2021.107879>.
- Pecorini, G., Ferraro, E., & Puppi, D., 2023, Polymeric Systems for the Controlled Release of Flavonoids, *Pharmaceutics*, **15**(2), 1–15, <https://doi.org/10.3390/pharmaceutics15020628>.
- Pieren, D. K. J., 2022, The adaptive immune system in early life: The shift makes it count, *Frontiers in Immunology*, **13**(1), 1–15, <https://doi.org/10.3389/fimmu.2022.1031924>.
- Popivanova, B. K., Kitamura, K., Wu, Y., Kondo, T., Kagaya, T., Kaneko, S., Oshima, M., Fujii, C., & Mukaida, N., 2008, Blocking TNF- $\alpha$  in mice reduces colorectal carcinogenesis associated with chronic colitis, *Journal of Clinical Investigation*, **118**(2), 560–570, <https://doi.org/10.1172/JCI32453>.
- Prasetyo, S. A., Prajoko, Y. W., Nugroho, E. A., Dharmana, E., Susilaningsih, N., & Riwanto, I., 2023, Graptophyllum pictum (L.) Griff Extract as Anti-Inflammatory on Wistar Rats With Experimental Hemorrhoids, *International Surgery*, **107**(2), 76–82, <https://doi.org/10.9738/INTSURG-D-18-00039.1>.
- Priyanto, J. A., Prastya, M. E., Minarti, M., & Permatasari, V., 2024, Pharmaceutical Properties and Phytochemical Profile of Extract Derived from Purple Leaf Graptophyllum pictum (L.) Griff, *Turkish Journal of Pharmaceutical Sciences*, **21**(2), 133–140, <https://doi.org/10.4274/tjps.galenos.2023.95690>.
- Qiu, T., Wu, D., Yang, L. L., Ye, H., Wang, Q., Cao, Z., & Tang, K., 2018, Exploring the mechanism of flavonoids through systematic bioinformatics analysis, *Frontiers in Pharmacology*, **9**(918), 1–12, <https://doi.org/10.3389/fphar.2018.00918>.
- Ratnasari, Y., Susanti, S., & Dhiani, B. A., 2020, Anti-inflammation and anti-platelet aggregation activities of the ethanolic extract of Graptophyllum pictum leaves in Wistar rats, *Pharmaciana*, **10**(2), 167–174, <https://doi.org/10.12928/pharmaciana.v10i2.15769>.
- Riastri, A., 2022, *Efek Imunomodulator Kombinasi Ekstrak Etanolik Herba Meniran dan Rimpang Temu Mangga Melalui Jalur NF- $\kappa$  B pada Sel RAW 264.7*, Universitas Gadjah Mada
- Rivera, L., Morón, R., Sánchez, M., Zarzuelo, A., & Galisteo, M., 2008, Quercetin ameliorates metabolic syndrome and improves the inflammatory status in obese Zucker rats, *Obesity*, **16**(9), 2081–2087, <https://doi.org/10.1038/oby.2008.315>.
- Riwanto, I., Nugroho, E., Susilaningsih, N., Prajoko, W. Y., Budiono, P., & Prasetyo, S. A., 2020, Antioxidant and Antiinflammatory of Graptophyllum pictul (L.) Griff Extract: Study on SOD and COX-2 Serum of experimental hemorrhoid, *Journal of Clinical Medicine*, **7**(2), 422–466, <https://doi.org/https://doi.org/10.36408/mhjcm.v7i2.515>.

- Rusanov, A. L., Kozhin, P. M., Tikhonova, O. V., Zgoda, V. G., Loginov, D. S., Chlastáková, A., Selinger, M., Sterba, J., Grubhoffer, L., & Luzgina, N. G., 2021, Proteome profiling of PMJ2-R and primary peritoneal macrophages, *International Journal of Molecular Sciences*, **22**(12) <https://doi.org/10.3390/ijms22126323>.
- Sakamoto, S., Putalun, W., Vimolmangkang, S., Phoolcharoen, W., Shoyama, Y., Tanaka, H., & Morimoto, S., 2018, Enzyme-linked immunosorbent assay for the quantitative/qualitative analysis of plant secondary metabolites, *Journal of Natural Medicines*, **72**(1), 32–42, <https://doi.org/10.1007/s11418-017-1144-z>.
- Saleh, H. A., Yousef, M. H., & Abdelnaser, A., 2021, The Anti-Inflammatory Properties of Phytochemicals and Their Effects on Epigenetic Mechanisms Involved in TLR4/NF- $\kappa$ B-Mediated Inflammation, *Frontiers in Immunology*, **12**, 1–29, <https://doi.org/10.3389/fimmu.2021.606069>.
- Sands, B. E., & Kaplan, G. G., 2007, The role of TNF $\alpha$  in ulcerative colitis, *Journal of Clinical Pharmacology*, **47**(8), 930–941, <https://doi.org/10.1177/0091270007301623>.
- Sato, S., Sugiyama, M., Yamamoto, M., Watanabe, Y., Kawai, T., Takeda, K., & Akira, S., 2003, Toll/IL-1 Receptor Domain-Containing Adaptor Inducing IFN-(TRIF) Associates with TNF Receptor-Associated Factor 6 and TANK-Binding Kinase 1, and Activates Two Distinct Transcription Factors, NF-B and IFN-Regulatory Factor-3, in the Toll-Like Receptor Signaling 1, *The Journal of Immunology*, **171**(8), 4304–4310, <https://doi.org/10.4049/jimmunol.171.8.4304>.
- Schmitz, F., Heit, A., Guggemoos, S., Krug, A., Mages, J., Schiemann, M., Adler, H., Drexler, I., Haas, T., Lang, R., & Wagner, H., 2007, Interferon-regulatory-factor 1 controls Toll-like receptor 9-mediated IFN- $\beta$  production in myeloid dendritic cells, *European Journal of Immunology*, **37**(2), 315–327, <https://doi.org/10.1002/eji.200636767>.
- Serhan, C. N., & Levy, B. D., 2018, Resolvins in inflammation: Emergence of the pro-resolving superfamily of mediators, *Journal of Clinical Investigation*, **128**(7), 2657–2669, <https://doi.org/10.1172/JCI97943>.
- 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, polarization, and function in health and disease, *Journal of Cellular Physiology*, **233**(9), 6425–6440, <https://doi.org/10.1002/jcp.26429>.
- Sica, A., & Mantovani, A., 2012, Macrophage plasticity and polarization: in vivo veritas, *The Journal of Clinical Investigation*, **122**(3), 787–795, <https://doi.org/10.1172/JCI59643>.
- Soehnlein, O., & Lindbom, L., 2010, Phagocyte partnership during the onset and resolution of inflammation, *Nature Reviews Immunology*, **10**(6), 427–439, <https://doi.org/10.1038/nri2779>.
- Stahl, E., 1969, *Thin Layer Chromatography*, 2nd ed., Springer-Verlag.

- Sun, Z., & Migaly, J., 2016, Review of Hemorrhoid Disease: Presentation and Management, *Clinics in Colon and Rectal Surgery*, **29**(1), 22–29, <https://doi.org/10.1055/s-0035-1568144>.
- Talorete, T. P. N., Bouaziz, M., Sayadi, S., & Isoda, H., 2006, Influence of medium type and serum on MTT reduction by flavonoids in the absence of cells, *Cytotechnology*, **52**(3), 189–198, <https://doi.org/10.1007/s10616-007-9057-4>.
- Tortora, G. J., & Derrickson, B. H., 2018, *Principles of Anatomy and Physiology*, 15th ed., John Wiley & Sons.
- Tracey, K. J., & Cerami, A., 1994, Tumor Necrosis Factor: A Pleiotropic Cytokine and Therapeutic Target, *Annual Review*, **45**(1), 491–503, <https://doi.org/10.1146/annurev.med.45.1.491>.
- Turchyn, L. R., Mobley, J. L., Lesch, C. A., Renkiewicz, R. R., & Baginski, T. J., 2007, Phenotypic and functional analysis of murine resident and induced peritoneal macrophages, *Comp Med*, **57**(6), 574–584, <https://doi.org/10.1002/art.21633>.
- USDA, 2008, *Classification for Kingdom Plantae Down to Species Graptophyllum Pictum (L.) Griff.*, United States Department of Agriculture.
- Waksmundzka-Hajnos, M., Sherma, J., & Kowalska, T., 2008, *Thin Layer Chromatography in Phytochemistry*, 1st ed., CRC Press.
- Webster, J. D., & Vucic, D., 2020, The Balance of TNF Mediated Pathways Regulates Inflammatory Cell Death Signaling in Healthy and Diseased Tissues, *Frontiers in Cell and Developmental Biology*, **8**(1), 1–14, <https://doi.org/10.3389/fcell.2020.00365>.
- Wu, E. B., Sung, F. C., Lin, C. L., Wu, K. L., & Chen, K. B., 2021, Colorectal cancer risk in patients with hemorrhoids: A 10-year population-based retrospective cohort study, *International Journal of Environmental Research and Public Health*, **18**(16), 1–10, <https://doi.org/10.3390/ijerph18168655>.
- Xie, C., Kang, J., Li, Z., Schauss, A. G., Badger, T. M., Nagarajan, S., Wu, T., & Wu, X., 2012, The açai flavonoid velutin is a potent anti-inflammatory agent: Blockade of LPS-mediated TNF- $\alpha$  and IL-6 production through inhibiting NF- $\kappa$ B activation and MAPK pathway, *Journal of Nutritional Biochemistry*, **23**(9), 1184–1191, <https://doi.org/10.1016/j.jnutbio.2011.06.013>.
- Yasintha, A. A., & Makkiyah, F. A., 2024, Aktivitas Antioksidan dan Antiinflamasi pada Daun Ungu (*Graptophyllum pictum*), *Ikraith-Humaniora*, **8**(1), 177–187, <https://doi.org/10.37817/ikraith-humaniora.v8i1>.
- Zhang, Goncalves, R., & Mosser, D. M., 2008, The isolation and characterization of murine macrophages, *Current Protocols in Immunology*, **14**(1), 1–18, <https://doi.org/10.1002/0471142735.im1401s83>.
- Zhang, L., Shan, Y., Tang, K., & Putheti, R., 2009, Ultrasound-assisted extraction flavonoids from Lotus (*Nelumbo nucifera* Gaertn) leaf and evaluation of its anti-fatigue activity, *International Journal of Physical Sciences*, **4**(8), 236–203, <https://doi.org/10.5897/IJPS.9000607>.

Zhang, Wang, G., Gurley, E. C., & Zhou, H., 2014, Flavonoid apigenin inhibits lipopolysaccharide-induced inflammatory response through multiple mechanisms in Macrophages, *PLoS ONE*, **9**(9) <https://doi.org/10.1371/journal.pone.0107072>.