**Useful references related to Vetiver growth and processing**

Table 1. Summary of Vetiver Applications Across Sectors

|  |  |
| --- | --- |
| Environmental Conservation | [1],[3],[4],[7],[11],[14],[18],[21],[32],[33],[39],[41],[46],[49],[50],[55],[59],[60],[61],[72],[77],[79],[80],[89],[95],[96],[103],[104],[118],[110],[126] |
| Perfumery Industry | [2],[8],[9],[12],[22],[26],[42],[47],[74],[81],[105],[132] |
| Biofuel Production | [5],[13],[20],[31],[51],[52],[66],[75],[86],[107],[111] |
| Soil Stabilization | [1],[7],[16],[20],[23],[24],[27],[28],[29],[32],[36],[41],[44],[49],[50],[54],[59],[61],[64],[65],[72],[76],[79],[80],[81],[82],[83],[84],[85],[86],[87],[88],[89],[90],[91],[92],[93],[94],[95],[96],[97],[102],[112],113],[123],[125] |
| Phytoremediation | [3],[6],[15],[21],[25],[37],[40],[57],[67],[71],[85],[87],[95],[109],[117],[120],[124],[131] |
| Economic Analysis | [11],[15],[30],[45],[58],[73],[88],[94],[102],[106],[130] |
| Agricultural Applications | [35],[53],[68],[83],[108],[129] |
| Medicinal Properties | [19],[69],[91],[100],[114],[121],[122],[129] |
| Erosion Control | [17],[43],[48],[62],[70],[78],[90],[92],[93],[116],[119] |
| Water Purification | [2],[34],[56],[63],[98],[99],[127] |

[1] E. Gnansounou, C. M. Alves, and J. K. Raman, “Multiple applications of vetiver grass – a review,” vol. 2, 2017.

[2] S. Neve, D. Sarkar, Z. Zhang, and R. Datta, “Optimized Production of Second-Generation Bioethanol from a Spent C4 Grass: Vetiver (Chrysopogon zizanioides),” *Energies*, vol. 15, no. 24, p. 9597, Dec. 2022, doi: 10.3390/en15249597.

[3] P. Kumar, V. P. Singh, A. Tagade, and A. N. Sawarkar, “Thermochemical characterization of post-phytoremediated vetiver (Vetiveria zizanioides (L.) Nash) root and shoot for their prospective bioenergy potential,” *Ind. Crops Prod.*, vol. 191, p. 115964, Jan. 2023, doi: 10.1016/j.indcrop.2022.115964.

[4] N. Dudai, E. Putievsky, D. Chaimovitch, and M. Ben-Hur, “Growth management of vetiver (Vetiveria zizanioides) under Mediterranean conditions,” *J. Environ. Manage.*, vol. 81, no. 1, pp. 63–71, Oct. 2006, doi: 10.1016/j.jenvman.2005.10.014.

[5] S. Likitlersuang, T. N. Phan, D. Boldrin, and A. K. Leung, “Influence of growth media on the biomechanical properties of the fibrous roots of two contrasting vetiver grass species,” *Ecol. Eng.*, vol. 178, p. 106574, May 2022, doi: 10.1016/j.ecoleng.2022.106574.

[6] S. Mangkoedihardjo and Y. Triastuti, “Vetiver in Phytoremediation of Mercury Polluted Soil with the Addition of Compost,” 2011.

[7] R. Chakraborty and A. Mukherjee, “Technical Note: Vetiver Can Grow on Coal Fly Ash Without DNA Damage,” *Int. J. Phytoremediation*, vol. 13, no. 2, pp. 206–214, Dec. 2010, doi: 10.1080/15226510903535171.

[8] P. Liu, C. Zheng, Y. Lin, F. Luo, X. Lu, and D. Yu, “Dynamic State of Nutrient Contents of Vetiver Grass”.

[9] D. P. Truong, “VETIVER GRASS PROPAGATION”.

[10] N. Chomchalow, “Vetiver: An Amazing Plant for the Green City,” 2012.

[11] H. T. Ho and A. B. Anicete, “INCREASED EFFICIENCY IN VETIVER PROPAGATION WITH THE USE OF GROWTH PROMOTERS”.

[12] P. Truong, “PROPAGATION AND MANAGEMENT OF VETIVER NURSERY”.

[13] R. Singh, D. Narzary, J. Bhardwaj, A. K. Singh, S. Kumar, and A. Kumar, “Molecular diversity and SSR transferability studies in Vetiver grass (Vetiveria zizanioides L. Nash),” *Ind. Crops Prod.*, vol. 53, pp. 187–198, Feb. 2014, doi: 10.1016/j.indcrop.2013.12.027.

[14] D. R. Lukiwati, “THE OPPORTUNITY OF VETIVER GRASS AS A FEED ADDITIVE”.

[15] J. K. Raman, C. M. Alves, and E. Gnansounou, “A review on moringa tree and vetiver grass – Potential biorefinery feedstocks,” *Bioresour. Technol.*, vol. 249, pp. 1044–1051, Feb. 2018, doi: 10.1016/j.biortech.2017.10.094.

[16] M. N. Tahir, Z. Khan, S. Ahmad, M. Z. Ihsan, M. H. Lashari, and M. A. Khan, “In situ dry matter, protein and neutral detergent fibre degradation kinetics of Cholistan Desert grasses,” *South Afr. J. Anim. Sci.*, vol. 50, no. 2, pp. 334–344, Jul. 2020, doi: 10.4314/sajas.v50i2.17.

[17] N. Chomchalow, “OTHER USES, AND UTILIZATION OF VETIVER”.

[18] Y. C. Akinci and Ö. Demi̇Rel, “Eurasian Journal of agricultural research”.

[19] D. T. Alamanda and A. Ramdani, “Valuable Craft: A Co-creation as a factor of success in Zocha Vetiver Root Industry,” *Small Bus.*, 2011.

[20] G. Pantin, O. Luque, G. Rivero, E. Ceballos, and H. Fontana, “VETIVER HANDICRAFT PRODUCTION: AN INNOVATIVE FOCUS ON COMMUNITY DEVELOPMENT AND POVERTY ALLEVIATION IN RURAL VENEZUELA”.

[21] K. Chiu, Z. Ye, and M. Wong, “Growth of and on Pb/Zn and Cu mine tailings amended with manure compost and sewage sludge: A greenhouse study,” *Bioresour. Technol.*, vol. 97, no. 1, pp. 158–170, Jan. 2006, doi: 10.1016/j.biortech.2005.01.038.

[22] A. Olowoake’, “Impact of vetiver prunes compost application on the growth and yield of jews mallow”.

[23] Kusuma, Heri Septya, Rohadi, Taufik Imam, Daniswara, Edwin Fatah, Altway, Ali, and Mahfud, Mahfud, “Preliminary Study: Comparison of Kinetic Models of Oil Extraction from Vetiver (Vetiveria Zizanioides) by Microwave Hydrodistillation,” *Korean Chem. Eng. Res.*, vol. 55, no. 4, pp. 574–577, Aug. 2017, doi: 10.9713/KCER.2017.55.4.574.

[24] A. David *et al.*, “Chemical Composition, Antioxidant, and Antimicrobial Activities of Vetiveria zizanioides (L.) Nash Essential Oil Extracted by Carbon Dioxide Expanded Ethanol,” *Molecules*, vol. 24, no. 10, p. 1897, May 2019, doi: 10.3390/molecules24101897.

[25] H. S. Kusuma, A. Altway, and M. Mahfud, “Alternative to conventional extraction of vetiver oil: Microwave hydrodistillation of essential oil from vetiver roots ( *Vetiveria zizanioides* ),” *IOP Conf. Ser. Earth Environ. Sci.*, vol. 101, p. 012015, Dec. 2017, doi: 10.1088/1755-1315/101/1/012015.

[26] L. Maistrello, G. Henderson, and R. A. Laine, “Efficacy of Vetiver Oil and Nootkatone as Soil Barriers Against Formosan Subterranean Termite (Isoptera: Rhinotermitidae),” *J. Econ. Entomol.*, vol. 94, no. 6, pp. 1532–1537, Dec. 2001, doi: 10.1603/0022-0493-94.6.1532.

[27] S. K. Pareek, M.L. Maheshwari and R. Gupta, “Inter-cropping in vetiver,” 1991.

[28] J. Martinez *et al.*, “Valorization of Brazilian Vetiver ( *Vetiveria zizanioides* (L.) Nash ex Small) Oil,” *J. Agric. Food Chem.*, vol. 52, no. 21, pp. 6578–6584, Oct. 2004, doi: 10.1021/jf049182x.

[29] U. C. Lavania, “Other Uses, and Utilization of Vetiver: Vetiver Oil”.

[30] L. T. Danh, P. Truong, R. Mammucari, and N. Foster, “Extraction of vetiver essential oil by ethanol-modified supercritical carbon dioxide,” *Chem. Eng. J.*, vol. 165, no. 1, pp. 26–34, Nov. 2010, doi: 10.1016/j.cej.2010.08.048.

[31] E. Talansier, M. E. M. Braga, P. T. V. Rosa, D. Paolucci-Jeanjean, and M. A. A. Meireles, “Supercritical fluid extraction of vetiver roots: A study of SFE kinetics,” *J. Supercrit. Fluids*, vol. 47, no. 2, pp. 200–208, Dec. 2008, doi: 10.1016/j.supflu.2008.07.018.

[32] S. C. Jain, S. Nowicki, T. Eisner, and J. Meinwald, “Insect repellents from vetiver oil: I. zizanal and epizizanal,” *Tetrahedron Lett.*, vol. 23, no. 45, pp. 4639–4642, Jan. 1982, doi: 10.1016/S0040-4039(00)85675-0.

[33] K. K. Aggarwal, A. Singh, A. P. Kahol, and M. Singh, “Parameters of Vetiver Oil Distillation,” *J. Herbs Spices Med. Plants*, vol. 6, no. 2, pp. 55–61, May 1998, doi: 10.1300/J044v06n02\_07.

[34] D. R. Massardo, F. Senatore, P. Alifano, L. Del Giudice, and P. Pontieri, “Vetiver oil production correlates with early root growth,” *Biochem. Syst. Ecol.*, vol. 34, no. 5, pp. 376–382, May 2006, doi: 10.1016/j.bse.2005.10.016.

[35] A. Pareek and A. Kumar, “ETHNOBOTANICAL AND PHARMACEUTICAL USES OF VETIVERIA ZIZANIOIDES (LINN) NASH: A MEDICINAL PLANT OF RAJASTHAN”.

[36] S. Panja, D. Sarkar, and R. Datta, “Removal of antibiotics and nutrients by Vetiver grass ( *Chrysopogon zizanioides* ) from secondary wastewater effluent,” *Int. J. Phytoremediation*, vol. 22, no. 7, pp. 764–773, Jun. 2020, doi: 10.1080/15226514.2019.1710813.

[37] S. Panja, D. Sarkar, and R. Datta, “Removal of tetracycline and ciprofloxacin from wastewater by vetiver grass (Chrysopogon zizanioides (L.) Roberty) as a function of nutrient concentrations,” *Environ. Sci. Pollut. Res.*, vol. 27, no. 28, pp. 34951–34965, Oct. 2020, doi: 10.1007/s11356-020-09762-5.

[38] Y. Munakata *et al.*, “Screening of Antimicrobial Activities and Lipopeptide Production of Endophytic Bacteria Isolated from Vetiver Roots,” *Microorganisms*, vol. 10, no. 2, p. 209, Jan. 2022, doi: 10.3390/microorganisms10020209.

[39] Mishra Snigdha \*, Sharma Satish Kumar, Mohapatra Sharmistha, and Chauhan Deepa, “An Overview on Vetiveria Zizanioides Mishra,” *Res. J. Pharm. Biol. Chem. Sci.*.

[40] Patra, D. D., “Agrotechnology of vetiver [Vetiveria zizanioides (L) Nash].,” 1996.

[41] Narong Chomchalow, “The Utilization of Vetiver as Medicinal and Aromatic Plants with Special Reference to Thailand,” 2001.

[42] S. J. Varjani, E. Gnansounou, B. Gurunathan, D. Pant, and Z. A. Zakaria, Eds., *Waste Bioremediation*. in Energy, Environment, and Sustainability. Singapore: Springer Singapore, 2018. doi: 10.1007/978-981-10-7413-4.

[43] A. Shabbir, M. M. A. Khan, B. Ahmad, Y. Sadiq, H. Jaleel, and M. Uddin, “Vetiveria zizanioides (L.) Nash: A Magic Bullet to Attenuate the Prevailing Health Hazards,” in *Plant and Human Health, Volume 2*, M. Ozturk and K. R. Hakeem, Eds., Cham: Springer International Publishing, 2019, pp. 99–120. doi: 10.1007/978-3-030-03344-6\_3.

[44] R. Datta *et al.*, “PHYTOREMEDIATION POTENTIAL OF VETIVER GRASS [ *CHRYSOPOGON ZIZANIOIDES (L.)* ] FOR TETRACYCLINE,” *Int. J. Phytoremediation*, vol. 15, no. 4, pp. 343–351, Apr. 2013, doi: 10.1080/15226514.2012.702803.

[45] S. Panja, D. Sarkar, K. Li, and R. Datta, “Uptake and transformation of ciprofloxacin by vetiver grass (Chrysopogon zizanioides),” *Int. Biodeterior. Biodegrad.*, vol. 142, pp. 200–210, Aug. 2019, doi: 10.1016/j.ibiod.2019.05.023.

[46] N. Marsidi, C. K. Nye, S. R. Sheikh, H. A. Hassan, and M. I. E. Halmi, “PHYTOREMEDIATION OF NAPROXEN IN WASTE WATER USING Vetiver zizaniodes,” vol. 11, 2016.

[47] V. Ramamurthy and S. K. Singh, “Land Use Planning for important Medicinal and Aromatic Plants in Karnataka”.

[48] K. Nantachit, M. Bunchoo, B. Khantava, and C. Khamvan, “Antimicrobial Activity of Alkaloid from Roots of Vetiveria zizanoides (L.) Nash ex Small,” vol. 5, no. 2, 2010.

[49] S. Sinha, M. Jothiramajayam, M. Ghosh, and A. Mukherjee, “Evaluation of toxicity of essential oils palmarosa, citronella, lemongrass and vetiver in human lymphocytes,” *Food Chem. Toxicol.*, vol. 68, pp. 71–77, Jun. 2014, doi: 10.1016/j.fct.2014.02.036.

[50] Van den Berg, J1, Midega, C2, Wadhams, LJ3 , Khan, ZR2, “Can Vetiver Grass be Used to Manage Insect Pests on Crops?,” 2003.

[51] Y. Lu, K. Liu, X. Zheng, and Z. Lü, “Electrophysiological responses of the rice striped stem borer Chilo suppressalis to volatiles of the trap plant vetiver grass (Vetiveria zizanioides L.),” *J. Integr. Agric.*, vol. 16, no. 11, pp. 2525–2533, Nov. 2017, doi: 10.1016/S2095-3119(17)61658-7.

[52] M. Boonsaner, T. Kaewumput, and A. Boonsaner, “Bioaccumulationof Organophosphate Pesticidesin Vetiver Grass (VetiveriazizanioidesNash.)”.

[53] M. Boonsaner, T. Kaewumput, and A. Boonsaner, “Vetiver Grass: a Natural Barrier to Protect Against Organophosphate Pesticides from Cabbage Fields”.

[54] N. Aarthi and K. Murugan, “Lar vicidal and repellent activity of Vetiveria zizanioides L, Ocimum basilicum Linn and the microbial pesticide spinosad against malarial vector, Anopheles stephensi Liston (Insecta: Diptera: Culicidae)”.

[55] N. Chomchalow, “Vetiver: An Amazing Plant for the Green City,” 2012.

[56] C. Gupta, “A Biotechnological Approach to Microbial Based Perfumes and Flavours,” *J. Microbiol. Exp.*, vol. 2, no. 1, Jan. 2015, doi: 10.15406/jmen.2015.02.00034.

[57] P. Alifano, L. Del Giudice, A. Talà, M. De Stefano, and M. E. Maffei, “Microbes at work in perfumery: the microbial community of vetiver root and its involvement in essential oil biogenesis,” *Flavour Fragr. J.*, vol. 25, no. 3, pp. 121–122, May 2010, doi: 10.1002/ffj.1978.

[58] J. Ouyang *et al.*, “The Smelling Principle of Vetiver Oil, Unveiled by Chemical Synthesis,” *Angew. Chem. Int. Ed.*, vol. 60, no. 11, pp. 5666–5672, Mar. 2021, doi: 10.1002/anie.202014609.

[59] P. Burger *et al.*, “Vetiver Essential Oil in Cosmetics: What Is New?,” *Medicines*, vol. 4, no. 2, p. 41, Jun. 2017, doi: 10.3390/medicines4020041.

[60] C. Gavira, F. Watteau, J.-M. Lainé, F. Bourgaud, and L. Legendre, “Evaluation of Vetiver Volatile Compound Production under Aeroponic-Grown Conditions for the Perfume Industry,” *Molecules*, vol. 27, no. 6, p. 1942, Mar. 2022, doi: 10.3390/molecules27061942.

[61] S. Freeman, “Perfume and Planes: Ignorance and Imagination in Haiti’s Vetiver Oil Industry,” *J. Lat. Am. Caribb. Anthropol.*, vol. 24, no. 1, pp. 110–126, Mar. 2019, doi: 10.1111/jlca.12368.

[62] U. C. Lavania, “VETIVER IN INDIA: HISTORICAL PERSPECTIVE AND PROSPECTIVE FOR DEVELOPMENT OF SPECIFIC GENOTYPES FOR ENVIRONMENTAL OR INDUSTRIAL APPLICATION”.

[63] S. V. Dowthwaite and S. Rajani, “VETIVER: PERFUMERS’ LIQUID GOLD”.

[64] D. Emishaw, “Extraction, Optimization and Characterization of Essential oil from Vetiver (vetiveria zizanioides) Grass Root by Steam Distillation for Perfume Application”.

[65] Y. He, Z. Wu, T. Zhao, H. Yang, W. Ali, and J. Chen, “Different plant species exhibit contrasting root traits and penetration to variation in soil bulk density of clayey red soil,” *Agron. J.*, vol. 114, no. 1, pp. 867–877, Jan. 2022, doi: 10.1002/agj2.20972.

[66] K. Chusreeaeom and N. Roongtanakiat, “Selection of vetiver grass based on growth and nutrient content under saline water irrigation and waterlogging prior to mutagenesis”.

[67] A. Parnian and J. N. Furze, “Vertical phytoremediation of wastewater using Vetiveria zizanioides L.,” *Environ. Sci. Pollut. Res.*, vol. 28, no. 45, pp. 64150–64155, Dec. 2021, doi: 10.1007/s11356-020-11906-6.

[68] J. D. Kiiskila, D. Sarkar, K. A. Feuerstein, and R. Datta, “A preliminary study to design a floating treatment wetland for remediating acid mine drainage-impacted water using vetiver grass (Chrysopogon zizanioides),” *Environ. Sci. Pollut. Res.*, vol. 24, no. 36, pp. 27985–27993, Dec. 2017, doi: 10.1007/s11356-017-0401-8.

[69] R. Regmi, R. Nitisoravut, S. Charoenroongtavee, W. Yimkhaophong, and O. Phanthurat, “Earthen Pot–Plant Microbial Fuel Cell Powered by Vetiver for Bioelectricity Production and Wastewater Treatment,” *CLEAN – Soil Air Water*, vol. 46, no. 3, p. 1700193, Mar. 2018, doi: 10.1002/clen.201700193.

[70] S. Hajipour, M. Mohammadi Deylamani, M. Momen Zadeh, and M. Afshar Mohammadian, “Purification of some industrial waste water contaminants entering the Caspian Sea basin using vetiver plant,” *Environ. Sci.*, vol. 20, no. 3, pp. 191–210, Sep. 2022, doi: 10.52547/envs.2022.1110.

[71] T. Sladkovska, K. Wolski, H. Bujak, A. Radkowski, and Ł. Sobol, “A Review of Research on the Use of Selected Grass Species in Removal of Heavy Metals,” *Agronomy*, vol. 12, no. 10, p. 2587, Oct. 2022, doi: 10.3390/agronomy12102587.

[72] A. K. Anning and R. Akoto, “Assisted phytoremediation of heavy metal contaminated soil from a mined site with Typha latifolia and Chrysopogon zizanioides,” *Ecotoxicol. Environ. Saf.*, vol. 148, pp. 97–104, Feb. 2018, doi: 10.1016/j.ecoenv.2017.10.014.

[73] X. Zhang, B. Gao, and H. Xia, “Effect of cadmium on growth, photosynthesis, mineral nutrition and metal accumulation of bana grass and vetiver grass,” *Ecotoxicol. Environ. Saf.*, vol. 106, pp. 102–108, Aug. 2014, doi: 10.1016/j.ecoenv.2014.04.025.

[74] N. Roongtanakiat and T. Akharawutchayanon, “Evaluation of vetiver grass for radiocesium absorption ability,” *Agric. Nat. Resour.*, vol. 51, no. 3, pp. 173–180, Jun. 2017, doi: 10.1016/j.anres.2017.01.002.

[75] K. Zare, V. Sheykhi, and M. Zare, “Investigating the heavy metals’ removal capacity of some native plant species from the wetland groundwater of Maharlu Lake in Fars province, Iran,” *Int. J. Phytoremediation*, vol. 22, no. 7, pp. 781–788, Jun. 2020, doi: 10.1080/15226514.2019.1710815.

[76] D. Akhzari and N. Alipoor, “Studying the quantitative and qualitative characteristics of vetiver grass (Chrysopogon zizanioides L.) under different compost and zeolite treatments,” 2019.

[77] K. Saeb, R. Khadami, S. Khoramnejadian, and E. Abdollahi, “Use of vetiver (Vetiveria zizanoides) in remediation of cyanide soil contamination,” *J. Biol. Todays World*, vol. 4, no. 7, 2015, doi: 10.15412/J.JBTW.01040702.

[78] L. T. Danh, P. Truong, R. Mammucari, T. Tran, and N. Foster, “VETIVER GRASS, *VETIVERIA ZIZANIOIDES* : A CHOICE PLANT FOR PHYTOREMEDIATION OF HEAVY METALS AND ORGANIC WASTES,” *Int. J. Phytoremediation*, vol. 11, no. 8, pp. 664–691, Oct. 2009, doi: 10.1080/15226510902787302.

[79] A. Bormudoi and M. Nagai, “A remote-sensing-based vegetative technique for flood hazard mitigation of Jiadhal basin, India,” *Nat. Hazards*, vol. 83, no. 1, pp. 411–423, Aug. 2016, doi: 10.1007/s11069-016-2321-1.

[80] P. N. Truong, P. A. Dalton, C. D. Knowles-Jackson, and D. S. Evans, “VEGETATIVE BARRIER WITH VETIVER GRASS: AN ALTERNATIVE TO CONVENTIONAL SOIL AND WATER CONSERVATION SYSTEM”.

[81] W. S. Paul Truong, “Vetiver-the hedge against soil erosion?,” vol. 3, no. 3, 1990.

[82] S. Feng, H. W. Liu, Q. P. Cai, and W. B. Jian, “Effects of grass type on hydraulic response of the three-layer landfill cover system,” *Waste Manag. Res. J. Sustain. Circ. Econ.*, vol. 40, no. 7, pp. 882–891, Jul. 2022, doi: 10.1177/0734242X211061213.

[83] O. Babalola, S. O. Oshunsanya, and K. Are, “Effects of vetiver grass (Vetiveria nigritana) strips, vetiver grass mulch and an organomineral fertilizer on soil, water and nutrient losses and maize (Zea mays, L) yields,” *Soil Tillage Res.*, vol. 96, no. 1–2, pp. 6–18, Oct. 2007, doi: 10.1016/j.still.2007.02.008.

[84] H. Shuai *et al.*, “Effects of Vetiveria zizanioides on the Restoration and Succession of Coal Gangue Mountain Plant Communities in Different Years,” *Diversity*, vol. 14, no. 10, p. 843, Oct. 2022, doi: 10.3390/d14100843.

[85] T. E. Fulbright, J. Alfonso Ortega-Santos, A. Lozano-Cavazos, and L. E. Ramírez-Yanez, “Establishing Vegetation on Migrating Inland Sand Dunes in Texas,” *Rangel. Ecol. Manag.*, vol. 59, no. 5, pp. 549–556, Sep. 2006, doi: 10.2111/06-025R1.1.

[86] Sayoni Mondal1 · Priyank Pravin Patel1, “Implementing Vetiver grass‑based riverbank protection programmes in rural West Bengal, India,” 2020.

[87] X. Wang, Z. Li, Y. Chen, and Y. Yao, “Influence of Vetiver Root Morphology on Soil–Water Characteristics of Plant-Covered Slope Soil in South Central China,” *Sustainability*, vol. 15, no. 2, p. 1365, Jan. 2023, doi: 10.3390/su15021365.

[88] S. Donjadee, R. S. Clemente, T. Tingsanchali, and C. Chinnarasri, “Effects of vertical hedge interval of vetiver grass on erosion on steep agricultural lands,” *Land Degrad. Dev.*, vol. 21, no. 3, pp. 219–227, May 2010, doi: 10.1002/ldr.900.

[89] O. Babalola, S. C. Jimba, O. Maduakolam, and O. A. Dada, “Use of Vetiver Grass for Soil and Water Conservation in Nigeria”.

[90] S. Neve, D. Sarkar, Z. Zhang, and R. Datta, “Optimized Production of Second-Generation Bioethanol from a Spent C4 Grass: Vetiver (Chrysopogon zizanioides),” *Energies*, vol. 15, no. 24, p. 9597, Dec. 2022, doi: 10.3390/en15249597.

[91] H. Rahardjo, A. Satyanaga, E. C. Leong, V. A. Santoso, and Y. S. Ng, “Performance of an instrumented slope covered with shrubs and deep-rooted grass,” *Soils Found.*, vol. 54, no. 3, pp. 417–425, Jun. 2014, doi: 10.1016/j.sandf.2014.04.010.

[92] P. Inthapan and S. Boonchee, “RESEARCH ON VETIVER GRASS FOR SOIL AND WATER CONSERVATION IN THE UPPER NORTH OF THAILAND”.

[93] F. S. R. Holanda, R. N. D. Araújo Filho, A. Pedrotti, B. P. Wilcox, R. H. Marino, and L. D. V. Santos, “Soil bioengineering in northeastern Brazil: An Overview,” *Ambiente E Agua - Interdiscip. J. Appl. Sci.*, vol. 16, no. 4, p. 1, Jul. 2021, doi: 10.4136/ambi-agua.2650.

[94] H. Ding, H. Zhang, B. Liu, and H. Huang, “Study on Mechanical Properties of Soil Stabilization by Different Vegetation Roots on High Steep Slope,” *Sustainability*, vol. 15, no. 3, p. 2569, Jan. 2023, doi: 10.3390/su15032569.

[95] Y. S. Berego, S. S. Sota, M. D. Ulsido, and E. M. Beyene, “Treatment Performance Assessment of Natural and Constructed Wetlands on Wastewater From Kege Wet Coffee Processing Plant in Dale Woreda, Sidama Regional State, Ethiopia,” *Environ. Health Insights*, vol. 16, p. 117863022211427, Jan. 2022, doi: 10.1177/11786302221142749.

[96] P.A. Dalton av \* , R.J. Smith a, and P.N.V. Truong b, “Vetiver grass hedges for erosion control on a cropped flood plain: hedge hydraulics,” 1995.

[97] National Research Council (U.S.), Ed., *Vetiver grass: a thin green line against erosion*. Washington, D.C: National Academy Press, 1993.

[98] K. Kim, S. Riley, E. Fischer, and S. Khan, “Greening Roadway Infrastructure with Vetiver Grass to Support Transportation Resilience,” *CivilEng*, vol. 3, no. 1, pp. 147–164, Feb. 2022, doi: 10.3390/civileng3010010.

[99] P. Methacanon, O. Chaikumpollert, P. Thavorniti, and K. Suchiva, “Hemicellulosic polymer from Vetiver grass and its physicochemical properties,” *Carbohydr. Polym.*, vol. 54, no. 3, pp. 335–342, Nov. 2003, doi: 10.1016/S0144-8617(03)00182-6.

[100] K. K. Chahal, U. Bhardwaj, S. Kaushal, and A. K. Sandhu, “Chemical composition and biological properties of Chrysopogon zizanioides (L.) Roberty syn. Vetiveria zizanioides (L.) Nash- A Review,” 2015.

[101] M. B. Raja, K. Rajamani, J. Suresh, A. J. Joel, and D. Uma, “Chemical composition of Vetiver root oil obtained by using GCMS analysis”.

[102] K. E. Nix, G. Henderson, B. C. R. Zhu, and R. A. Laine, “Evaluation of Vetiver Grass Root Growth, Oil Distribution, and Repellency Against Formosan Subterranean Termites,” *HortScience*, vol. 41, no. 1, pp. 167–171, Feb. 2006, doi: 10.21273/HORTSCI.41.1.167.

[103] D. L. Teixeira, A. T. D. Matos, M. Pimentel De Matos, D. P. Vieira, E. D. Araújo, and L. A. Ferraz, “The influence of plant roots on the clogging process and the extractive capacity of nutrients/pollutants in horizontal subsurface flow constructed wetlands,” *Ecol. Eng.*, vol. 120, pp. 54–60, Sep. 2018, doi: 10.1016/j.ecoleng.2018.05.031.

[104] K. K. Aggarwal, A. Singh, A. P. Kahol, and M. Singh, “Parameters of Vetiver Oil Distillation,” *J. Herbs Spices Med. Plants*, vol. 6, no. 2, pp. 55–61, May 1998, doi: 10.1300/J044v06n02\_07.

[105] A. Kadarohman, R. E. Sardjono, S. Aisyah, and L. L. Khumaisah, “Biolarvicidal of Vetiver Oil and Ethanol Extract of Vetiver Root Distillation Waste ( *Vetiveria zizanoides* ) Effectiveness toward *Aedes aegypti* , Culex sp., and *Anopheles sundaicus*,” *J. Essent. Oil Bear. Plants*, vol. 16, no. 6, pp. 749–762, Nov. 2013, doi: 10.1080/0972060X.2013.862075.

[106] G. M. Sabila, C. Sephia, T. Karliati, Y. Suhaya, and R. Dungani, “Washing and Chopping Pre-treatment Effect of Vetiver Roots on Vetiver Oil Yield and Distillation Time,” *IOP Conf. Ser. Earth Environ. Sci.*, vol. 891, no. 1, p. 012021, Nov. 2021, doi: 10.1088/1755-1315/891/1/012021.

[107] H. B. Wedler, T. Newman, and D. J. Tantillo, “Decarboxylation Facilitated by Carbocation Formation and Rearrangement during Steam Distillation of Vetiver Oil,” *J. Nat. Prod.*, vol. 79, no. 10, pp. 2744–2748, Oct. 2016, doi: 10.1021/acs.jnatprod.6b00348.

[108] N. Dudai, E. Putievsky, D. Chaimovitch, and M. Ben-Hur, “Growth management of vetiver (Vetiveria zizanioides) under Mediterranean conditions,” *J. Environ. Manage.*, vol. 81, no. 1, pp. 63–71, Oct. 2006, doi: 10.1016/j.jenvman.2005.10.014.

[109] D. Chi Cuong, V. Van Minh, and P. Truong, “Effects of Sea Water Salinity on the Growth of Vetiver Grass (Chrysopogon Zizanioides L.),” *Mod. Environ. Sci. Eng.*, vol. 1, no. 4, pp. 185–191, Dec. 2015, doi: 10.15341/mese(2333-2581)/04.01.2015/004.

[110] F. Huq, “VETIVER - AN ECONOMIC MIRACLE GRASS FOR SMALL-SCALE FARMERS IN BANGLADESH: THE PROSHIKA EXPERIENCE”.

[111] W. Liu *et al.*, “Seedling Production from Seeds of a Wild Ecotype of Vetiver Grass (&lt;i&gt;Vetiveria zizanioides&lt;/i&gt; L.) in Southern China,” *Am. J. Plant Sci.*, vol. 12, no. 03, pp. 394–405, 2021, doi: 10.4236/ajps.2021.123025.

[112] S. Donjadee and T. Tingsanchali, “Soil and water conservation on steep slopes by mulching using rice straw and vetiver grass clippings,” *Agric. Nat. Resour.*, vol. 50, no. 1, pp. 75–79, Jan. 2016, doi: 10.1016/j.anres.2015.03.001.

[113] R. G. Grimshaw, “The Role of Vetiver Grass in Sustaining Agricultural Productivity.”.

[114] Y. Achour, A. Ouammi, and D. Zejli, “Technological progresses in modern sustainable greenhouses cultivation as the path towards precision agriculture,” *Renew. Sustain. Energy Rev.*, vol. 147, p. 111251, Sep. 2021, doi: 10.1016/j.rser.2021.111251.

[115] V. Davamani, C. Indhu Parameshwari, S. Arulmani, J. Ezra John, and R. Poornima, “Hydroponic phytoremediation of paperboard mill wastewater by using vetiver (Chrysopogon zizanioides),” *J. Environ. Chem. Eng.*, vol. 9, no. 4, p. 105528, Aug. 2021, doi: 10.1016/j.jece.2021.105528.

[116] B. Hart, R. Cody, and P. Truong, “Hydroponic Vetiver Treatment of Post Septic Tank Effluent”.

[117] A. Worku, N. Tefera, H. Kloos, and S. Benor, “Bioremediation of brewery wastewater using hydroponics planted with vetiver grass in Addis Ababa, Ethiopia,” *Bioresour. Bioprocess.*, vol. 5, no. 1, p. 39, Dec. 2018, doi: 10.1186/s40643-018-0225-5.

[118] K. F. Chen, T. Y. Yeh, and C. F. Lin, “Phytoextraction of Cu, Zn, and Pb Enhanced by Chelators with Vetiver ( *Vetiveria zizanioides* ): Hydroponic and Pot Experiments,” *ISRN Ecol.*, vol. 2012, pp. 1–12, Mar. 2012, doi: 10.5402/2012/729693.

[119] S. Marcacci, M. Raveton, P. Ravanel, and J.-P. Schwitzguébel, “Conjugation of atrazine in vetiver (Chrysopogon zizanioides Nash) grown in hydroponics,” *Environ. Exp. Bot.*, vol. 56, no. 2, pp. 205–215, Jun. 2006, doi: 10.1016/j.envexpbot.2005.02.004.

[120] S. X. Sun *et al.*, “Uptake of 2,4-bis(Isopropylamino)-6-methylthio-s-triazine by Vetiver Grass (Chrysopogon zizanioides L.) from Hydroponic Media,” *Bull. Environ. Contam. Toxicol.*, vol. 96, no. 4, pp. 550–555, Apr. 2016, doi: 10.1007/s00128-016-1737-3.

[121] N. Girija, M. M. Nair, S. Lakshmi, and S. S. Pillai, “Phytoremediation Potential of Vetiver Zizanioides: A Green Technology to Remove Pollutants from Pampa River by Hydroponic Technique,” *Indian J. Adv. Chem. Sci.*, 2016.

[122] N. Ajijah *et al.*, “Beneficiary of nitrifying bacteria for enhancing lettuce (Lactuca sativa) and vetiver grass (Chrysopogon zizanioides L.) growths align with carp (Cyprinus carpio) cultivation in an aquaponic system,” *Environ. Sci. Pollut. Res.*, vol. 28, no. 1, pp. 880–889, Jan. 2021, doi: 10.1007/s11356-020-10468-x.

[123] Ms. Nilda S. Alforja Ms. Marites G. Ortañez Ms. Roman V. Austria, “VETIVER on AQUAPONICS: Improving Water Quality for the Rearing of Pangasius hypothalamus Fingerlings in Concrete Tank Using Vetiver Grass Chrysopagon zizanioides,” 2018.

[124] H. Honary and M. Vasundhara, “Hydroponics and aeroponics as alternative production systems for high- value medicinal and aromatic crops: Present scenario and future prospects,” 2011.

[125] C. Gavira, F. Watteau, J.-M. Lainé, F. Bourgaud, and L. Legendre, “Evaluation of Vetiver Volatile Compound Production under Aeroponic-Grown Conditions for the Perfume Industry,” *Molecules*, vol. 27, no. 6, p. 1942, Mar. 2022, doi: 10.3390/molecules27061942.

[126] Ralph Ash1 and Paul Truong2, “THE USE OF VETIVER GRASS FOR SEWERAGE TREATMENT,” 2004.

[127] M. Yaseen, M. Singh, and D. Ram, “Growth, yield and economics of vetiver (Vetiveria zizanioides L. Nash) under intercropping system,” *Ind. Crops Prod.*, vol. 61, pp. 417–421, Nov. 2014, doi: 10.1016/j.indcrop.2014.07.033.

[128] N. Dudai *et al.*, “Agronomic and economic evaluation of Vetiver grass (Vetiveria zizanioides L.) as means for phytoremediation of diesel polluted soils in Israel,” *J. Environ. Manage.*, vol. 211, pp. 247–255, Apr. 2018, doi: 10.1016/j.jenvman.2018.01.013.

[129] L. Xu, “China Vetiver Network: Twenty Years Experience In Vetiver Development”.

[130] R. S. Sharma, “Economics of Vetiver Cultivation: Increase in the Income of Household from Marginal Land in Madhepura District of Bihar,” *Econ. Aff.*, vol. 67, no. 1s, Feb. 2022, doi: 10.46852/0424-2513.1.2022.11.

[131] J. Boonyanuphap, “Cost-benefit analysis of vetiver system-based rehabilitation measures for landslide-damaged mountainous agricultural lands in the lower Northern Thailand,” *Nat. Hazards*, vol. 69, no. 1, pp. 599–629, Oct. 2013, doi: 10.1007/s11069-013-0730-y.

[132] S. P. Dewi and R. Kurniati, “Revealing Cost and Benefit of Vegetative Approach to Mitigate Riverbank Landslide in Semarang Coastal Villages,” *IOP Conf. Ser. Earth Environ. Sci.*, vol. 1082, no. 1, p. 012030, Sep. 2022, doi: 10.1088/1755-1315/1082/1/012030.

[133] J. K. Raman and E. Gnansounou, “LCA of bioethanol and furfural production from vetiver,” *Bioresour. Technol.*, vol. 185, pp. 202–210, Jun. 2015, doi: 10.1016/j.biortech.2015.02.096.