

## DAFTAR PUSTAKA

- Agustin, A.W. Sudarti, S. & Yushardi, Y., 2023. Potensi Pemanfaatan Biogas Dari Sampah Organik Sebagai Sumber Energi Terbarukan. *INSOLOGI: Jurnal Sains dan Teknologi*, 2(6), pp. 1109-1116.
- Alrumman, S., Mostafa, Y., Al-Qahtani, S., & Taha, T., 2018. Hydrolytic Enzyme Production by Thermophilic Bacteria Isolated from Saudi Hot Springs. *Open Life Sciences*, 13, pp.470-480.
- Andraskar, J., Yadav, S., & Kapley, A., 2021. Challenges and Control Strategies of Odor Emission from Composting Operation. *Applied Biochemistry and Biotechnology*, 193, pp. 2331-2356.
- Azkiya, R. A. N., 2021. Degradasi Sampah Organik Buah dan Sayur Menggunakan Konsorsium Bakteri Selulolitik, Amilolitik, Proteolitik, dan Lipolitik dengan Waktu Inkubasi Berbeda. *Skripsi*. Purwokerto: Unsoed.
- Cahyani, V., Rahayu, R., Lakshitarsari, K., Megow, R., & azzahra, N., 2023. Composting of Rice Straw-Based Materials using Aerobic Bioactivator Isolated from Rice Straw, Mahogany Bark and Cassava Peels. *Caraka Tani : Journal of Sustainable Agriculture*.
- Cheah, Y., Dosta, J., & Mata-Alvarez, J., 2019. Enhancement of Volatile Fatty Acids Production from Food Waste by Mature Compost Addition. *Molecules*, 24.
- Chukwuma, O., Rafatullah, M. Kapoor, R., Tajaradin, H., Ismail, N., Alam, M., & Siddiqui, M., 2025. Optimization and Comparative Study of Bacillus Consortia for Cellulolytic Potential and Cellulase Enzyme Activity. *Open Life Sciences*, 20.
- Daswito, R., Dwiyanto, M., & Safitri, M., 2025. Bioaktivator Limbah Ikan vs EM4: Solusi Hijau untuk Pengomosan Cepat Sampah organik Pasar. *tropical Public Health Journal*, p. 20165.
- Deng, L., Zhao, Y., Zhang, J., Bello, A., Sun, Y., Han, Y., wang, B., egbeagu, U., Li, D., Jong, C., & Xu, X., 2020. Insight to Nitrification During Cattle Manure-Maize Straw and Biochar Composting in Terms of Multi-Variable Interaction. *Bioresource technology*, 323, pp. 124572.
- Farghali, M., Chen, Z., Osman, A., Ali, I., Hassan, D., Ihara, I., Rooney, D., & Yap, P., 2024. Strategies for Ammonia Recovery from Wastewater : a Review. *Environmental Chemistry Letters*.
- Fatimah, S., Said, M., Hatta, W., Sirajuddin, S., Al-Tawaha, A., & Al-Tawaha, A., 2022. Quality of Compost Combination of Feces from Cattle and Laying Hens using Rice Waste a Decomposer Media. *Advances in Environmental Biology*.
- Fatmalia, E. & Yuliansari, D., 2022. Kualitas Kompos dari Sampah Organik Rumah Tangga Menggunakan Variasi Jenis Mikroorganisme Lokal. *Bioscientist: Jurnal Ilmiah Biologi*, 10(2), pp. 984-995.
- Gajbhiye, M., Patil, S., Awate, S., Kokare, S., Terdale, S., & Dubey, M., 2025. Valorization of Rice Stubble Through Biodegradation Using Hydrolytic Enzyme Producing Olivibacter oleidegradans CMB10 and Agrobacterium Pusense SFMB. *Heliyon*, 11.

- Ibrahim, J., & Majeed, A., 2023. Organic Solid Waste in Vessel Composting System. *Journal of Engineering*.
- Irdawati, I., Matondang, I., Advinda, L., Anhar, A., & Y, Y., 2023. Compatibility Test Consortium of Thermophilic Bacteria Producing Xylanase Enzym from The Hot Water of Mudiak Sapan (MS18, MSS15, MSS11, MS16). *Jurnal Biologi Tropis*.
- Iqbal, M, Shafiq, T., & Ahmed, K., 2010. Characterization of Bulking Agents and its Effects on Physical Properties of Compost. *Bioresource technology*, 101, pp.191-193.
- Jamir, L., Singhal, P., Goyal, S., Khajuria, S., Rakhra, G., Aochen, C., & Gupta, M., 2022. Development of Microbial Consortium for Degradation of Organic Kitchen Waste. *Nova Biotechnologica et Chimica.*, 19.
- Jiang, J., Liu, X., Huang, Y., & Huang, H., 2015. Inoculation with Nitrogen Turnover Bacterial Agent Appropriately Increasing Nitrogen and Promoting Maturity in Pig Manure Composting. *Waste Management*, 39, pp.78-85.
- Jiang, K., Cheng, Z., Lou, Z., Wang, L.H., Xu, B., & Jin, N., 2021. Chemical and Olfactive Impacts of Organic Matters on Odor Emission Patterns from The Simulated Construction and Demolition Waste Landfills. *Journal of Environmental Science*, 103, pp. 196-206.
- Le, T., Fettig, J., & Meon, G., 2019. Kinetics and Simulation of Nitrification at Various pH Values of a Polluted River in the Tropics. *Ecohydrology & Hydrobiology*.
- Li, K., Zhang, L., Zhou, F., Yang, K., Zhan, M., Su, Y., Wu, D., & Xie, B., 2024. Revealing Mechanism of NH<sub>3</sub> and N<sub>2</sub>O Emissions Reduction in The Rapid Bio-Drying of Food Waste : Insights from Organic Nitrogen Composition and Microbial Activity. *The Science of The Total Environment*, pp. 173353
- Li, T., Zhang, X., Wang, X., Yan, Z., Peng, C., Zhao, S., Xu, D., Liu, D., & Shen, Q., 2023. Effect of Inoculating Thermophilic Bacterial Consortia on Compost Efficiency and Quality. *Waste Management*, 170, pp. 341-353.
- Ma, Y., Wang, J., Zhang, Y., Guan, W., Qi, W., Tai, X., Lin, D., He, R., Sun, L., & Zhang, A., 2025. Research on Nitrogen Transformation Pathways of A Thermophilic Heterotrophic Nitrifying Bacterial Consortium GW7. *Frontiers in Microbiology*, 16.
- Mentari, F.S.D. Yuanita, Y. & Roby, R., 2021. Pembuatan Kompos Ampas Tebu dengan Bioaktivator MOL Rebung Bambu. *Buletin Poltanesa*, 22(1), pp. 1-6.
- Mironov, V., Zhukov, V., Efremova, K., & Brinton, W. 2024. Enhancing Aerobic Composting of Food Waste by Adding Hydrolytically Active Microorganism. *Frontiers in Microbiology*, 15.
- Neugebauer, M., Solowiej, P., Piechocki, J., Czekala, W., & Janczak, D., 2017. The Influence of the C:N ration on The Composting Rate. *International Journal of Smart Grid and Clean Energy*, 6, pp. 54-60.
- Nguyen, V., Le, T., Bui, X., Nguyen, T., Vo, T., Lin, C., Vu, T., Nguyen, H., Nguyen, D., Senoro, D., & Dang, B., 2020. Effects of C/N ratios and Turning

- Frequencies on the Composting Process of Food Waste and Dry Leaves. *Bioresources Technology Reports*, 11, pp.100527.
- Nurhamsry, B.G., 2021. Biodegradation of Organic Waste at Different Incubation Times Using Bacterial Consortium Producing Amylase, Cellulase, Lipase, and Protease. *Skripsi*. Purwokerto: Fakultas Biologi Universitas Jenderal Soedirman .
- Puspitasari, D.P., 2017. C/N Rasio pada Serasah Daun dan Ranting Mangrove (*Avicennia alba*) di Unit Pelaksanaan Teknis (UPT) Budidaya Air laut dan Air Payau
- Putri, K., Jumar, J., & Saputra, R., 2022. Evaluasi Kualitas Kompos Limbah Baglog Jamur Tiram Berbasis Standar Nasional Indonesia dan Uji Perkecambahan Benih pada Tanah Sulfat Masam. *Agrotechnology Research Journal*.
- Qiao, C., Qiao, C., Penton, C., Liu, C., Shen, Z., Ou, Y., Liu, Z., Xu, X., Li, R., & Shen, Q., 2019. Key Extracellular Enzymes triggered High-Efficiency Composting Associated with Bacterial Community Sucession. *Bioresource technology*, 288, pp. 121576
- Rosmania & Yanti, F., 2020. Perhitungan Jumlah Bakteri di Laboratorium Mikrobiologi Menggunakan Pengembangan Metode Spektrofotometri. *Jurnal Penelitian Sains*, 22(2), pp. 76-86
- Sadeli, A. Wulandari, A. Sinuraya L. Mirwandhono, E. & H.L., 2022. The Comparative of Activator Effect adn Fermentation Time on Nutrient Quality, Physical Quality (Temperature, pH) in Compost. *IOP Conference Series: Earth and Enviromental Science*, 977(1), p. 012130.
- Safitri, R. N., Shovitri, M. & Hidayat., 2018. Potensi Bakteri Koleksi sebagai Biofertilizer. *Jurnal Sains dan Seni*, 7(2), pp. 2337-3520.
- Saputri, M. & Suhandoyono, S., 2024. The Effectivity of EM4 Made From Bacteria Bacillus sp. For Composting Household Waste and On The Growth of Cayyene Pepper Plant (*Capsicum frustencens* L.). *Indonesian Journal of Bioscience (IJOBI)*, p. 620
- Sarijan, A. Ekowati, N. Widijastuti, R. & Panga, N.J., 2023. Pelatihan Pembuatan Bioaktivator dari Limbah Udang dan Nanas di Kampung Yasamulya SP 2 Kabupaten Merauke, Provinsi Papua Selatan.. *Jurnal Abdi Masyarakat Indonesia*, 3(1), pp. 153-162.
- SNI 19-7030-2004, 2004. Spesifikasi Kompos dari Organik Domestik. Jakarta : Badan Standarisasi Nasional.
- Sumiyati, S., Priyambada, I., Zahra, S., Pradhana, D., Haritsa, R., Rahman, T., Haq, M., & Harjanti, A., 2022. Addition of Local Microorganisms (MOL) Organic Waste as Compost Bioactivator. *IOP Conference Series : Earth and Enviromental Science*, p. 1098
- Supadma, A. Mega, I. & Dana I., 2019. Kajian Kualitas Beberapa Pupuk Kompos Produksi Simantri di Daerah Bali Sesuai dengan Standar Nasional Indonesia Tahun 2004 (SNI 19-7030-2004). *Agrotop : Journal on Agriculture Science*.

- Susilowati, L. Arifin, Z. & Kusumo, B., 2021. Pengomposan sampah organik rumah tangga dengan dekomposer lokal di desa narmada, kabupaten lombok barat. *JMM (Jurnal Masyarakat Mandiri)*, 5(1), pp. 34-45.
- Syafria, H., 2022. Karakteristik Kompos dengan Penambahan Effective Microorganism<sup>4</sup> (EM4) untuk Pupuk Tanaman Pakan. *Jurnal Peternakan Indonesia (Indonesian Journal of Animal Science)*.
- Syakir, A. Haryadi, H. & Firdaus, M., 2024. Pembuatan Pupuk Kompos Berbahan Baku Sampah Organik Desa Paloh Seulimeng Kecamatan Jeumpa Kabupaten Bireuen. *BERNAS : Jurnal Pengabdian Kepada Masyarakat*, 5(2), pp. 1334-1350.
- Uliyandari, M. Candrawati, E. & Latipah N., 2021. Peningkatan Produktivitas Pupuk Kompos Bioaktivator dengan Bahan Baku Limbah Organik Rumah Tangga. *Aksiologi ; Jurnal Pengabdian Kepada Masyarakat*, 5(2), pp. 203-208.
- Wahyuni, S.A. Rokhimah, A. Mawardah, A., & Maulidya, S., 2019. Pelatihan Pengolahan Sampah Organik Skala Rumah Tangga. *Indonesia Journal of Community Empowerment*, Volume 1161, pp. 51-54.
- Wang, L. Ren, Z. Xu, Z. Liu, L. Chang, R. & Li Y., 2024. Promoting Effect of Ammonia Oxidation on Sulfur Oxidation During Composting : Nitrate as A Bridge. *Waste Management*, Volume 191, pp. 13-22.
- Wijerathna, P. Udayagee, K.P.P., Idroos, F.S., & Manage, P., 2024. Novel Bacterial Consortium for Mitigation of Odor and Enhance Compost maturation rate of Municipal Solid Waste: A Step Toward a Greener Economy.. *Nature Environment & Pollution Technology*, 23(3).
- Wiraswati, S. M. Pramono, H. Ryandini, D. Kusharyati, D.F. Pratiwi, M. Satwika T. & Mariana A., 2023. Keragaman Morfologi Bakteri Nitrifikasi Asal Kompos Kotoran Domba Pada Peternakan Domba dengan Sistem Bedding.
- Xie, Y., Zhou, L., Dai, J., Chen, J., Yang, X., Wang, X., Wang, Z., & Feng, L., 2022. Effects of the C/N Ratio on the Microbial Community and Lignocellulose Degradation, During Branch Waste Composting. *Bioprocess and Biosystems Engineering*, 45, pp.1163.
- Xu, J., Xu, X., Han, Y., Sheng, S., Meng, Q., Wang, Z., Liu, W., & Di, L., 2019. Evaluation of a Novel Thermophilic Nitrifying Bacillaceae Species *Aliibacillus Thermotolerans* BM62T Promoting Nitrogen Retention in Livestock Manure Compost. *Environmental Progress & Sustainable Energy*, 39.
- Xu, M., Sun, H., Yang, M., Xie, D., Sun, X., Meng, J., Wang, Q., & Wu, C., 2022. Biodrying of Biogas Residue Through a Thermophilic Bacterial Agent Inoculation : Insights into Dewatering Contribution and Microbial Mechanism. *Bioresourcetechnology*, pp. 127256.
- Yang, Y., Awasthi, M., Bao, H., Bie, J., Lei, S., & Ly, J., 2020. Exploring the Microbial Mechanism of Organic Matter transformation During Pig Manure Composting Amended With Bean Dregs and Biochar. *Bioresourcetechnology*, 313, pp. 123647.

- Yun, C., Yan, C., Xue, Y., Xu, Z., Jin, T., & Liu, Q., 2021. Effects of Exogenous Microbial Agents on Soil Nutrient and Microbial Community Composition in Greenhouse-Derived Vegetable Straw Composts. *Sustainability*.
- Zahari, N., Tuah, P., Zulkifli, N., & Cleophas, F., 2023. Composting of Oil Palm Empty Fruit Bunches by Microbial Inoculant. *International Journal of Technology*.
- Zhang, H., Li, Y., Yan, S., Tong, Z., Qiu, Y., Zhang, X., Yong, X., Luo, L., Wong, J., & Zhou, J., 2024. Control of Nitrogen and Odor Emissions During Chicken Manure Composting With a Carbon-based Microbial Inoculant and a Biotrickling Filter. *Journal of Environmental Management*, 357, pp. 120636.
- Zhao, Y. Li, W. Chen, L. Meng, L., & Zhang, S., 2022. Impacts of Adding Thermotolerant Nitrifying Bacteria on Nitrogenous Gas Emissions and Bacterial Community Structure During Sewage Sludge Composting. *Bioresource Technology*, p. 128359.
- Zhao, Y. Li, W. Chen, L. Meng, L., & Zheng Z., 2020. Effect of Enriched Thermotolerant Nitrifying Bacteria Inoculation on Reducing Nitrogen Loss During Sewage Sludge Composting. *Bioresource Technology*, Volume 311, p. 123461.
- Zhong, X., Li, X., Zeng, Y., Wang, S., Sun, Z., & Tang, Y., 2020. Dynamic Change of Bacterial Community During Dairy Manure Composting Process Revealed by High-Throughput Sequencing and Advanced Bioinformatics Tools. *Bioresource technology*, 306, pp. 123091.
- Zhou, L., Liu, S., Shen, H., Zhao, M., Xu, L., Xing, A., & Fang, J., 2020. Soil Extracellular Enzyme Activity and Stoichiometry in China's Forests. *functional Ecology*, 34, pp. 1461-1471.
- Zhu, L., Huang, C., Li, L., Wang, S., Wu, X., Shan, G., & Tian, Y., 2024. Innovative Insights into Organic Nitrogen Degradation Through Protein Family Domains Analysis in Chicken and Pig Manure Composting using Metagenomic Sequencing. *Bioresource technology*, pp. 131048.