

DAFTAR PUSTAKA

- Abollino, O., M. Aceto, M. Malandrino, C. Sarzanini, and E. Mentasti. 2003. Adsorption of heavy metals on Na-montmorillonite. Effect of pH and organic substances. *Water Research* 37(7):1619-1627. doi: 10.1016/S0043-1354(02)00524-9.
- Ademilua, O. E. A., and D. A. Obalola. 2008. The effect of cement dust pollution on *Celosia argentea* (Lagos Spinach) plant. *Journal of Environmental Science and Technology* 1:47-55.
- Agbeshie, A. A., R. Adjei, J. Anokye, and A. Banunle. 2020. Municipal waste dumpsite: Impact on soil properties and heavy metal concentrations, Sunyani, Ghana. *Scientific African* 8 : 1-10.
- Ai-Jun, L., Z. Xu-hong, and C. Mei-Mei, and C. Qing. 2006. Oxidative stress and DNA damages induced by cadmium accumulation. *Journal of Environmental Sciences* 19: 596-602.
- Alloway, B. J. 1995. *Heavy Metals in Soils*. Glasgow: Blackie Academic & Profesional, An Imprint of Chapman & Hall.
- Amadi, A. N. 2011. Assesing the effect of Aladimma Dumpsite on soil and Groundwater using water quality index and factor analysis. *Australian Journal of Basic and Applied Science* 5:763-770.
- Anikwe, M. A. N., and K. C. A. Nwobodo. 2002. Long term effect of municipal waste disposal on soil properties and productivity of sites used for urban agriculture in Abakaliki, Nigeria. *Bioresource Technology* 83:241-250.
- Benavides, M. P., S. M. Gallego, and M. L. Tamaro. 2005. Cadmium toxicity in plants. *Plant Physiology* 17(1):21-34.
- Benjamin, A., K. Asemave, L. Leke, and O. G. Igbum. 2012. Determination of heavy metals in some selected waste dumpsites in Gboko Metropolis, Benue State, Nigeria. *International Journal of Current Research* 4:278-280.
- Bordin, D. L., L. Lirussi, and H. Nilsen. 2021. Cellular response to endogenous DNA damage: DNA base modifications in gene expression regulation. *DNA Repair* 99: 103051. <https://doi.org/10.1016/j.dnarep.2021.103051>.
- Bini, C., M. Wahsha, S. Fontana, and L. Maleci. 2012. Effects of heavy metals on morphological characteristics of *Taraxacum officinale* Web growing on mine soils in NE Italy. *Journal of Geochemical Exploration* 123:101-108.

- Chandra, R. P., A. K. Abdussalam, and K. M. Khaleel. 2018. Assessment of phytoremediation potential of wild plants growing in metal contaminated soil. *IAETSD Journal For Advanced Research In Applied Sciences* 5:510-517.
- Chen, J., M. Shafi, S. Li, Y. Wang, J. Wu, Z. Ye, D. Peng, W. Yan, and D. Liu. 2015. Copper induced oxidative stresses, antioxidant responses and phytoremediation potential of Moso Bamboo (*Phyllostachys pubescens*). *Scientific Reports* 5:13554. DOI: 10.1038/srep13554.
- Corvianindya, Y. and E. I. Auerkari. 2001. Studi molekuler pada instabilitas genetik: Mekanisme kerusakan DNA dan proses perbaikannya. *Jurnal Kedokteran Gigi Universitas Indonesia* 8(3): 44-50.
- Chua, J., J. M. Banua, I. Arcilla, A. Orbecido, M. E. D. Castro, N. Ledesma, C. Deocaris, C. Madrazo, and L. Belo. 2019. Phytoremediation potential and copper uptake kinetics of Philippine bamboo species in copper contaminated substrate. *Heliyon* 5:1-9.
- Dresler, S., M. W. Kosior, I. Sowa, G. Stanislawski, I. Bany, and M. Wojcik. 2017. Effect of short-term Zn/Pb or long-term multi-metal stress on physiological and morphological parameters of metalicolous and nonmetalicolous *Echium vulgare* L. populations. *Plant Physiology and Biochemistry* 115:380-389.
- Ertani, A., A. Mietto, M. Borin, and S. Nardi. 2017. Chromium in agricultural soils and crops: A review. *Water Air Soil Pollut* 228:190. DOI 10.1007/s11270-017-3356-y
- Galdiero, E., V. Maselli, A. Falanga, R. Gesuele, S. Galdiero, D. Fulgione, and M. Guida. 2015. Integrated analysis of the ecotoxicological and genotoxic effects of the antimicrobial peptide melittin on *Daphnia magna* and *Pseudokirchneriella subcapitata*. *Environmental Pollution* 203: 145-152. <http://dx.doi.org/10.1016/j.envpol>
- Gichner, T., Z. Patkova, J. Szakova, I. Znidar, and A. Mukherjee. 2008. DNA damage in potato plants induced by cadmium, ethyl methanesulphonate and-rays. *Environmental and Experimental Botany* 62:113-119.
- Gonnelli, C. and G. Renella. 2013. "Chromium and Nickel" dalam Brian J. Alloway. (Eds.), *Heavy Metals in Soils: Trace Metals And Metalloid in Soils and Their Bioavailability* (hlm. 313-335). Gasglow: Blackie Academic and Professional.
- Grubben, G. J. H. and Denton, O. A. 2004. *Plant Resource of Tropical Africa 2 Vegetables*. Belanda: PROTA Foundation.

- Hadad, H. R., M. M Mufarrege, M. Pincioli, G. A. D. Luca, and M. A. Maine. 2010. Morphological response of *Typha domingensis* to an industrial effluent containing heavy metals in a constructed wetland. *Archives of Environmental Contamination and Toxicology* 58:666-675.
- Hadi, A. 2015. *Pengambilan Sampel Lingkungan*. Jakarta: Erlangga.
- Haridjaja, O., D. P. T. Baskoro, and M. Setianingsih. 2013. Perbedaan Nilai Kadar Air Kapasitas Lapang Berdasarkan Metode Alhricks, Drainase Bebas, dan Pressure Plate pada Berbagai Tekstur Tanah dan Hubungannya dengan Pertumbuhan Bunga Matahari (*Helianthus annuus* L.). *Jurnal Ilmu Tanah dan Lingkungan* 15(2):52.
- Hidayati, N. 2005. Fitoremediasi dan Potensi Tumbuhan Hiperakumulator. *Hayati* 12:35-40. ISSN 0854-8587.
- Huang, X., S. Duan, Q. Wu, M. Yu, and S. Shabala. 2020. Reducing cadmium accumulation in plants: Structure–function relations and tissue-specific operation of transporters in the spotlight. *Plants* 9:223. doi:10.3390/plants9020223.
- India Biodiversity Portal. 2020. *Celosia argentea argentea*. <https://indiabiodiversity.org/species/show/33021> (Terakhir diakses pada 30 Oktober 2020 pukul 05.50 WIB)
- Islam, E., X. Yang, T. Li, D. Liu, X. Jin, and F. Meng. 2007. Effect of Pb toxicity on root morphology, physiology and ultrastructure in the two ecotypes of *Elsholtzia argyi*. *Journal of Hazardous Materias* 147:806-816.
- ITIS. 2020. *Celosia argentea* L. https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=20778#null (Terakhir diakses pada 29 Oktober 2020 pukul 22.58 WIB)
- ITIS. 2020. *Cleome rutidosperma* D.C. https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=22624#null (Terakhir diakses pada 29 Oktober 2020 pukul 23.00 WIB)
- Jiang, K., B. Wu, C. Wang, and Q. Ran. 2019. Ecotoxicological effects of metals with different concentrations and types on the morphological and physiological performance of wheat. *Ecotoxicology and Environmental Safety* 167:345-353.
- Jones, D. L., K. L. Williamson, and A. G. Owen. 2006. Phytoremediation of landfill leachate. *Waste Management* 26:825-837.

- Juhriah and M. Alam. 2016. Fitoremediasi logam berat merkuri (hg)pada tanah dengan tanaman *Celosia plumosa* (voss) burv. *Jurnal Biologi Makassar (Bioma)* 1:1-8.
- Juhriah, S. Suhadiyah, and R. Mandasari. 2017. Respon pertumbuhan tanaman jengger ayam merah *Celosia plumosa* (voss) burv. pada tanah tercemar logam berat kadmium (Cd). *Jurnal Ilmu Alam dan Lingkungan* 8:22-28.
- Klober, J. A. and Z. Lou. 2021. Critical DNA damaging pathways in tumorogenesis. *Seminars in Cancer Biology*.
<https://doi.org/10.1016/j.semcancer.2021.04.012>
- Koda, E., J. Winkler, P. Wowkonowicz, M. Cerny, A. Kiersnowska, G. Pasternak, and M. D. Vaverkova. 2022. Vegetation changes as indicators of landfill leachate seepage locations: Case study. *Ecological engineering* 174: 106448.
- Komal, T., M. Mustafa, Z. Ali, A. G. Kazi. 2014. Heavy metal induced adaptation strategies and repair mechanisms in plants. *Journal of Endocytobiosis and Cell Research* 33-41. DOI: 10.1007/978-3-319-14526-6_10.
- Kumar, R., R. K. Mishra, V. Mishra, A. Qidwai, A. Pandey, S. K. Shukla, M. Pandey, A. Pathak, and A. Dikshit. 2016. Detoxification and tolerance of heavy metals in plants. *Plant Metal Interaction* 335-359.
<http://dx.doi.org/10.1016/B978-0-12-803158-2.00013-8>.
- Kurniawan, T. A., W. Lo, and G. Y. S.Chan. 2006. Physico-chemical treatments for removal of recalcitrant contaminants from landfill leachate. *Journal of Hazardous Materials* 129:80-100.
- Lajszner, E. B., J. Wyszowska, and J. Kurcharski. 2020. Phytoremediation of soil contaminated with nickel, cadmium and cobalt. *International Journal of Phytoremediation*. DOI: [10.1080/15226514.2020.1807907](https://doi.org/10.1080/15226514.2020.1807907).
- Liu, J., L. Mo, X. Zhang, S. Yao, and Y. Wang. 2018. Simultaneous hyperaccumulation of cadmium and manganese in *Celosia argentea* Linn. *International Journal of Phytoremediation* 20:1106-1112.
- Liu, J., W. Shang, X. Zhang, Y. Zhu, and K. Yu. 2014. Mn accumulation and tolerance in *Celosia argentea* Linn: A new Mn-hyperaccumulating plant species. *Journal of Hazardous Material* 267:136-141.
- Londono, J. M. B., A. G. Carabali, and M. A. B. Londono. 2019. Nutrient absorption in *Tithonia diversifolia*. *Universitas Scientiarum* 24 (1): 33-48.
 doi: [10.11144/Javeriana.SC24-1.nait](https://doi.org/10.11144/Javeriana.SC24-1.nait)
- Lu, Y., Y. Liu, and C. Yang. 2017. Evaluating *In Vitro* DNA Damage Using Comet Assay. *Journal of Visualizes Experiments* 128: 1-6. doi:10.3791/56450

- Lum, A. F., E. S. A. Ngwa, D. Chikoye, and C. E. Suh. 2014. Phytoremediation potential of weeds in heavy metal contaminated soils of the bassa industrial zone of Douala, Cameroon. *International Journal of Phytoremediation* 16:302-319.
- Manova, V. and D. Gruszka. 2015. DNA damage and repair in plants from models to crops. *Frontiers in Plant Science* :1-26. doi: 10.3389/fpls.2015.00885
- Marantika, M. Y., S. Subiyanto, and Hani'ah. 2014. Analisis geospasial persebaran tps dan tpa di Kabupaten Batang menggunakan sistem informasi geografis. *Jurnal Geodesi Undip* 3:228-240.
- Ministry of State for Population and Environment Republic of Indonesia and Dalhousie University of Canada. 1992. Environmental management in indonesia. Report on soil quality standards for Indonesia (interim report).
- Negrete, J. M., S. M. Madrid, J. P. Hernandez, J. Durango, and S. Diez. 2016. Screening of native plant species for phytoremediation potential at a Hg-contaminated mining site. *Science of The Total Environment* 542:809-816.
- Nisa, M. U., Y. Huang, M. Benhamed, and C. Raynaud. 2019. The plant DNA damage response: Signaling pathways leading to growth inhibition and putative role in response to stress conditions. *Frontiers in Plant Science* 10: 1-12. doi: 10.3389/fpls.2019.00653
- Oguntade, O. A., A. A. Adegbuyi, A. L. Nassir, S. O. Olagunju, W. A. Salamami, and R. O. Adawale. 2020. Geoassessment of heavy metals in rural and urban floodplain soils: health implications for consumers of *Celosia argentea* and *Corchorus olitorius* vegetables in Sagamu, Nigeria. *Environment Monitoring Assessment* 192:164. <https://doi.org/10.1007/s10661-020-8077-9>.
- Ogunyebi, A. L., O. E. Olojuola, K. O. Omoyajowo, and G. E. Shodunmola. 2019. Metal bioaccumulation and translocation studies of *Spinacea oleraceae* and *Celosia argentea* cultivated on contaminated soil. *Ruhuna Journal of Science*
- Pequerul, A. C. Perez, P. Madero, J. Val, and E. Monge. 1993. A rapid wet digestion method for plant analysis. *Development in Plant and Soil Science* 53:3-6. DOI: 10.1007/978-94-017-2496-8_1
- Pham, T. L. 2020. Accumulation, depuration and risk assessment of cadmium (Cd) and lead (Pb) in clam (*Corbicula fluminea*) (O. F. Muller, 1774) under laboratory condition. *Iranian Journal of Fisheries Sciences* 19:1062-1072.
- Polyn, S., A. Willems, and L. D. Veylde. 2015. Cell cycle entry, maintenance, and exit during plant development. *Current Opinion in Plant Biology* 23: 1-7.

- Rastogi, R.P., Richa, A. Kumar, M. B. Tyagi, and R. P. Sinha. 2010. Molecular mechanisms of ultraviolet radiation-induced DNA damage and repair. *Journal of Nucleic Acids* : 1-33. doi:10.4061/2010/592980
- Ray, J. G. And J. George. 2009. Phytosociology of roadside communities to identify ecological potentials of tolerant species. *Journal of Ecology and the Natural Environment* 1:184-190.
- Rodriguez, E., R. Azevedo, P. Fernandes, and C. Santo. 2011. Cr (VI) induces DNA damage, cell cycle arrest and polyploidization: A flow cytometric and comet assay study in *Pisum sativum*. *Chemical Research in Toxicology* 24: 1040-1047. dx.doi.org/10.1021/tx2001465
- Shahid, M., S. Shamshad, M. Rafiq, S. Khalid, I. Bibi, N. K. Niazi, C. Dumat, and M. I. Rashid. 2017. Chromium speciation, bioavailability, uptake, toxicity and detoxification in soil-plant system: A review. *Chemosphere* 178:513-533.
- Shah, F. U. R., N. Ahmad, K. R. Masood, J. R. Peralta-Videa, and D. D. Ahmad F..D. 2010. Heavy metal toxicity in plants. In: Ashraf, M., M. Ozturk, and M. Ahmad (eds) *Plant Adaptation and Phytoremediation*. Springer, Dordrecht. https://doi.org/10.1007/978-90-481-9370-7_4
- Sharma, H. 2011. Metal Hyperaccumulation in plants: a review focusing on phytoremediation technology. *Journal of Environment Science and Technology*, 4, 118-138.
- Sharma, P., S. Tripathi, and R. Chandra. 2020. Highly efficient phytoremediation potential of metal and metalloids from the pulp paper industry waste employing *Eclipta alba* (L) and *Alternanthera philoxeroides* (L): Biosorption and pollution reduction. *Bioresource Technology* 319:1-8. <https://doi.org/10.1016/j.biortech.2020.124147>.
- Shen, Z., Y. Wang, Y. Chen, and Z. Zhang. 2017. Transfer of heavy metals from the polluted rhizosphere soil to *Celosia argentea* L. in Copper Mine Tailings *Horticulture, Environment, and Biotechnology* 58:93-100. DOI 10.1007/s13580-017-0077-5.
- Silva, A. R. R., D. N. Cardoso, A. Cruz, J. Lourenco, S. Mendo, A. M. V. M. Soares, and S. Loureiro. 2015. Ecotoxicity and genotoxicity of a binary combination of triclosan and carbendazim to *Daphnia magna*. *Ecotoxicology and Environmental Safety* 115: 279-290.
- Singh, M., J. Kumar, S. Singh, V. P. Singh, S. M. Prasad, and MPVVB Singh. 2015. Adaptation strategies of plants against heavy metal toxicity: a short review. *Biochemistry and Pharmacology* 4: 1-7. DOI: 10.4172/2167-0501.1000161 Smolders, E. and J. Metens. 2013. "Cadmium" dalam Brian J. Alloway. (Eds.), *Heavy Metals in Soils: Trace Metals And Metalloid in Soils*

and Their Bioavailability (hlm. 283-312). Gasglow: Blackie Academic and Professional.

Sobkowiak, R. R. 2016. Water relations in plants subjected to heavy metal stresses. *Acta Physiologiae Plantarum* 38 (257):1-13. DOI 10.1007/s11738-016-2277-5.

Song, Y., L. Jin, and X. Wang. 2017. Cadmium absorption and transportation pathways in plants. *International Journal of Phytoremediation* 19:133-141.

Sudarmadji, J. Mungkono, and I. P. Corie. 2006. Toksikologi logam berat B3 dan dampaknya terhadap kesehatan. *Jurnal Kesehatan Lingkungan* 2(2): 129-142.

Tangahu, B. V., S. R. S. Abdullah, H. Basri, M. Idris, N. Anuar, and M. Mukhlisin. 2011. A review on heavy metals (As, Pb, and Hg) uptake by plants through phytoremediation. *International Journal of Chemical Engineering*:1-31. Doi:10.1155/2011/939161.

Tangahu, B. V., H. S. Titah, and S. Mangkoedihardjo. 2018. *Teknologi Remediasi Lingkungan*. Surabaya: Mobius.

The Biodiversity of Singapore. 2020. *Cleome rutidosperma* DC. DC. <https://singapore.biodiversity.online/species/P-Angi-002459?imageId=0> (Terakhir diakses pada 30 Oktober 2020 pukul 06.40 WIB).

Usman, K., M. A. AL-Ghouti, and M. H. Abu-Dieyeh. 2019. The assessment of cadmium, chromium, copper, and nickel tolerance and bioaccumulation by shrub plant *Tetraena qataranse*. *Scientific Reports* 9:1-4. <https://doi.org/10.1038/s41598-019-42029-9>.

Vavoulidou, E., E. J. Avramides, P. Papadopoulos, A. Dimirkou, A. Charoulis, and S. K. Doltsinis. 2005. Copper content in agricultural soils related to cropping systems in different regions of Greece. *Communications in Soil Science and Plant Analysis* 36:4-6. DOI: 10.1081/CSS-200043367

Vaverkova, M. D., D. Adamcova, S. Voberkova, Z. Mazur, and J. Zloch. 2018. Assessment and evaluation of heavy metals removal from landfill leachate by *Pleurotus ostreatus*. *Waste and Biomass Valorization* 9:503-511.

Vaverkova, M. D., J. Elbl, M. Radziemska, D. Adamcova, A. Kintl, L. Balakov, S. Barton, J. Hladky, J. Kynicky, and M. Brtnicky. 2018. Environmental risk assessment and consequences of municipal solid waste disposal. *Chemosphere* 208:569-578.

Yap, C. K., A. Ismail, S. G. Tan, and H. Omar. 2003. Accumulation, depuration and distribution of cadmium and zinc in the green-lipped mussel *Perna viridis* (Linnaeus) under laboratory conditions. *Hydrobiologia* 498:151-160.

Zwolak, A., M. Sarzynska, E. Szpyrka, and K. Stawarczyk. 2019. Sources of soil pollution by heavy metals and their accumulation in vegetables: A review. *Water Soil Pollut* 230:1-9. <https://doi.org/10.1007/s11270-019-4221-y>.