

DAFTAR PUSTAKA

- Asgher, M., Noreen, S., & Bilal, M. (2017). Enhancement of catalytic, reusability, and long-term stability features of *Trametes versicolor* IBL-04 laccase immobilized on different polymers. *International Journal of Biological Macromolecules*, 95, 54–62. <https://doi.org/10.1016/j.ijbiomac.2016.11.012>
- Basana, L. D. U. (2022). Efektifitas pemberian jus buah pare (*Momordica charantia*) dalam membasmi jentik nyamuk *Aedes aegypti* di Kelurahan Pasir Bidang Kecamatan Sarudik tahun 2021. *Journal of Innovation Research and Knowledge*, 1(11), 1539–1542. <https://www.bajangjournal.com/index.php/JIRK/article/view/6891>
- Bedan, D. S. (2020). Extraction, precipitation and characterization of urease from *Vicia faba* L. *Al-Mustansiriyah Journal of Science*, 31(1), 9–14. <https://doi.org/10.23851/mjs.v31i1.555>
- Bilal, M., Asgher, M., Shahid, M., & Bhatti, H. N. (2016). Characteristic features and dye degrading capability of agar-agar gel immobilized manganese peroxidase. *International Journal of Biological Macromolecules*, 86, 728–740. <https://doi.org/10.1016/J.IJBIOMAC.2016.02.014>
- Brena, B. M., & Batista-Viera, F. (2006). *Immobilization of enzymes BT - immobilization of enzymes and cells* (J. M. Guisan (ed.); pp. 15–30). Humana Press. https://doi.org/10.1007/978-1-59745-053-9_2
- Campbell, N. A., Reece, J. B., & Mitchell, L. G. (2002). *Biology, fifth edition* (1st ed.). Jakarta: Erlangga.
- Chong, Y. M., Ahmad, M., & Heng, L. Y. (2019). A new ultra violet-visible spectrophotometric method for quantitative determination of acrylamide via hydrolysis process. *Malaysian Journal of Analytical Sciences*, 23(1), 14–22. <https://doi.org/10.17576/mjas-2019-2301-02>
- Fadila, R. S. (2024). Ekstraksi, pemurnian parsial, dan karakterisasi enzim urease dari biji kedelai hitam (*Glycinesoja* (L.) Merril). *Skripsi*. Universitas Jenderal Soedirman.
- Graner, D. K., & Murray, R. K. (2012). *Biokimia harper edisi 29*. Jakarta: Penerbit Buku Kedokteran EGC.
- Hapsari, M. W., Anggraeni, N., Kusumaningtias, N., & Wuryanti. (2021). Isolasi, purifikasi parsial dan karakterisasi enzim *L-Asparaginase* dari bawang putih (*Allium sativum*). *Science, Technology and Management Journal*, 5.
- Harjanto, S. (2017). Perbandingan pembacaan absorbansi menggunakan spectronic 20 D+ dan spectrophotometer UV-Vis T 60U dalam penentuan kadar protein dengan larutan standar BSA. *Jurnal Kimia Sains Dan Aplikasi*, 20(3), 114–116. <https://doi.org/10.14710/jksa.20.3.114-116>
- Jannah, Z. N., Herawati, D., & Ngibad, K. (2021). Review: Analisis konsentrasi ion sulfat dalam air menggunakan spektrofotometri. *Jurnal Pijar Mipa*, 16(2),

203–206. <https://doi.org/10.29303/jpm.v16i2.1907>

- Laksanawati, T. A., Khirzin, M. H., & Shinta, K. M. (2022). Pemurnian dan uji aktivitas protease sulfhidril batang kamboja (*Plumeria obusta*). *Agribios*, 20(2), 235. <https://doi.org/10.36841/agribios.v20i2.2232>
- Lehninger, A. L. (1988). *Dasar-dasar biokimia*. Jakarta: Erlangga.
- Lim, A., Muhammad, D. A., & Lestari, A. S. (2019). Studi eksperimental kemampuan biosementasi bakteri lokal pada tanah pasir lepas. *Jurnal Teknik Sipil*, 26(2), 129–138. <https://doi.org/10.5614/jts.2019.26.2.5>
- Mazzei, L., Cirri, D., Cianci, M., Messori, L., & Ciurli, S. (2021). Kinetic and structural analysis of the inactivation of urease by mixed-ligand phosphine halide Ag(I) complexes. *Journal of Inorganic Biochemistry*, 218, 111375. <https://doi.org/10.1016/j.jinorgbio.2021.111375>
- Mundriyastutik, Y., Kusumatuti, D., & Tuzzahroh, F. (2021). Evaluasi kadar formaldehid ikan teri (*Stolephorus Heterolobus*) asin dengan metode spektrofotometri UV-Vis. *Indonesia Jurnal Farmasi*, 5(2), 19. <https://doi.org/10.26751/ijf.v5i2.1174>
- Muslihah, N. I., Zufahair, Z., Ningsih, D. R., & Nuradha, F. (2024). The characteristics of urease enzyme of green bean seeds (*Vigna radiata* L.) and its activity as an antifungal against *Candida albicans*. *Jurnal Kimia Sains Dan Aplikasi*, 27(3), 145–150. <https://doi.org/10.14710/jksa.27.3.145-150>
- Nisah, K., & Nadhifa, H. (2020). Analisis kadar logam Fe dan Mn pada air minum dalam kemasan (AMDK) dengan metode spektrofotometri serapan atom. *Amina*, 2(1), 6–12. <https://doi.org/10.22373/amina.v2i1.491>
- Nisak, F. (2021). Ekstraksi dan karakterisasi enzim urease dari biji pare (*Momordica charantia* L.) serta uji antibakteri terhadap *Escherichia coli*. *Skripsi*. Universitas Jenderal Soedirman.
- Nurhayati, T., Nugraha, R., & Lihuana, D. N. (2020). Characterization of ammonium sulphate fraction trypsin isolated from intestine of little tuna. *Jurnal Pengolahan Hasil Perikanan Indonesia*, 23(2), 372–382. <https://doi.org/10.17844/jphpi.v23i2.32221>
- Nurkhotimah, N., Yuliati, E., & Rahmawati, A. (2017). Pengaruh suhu dan pH terhadap aktivitas enzim fosfatase bakteri termofilik Sungai Gendol pasca erupsi Merapi. *Kingdom (The Journal of Biological Studies)*, 6(8), 465–471. <https://doi.org/10.21831/kingdom.v6i8.7891>
- Nurrokhayati, N. (2022). Karakterisasi enzim urease dari biji pare (*Momordica charantia* L.). *Skripsi*. Universitas Jenderal Soedirman.
- Poolperm, S., & Jiraungkoorskul, W. (2017). An update review on the anthelmintic activity of bitter gourd, *Momordica charantia*. *Pharmacogn. Rev.*, 11(21), 31–34. https://doi.org/10.4103/phrev.phrev_52_16
- Ratnayani, O., Yulianthi, P. E., & Wirajana, I. N. (2021). Fraksinasi selulase mikroba selulolitik dengan amonium sulfat dan amobilisasi pada agar-agar

- komersial. *Indonesian Journal of Applied Chemistry*, 9(1), 1–9.
- Rejeki, D. S., Cahyanta, A. N., & Musiyam, S. A. (2023). Pengaruh metode pengemasan terhadap kadar protein pada tempe. *Kunir: Jurnal Farmasi Indonesia*, 1(2), 10–17. <https://doi.org/10.36308/kjfi.v1i2.555>
- Rosnah., & Haryoto. (2024). Isolasi dan identifikasi ekstrak etanol biji pare. *Jurnal Ners*, 8, 1252–1257.
- San, H. Y. (2019). Purification, immobilization and application of urease enzyme from pigeonpea seeds (*Cajanus cajan* L.). *Journal of the Myanmar Academy of Arts and Science*, XVII(1).
- Sattar, H., Aman, A., & Qader, S. A. U. (2018). Agar-agar immobilization: An alternative approach for the entrapment of protease to improve the catalytic efficiency, thermal stability and recycling efficiency. *International Journal of Biological Macromolecules*, 111, 917–922. <https://doi.org/10.1016/j.ijbiomac.2018.01.105>
- Setiawan, S. N. (2024). Amobilisasi dan karakterisasi urease dari biji kacang buncis (*Phaseolus vulgaris* L.) menggunakan matriks alginat. *Skripsi*. Universitas Jenderal Soedirman.
- Silaban, R., Nurhayati, T., & Abdullah, A. (2025). Ekstraksi dan karakterisasi enzim tripsin dari jeroan ikan bandeng (*Chanos chanos*) hasil purifikasi parsial. *JPHPI: Jurnal Pengolahan Hasil Perikanan Indonesia*, 28(1), 24–37.
- Sinha, D. R. (2022). Protein biochemistry and enzymology: purification of enzymes. In *Biochemistry* (pp. 1–14). Athshala.
- Sinha, S. K., Kumar, A., Kumari, A., & Singh, A. K. (2024). The integrated effect of organic manure, biofertilizer and inorganic fertilizer on soil properties, yield and quality in sugarcane plant-ratoon system under calcareous soil of indo-gangetic plains of India. *Journal of Scientific Research and Reports*, 30(5), 193–206. <https://doi.org/10.9734/jsrr/2024/v30i51934>
- Sudjadi, B., & Laila, S. (2007). *Biologi: sains dalam kehidupan*. Surabaya: Yudhistira Ghalia Indonesia.
- Tripathi, A. D., Darani, K. K., & Srivastava, S. K. (2022). *Novel food grade enzymes: applications in food processing and preservation industries* (A. D. Tripathi, K. K.- Darani, & S. K. Srivastava (eds.)). Singapore: Springer Nature Singapore. <https://books.google.co.id/books?id=1F6LEAAQBAJ>
- Wening, K. W., & Herdyastuti, N. (2021). Imobilisasi enzim papain dengan silika mesopori dan karagenan sebagai bahan pendukung. *Unesa Journal of Chemistry*, 10(3), 268–279.
- Wirajana, I. N., Sirait, R. R., & Suarya, P. (2021). Pemurnian amilase mikroba amilolitik dengan fraksinasi amonium sulfat dan amobilisasi pada agar-agar komersial. *Jurnal Kimia*, 15(1), 41. <https://doi.org/10.24843/jchem.2021.v15.i01.p07>
- Zummah, A., Astuti, E., & Purwono, B. (2023). Penentuan tipe inhibisi senyawa

analog kurkumin CA₂ terhadap enzim α -Glukosidase dari beras lapuk. *Biotropic: The Journal of Tropical Biology*, 7(2), 52–59. <https://doi.org/https://doi.org/10.29080/biotropic.v7i2.1952>

- Zusfahair, Fatoni, A., Ningsih, D. R., & Riapanitra, A. (2021). Determination of Cu and Pb concentrations based on urease activity inhibition of *Durio zibethinus* L. seeds. *Molekul*, 16(2), 92–99. <https://doi.org/10.20884/1.jm.2021.16.2.736>
- Zusfahair, Ningsih, D. R., Fatoni, A., & Pertiwi, D. S. (2018a). Determination of urease biochemical properties of asparagus bean (*Vigna unguiculata ssp sesquipedalis* L.). *IOP Conference Series: Materials Science and Engineering*, 349(1). <https://doi.org/10.1088/1757-899X/349/1/012073>
- Zusfahair, Ningsih, D. R., Lestari, P., Bilalodin, Aryanti, E., & Muslihah, N. I. (2024). Immobilization of urease from *Psophocarpus tetragonolobus* L. DC. using natrium alginate supporting matrix. *Molekul*, 19(1), 8–16. <https://doi.org/10.20884/1.jm.2024.19.1.7335>
- Zusfahair, Z., Ningsih, D. R., Fatoni, A., & Pertiwi, D. S. (2018b). Pemurnian parsial dan karakterisasi urease dari biji kacang panjang (*Vigna unguiculata subsp sesquipedalis* L.). *ALCHEMY Jurnal Penelitian Kimia*, 14(1), 72. <https://doi.org/10.20961/alchemistry.14.1.13000.72-83>
- Zusfahair, Z., Ningsih, D. R., Kartika, D., Fatoni, A., & Permatawati, I. (2017). Immobilization and characterization of *Bacillus thuringiensis* HCB6 amylase in calcium alginate matrix. *Molekul*, 12(1), 70–77.
- Zusfahair, Z., Ningsih, D. R., Putri, D., & Fatoni, A. (2018). Partial purification and characterization of urease from black-eyed pea (*Vigna unguiculata ssp unguiculata* L.). *Malaysian Journal of Fundamental and Applied Sciences*, 14(1), 20–24.