

## DAFTAR PUSTAKA

- Abarikwu, S. O., Benjamin, S., Ebah, S. G., Obilor, G., & Agbam, G. (2017). Protective effect of *Moringa oleifera* oil against HgCl<sub>2</sub>-induced hepato-and nephro-Toxicity in rats. *Journal of Basic and Clinical Physiology and Pharmacology*, 28(4), 337–345. <https://doi.org/10.1515/jbcpp-2016-0033>
- Aekthammarat, D., Pannangpatch, P., & Tangsucharit, P. (2019). *Moringa oleifera* leaf extract lowers high blood pressure by alleviating vascular dysfunction and decreasing oxidative stress in L-NAME hypertensive rats. *Phytomedicine*, 54, 9–16. <https://doi.org/10.1016/j.phymed.2018.10.023>
- Aring, A. M., & Chan, M. M. (2016). Current concepts in adult acute rhinosinusitis. *American Family Physician*, 94(2), 97–105.
- Autio, T. J., Koskenkorva, T., Koivunen, P., & Alho, O. (2018). *Inflammatory Biomarkers During Bacterial Acute Rhinosinusitis*. 3–8.
- Ayala, A., Muñoz, M. F., & Argüelles, S. (2014). *Lipid Peroxidation: Production, Metabolism, and Signaling Mechanisms of Malondialdehyde and 4-Hydroxy-2-Nonenal*. 2014. <https://doi.org/10.1155/2014/360438>
- Chow, A. W., Benninger, M. S., Brook, I., Brozek, J. L., Goldstein, E. J. C., Hicks, L. A., Pankey, G. A., Seleznick, M., Volturo, G., Wald, E. R., & Jr, T. M. F. (2012). *IDSA GUIDELINES IDSA Clinical Practice Guideline for Acute Bacterial Rhinosinusitis in Children and Adults*. 54. <https://doi.org/10.1093/cid/cir1043>
- Dale, A. (2019). *Accuracy of Signs and Symptoms for the Diagnosis of Acute Rhinosinusitis and Acute Bacterial Rhinosinusitis*. 164–172.
- Demuri, G. (2017). *Acute Bacterial Sinusitis in Children*. 34(10).
- Dinas Kesehatan Kota Semarang. (2018). Profil Kesehatan Kota Semarang 2018. *Dinkes.Semarang.Go.Id*, 15–68.
- El-Sayed, N. M., & Fathy, G. M. (2018). Prophylactic and Therapeutic Treatments' Effect of *Moringa Oleifera* Methanol Extract on Cryptosporidium Infection in Immunosuppressed Mice. *Anti-Infective Agents*, 17(2), 130–137. <https://doi.org/10.2174/2211352517666181221094420>
- Elgaml, S. A., & Hashish, E. A. (2014). *Clinicopathological studies of Thymus vulgaris Extract Against Cadmium Induced Hepatotoxicity in Albino Rats*. 8(4), 501–509. <https://doi.org/10.5829/idosi.gjp.2014.8.4.8444>
- Foden, N., Burgess, C., Shepherd, K., & Almeyda, R. (2013). *Clinical Intelligence A*

- guide to the management of acute rhinosinusitis in primary care management strategy based on best evidence and recent European guidelines. November, 611–613. <https://doi.org/10.3399/bjgp13X674620>*
- Fokkens, W. J., Lund, V. J., Hopkins, C., Hellings, P. W., Kern, R., Reitsma, S., & Mullol, J. (2020). *2020*. 58(February).
- Forrester, S. J., Kikuchi, D. S., Hernandes, M. S., Xu, Q., & Griendling, K. K. (2018). *Reactive Oxygen Species in Metabolic and Inflammatory Signaling*. <https://doi.org/10.1161/CIRCRESAHA.117.311401>
- Fotio, A. L., Nguepi, M. S. D., Tonfack, L. B., Temdie, R. J. G., & Nguelefack, T. B. (2019). South African Journal of Botany Acetaminophen induces liver injury and depletes glutathione in mice brain : Prevention by Moringa oleifera extract. *South African Journal of Botany*. <https://doi.org/10.1016/j.sajb.2019.08.037>
- Fouad, E. A., Abu Elnaga, A. S. M., & Kandil, M. M. (2019). Antibacterial efficacy of Moringa oleifera leaf extract against pyogenic bacteria isolated from a dromedary camel (*Camelus dromedarius*) abscess. *Veterinary World*, 12(6), 802–808. <https://doi.org/10.14202/vetworld.2019.802-808>
- Gimenis, J. M., Gomes, A. C., Dos Santos, V. H. M., Ferreira, P. C., Oliveira, C. A., Baby, A. R., & da SILVA, R. M. G. (2018). Antioxidant and photoprotective potential of moringa oleifera lam (Moringaceae). *Bioscience Journal*, 34(5), 1365–1378. <https://doi.org/10.14393/BJ-v34n5a2018-39845>
- Gopalakrishnan, L., Doriya, K., & Kumar, D. S. (2016a). Ac ce p te cr t. *Food Science and Human Wellness*. <https://doi.org/10.1016/j.fshw.2016.04.001>
- Gopalakrishnan, L., Doriya, K., & Kumar, D. S. (2016b). Moringa oleifera: A review on nutritive importance and its medicinal application. *Food Science and Human Wellness*, 5(2), 49–56. <https://doi.org/10.1016/j.fshw.2016.04.001>
- Hoffmans, R., Wagelmakers, A., Drunen, C. Van, Hellings, P., & Fokkens, W. (2018). *Acute and chronic rhinosinusitis and allergic rhinitis in relation to comorbidity , ethnicity and environment*. 1–14.
- Kamaneh, S. A. R., Qaraaty, M., Tabarrai, M., Mazidi, M., Mojahedi, M., & Azizkhani, M. (2018). Sinusitis and the related remedies in Persian medicine. *Indian Journal of Traditional Knowledge*, 17(4), 654–662.
- Lin, M., Zhang, J., & Chen, X. (2018a). Bioactive flavonoids in Moringa oleifera and their health-promoting properties. *Journal of Functional Foods*, 47(August), 469–479. <https://doi.org/10.1016/j.jff.2018.06.011>
- Lin, M., Zhang, J., & Chen, X. (2018b). Bioactive flavonoids in Moringa oleifera and their health-promoting properties Bioactive fl avonoids in Moringa oleifera and

- their health-promoting properties. *Journal of Functional Foods*, 47(August), 469–479. <https://doi.org/10.1016/j.jff.2018.06.011>
- Oluduro, A. O. (2012). Evaluation of Antimicrobial properties and nutritional potentials of *Moringa oleifera* Lam. leaf in South-Western Nigeria. *Malaysian Journal of Microbiology*, 8(2), 59–67. <https://doi.org/10.21161/mjm.02912>
- Rosenfeld, R. M., Piccirillo, J. F., Chandrasekhar, S. S., Brook, I., Kumar, K. A., Kramper, M., Orlandi, R. R., Palmer, J. N., Patel, Z. M., Peters, A., Walsh, S. A., & Corrigan, M. D. (2015). *Clinical Practice Guideline (Update): Adult Sinusitis*. <https://doi.org/10.1177/0194599815572097>
- Skye, E. P., & Terrell, J. E. (2018). *Acute Rhinosinusitis in Adults Key points. December*.
- Smith, S. S., Ference, E. H., Charlesnika, T., Tan, B. K., Kern, R. C., & Chandra, R. K. (2013). 2, 3 ; 8182.
- Sumandjar, T., Purwanto, B., Riswanto, & Rahman, A. (2020). The effects of ethyl acetate fraction of *Moringa oleifera* leaves on kidney and liver function in sepsis rat model. *Bali Medical Journal*, 9(1), 271–275. <https://doi.org/10.15562/bmj.v9i1.1681>
- Sumandjar, T., Purwanto, B., Wasita, B., & Indarto, D. (2019). *The ethyl acetate fraction of *Moringa oleifera* leaves effects on endothelial stress in rat sepsis model*. 8(3), 757–760. <https://doi.org/10.15562/bmj.v8i3.1679>
- Suwannawong, D., Seresirikachorn, K., Aeumjaturapat, S., Chusakul, S., Kanjanaumporn, J., Chitsuthipakorn, W., Ruksakul, W., & Snidvongs, K. (2020). Predicting bacteria causing acute bacterial rhinosinusitis by clinical features & *Brazilian Journal of Otorhinolaryngology*, xx. <https://doi.org/10.1016/j.bjorl.2018.12.002>
- Tsikas, D. (2017). Assessment of lipid peroxidation by measuring malondialdehyde (MDA) and relatives in biological samples : Analytical and biological challenges. *Analytical Biochemistry*, 524, 13–30. <https://doi.org/10.1016/j.ab.2016.10.021>
- Vergara-jimenez, M., Almatrafi, M. M., & Fernandez, M. L. (2017). *Bioactive Components in *Moringa Oleifera* Leaves Protect against Chronic Disease*. 1–13. <https://doi.org/10.3390/antiox6040091>
- Wald, E. R. (2012). *Staphylococcus aureus : Is It a Pathogen of Acute Bacterial Sinusitis in Children and Adults ?* 54. <https://doi.org/10.1093/cid/cir940>
- Wang, Q., Chen, H., Chen, H., & Wang, S. (2016). A rat model of *staphylococcus aureus* biofilm in rhinosinusitis. *International Journal of Clinical and Experimental Medicine*, 9(2), 2472–2478.