



## DAFTAR PUSTAKA

- Ahmad, R., Duryee, M.J., Chandan, S., Dhawan, P., Singh, S., Thiele, G.M., Singh, A.B., 2019. Su1913 – Anti-Maa (Malondialdehyde-Acetaldehyde Adducts) Immunoglobulin Isotypes in Inflammatory Bowel Disease - Novel Diagnostic Implications for Ulcerative Colitis. *Gastroenterology* 156, S-657-S-658. [https://doi.org/10.1016/S0016-5085\(19\)38550-6](https://doi.org/10.1016/S0016-5085(19)38550-6)
- Ai, X.-Y., Qin, Y., Liu, H.-J., Cui, Z.-H., Li, M., Yang, J.-H., Zhong, W.-L., Liu, Y.-R., Chen, S., Sun, T., Zhou, H.-G., Yang, C., 2017. Apigenin inhibits colonic inflammation and tumorigenesis by suppressing STAT3-NF-κB signaling. *Oncotarget* 8, 100216–100226. <https://doi.org/10.18632/oncotarget.22145>
- Al-Hassani, Z.K.K., Naji, H.F., 2016. Isolation and Molecular Identification of Some Enterobacteriaceae Genera that Forming Biofilms on Intrauterine Devices by Polymerase Chain Reaction.
- Armstrong, H., Alipour, M., Valcheva, R., Bording-Jorgensen, M., Jovel, J., Zaidi, D., Shah, P., Lou, Y., Ebeling, C., Mason, A.L., Lafleur, D., Jerasi, J., Wong, G.K.-S., Madsen, K., Carroll, M.W., Huynh, H.Q., Dieleman, L.A., Wine, E., 2019. Host immunoglobulin G selectively identifies pathobionts in pediatric inflammatory bowel diseases. *Microbiome* 7, 1. <https://doi.org/10.1186/s40168-018-0604-3>
- Baldelli, V., Scaldaferrri, F., Putignani, L., Del Chierico, F., 2021. The Role of Enterobacteriaceae in Gut Microbiota Dysbiosis in Inflammatory Bowel Diseases. *Microorganisms* 9, 697. <https://doi.org/10.3390/microorganisms9040697>
- Burri, E., Maillard, M.H., Schoepfer, A.M., Seibold, F., Van Assche, G., Rivière, P., Laharie, D., Manz, M., on behalf of the Swiss IBDnet, an official working group of the Swiss Society of Gastroenterology, 2020. Treatment Algorithm for Mild and Moderate-to-Severe Ulcerative Colitis: An Update. *Digestion* 101, 2–15. <https://doi.org/10.1159/000504092>
- Chassaing, B., Aitken, J.D., Malleshappa, M., Vijay-Kumar, M., 2014. Dextran Sulfate Sodium (DSS)-Induced Colitis in Mice. *Current Protocols in Immunology* 104. <https://doi.org/10.1002/0471142735.im1525s104>
- de Souza, H.S.P., Fiocchi, C., 2016. Immunopathogenesis of IBD: current state of the art. *Nat Rev Gastroenterol Hepatol* 13, 13–27. <https://doi.org/10.1038/nrgastro.2015.186>
- Derouich, M., Bouhlali, E.D.T., Bammou, M., Hmidani, A., Sellam, K., Alem, C., 2020. Bioactive Compounds and Antioxidant, Antiperoxidative, and Antihemolytic Properties Investigation of Three *Apiaceae* Species Grown in the Southeast of Morocco. *Scientifica* 2020, 1–10. <https://doi.org/10.1155/2020/3971041>
- Eeckhaut, V., Machiels, K., Perrier, C., Romero, C., Maes, S., Flahou, B., Steppe, M., Haesebrouck, F., Sas, B., Ducatelle, R., Vermeire, S., Van Immerseel, F., 2013. *Butyricicoccus pullicaecorum* in inflammatory bowel disease. *Gut* 62, 1745–1752. <https://doi.org/10.1136/gutjnl-2012-303611>



- Eichele, D.D., Kharbanda, K.K., 2017. Dextran sodium sulfate colitis murine model: An indispensable tool for advancing our understanding of inflammatory bowel diseases pathogenesis. *WJG* 23, 6016–6029. <https://doi.org/10.3748/wjg.v23.i33.6016>
- Emad, A.M., Ali, S.F., Abdel-Rahman, E.A., Meselhy, M.R., Farag, M.A., Ali, S.S., Abdel-Sattar, E.A., 2020. Anti-inflammatory and antioxidant effects of *Apium graveolens* L. extracts mitigate against fatal acetaminophen-induced acute liver toxicity. *J. Food Biochem.* 44. <https://doi.org/10.1111/jfbc.13399>
- Eroschenko, V.P., 2012. *Atlas Histologi diFiore*. EGC, Jakarta.
- Eskandani, A.A., 2021. Effect of supplementing fava bean (*Vicia faba* L.) on ulcerative colitis and colonic mucosal DNA content in rats fed a high-sucrose diet. *Saudi Journal of Biological Sciences* 28, 3497–3504. <https://doi.org/10.1016/j.sjbs.2021.03.017>
- Fazzeli, H., Arabestani, M.R., Esfahani, B.N., Khorvash, F., Pourshafie, M.R., Moghim, S., Safaei, H.G., Faghri, J., Narimani, T., 2012. Development of PCR-based method for detection of Enterobacteriaceae in septicemia. *Journal of Research in Medical Sciences*.
- Frank, D.N., Robertson, C.E., Hamm, C.M., Kpadeh, Z., Zhang, T., Chen, H., Zhu, W., Sartor, R.B., Boedeker, E.C., Harpaz, N., Pace, N.R., Li, E., 2011. Disease phenotype and genotype are associated with shifts in intestinal-associated microbiota in inflammatory bowel diseases: *Inflammatory Bowel Diseases* 17, 179–184. <https://doi.org/10.1002/ibd.21339>
- Friedman, A., Claypool, S., Liu, R., 2013. The Smart Targeting of Nanoparticles. *CPD* 19, 6315–6329. <https://doi.org/10.2174/13816128113199990375>
- Griffin, S., Masood, M., Nasim, M., Sarfraz, M., Ebokaiwe, A., Schäfer, K.-H., Keck, C., Jacob, C., 2017. Natural Nanoparticles: A Particular Matter Inspired by Nature. *Antioxidants* 7, 3. <https://doi.org/10.3390/antiox7010003>
- Handayani, L., Widowati, L., 2020. Analisis Lanjut Pemanfaatan Empiris Ramuan Seledri (*Apium graveolens* L) oleh Penyehat Tradisional. *jki* 31–41. <https://doi.org/10.22435/jki.v10i1.1718>
- Handoko, T., 2015. Pengaruh Terapi Ekstrak Etanol Akar Seledri (*Apium Graveolens*) Terhadap Aktivitas Protease Dan Gambaran Histopatologi Jejunum Tikus (*Rattus Norvegicus*) Model IBD (Inflammatory Bowel Disease) Hasil In. Sarjana thesis, Universitas Brawijaya.
- Hansen, I.S., Baeten, D.L.P., den Dunnen, J., 2019. The inflammatory function of human IgA. *Cell. Mol. Life Sci.* 76, 1041–1055. <https://doi.org/10.1007/s00018-018-2976-8>
- Hostetler, G., Riedl, K., Cardenas, H., Diosa-Toro, M., Arango, D., Schwartz, S., Doseff, A.I., 2012. Flavone deglycosylation increases their anti-inflammatory activity and absorption. *Mol. Nutr. Food Res.* 56, 558–569. <https://doi.org/10.1002/mnfr.201100596>



- Jeengar, M.K., Thummuri, D., Magnusson, M., Naidu, V.G.M., Uppugunduri, S., 2017. Uridine Ameliorates Dextran Sulfate Sodium (DSS)-Induced Colitis in Mice. *Sci Rep* 7, 3924. <https://doi.org/10.1038/s41598-017-04041-9>
- Jing, M., Wang, Y., Xu, L., 2019. Andrographolide Derivative AL-1 Ameliorates Dextran Sodium Sulfate-Induced Murine Colitis by Inhibiting NF-  $\kappa$  B and MAPK Signaling Pathways. *Oxidative Medicine and Cellular Longevity* 2019, 1–18. <https://doi.org/10.1155/2019/6138723>
- Kiesler, P., Fuss, I.J., Strober, W., 2015. Experimental Models of Inflammatory Bowel Diseases. *Cellular and Molecular Gastroenterology and Hepatology* 1, 154–170. <https://doi.org/10.1016/j.jcmgh.2015.01.006>
- Kooti, W., Daraei, N., 2017. A Review of the Antioxidant Activity of Celery (*Apium graveolens* L.). *J Evid Based Complementary Altern Med* 22, 1029–1034. <https://doi.org/10.1177/2156587217717415>
- Lansdown, R.V., 2013. Apium graveolens: Lansdown, R.V.: The IUCN Red List of Threatened Species 2013: e.T164203A13575099. <https://doi.org/10.2305/IUCN.UK.2013-1.RLTS.T164203A13575099.en>
- Lynch W.D., Hsu R., 2020. Ulcerative Colitis, In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK459282/>
- Martien, R., Irianto, I.D.K., Farida, V., Sari, P., 2012. Perkembangan Teknologi Nanopartikel Sebagai Sistem Penghantaran Obat.
- Mescher, A.L., 2011. Histologi Dasar Junoueira Teks & Atlas. EGC, Jakarta.
- Minaiyan, M., Ghanadian, S. M., & Hossaini, M., 2021. Protective Effect of Apium graveolens L. (Celery) Seeds Extracts and Luteolin on Acetic Acid-Induced Colitis in Rats. *International journal of preventive medicine*, 12,100.[https://doi.org/10.4103/ijpvm.IJPVM\\_651\\_20](https://doi.org/10.4103/ijpvm.IJPVM_651_20).
- Minaiyan, M., Asghari, G., Taheri, D., Saeidi, M., & Nasr-Esfahani, S., 2014. Antiinflammatory effect of Moringa oleifera Lam. seeds on acetic acid-induced acute colitis in rats. *Avicenna journal of phytomedicine*, 4(2), 127–136.
- Mohanraj, V.J., Chen, Y., 2007. Nanoparticles - A review. *Trop. J. Pharm Res* 5, 561–573. <https://doi.org/10.4314/tjpr.v5i1.14634>
- Morgan, X.C., Tickle, T.L., Sokol, H., Gevers, D., Devaney, K.L., Ward, D.V., Reyes, J.A., Shah, S.A., LeLeiko, N., Snapper, S.B., Bousvaros, A., Korzenik, J., Sands, B.E., Xavier, R.J., Huttenhower, C., 2012. Dysfunction of the intestinal microbiome in inflammatory bowel disease and treatment. *Genome Biol* 13, R79. <https://doi.org/10.1186/gb-2012-13-9-r79>
- Musthaba, S.M., Baboota, S., Ahmed, S., Ahuja, A., Ali, J., 2009. Status of novel drug delivery technology for phytotherapeutics. *Expert Opinion on Drug Delivery* 6, 625–637. <https://doi.org/10.1517/17425240902980154>
- Nagavarma, B.V.N., Yadav, H.K., Ayaz, A., Vasudha, L.S., Shivakumar, H.G., 2012. Different techniques for preparation of polymeric nanoparticles—a review. *Asian J Pharm Clin Res*;5(3):16–23.
- Nascimento, R. de P. do, Machado, A. P. da F., Galvez, J., Cazarin, C. B. B., & Maróstica Junior, M. R. (2020). Ulcerative colitis: Gut microbiota,



- immunopathogenesis and application of natural products in animal models. *Life Sciences*, 118129. <https://doi.org/10.1016/j.lfs.2020.118129>
- Ni, J., Gary, D.W., Albenberg, L., Tomov, V.T., 2017. Gut microbiota and IBD: causation or correlation?. *Nat Rev Gastroenterol Hepatol.* 14 (10): 573-584.
- Nisa, U., 2018. Pengadaan Bahan yang Baik, Ketepatan Dosis dan Monitoring Efek Samping Merupakan Langkah untuk Mendapatkan Obat Herbal yang Berkualitas. *Proc. Mul. Pharm. Conf.* 7, 32–36. <https://doi.org/10.25026/mpc.v7i1.288>
- Okai, S., Usui, F., Yokota, S., Hori-i, Y., Hasegawa, M., Nakamura, T., Kurosawa, M., Okada, S., Yamamoto, K., Nishiyama, E., Mori, H., Yamada, T., Kurokawa, K., Matsumoto, S., Nanno, M., Naito, T., Watanabe, Y., Kato, T., Miyauchi, E., Ohno, H., Shinkura, R., 2016. High-affinity monoclonal IgA regulates gut microbiota and prevents colitis in mice. *Nat Microbiol* 1, 16103. <https://doi.org/10.1038/nmicrobiol.2016.103>
- Powanda, Michael C., Whitehouse, Michael W., Rainsford, K.D., 2015. Celery Seed and Related Extracts with Antiarthritic, Antiulcer, and Antimicrobial Activities, in: Rainsford, K.D., Powanda, M. C., Whitehouse, M. W. (Eds.), *Novel Natural Products: Therapeutic Effects in Pain, Arthritis and Gastro-Intestinal Diseases, Progress in Drug Research*. Springer Basel, Basel, pp. 133–153. [https://doi.org/10.1007/978-3-0348-0927-6\\_4](https://doi.org/10.1007/978-3-0348-0927-6_4)
- Rashidian, A., Dejban, P., Karami Fard, K., Abdollahi, A., Chamanara, M., Dehpour, A., Hasanzadeh, A., 2020. Bupropion Ameliorates Acetic Acid-Induced Colitis in Rat: the Involvement of the TLR4/NF- $\kappa$ B Signaling Pathway. *Inflammation* 43, 1999–2009. <https://doi.org/10.1007/s10753-020-01273-2>
- Sadraei, H., Asghari, G., Khanabadi, M., Minaiyan, M., 2017. Anti-inflammatory effect of apigenin and hydroalcoholic extract of *Dracocephalum kotschy* on acetic acid-induced colitis in rats. *Res Pharma Sci* 12, 322. <https://doi.org/10.4103/1735-5362.212050>
- Sherwood, L., 2013. *Introduction to human physiology*. Nelson Education, Canada, pp. 165, 204–206.
- Sommer, F., Anderson, J.M., Bharti, R., Raes, J., Rosenstiel, P., 2017. The resilience of the intestinal microbiota influences health and disease. *Nat Rev Microbiol* 15, 630–638. <https://doi.org/10.1038/nrmicro.2017.58>
- Syafruddin, S., Suriani, S., Nahdawati, N., Pakadang, S.R., 2018. Pengaruh Ekstrak Daun Keladi Tikus (*Typhonium Flagelliforme*) Terhadap Aktivitas Antimutagenik Pada Mencit (*Mus Musculus*) Dengan Menggunakan Metode Mikronukleus Assay. *MF* 14, 108. <https://doi.org/10.32382/mf.v14i1.141>
- Treuting, P.M., Dintzis, S.M., 2012. *Comparative Anatomy and Histology A Mouse and Human Atlas*. Academic Press, USA, pp. 166–173.
- Walujkar, S.A., Dhotre, D.P., Marathe, N.P., Lawate, P.S., Bharadwaj, R.S., Shouche, Y.S., 2014. Characterization of bacterial community shift in human Ulcerative Colitis patients revealed by Illumina based 16S rRNA



- gene amplicon sequencing. Gut Pathog 6, 22. <https://doi.org/10.1186/1757-4749-6-22>
- Widyowati, R., Agil, M., 2018. Chemical Constituents and Bioactivities of Several Indonesian Plants Typically Used in Jamu. Chem. Pharm. Bull. 66, 506–518. <https://doi.org/10.1248/cpb.c17-00983>
- Yamada, T., 2005. Inflammatory Bowel Disease. Handbook of Gastroenterology. Lippincott Williams & Wilkins, Philadelphia, pp. 357–73.
- Yang, M., Cao, L., Xie, M., Yu, Y., Kang, R., Yang, L., Zhao, M., Tang, D., 2013. Chloroquine inhibits HMGB1 inflammatory signaling and protects mice from lethal sepsis. Biochemical Pharmacology 86, 410–418. <https://doi.org/10.1016/j.bcp.2013.05.013>
- Yang, Y., Palm, N.W., 2020. Immunoglobulin A and the microbiome. Current Opinion in Microbiology 56, 89–96. <https://doi.org/10.1016/j.mib.2020.08.003>
- Zhang, J., Lei, H., Hu, X., Dong, W., 2020. Hesperetin ameliorates DSS-induced colitis by maintaining the epithelial barrier via blocking RIPK3/MLKL necroptosis signaling. European Journal of Pharmacology 873, 172992. <https://doi.org/10.1016/j.ejphar.2020.172992>
- Zhang, M., Viennois, E., Prasad, M., Zhang, Y., Wang, L., Zhang, Z., Han, M.K., Xiao, B., Xu, C., Srinivasan, S., Merlin, D., 2016. Edible ginger-derived nanoparticles: A novel therapeutic approach for the prevention and treatment of inflammatory bowel disease and colitis-associated cancer. Biomaterials 101, 321–340. <https://doi.org/10.1016/j.biomaterials.2016.06.018>
- Zhang, Y.-Z., 2014. Inflammatory bowel disease: Pathogenesis. WJG 20, 91. <https://doi.org/10.3748/wjg.v20.i1.91>