

DAFTAR PUSTAKA

- Agustin, M. P. (2021). Pengaruh paparan rokok elektrik terhadap kadar gpx dan catalase pada darah tikus. *J UNNES. Jurnal UNNES*, 10(1), 65–75.
- Ahmad, Z., & Damayanti. (2018). Penuaan Kulit : Patofisiologi dan Manifestasi Klinis. *Berkala Ilmu Kesehatan Kulit Dan Kelamin – Periodical of Dermatology and Venereology*, 30(03), 208–215.
<http://download.garuda.ristekdikti.go.id/article.php?article=850430&val=7405&title=Pe>
nuaan Kulit: Patofisiologi dan Manifestasi Klinis
- Amid, M., Abd Manap, M. Y., & Zohdi, N. K. (2014). Purification and Characterization of Alkaline-Thermostable Protease Enzyme from Pitaya (*Hylocereus polyrhizus*) Waste: A Potential Low Cost of the Enzyme. *BioMed Research International*, 2014.
<https://doi.org/10.1155/2014/259238>
- Andarina, R., & Djauhari, T. (2017). Antioksidan dalam dermatologi. *Jurnal Kedokteran Dan Kesehatan*, 4(1), 39–48.
- Berger, M. M. (2005). Can oxidative damage be treated nutritionally? *Clinical Nutrition*, 24(2), 172–183. <https://doi.org/10.1016/j.clnu.2004.10.003>
- Bolduc, J. A., Collins, J. A., & Loeser, R. F. (2019). Reactive oxygen species, aging and articular cartilage homeostasis. *Free Radical Biology and Medicine*, 132, 73–82.
<https://doi.org/10.1016/j.freeradbiomed.2018.08.038>
- Buranasudja, V., Rani, D., Malla, A., Kobtrakul, K., & Vimolmangkang, S. (2021). Insights into antioxidant activities and anti-skin-aging potential of callus extract from *Centella asiatica* (L.). *Scientific Reports*, 11(1), 1–16. <https://doi.org/10.1038/s41598-021-92958-7>
- Chen, L., Hu, J. Y., & Wang, S. Q. (2012). The role of antioxidants in photoprotection: A critical review. *Journal of the American Academy of Dermatology*, 67(5), 1013–1024.
<https://doi.org/10.1016/j.jaad.2012.02.009>
- Garg, A., Aggarwal, D., Garg, S., & Singla, A. K. (2002). Spreading of semisolid formulations: An update. *Pharmaceutical Technology North America*, 26(9), 84–105.
- Gunarti, N. S., & Fikayuniar, L. (2020). FORMULASI DAN UJI AKTIVITAS GEL TABIR SURYA DARI EKSTRAK BUAH BLACKBERRY (*Rubus fruticosus*) SECARA IN VITRO DENGAN SPEKTROFOTOMETRI UV-VISIBEL. *Kartika : Jurnal Ilmiah Farmasi*, 7(2), 66. <https://doi.org/10.26874/kjif.v7i2.227>
- Hashim, P., Sidek, H., Helan, M. H. M., Sabery, A., Palanisamy, U. D., & Ilham, M. (2011).

- Triterpene composition and bioactivities of centella asiatica. *Molecules*, 16(2), 1310–1322. <https://doi.org/10.3390/molecules16021310>
- Ighodaro, O. M., & Akinloye, O. A. (2018). First line defence antioxidants-superoxide dismutase (SOD), catalase (CAT) and glutathione peroxidase (GPX): Their fundamental role in the entire antioxidant defence grid. *Alexandria Journal of Medicine*, 54(4), 287–293. <https://doi.org/10.1016/j.ajme.2017.09.001>
- Jawetz, Melinick, & Aldeberg. (2008). Mikrobiologi Iftdokteran. *Mikrobiologi Kedokteran*, 23(1), 251–257.
- Kalangi, S. J. R. (2014). Histofisiologi Kulit. *Jurnal Biomedik (Jbm)*, 5(3), 12–20. <https://doi.org/10.35790/jbm.5.3.2013.4344>
- Lubapepita Triananda, A., & Wijaya, A. (2021). FORMULASI DAN UJI FISIK SEDIAAN GEL EKSTRAK DAUN PETAI CINA (*Leucaena leucocephala* (Lam.) De. Wit) DENGAN BASIS HYDROXY PROPYL METHYL CELLULOSE (HPMC). *Jurnal Kefarmasian Akfarindo*, 29–36. <https://doi.org/10.37089/jofar.vi0.101>
- Machsun, I. R., & Zulaika, E. (2017). Profil Protein Bakteri Ureolitik. *Jurnal Sains Dan Seni ITS*, 6(2), 2–4. <https://doi.org/10.12962/j23373520.v6i2.25813>
- Maria, B., Sikawin, B., Yamlean, P. V. Y., & Sudewi, S. (2018). Formulasi Sediaan Gel Antibakteri Ekstrak Etanol Tanaman Sereh (*Cymbopogon Citratus* (Dc.) Stapf) Dan Uji Aktivitas Antibakteri (*Staphylococcus Aureus*) Secara in Vitro. *Pharmacon*, 7(3), 302–310. <https://doi.org/10.35799/pha.7.2018.20571>
- Nagy, J. M., Cass, A. E. G., & Brown, K. A. (1997). Purification and characterization of recombinant catalase-peroxidase, which confers isoniazid sensitivity in *Mycobacterium tuberculosis*. *Journal of Biological Chemistry*, 272(50), 31265–31271. <https://doi.org/10.1074/jbc.272.50.31265>
- Parwata, M. O. A. (2016). Antioksidan. *Kimia Terapan Program Pascasarjana Universitas Udayana*, April, 1–54.
- Purwanto, M. G. M. (2016). The Role and Efficiency of Ammonium Sulphate Precipitation in Purification Process of Papain Crude Extract. *Procedia Chemistry*, 18(Mcls 2015), 127–131. <https://doi.org/10.1016/j.proche.2016.01.020>
- Rahman, H., Kartawinata, T. G., & Julianti, E. (2012). Uji Aktivitas Enzim Superoksida Dismutase dalam Ekstrak Mesokarp Buah Merah (*Pandanus conoideus* Lamarck) Menggunakan Densitometri Citra Elektroforegram. *Acta Pharmaceutica Indonesia*, 37(2), 43–47.
- Rahmi, H., Hariyanti, R., Putri, A., & Wulandari, D. (2020). *BIOTEKNOLOGI & BIOSAINS*

- INDONESIA Analysis of Protease and Lipase Fractionation Originated from the Digestive Tract of Vannamei Shrimp (Litopenaeus vannamei)*. 7(December), 194–202.
<http://ejurnal.bppt.go.id/index.php/JBBI>
- Sari, A. N. (2015). Antioksidan Alternatif Untuk Menangkal Bahaya Radikal Bebas Pada Kuli. *Elkawanie: Journal of Islamic Science and Technology*, 1(1), 63–68. www.jurnal.ar-raniry.com/index.php/elkawanie
- Setyoko, H., & Utami, B. (2016). Isolasi dan Karakterisasi Enzim Selulase Cairan Rumen Sapi untuk Hidrolisis Biomassa. *Proceeding Biology Education Conference*, 13(1), 863–867.
- Sudevan, S., Vijayarghavan, R., & Arts, N. (2013). Purification and characterization of Catalase enzyme from *Agaricus bisporus* Original Research Article Purification and characterization of Catalase enzyme from *Agaricus bisporus*. *International Journal of Current Microbiology and Applied Sciences*, 2(12), 255–263.
- Suharno, S. H. P., Wasyilah, T. W., & Nugrahani, R. A. (2019). Pengaruh Konsentrasi Amonium Sulfat Terhadap Rendemen Isolat Protein Defatted Dedak Padi Pada Ekstraksi Menggunakan Air. *Prosiding Semnastek*, 1–5.
<https://jurnal.umj.ac.id/index.php/semnastek/article/view/5185>
- Sutardi, S. (2017). Kandungan Bahan Aktif Tanaman Pegagan dan Khasiatnya untuk Meningkatkan Sistem Imun Tubuh. *Jurnal Penelitian Dan Pengembangan Pertanian*, 35(3), 121. <https://doi.org/10.21082/jp3.v35n3.2016.p121-130>
- Widyaningrum, N., Novitasari, M., & Puspitasary, K. (2019). PERBEDAAN VARIASI FORMULA BASIS CMC Na TERHADAP SIFAT FISIK GEL EKSTRAK ETANOL KULIT KACANG TANAH (*Arachis hypogaea* L). *Avicenna : Journal of Health Research*, 2(2), 121–134. <https://doi.org/10.36419/avicenna.v2i2.308>
- Wistar, T., Norvegicus, R., Terpapar, Y., Jelantah, M., Candra, A., Rahadiyanti, A., Kedokteran, F., & Diponegoro, U. (2020). Efek Ekstrak Tomat (*Solanum Lycopersicum*) Terhadap Enzim Katalase Hepar Tikus Wistar (*Rattus Norvegicus*) Yang Terpapar Minyak Jelantah. *JNH (Journal of Nutrition and Health)*, 8(1), 1–11.
<https://doi.org/10.14710/jnh.8.1.2020.1-11>
- Yuswan, M. H. M. Y., Al-Obaidi, J. R., Rahayu, A., Sahidan, S., Shazrul, F., & Fauzi, D. (2015). New Bioactive Molecules with Potential Antioxidant Activity from Various Extracts of Wild Edible Gelam Mushroom (<i>Boletus</i> spp.). *Advances in Bioscience and Biotechnology*, 06(04), 320–329.
<https://doi.org/10.4236/abb.2015.64031>

Yuzugullu Karakus, Y. (2020). Typical Catalases: Function and Structure. *Glutathione System and Oxidative Stress in Health and Disease, reaction 3*.

<https://doi.org/10.5772/intechopen.90048>