DAFTAR PUSTAKA

Ahammad S. J., S. Sumithra, and P. Senthilkumar. 2018. Mercury uptake and translocation by indigenous plants. *Rasayan Journal Chemistry*. 11(1): 1-12.

Ai, N. S., J. A. Rumbay, P. S. Anggini, P. S. L. Supit, and D. P. M. Ludong. 2021. Potensi Metode Sonic Bloom untuk Meningkatkan Pertumbuhan Tanaman. *Jurnal MIPA*, 10(2):76-80.

Aini, H. N. 2023. *Respons fisiologis dan anatomis tangkai daun Aquarius palifolius (Nees & Mart.) Christenh. & Byng terhadap merkuri dalam sistem FWS-CW*. Skripsi. Yogyakarta: Universitas Gadjah Mada.

Alcantara, H. J. P., A. I. Doronila, and S. D. Kolev. 2017. Phytoextraction potential of *Manihot esculenta* Crantz. (cassava) grown in mercury- and gold-containing biosolids and mine tailings. *Minerale Engineering*, 114:57-63.

Alengebawy, A., S. T. Abdelkhalek, S. R. Qureshi, and M. Q. Wang. 2021. Heavy metals and pesticides toxicity in agricultural soil and plants: ecological risks and human health implications. *Toxics*, 9(42):1-33.

Almuktar, S. A. A. A. N., S. N. Abed, and M. Scholz. 2018. Wetlands for wastewater treatment and subsequent recycling of treated effluent: a review. *Environmental Science and Pollution Research*, 25:1-30.

Ariany, S. P., N. Sahiri, and A. Syakur. 2013. Pengaruh kuantitas cahaya terhadap pertumbuhan dan kadar antosianin daun dewa (*Gynura pseudochina* (L.) DC) secara *in vitro*. *Agroteknis : Jurnal Ilmu Pertanian*, 1(5):413-420.

Astuti, L. P., and Indriatmoko. 2018. Kemampuan Beberapa Tumbuhan Air dalam Menurunkan Pencemaran Bahan Organik dan Fosfat untuk Memperbaiki Kualitas Air. *Jurnal Teknologi Lingkungan*, 19(2):183-190.

Azubuike, C. C., C. B. Chikere, and G. C. Okpokwasili. 2016. Bioremediation techniques–classification based on site of application: principles, advantages, limitations, and prospects. *World Journal Microbiology Biotechnology*, 32(180):1-18.

Balodi, R., S. Bisht, A. Ghatak, and K. H. Rao. 2017. Plant disease diagnosis: technological advancements and challenges. *Indian Phytopathology*, 70(3):275-281.

Baroroh, F., and R. Irawanto, 2016. Seleksi Tumbuhan Akuatik ber-potensi dalam Fitoremediasi Air Limbah Domestik di Kebun Raya Purwodadi. *Lembaga Ilmu Pengetahuan Indonesia*,1:1–13.

Basuchaudhuri, P. 2016. *Nitrogen Metabolism in Rice*. Boca Raton: CRC Press. P: 31-52.

Budiastuti, P., M. Rahadjo, and N. A. Y. Dewanti. 2016. Analisis pencemaran logam berat timbal di badan Sungai Babon Kecamatan Genuk Semarang. *Jurnal Kesehatan Masyarakat, 4*(5):119-118.

Carocci, A., N. Rovita, M. S. Sinicropi, and G. Genchi. 2014. Mercury toxicity and neurodegenerative effects. *Reviews of Environmental Contamination and Toxicology*, 229(1):1-18.

Chen, J. and Yang, Z.M., 2012. Mercury toxicity, molecular response and tolerance in higher plants. *Biometals*, 25: 847-857.

Coelho, C., and M. J. Romao. 2015. Structural and mechanistic insights on nitrate reductases. *Protein Science*, 24:1901-1911.

Dambreville, A., P. E. Lauri, F. Normand, and Y. Guedon. 2015. Analysing growth and development of plants jointly using developmental growth stages. *Annals of Botany*, 115:93-105.

Danususila, H. 1989. Kajian pengaruh nitrogen dari pupuk buatan terhadap aktivitas nitrat reduktase pada daun bawang putih (*Allium sativum* L). *Skripsi*. Yogyakarta: Universitas Gadjah Mada.

Ende, S., S. Salawati, I. Kadekoh, F. Fathurrahman, S. Darman and L. Lukman. 2022. Aktivitas Nitrat Reduktase (ANR) Tanaman Jagung pada Pola Tumpangsari yang Diberi Serasah Jagung-Kedelai serta Biochar di Lahan Suboptimal Sidondo Sulawesi Tengah. *Jurnal Ilmu Pertanian Indonesia*, 27(4): 528-535.

Fauzi, M. R., and M. A. Mardyanto. 2016. Perencanaan Constructed Wetland Sebagai Media Reduksi Greywater Dan Pengendali Banjir: Studi Kasus Perumahan Sutorejo Indah. *Jurnal Teknik ITS*, 5(2):162-165.

Frankie, D. 2023. Effect of light intensity on photosynthesis in aquatic plants in Australia. *International Journal of Natural Science*, 3(2):14-24.

GBIF Secretariat. 2024. *Aquarius palifolius* (Nees & Mart.) *Christenh. & Byng*. GBIF Backbone Taxonomy. Checklist dataset. https://doi.org/10.15468/39omei. Diakses tanggal 26 Mei 2024 22:43

Gil, S. C., C. O. Villasante, J. S. Plata, A. B. Sola, R. Millan, and L. E. Hernandez. 2023. Attenuation of mercury phytotoxicity with a high nutritional level of nitrate in alfalfa plants grown hydroponically. *Plant Stress*, 7:1-12.

Gontia-Mishra, I., S. Sapre, A. Sharma, and S. Tiwari. 2016. Alleviation of mercury toxicity in wheat by the interaction of mercury-tolerant plant growth-promoting rhizobacteria. *Journal of Plant Growth Regulation*, 35(4):1000-1012.

Gull, A., A. A. Lone, and N. U. I. Wani. 2019. Biotic and Abiotic Stresses in Plants. *Abiotic and Biotic Stress in Plants*. DOI: 10.5772/intechopen.85832.

Gworek, B., Dmuchowski, W. and A. H. Baczewska-Dabrowska, 2020. Mercury in the terrestrial environment: A review. *Environmental Sciences Europe*, 32(1):1-19.

Hakim, A. H. 2014. *Evaluasi Efektivitas Tanaman dalam Mereduksi Polusi Berdasarkan Karakter Fisik Pohon pada Jalur Hijau Pajajaran Bogor*. Skripsi. Bogor: Institut Pertanian Bogor.

Hamim, H., A. Mutyandini, Y. C. Sulistyaningsih, H. F. Putra, D. Saprudin, and L. Setyaningsih. 2019. Effect of mercury on growth, anatomy and physiology of four non-edible oil-producing species. *Asian Journal of Plant Sciences*, 18(4): 164-174.

Han, K., J. Zhang, C. Wang, Y. Yan, Y. Chang, Y. Gao, Y. Liu, and J. Xie. 2023 Changes in growth, physiology, and photosynthetic capacity of spinach (*Spinacia oleracea* L.) under different nitrate levels. *PLOS ONE*, 18(3): e0283787.

Handajani, H., Adhywirawan, G., Andriawan, S., Prasetyo, D. and Mavuso, B.R., 2021. Evaluation of Efficiency of *Aquarius palifolius* (Christenh. & Byng) Involved in the *Clarias gariepinus* (Burchell, 1822) Culture for Water Quality Recovery and Fish Growth Support. *Jordan Journal of Biological Sciences*, 14(5):959-964.

Hapsari, A. T., S. Darmanti, and E. D. Hastuti. 2018. Pertumbuhan Batang, Akar dan Daun Gulma Katumpangan (*Pilea microphylla* (L.) Liebm.). Buletin Anatomi dan Fisiologi, 3(1): 79-84.

Hasanuzzaman, M., K. Nahar, M. M. Alam, R. Roychowdhury, and M. Fujita. 2013. Physiological, biochemical, and molecular mechanisms of heat stress tolerance in plants. *International Journal of Molecular Sciences*, 14(5): 9643-9684.

Hasanuzzaman, M., O. Hirosuke, K. Nahar, M. H. M. B. Bhuyan, J. Al Mahmud, F. Baluska, and M. Fujita. 2018. Nitric oxide-induced salt stress tolerance in plants: ROS metabolism, signaling, and molecular interactions. *Plant Biotechnology Reports*, 12: 77–92.

Hoffmann, W. A., and H. Poorter. 2002. Avoiding Bias in Calculation of relative growth rate. *Annals of Botany*, 80:37-42.

Hounkpe, S. P., M. Crapper, A. Sagbo, E. Adjovi, and M. P. Aina. 2022. Influence of pH on Water Hyacinth Ponds Treating and Recycling Wastewater. *Journal of Water Resource and Protection*, 14:86-99.

Hussain, S., A. Khaliq, M. A. Noor, M. Tanveer, H. A. Hussain, S. Hussain, T. Shah, and T. Mehmood. 2020. Metal Toxicity and Nitrogen Metabolism in Plants: An Overview. In: Datta, R., Meena, R., Pathan, S., Ceccherini, M. (eds) *Carbon and Nitrogen Cycling in Soil*. Springer, Singapore.

Igiri, B. E., I. R. O. Stanley, O. I. Grace, P. A. Ebere, O. A. Abraham, and K. E. Ibe. 2018. Toxicity and bioremediation of heavy metals contaminated ecosystems from tannery wastewater: A review. *Journal of Toxicology*, 2568038:1-16.

Islam, M., and A. Sandhi. 2023. Heavy metal and drought stress in plants: the role of microbes—A Review. *Gesunde Pflanzen*, 75:695-708.

Jin, C. W., S. T. Du, I. H. Shamsi, B. F. Luo, and X. Y. Lin. 2011. NO synthase-generated NO acts downstream of auxin in regulating Fe-deficiency-induced root branching that enhances Fe-deficiency tolerance in tomato plants. *Journal of Experimental Botany*, 62(11):3875-3884.

Jose, A., Nandagopalan, S., Ubalanka, V., Viswanath, D. 2021. Detection and classification of nutrient deficiensies in plants using machine learning. *Journal of Physics: Conference Series*. 1850: 012050.

Kafle, A., Timilsina, A., Gautam, A., Adhikari, K., Bhattarai, A. and Aryal, N., 2022. Phytoremediation: Mechanisms, plant selection and enhancement by natural and synthetic agents. *Environmental Advances*, 8:1-18.

Kasman, M., P. Herawati, and N. Aryani. 2018. pemanfaatan tumbuhan melati air (*Aquarius palifolius*) dengan sistem constructed wetlands untuk pengolahan grey water. *Jurnal Daur Lingkungan*, 1(1):10-15.

Kavoosi, G., S. Balotf, H. Eshghi, and H. Hasani. 2014. Analysis of nitrate reductase mRNA expression and nitrate reductase activity in response to nitrogen supply. *Molecular Biology Research Communications*, 3(2):74-84.

Kochhar, S. L., and Gujral, S. K. 2020. *Plant Physiology: Theory and Applications*, 2th ed. New York: Cambridge University Press. P. 411-412.

Kumari, S., Amit, Jamwal, R., Mishra, N., and D. K. Singh, 2020. Recent developments in environmental mercury bioremediation and its toxic. *Environmental Nanotechnology, Monitoring & Management*, 13: 1-14.

Landis, W. G., R. M. Sofield, and M. H. Yu. 2018. *Introduction to Environmental Toxicology: Molecular Substructures to Ecological Landscape*, 5th ed. Boca Raton: CRC Press. P: 255.

Lukic, B., A. Panico, D. Huguenot, M. Fabbticino, E. D. Hullebusch, and G. Esposito. 2017. A review on the efficiency of landfarming integrated with composting as

a soil remediation treatment. *Environmental Technology Reviews*, 6(1): 94-116.

Lupitasari, D., M. Melina, and V. A. Kusumaningtyas. 2020. Pengaruh cahaya dan suhu berdasarkan karakter fotosintesis *Ceratophyllum demersum* sebagai agen fitoremediasi. *Jurnal Kartika Kimia*, 3(1):33-38.

Ma, Y., G. Wang, Y. Wang, W. Dai, and Y. Luan. 2021. Mercury Uptake and Transport by Plants in Aquatic Environments: A Meta-Analysis. *Applied science*, 11(8829):1-15.

Makabe, S., Y. Takizawa, A. Matsunaga,T. Nishimura, K. Sakamoto, and H. Morikawa. 2016. Bioremediation of heavy metals and organic pollutants by genetically engineered microorganisms. *Current opinion in biotechnology*, 38:68-75.

Mariwy, A., J. B. Manuhutu, and D. Frans. 2021. Bioaccumulated Mercury by Several Types of Plants in Ex-Traditional Gold Processing Area, Gogorea Village, Buru Island. *Indonesian Journal of Chemical Research*, 9(2):105-110.

Martemyanov, V.I., and D.V. Tikhonenkov. 2022. Assessment of the tolerance range of salinity for invasive waterweed *Elodea canadensis* Michaux by parameters of water-salt homeostasis. *Biol Invasions*, 24:3845–3853.

Mayasin, L. S., H. Gubali, and S. Dude. 2021. Analisis pertumbuhan dan hasil dua varietas kacang tanah (*Arachis hypogaea* l.) pada pemberian berbagai dosis mikoriza vesikular arbuscular. *JATT*, 10(2):24-33.

Melo, B. P., P. A. Carpinetti, O. T. Fraga, P. L. R. Silva, V. S. Fioresi, L. F. Camargos, and M. F. S. Ferreira. 2022. Abiotic stresses in plants and their markers: a practice view of plant stress responses and programmed cell death mechanisms. *Plants*, 11:1-25.

Mohebi, Z., and M. Nazari. 2021. Phytoremediation of wastewater using aquatic plants, A review. *Journal of Applied Research in Water and Wastewater*, 8(1):50-58.

Montenegro, O. Magnitskiy, S., Darghan A. 2019. Effect of nitrogen and potassium on plant height and stem diameter of *Jatropha curcas* L. in Colombian tropical dry forest. Agronomia Colombiana 37(3): 203-212.

Negrao, S., S. M. Schmockel, and M. Tester. 2017. Evaluating physiological responses of plants to salinity stress. *Annals of Botany*, 119:1-11.

Negrete, J. M., J. D. Hernandez, J. P. Hernandez, G. E. Montes, and S. Diez. 2016. Mercury uptake and effects on growth in *Jatropha curcas*. *Journal of Environmental Sciences*, 48:120-125.

Nur, F., and I., Slamet. 2020. The phytoremediation of *Aquarius palaefolius* (Water Jasmine) in reducing BOD and COD of liquid waste - Batik Industry "X" in Pekalongan. *GSC Biological and Pharmaceutical Sciences*, 12(3):215-222.

Ohtaka, K., Y. A. Yoshida, Y. Kakei, K. Fukui, M. Kojima, Y. Takebayashi, K. Yano, S. Imanishi, and H. Sakakibara. 2020. Difference Between Day and Night Temperatures Affects Stem Elongation in Tomato (*Solanum lycopersicum*) Seedlings via Regulation of Gibberellin and Auxin Synthesis. *Frontier in Plant Science*, 11(577235):1-12.

Perchlik, M. and M. Tegeder. 2018. Leaf Amino Acid Supply Affects Photosynthetic and Plant Nitrogen Use Efficiency under Nitrogen Stress. *Plant Physiology*, 178(1):174-188.

Perdana, M. C., H. B. Sutanto, and G. Prihatmo. 2018. Vertical Subsurface Flow (VSSF) constructed wetland for domestic wastewater treatment. *IOP Conference Series: Earth and Environmental Science,* 148(1):012025.

Philippot, L., M. Cregut, D. Cheneby, M. Bressan, S. Dequiet, F. M. Laurent, L. Ranjard, and P. Lemanceau. 2008. Effect of primary mild stresses on resilience and resistance of the nitrate reducer community to a subsequent severe stress. *FEMS Microbiology Letters,* 28(1):51-57.

Prasetya, A., Prihutami, P., Warisaura, A. D., Fahrurrozi, M. & Murti Petrus, H. T.B. 2020. Characteristic of Hg removal using zeolite adsorption and *Aquarius palifolius* phytoremediation in subsurface flow constructed wetland (SSF-CW) model. *Journal of Environmental Chemical Engineering*, 8(3).1-8.

Puspitasari, R. F., A. Prasetya, and E. Rahayuningsih. 2019. Penurunan Logam Hg dalam Air Menggunakan Sistem *Sub-Surface Flow Constructed Wetland*: Studi Efektivitas. *Jurnal Rekayasa Proses*, 13(1):41-46.

Qomariah, U. K. N. 2019. Aktivitas nitrat reduktase *Capsicum annum* L. secara in vivo dengan spektrofotometri. *Exact Papers in Compilation*, 1(2): 95-100.

Raharja, R. A., H. Hamim, Y. C. Sulistyaningsih, and T. Tridiati. 2020. Analisis Morfofisiologi, Anatomi, dan Histokimia pada Lima Spesies Tanaman Gulma sebagai Respons terhadap Merkuri dan Timbal. *Jurnal Ilmiah Pertanian Indonesia*, 25(3):414-425.

Rahmaisyanti, A., Y.A. Hidayati, and A. Pratama. 2022. Pengaruh kuantitas tanaman melati air (*Aquarius palaefolius*) sebagai fitoremediator limbah cair penyamakan kulit proses tanning. *Jurnal Teknologi Hasil Peternakan*,3(2):73-82.

Raj, D. and S. K. Maiti, 2019. Sources, toxicity, and remediation of mercury: an essence review. *Environmental Monitoring and Assessment*, 191(566):1-22.

Ratini, N. N., I. W. Supardi, and Y. Nurfadhillah. 2019. Pengaruh Photosynthetic Activity Radiation (PAR) pada Pertumbuhan Tanaman Sawi Hijau (*Brassica rapa var. parachinensis* L.). *Buletin Fisika*, 20(1): 19-24.

Ringel, P., J., Krausze, J. van den Heuvel, U. Curth, A. J. Plerik, S. Herzog, R. R. Mendel, and T. Kruse. 2013. Biochemical Characterization of Molybdenum Cofactor-free Nitrate Reductase from *Neurospora crassa*. *The Journal of Biological ChemistryI*, 288(20):14657-14671.

Rizki, Rasdanelwati, R. Alfina, O. Darlis, and L. Meriko. 2022. Morphological Characterization of the Mexican sword *Aquarius palifolius* (Nees & Mart.) Christenh. & Byng. Family Alismataceae. *Sainstek: Jurnal Sains dan Teknologi*, 14(2):79-88.

Roberts, S. M., R. C. James, and P. L. Williams. 2015. *Principles of Toxicology: Environmental and Industrial Applications*, 3rd ed. Hoboken: John Wiley & Sons Inc. p: 300-301.

Sandhi, A., T. Landberg, and M. Greger. 2018. Effect of pH, temperature, and oxygenation on arsenic phytofiltration by aquatic moss (*Warnstorfia fluitans*). *Journal of Environmental Chemical Engineering*, 6(4):3918-3925.

Santriyana, D. D., Hayati, R., and I. Apriani, 2013. Ditumbuhkan Pada Limbah Ipa Pdam Tirta Khatulistiwa Kota Pontianak. *Teknologi Lingkungan Lahan Basa*h, 1(1):1–11.

Sari, I. D. M., I. R. Eri, and I. Thohari. 2021. Pengaruh fitoremediasi tanaman melati air (*Aquarius palifolius*) terhadap penurunan kadar fosfat pada limbah laundry. *Jurnal Penelitian Kesehatan Suara Forikes*, 12(1):10-13.

Sari, M. O. S. K., E. D. Hastuti, and S. Darmanti. 2019. Potential of water jasmine (*Aquarius palifolius*) in phytoremediation of Fe in leachate jatibarang landfill. *Biosaintifika*, 11(1): 55-61.

Sarie, H. 2019. Potensi bahaya kontaminasi logam berat di lahan bekas tambang batubara yang digunakan sebagai lahan pertanian. *Buletin LOUPE*, 15(2):37-41.

Shahid, M., C. Dumat, S. Khalid, E. Schreck, T. Xiong, and N. K. Niazi. 2016. Foliar heavy metal uptake, toxicity and detoxification in plants: A comparison of foliar and root metal uptake. *Journal of hazardous materials*, 325: 36-58.

Shrivastava, S., Shrivastava, A., and Sharma, J. 2015. Detoxification mechanisms of mercury toxicity in plant: A review. *Recent Adv. in Biology and Med*, 1: 60-68.

Siswanti, D. U., B. S. Daryono, H. T. B. M. Petrus, and E. A. Suyono. 2023. Bioremediation of Mercury-Polluted Water in Free Water Surface-Constructed Wetland System by *Euglena* sp. and *Aquarius palifolius* (Nees & Mart.) Christenh. & Byng *Journal of Tropical Biodiversity and Biotechnology*, 8(3):1-13.

Sitarska, M., T. Traczewska, W. Filarowska, A. Holtra, D. Z. Wojdyla, and B. H. Lorez. 2023. Phytoremediation of mercury from water by monocultures and mixed cultures pleustophytes. *Journal of Water Process Engineering*, 52: 103529.

Song, Y., X. J. He, M. Chen, L. L. Zhang, J. Li and Y. Deng. 2018. Effect of pH on the submerged macrophyte *Hydrilla verticillate*. *Russian Journal of Plant Physiology*¸65(4):611-619.

Thabet, J., J. Elleuch, F. Martinez, S. Abdelkafi, L. E. Hernandez, and I. Fendri. 2023. mercury in the marine microalgae *Chlorococcum dorsiventrale* isolated from a metal-polluted coastal site. *Chemosphere*, 338(139391):1-14.

Tiwari, S., and C. Lata. 2018. Heavy metal stress, signaling, and tolerance due to plant-associated microbes: an overview. *Frontiers in Plant Science*, 9(452): 1-12.

Ukalska, J., and S. Jastrzebowski. 2019. Sigmoid growth curves, a new approach to study the dynamics of the epicotyl emergence of oak. *Forestry*, 61(1): 30-41.

Utami. 2018. *Gejala Simtomatik Unsur Hara Essensial Pada Beberapa Jenis Tanaman.* Denpasar: Universitas Udayana. p. 4.

Wang, S., J. Duo, R. Wufuer, W. Li, and X. Pan. 2022. The Binding Ability of Mercury (Hg) to Photosystem I and II Explained the Difference in Its Toxicity on the Two Photosystems of *Chlorella pyrenoidosa*. *Toxics*, 10(455):1-17.

Warisaura, A. D., I. Fadlilah. A. Prasetya, and M. Fahrurrozi. 2019. Studi stabilitas *sistem sub surface flow constructed wetland* (SSF-CW) menggunakan tanaman melati air dan media tanam zeolit untuk menurunkan logam Hg. *Jurnal Pengendalian Pencemaran Lingkungan*, 1(1):17-27.

You, J. and Z. Chan. 2015. ROS Regulation During Abiotic Stress Responses in Crop Plants. *Frontiers in Plant Science*, 6(1092):1-15.

Zhang, P., B. M. C. Grutters, C. H. A. van Leeuwen, J. Xu, A. Petruzzella, R. F. van den Berg, and E. S. Bakker. 2019. Effects of Rising Temperature on the Growth, Stoichiometry, and Palatability of Aquatic Plants. *Front in Plant Sci*, 9(1947):1-14.

Zulaikhah, S. T., J. Wahyuwibowo, and A. A. Pratama. 2020. Mercury and its effect on human health: a review of the literature. *Int. J. of Public Health Sci*, 9(2): 103-114.

Zulfikah, M. Basir, and Isrun. 2014. Konsentrasi merkuri (Hg) dalam tanah dan jaringan tanaman kangkung (*Ipomoea reptans*) yang diberi bokashi kirinyu (*Chromolaena odorata* l.) pada limbah tailing penambangan emas poboya kota palu. *E-Jurnal Agrotekbis*, 2(6):587-595.