DAFTAR PUSTAKA

Afzal, I., Shinwari, Z. K., Sikandar, S., & Shahzad, S. (2019). Plant beneficial endophytic bacteria: Mechanisms, diversity, host range and genetic determinants. *Microbiological Research*, *221*, 36–49. https://doi.org/https://doi.org/10.1016/j.micres.2019.02.00

Ahmed, R., Khan, M. S., Javed, S., & Ahmad, A. (2020). Screening and characterization of L-asparaginase producing bacterial endophytes from medicinal plants. *Journal of Genetic Engineering and Biotechnology*, 18(1), 1–10. https://doi.org/10.1186/s43141-020-00057-5

Ahnaf, T. R., Sarkar, P., Shikdar, Md. E., & Saha, S. (2023). A Systematic Review On Chemical And Pharmacological Activities Of Excoecaria Agallocha: A Potential Sundarban Plant. *Khulna University Studies*, *20*(2), 140–159. https://doi.org/10.53808/kus.2023.20.02.1092-ls

Aji, O. R., & Lestari, I. D. (2020). Bakteri Endofit Tanaman Jeruk Nipis (Citrus aurantifolia) Penghasil Asam Indol Asetat (AIA). *Al-Kauniyah: Jurnal Biologi*, *13*(2), 179–191. https://doi.org/10.15408/kauniyah.v13i2.13044

Ariyanti, N., Rahmawati, D., & Sari, R. (2022). Potensi enzim L-asparaginase dalam industri pangan berbasis pati: Kajian aplikasi dan prospek. *Jurnal Teknologi dan Industri Pangan Indonesia*, 33(2), 85–94. https://doi.org/10.22146/jtipi.2022.33.2.85

Barka, E. A., Vatsa, P., Sanchez, L., Gaveau-Vaillant, N., Jacquard, C., Meier-Kolthoff, J. P., & Clément, C. (2016). *Taxonomy, physiology, and natural products of Actinobacteria*. Microbiology and Molecular Biology Reviews, 80(1), 1–43. https://doi.org/10.1128/MMBR.00019-15

Bej, A. K., Mondal, P., & Dey, A. (2020). *Genomic insights into Pantoea anthophila reveal genes associated with hydrolytic enzymes and secondary metabolite production including L-asparaginase*. Microbial Genomics, 6(8), e000421. https://doi.org/10.1099/mgen.0.000421

Benny, M. (2017). *Antileukemic activity of L-asparaginase produced by estuarine Aeromonas species*. Journal of Marine Biotechnology, 5(3), 123–127.

Chen, L., Wang, Q., Jiang, J., & Zhang, Y. (2019). Efficient DNA extraction and PCR amplification protocol for mangrove plants rich in polyphenols and polysaccharides. *Plant Methods*, **15**(1), 1–8. https://doi.org/10.1186/s13007-019-0447-3

Chen, Y., Huang, Z., & Tang, L. (2021). Invisible red in young leaves: Anthocyanin likely plays a defensive role in some other way beyond visual warning. *Flora: Morphology, Distribution, Functional Ecology of Plants*, *280*, 1–7. https://doi.org/10.1016/j.flora.2021.151833

Clarridge, J. E. (2004). *Impact of 16S rRNA gene sequence analysis for identification of bacteria on clinical microbiology and infectious diseases*. Clinical Microbiology Reviews, 17(4), 840–862. https://doi.org/10.1128/CMR.17.4.840-862.2004

Compant, S., Cambon, M. C., Vacher, C., Mitter, B., Samad, A., Sessitsch, A., & Mathieu, F. (2021). *The plant endosphere world – bacterial life within plants*. Environmental Microbiology, 23(8), 3658–3674. https://doi.org/10.1111/1462-2920.15616

Cutting, S. M. (2021). *Bacillus probiotics*. Food Microbiology, 96, 103–112. https://doi.org/10.1016/j.fm.2020.103701

Dalimunthe, R., Khairuddin, & Tambunan, E. P. (2023). Efektivitas dan Validitas Modul Keanekaragaman Tumbuhan Berbasis Pemanfaatan Tanaman Obat Oleh Etnis Batak Sumatera Utara Sebagai Sumber Belajar Biologi Siswa Kelas X. *Journal on Education*, *05*(04), 15895–15901.

Delgado-Baquerizo, M., Oliverio, A. M., Brewer, T. E., Benavent-González, A., Eldridge, D. J., Bardgett, R. D.,& Fierer, N. (2018). *A global atlas of the dominant bacteria found in soil*. Science, 359(6373), 320–325. https://doi.org/10.1126/science.aap9516

Desai, M. C., & Varma, A. (2020). Standard protocols for metagenomic DNA extraction and quality assessment from environmental samples. *Methods in Molecular Biology*, **2100**, 15–25. https://doi.org/10.1007/978-1-0716-0215-7_2

Duan, Q. Z. M. Z. L. Z. G. (2013). Flagella and bacterial pathogenicity. *Journal of Basic Microbiology*, *53*(1), 1–8.

Duraikannu, K., & Prabhu, S. (2021). *Production, purification and characterization of thermostable L-asparaginase from Klebsiella pneumoniae with potential anticancer activity*. Journal of Applied Microbiology, 131(3), 1215–1224. https://doi.org/10.1111/jam.15032

Dwijayati, A. K., Suprapto, D., Program, S. R., Manajemen, S., Perairan, S., Perikanan, F., & Kelautan, I. (2016). Identification of Potential and Development Srategy of Ecotourism In Mangrove Forest Conservation Area of Pasar Banggi Village Rembang Regency. In *Diponegoro Journal Of Maquares* (Vol. 5, Issue 4). http://ejournal-s1.undip.ac.id/index.php/maquares

Elawati, N. E., Lestari, C. R., Marco, M. A., Dewi, S. P., & Ramadan, B. S. (2023). Metagenomic Analysis of Microbial Communities from Coal Waste. *Biosaintifika*,*15*(3),306–313. https://doi.org/10.15294/biosaintifika.v15i3.47865

Eldeen, I. M. S., & Effendy, M. A. W. (2013).*Antimicrobial agents from mangrove plants and their endophytes*. https://api.semanticscholar.org/CorpusID:29842729

El-Gendy, A. O., Ahmed, E. F., & Abdallah, N. A. (2020). *Marine Vibrio species as a source of L-asparaginase with potential antitumor activity*. Egyptian Journal of Aquatic Biology & Fisheries, 24(3), 121–132.

El-Sayed, W. S., Rady, A. M., & El-Sayed, A. K. (2022). *Production, purification, and characterization of L-asparaginase from endophytic Enterobacter sp. isolated from medicinal plant*. Journal of Genetic Engineering and Biotechnology, 20(1), 1–10. https://doi.org/10.1186/s43141-022-00342-1

Elshikh, M., Ahmed, S., & Al-Shehri, M. (2021). Therapeutic potential of microbial L-asparaginase in the treatment of acute lymphoblastic leukemia and other cancers. *Biotechnology Reports*, 29.

Faisal, H. K. P., Zaini, J., Yunus, F., Pulmonologi, D., Respirasi, K., & Kedokteran, F. (2020). Next-Generation Sequencing pada Kanker Paru. *EJKI*, *8*(2), 148–156. https://doi.org/10.23886/ejki.8.11579

Felsenstein, J. (2004). *Inferring phylogenies*. Sunderland, MA: Sinauer Associates.

Ginting, L., & Kusdiyantini, E. (2020). Isolasi Bakteri Endofit Tanaman Pepaya (Carica Papaya L.) Dan Uji Aktivitas Enzim Amilase. In *Berkala Bioteknologi* (Vol. 3, Issue 2).

Harianto, S. P., Iswandaru, D., & Djoko Winarnoi, G. (2015). *Analisis Obyek Daya Tarik Wisata Hutan Mangrove (Studi Kasus Di Desa Purwerejo Kecamatan Pasir Sakti Kabupaten Lampung Timur)*

Hartawan, I. G., Arsa, M., Komang Ariati, N., & Nengah Wirajana, dan I. (2015). Isolasi DNA Metagenomik dari Madu dengan dan Tanpa Pengayaan Media LB (Luria-Bertani). *Jurnal Kimia*, *7*(2), 189–195.

Hashem, A., Tabassum, B., & Abd_Allah, E. F. (2022). *Bacillus subtilis: A plant-growth promoting rhizobacterium that also acts as a biocontrol agent*. Saudi Journal of Biological Sciences, 29(3), 1243–1250. https://doi.org/10.1016/j.sjbs.2021.11.054

Hassanudin, N., Rahman, A., & Zulkifli, N. (2023). *Production and optimization of L-asparaginase from marine Vibrio alginolyticus isolated from seawater samples*. Journal of Marine Biotechnology, 31(2), 115–124.

Hendrayanti, D., Prihantini, N. B., Ningsih, F., & Maulana, F. (2023). Next Generation Sequencing (NGS) for Cyanobacterial study in Agung and Sunter Barat Lakes, North Jakarta, Indonesia. *Biodiversitas*, *24*(2), 1117–1124. https://doi.org/10.13057/biodiv/d240251

Hossain, M. B., Masum, Z., Rahman, M. S., Yu, J., Noman, M. A., Jolly, Y. N., Begum, B. A., Paray, B. A., & Arai, T. (2022). Heavy Metal Accumulation and Phytoremediation Potentiality of Some Selected Mangrove Species from the World's Largest Mangrove Forest. *Biology*, *11*(8), 216–233. https://doi.org/10.3390/biology11081144

Hossain, S., & Aoshima, H. (2009). *Antioxidative and anti-histamine-release activities of Excoecaria agallocha L*. https://www.researchgate.net/publication/234237296

Hosseini, K., Zivari-Ghader, T., Akbarzadehlaleh, P., Ebrahimi, V., Sharafabad, B. E., & Dilmaghani, A. (2024). A Comprehensive Review of L-Asparaginase: Production,

Applications and Therapeutic Potential in Cancer Treatment. *Applied Biochemistry and Microbiology*, *60*(4), 599–613. https://doi.org/10.1134/S0003683823602937

Janda, J. M., & Abbott, S. L. (2021). *16S rRNA gene sequencing for bacterial identification in the diagnostic laboratory: Pluses, perils, and pitfalls*. Journal of Clinical Microbiology, 45(9), 2761–2764. https://doi.org/10.1128/JCM.01228-07

Kaliamurthi, S., & Selvaraj, G. (2016). Insight on Excoecaria agallocha: An Overview. *Natural Products Chemistry & Research*, *04*(02), 1–6. https://doi.org/10.4172/2329-6836.1000203

Kämpfer, P. (2012). *The family Enterobacteriaceae*. In M. Dworkin (Ed.), The Prokaryotes (pp. 443–490). Springer. https://doi.org/10.1007/978-3-642-30197-1_177

Kaur, H., Singh, R., & Bhatia, R. (2022). *Production and characterization of L-asparaginase from Pantoea dispersa isolated from agricultural soil*. Journal of Biotechnology, 349, 45–53. https://doi.org/10.1016/j.jbiotec.2022.03.012

Kumar, A., Patel, J. S., Meena, V. S., & Ramteke, P. W. (2016). *Bacillus as PGPR in crop ecosystem*. In D. P. Singh et al. (Eds.), Plant Growth Promoting Rhizobacteria for Sustainable Stress Management (pp. 37–59). Springer. https://doi.org/10.1007/978-981-10-0388-2_3

Kumar, A., Sharma, R., & Singh, K. (2020). *Optimization and production of L-asparaginase from Bacillus altitudinis isolated from soil*. Journal of Applied Biology and Biotechnology, 8(4), 45–52. https://doi.org/10.7324/JABB.2020.80407

Kumar, P., Dubey, R. C., & Maheshwari, D. K. (2020). Bacillus strains isolated from rhizosphere showed plant growth promoting and antagonistic activity against phytopathogens. *Microbiological Research*, 181, 73–81. https://doi.org/10.1016/j.micres.2015.08.001

Kumar, S., Rani, R., & Mehta, R. (2021). *Production and characterization of L-asparaginase from Enterobacter hormaechei isolated from soil samples*. Journal of Genetic Engineering and Biotechnology, 19(1), 87–96. https://doi.org/10.1186/s43141-021-00172-9

Kurniawan, A., Febrianti, D., Sari, S., & Asriani, E. (2018). Isolasi dan Identifikasi Bakteru Pendegredasi Selulosa Asal Ekosistem Mangrove Tukak Sadai, Bangka Selatan. *Jurnal Perikanan Pantura*, *1*(2), 9–16.

Kurniawan, R., Nurhidayat, N., & Rahmawati, E. (2021). *Characterization of L-asparaginase enzyme from Bacillus sp. isolated from mangrove rhizosphere*. Biodiversitas Journal of Biological Diversity, 22(6), 3171–3176. https://doi.org/10.13057/biodiv/d220619

Lin, H., Liu, C., Peng, Z., Tan, B., Wang, K., & Liu, Z. (2022). Distribution pattern of endophytic bacteria and fungi in tea plants. *Frontiers in Microbiology*, *13*. https://doi.org/10.3389/fmicb.2022.872034

Liu, C., Guo, X., Wu, W., Zhang, J., Du, G., & Chen, J. (2019). *Metagenomic insights into the microbial community and functional genes in fermented vegetables*. Food Microbiology, 83, 1–10. https://doi.org/10.1016/j.fm.2019.02.004

Liu, Y., Wang, Y., & Zhao, G. (2020). *Uncultured microorganisms in mangrove ecosystems: Diversity, functions, and ecological roles*. Frontiers in Microbiology, 11, 1792. https://doi.org/10.3389/fmicb.2020.01792

Mahajan, R. V., Saran, S., & Saxena, R. K. (2018). *Purification and biochemical characterization of L-asparaginase from mangrove-associated Enterobacter hormaechei*. Biocatalysis and Agricultural Biotechnology, 16, 235–242. https://doi.org/10.1016/j.bcab.2018.07.004

Malfanova, N. V. (2013). *Endophytic bacteria with plant growth promoting and biocontrol abilities*.

Mondal, S., Ghosh, D., & Ramakrishna, K. (2016). A complete profile on blind-your-eye mangrove Excoecaria agallocha L. (Euphorbiaceae): Ethnobotany, Phytochemistry, and Pharmacological Aspects. In *Pharmacognosy Reviews* (Vol. 10, Issue 20, pp. 123–138). Medknow Publications. https://doi.org/10.4103/0973-7847.194049

Mulyani, R., Handayani, S., & Yusuf, M. (2023). Potensi bakteri endofit penghasil enzim hidrolitik dari tanaman mangrove. *Indonesian Journal of Applied Biology*, 5(1), 45–56. https://doi.org/10.25077/ijab.2023.5.1.45

Nafisaturrahmah, A., Susilowati, A., & Pangastuti, A. (2023). Optimization of L-asparaginase production from endophytic bacteria isolated from the mangrove Rhizophora mucronata. *Nusantara Bioscience*, *15*(2), 279–287. https://doi.org/10.13057/nusbiosci/n150215

Nengah Wirajana, I., Yuliana, D. A., & Ratnayani, D. K. (2013). Isolasi DNA Metagenomik dari Tanah Hutan Mangrove Pantai Suwung Bali. *Jurnal Kimia*, *7*(1), 19–24.

Nguyen, T. H., Tran, P. T., Le, Q. T. P., & Pham, T. T. (2020). Metagenomic analysis of endophytic bacteria associated with mangrove plants reveals diverse microbial communities and functional genes. *Frontiers in Microbiology*, 11, 569845. https://doi.org/10.3389/fmicb.2020.569845

Nuro, F. (2017). *METAGENOM: Penelusuran Makhluk Tak Kasat Mata dalam Tanah*. https://www.researchgate.net/publication/323186419

Nyoman Purwani, N. (2018). *ENZIM: Aplikasi di Bidang Kesehatan sebagai Agen Terapi Enzyme: Medical Application as Theraphy Agent* (Vol. 9, Issue 2).

Okamoto, T., Shinjo, R., Nishihara, A., Uesaka, K., Tanaka, A., Sugiura, D., & Kondo, M. (2021). Genotypic Variation of Endophytic Nitrogen-Fixing Activity and Bacterial Flora in Rice Stem Based on Sugar Content. *Frontiers in Plant Science*, *12*. https://doi.org/10.3389/fpls.2021.719259

Patel, R., Mehta, P., & Dholakiya, B. (2020). *Microbial L-asparaginase: A promising enzyme for therapeutic applications*. 3 Biotech, 10(5), 207. https://doi.org/10.1007/s13205-020-02201-y

Pattnaik, S., Ahmed, S. A., & Das, N. (2000). *Production of L-asparaginase by Aeromonas species isolated from freshwater habitat*. Indian Journal of Experimental Biology, 38(11), 1173–1176.

Pricilia, S., Astuti, W., & Marliana, E. (2018). *Skrining Bakteri Endofit Penghasil Amilase, Lipase dan Protease dari Daun Macaranga hullettii King ex Hook.f.*

Prihanto, A. A., Ardiansyah, R. F., & Pradarameswari, K. A. (2019). Identifikasi Molekuler Bakteri Endofit Penghasil L-asparaginase yang Diisolasi dari Mangrove Buta-Buta *(Excoecaria agallocha)*. *Jurnal Pascapanen Dan Bioteknologi Kelautan Dan Perikanan*, *14*(1), 29. https://doi.org/10.15578/jpbkp.v14i1.577

Purwanto, D. (2021). Analisis kualitas DNA hasil isolasi untuk identifikasi molekuler mikroorganisme. *Jurnal Bioteknologi dan Biosains Indonesia*, 8(2), 97–104. https://doi.org/10.29122/jbbi.v8i2.2021

Purwoko, D., Civi Cartealy, I., Tajuddin, T., Dinarti, D., Bioteknologi, B., Gedung, B., Puspiptek, K., & Selatan, T. (2018). *Analisis Bioinformatika Berbasis Web pada Sekuen Genom Parsial Sagu (Metroxylon sagu Rottb.)* (Vol. 5). http://ejurnal.bppt.go.id/index.php/JBBI

Puspitasari, D. (2018). *Pengaruh Metode Perebusan terhadap Uji Fitokimia Daun Mangrove Excoecaria agallocha* (Vol. 3, Issue 2).

Puspitasari, O. (2010). Isolasi Enzim L-Asparaginase dari Rimpang Temulawak (Curcuma xanthorrhiza Roxb.) dan Uji Potensi terhadap Kultur Sel Leukemia Tipe K562. *Jurnal Kimia Sains Dan Aplikasi*, *13*(2), 61–65.

Putra, W. A., Diharmi, A. R., & Karnila, R. (2021). Aktivitas Ekstrak Kasar Enzim Kolagenase dari Organ Dalam Ikan Malong *(Congresox talabon)* pada pH Berbeda. *Jurnal Teknologi Dan Industri Pertanian Indonesia*, *13*(1), 27–30. https://doi.org/10.17969/jtipi.v13i1.18587

Rahman, M., Hasan, R., & Kabir, M. S. (2023). Exploring L-asparaginase producing endophytic bacteria: Diversity, biotechnological applications, and therapeutic potential. *Frontiers in Bioengineering and Biotechnology*, 11, 1132448. https://doi.org/10.3389/fbioe.2023.1132448

Rawana. (2022). Pengaruh Jenis dan Konsentrasi Hormon pada Stek Batang *Excoecaria agallocha* Effect of Type and Concentration of Hormone on Excoecaria Agallocha Stem Cutting. In *Jurnal Hutan Tropis* (Vol. 10, Issue 3). Cetak.

Risnoyatiningsih, S. (2008). Yellow Sweet Potato Starch Hydrolisis Into Glucose EnNZYMATICALLY. In *Jurnal Teknik Kimia* (Vol. 3, Issue 1).

Ryan, R. P., Germaine, K., Franks, A., Ryan, D. J., & Dowling, D. N. (2008). Bacterial endophytes: recent developments and applications. *FEMS Microbiology Letters*, *278*(1), 1–9. https://doi.org/10.1111/j.1574-6968.2007.00918.x

Saeed, M., Jamil, Z., Shehzad, T., Hasan, S. Z. ul, Bibi, R., Malik, S. N., Matee-ur-Rehman, H., & Ahmed, R. (2023). Role of Next Generation Sequencing (NGS) in Plant Disease Management: A Review. *Journal of Applied Research in Plant Sciences*, *4*(01), 512–517. https://doi.org/10.38211/joarps.2023.04.01.61

Safitri, I., Kushadiwijayanto, A. A., Nurdiansyah, S. I., Sofiana, M. S. J., & Andreani, A. (2023). Inventarisasi Jenis Mangrove di Wilayah Pesisir Desa Sungai Nibung, Kalimantan Barat. *Jurnal Ilmu Lingkungan*, *22*(1), 109–124. https://doi.org/10.14710/jil.22.1.109-124

Sahu, M. K., Mishra, R., & Nayak, S. (2021). *Purification and characterization of L-asparaginase from Bacillus altitudinis with anticancer potential*. International Journal of Biological Macromolecules, 182, 1669–1677. https://doi.org/10.1016/j.ijbiomac.2021.05.067

Sharma, A., Shankhdhar, D., & Shankhdhar, S. C. (2017). *Bacillus as a biofertilizer and biocontrol agent*. In A. A. Ansari (Ed.), Plant-Microbe Interactions (pp. 37–59). Springer. https://doi.org/10.1007/978-981-10-6593-4_3

Simbolo, M., Gottardi, M., Corbo, V., Fassan, M., Mafficini, A., Malpeli, G., ... & Scarpa, A. (2013). DNA qualification workflow for next generation sequencing of histopathological samples. *PLoS ONE*, **8**(6), e62692. https://doi.org/10.1371/journal.pone.0062692

Singh, P., Chauhan, N., & Verma, A. (2020). *Optimization and molecular characterization of L-asparaginase produced by Pantoea agglomerans isolated from rhizosphere soil*. International Journal of Biological Macromolecules, 153, 307–315. https://doi.org/10.1016/j.ijbiomac.2020.03.238

Singh, P., Tiwari, V., & Gupta, N. (2022). *Genome analysis of Bacillus altitudinis reveals the presence of ansA gene encoding L-asparaginase enzyme*. Biotechnology Reports, 33, e00738. https://doi.org/10.1016/j.btre.2021.e00738

Suganthi, A., Anitha, K., & Muthusamy, K. (2018). Biotechnological potential of mangrove-associated microorganisms: A review. *Journal of Environmental Biology*, **39**(5), 783–793.

Supriyatna, A., Amalia, D., Jauhari, A. A., & Holydaziah, D. (2015). *Aktivitas Enzim Amilase, Lipase, dan Protease dari Larva*. *IX*(2), 18–32.

Suryaningtyas, E. D., Nurhayati, A. P. D., & Wulandari, N. (2023). Analisis metagenomik komunitas bakteri endofit pada tanaman mangrove di perairan Indonesia. *Jurnal Bioteknologi dan Biosains Indonesia*, **10**(1), 12–20.

Syafira, S., & Rostinawati, T. (2020). *Review Artikel : Produksi Enzim Asparaginase dengan Tekonologi DNA Rekombinan* (Vol. 17).

Thompson, L. R., Sanders, J. G., McDonald, D., Amir, A., Ladau, J., Locey, K. J., ... & Knight, R. (2022). *A communal catalogue reveals Earth's multiscale microbial diversity*. Nature, 631(7584), 1–10. https://doi.org/10.1038/nature24621

Uniprot Consortium. (2024). UniProt: The Universal Protein Knowledgebase in 2024. *Nucleic Acids Research*, 52(D1), D787–D795.

Verma, N., Kumar, K., Kaur, G., & Anand, S. (2022). L-asparaginase: A promising enzyme for therapeutic and industrial applications. *Applied Microbiology and Biotechnology*, 106(3), 1075–1092. https://doi.org/10.1007/s00253-021-11654-5

Vollmers, J., Wiegand, S., & Kaster, A. K. (2017). Comparing and evaluating metagenome assembly tools from a microbiologist's perspective - Not only size matters! In *PLoS ONE* (Vol. 12, Issue 1, pp. 1–31). Public Library of Science. https://doi.org/10.1371/journal.pone.0169662

Wahyuni, D., Santoso, T., & Wibowo, A. (2022). Analisis metagenomik komunitas bakteri endofit pada tanaman mangrove menggunakan gen 16S rRNA. *Biodiversitas Journal of Biological Diversity*, 23(9), 4754–4762. https://doi.org/10.13057/biodiv/d230915

Wakil, S. M., & Adelegan, O. A. (2015). *Production and optimization of L-asparaginase by Bacillus firmus isolated from soil*. Journal of Applied Life Sciences International, 3(4), 176–186. https://doi.org/10.9734/JALSI/2015/15020

Walterson, A. M., & Stavrinides, J. (2015). *Pantoea: Insights into a highly versatile and diverse genus within the Enterobacteriaceae*. FEMS Microbiology Reviews, 39(6), 968–984. https://doi.org/10.1093/femsre/fuv027

Wang, Y., Wu, L., Zhao, Y., & Li, Y. (2020). *Microbial communities in biofilm and their role in wastewater treatment*. Chemosphere, 253, 126649. https://doi.org/10.1016/j.chemosphere.2020.126649

Wang, Y., Wang, Z., Zhang, X., & Liu, L. (2022). Structure and function of microbial communities in industrial biofilms. *Applied Microbiology and Biotechnology*, 104(15), 6491–6502. https://doi.org/10.1007/s00253-020-10741-5

Wang, Y., Zhang, J., & Li, X. (2022). *Genome analysis of Enterobacter hormaechei reveals L-asparaginase synthesis and its potential biotechnological applications*. Biotechnology Reports, 33, e00765. https://doi.org/10.1016/j.btre.2022.e00765

Wangka, M., Wullur, S., Angkouw, E. D., Mamuaja, J. M., Tumbol, R. A., & Ginting, E. L. (2020). Analisis Komunitas Bakteri Pada Sedimen Dari Pulau Bangka Sulawesi Utara. In *Wangka Jurnal Ilmiah Platax* (Vol. 8, Issue 2). http://ejournal.unsrat.ac.id/index.php/platax

Widiawati, D., Marlinsa, E., M, M., & Putra, E. P. (2021). Inventarisasi Jenis Tumbuhan Mangrove di Area Taman Wisata Bhadrika Provinsi Bengkulu. *Jurnal Biosilampari : Jurnal Biologi*, *4*(1), 13–18. https://doi.org/10.31540/biosilampari.v4i1.1340

Widowati, T., Simarmata, R., Nurjanah, L., Nuriyanah, N., & Lekatompessy, S. J. R. (2024). Aktivitas Pemacu Pertumbuhan Tanaman dari Bakteri Endofit Bawang Merah (Allium cepa L.). *Jurnal Ilmu Lingkungan*, *22*(4), 887–893. https://doi.org/10.14710/jil.22.4.887-893

Vilchez, J. I., Yang, Y., He, D., Ziadi, M., Mur, L. A. J., & Ton, J. (2016). *Bacillus spp.: A biological tool for crop improvement through modulation of plant immunity*. Frontiers in Microbiology, 7, 1305. https://doi.org/10.3389/fmicb.2016.01305

Yuan, J., Zhao, Y., & Li, X. (2018). Molecular approaches in studying mangrove microbiomes and their biotechnological potential. *Marine Biotechnology*, **20**(2), 127–139. https://doi.org/10.1007/s10126-017-9797-8

Zhang, Y., Ma, Y., Zhuang, L., Wang, B., & Zhang, H. (2019). *Endophytic bacteria from mangrove plants enhance tolerance to salinity and heavy metals in host plants*. Environmental Science and Pollution Research, 26(31), 31957–31967. https://doi.org/10.1007/s11356-019-06378-y

Zhou, J., Deng, Y., Luo, F., He, Z., & Tu, Q. (2017). *Functional molecular ecological networks reveal the effects of environmental and biotic factors on microbial communities*. Environmental Microbiology, 19(10), 4140–4155. https://doi.org/10.1111/1462-2920.13825

Zulkifli, L., Jekti, D. S., & Mahrus. (2016). Isolasi Bakteri Endofit Dari Sea Grass Yang Tumbuh Di Kawasan Pantai Pulau Lombok Dan Potensinya Sebagai Sumber Antimokroba Terhadap Bakteri Patogen. *Jurnal Biologi Tropis*, *16*(2), 80–93.

`