

DAFTAR PUSTAKA

- Abbassi, B. E., & Shquirat, W. D. (2008). Kinetics of indigenous isolated bacteria used forex-situ bioremediation of petroleum contaminated soil. *Water, Air, and Soil Pollution*, 192, 221-226.
- Anastassiades, M., Scherbaum, E., & Bertsch, D. 2003. Validation of a simple and rapidmultiresidue method (QuEChERS) and its implementation in routine pesticide analysis. In *MGPR Symposium: Aix en Provence, France* (Vol. 7).
- Badan Pusat Statistik Kabupaten Sleman. 2019. Kecamatan Pakem dalam Angka. BPS Kabupaten Sleman. Yogyakarta.
- Badan Pusat Statistik Kabupaten Sleman. 2021. Kabupaten Sleman dalam Angka. BPS Kabupaten Sleman. Yogyakarta.
- Bangar, V. R., Kolase, S. V., Sable, S. B., & Latake, S. B. (2020). Screening for fungicide degrading potential of isolated bacterial strains and identification of potent degrading strains. *Journal of Pharmacognosy and Phytochemistry*, 9(6), 201-206.
- Bhatt, D., Srivastava, A., Srivastava, P. C., & Sharma, A. 2023. Evaluation of three novel soil bacterial strains for efficient biodegradation of persistent boscalid fungicide: Kinetics and identification of microbial biodegradation intermediates. *Environmental Pollution*, 316, 120484.
- Chang, Y. T., Lee, J. F., & Chao, H. P. 2007. Variability of communities and physiological characteristics between free-living bacteria and attached bacteria during the PAH biodegradation in a soil/water system. *European Journal of Soil Biology*, 43(5-6), 283-296.
- Chen, S., Chang, C., Deng, Y., An, S., Dong, Y. H., Zhou, J., Zhang, L. H. 2014. Fenpropathrin biodegradation pathway in *Bacillus* sp. DG-02 and its potential for bioremediation of pyrethroid-contaminated soils. *Journal of Agricultural and Food Chemistry*, 62(10), 2147-2157.
- Chen, X., Peng, S., Liu, M., Wang, L., Pang, K., Zhang, L., Liu, A. 2023. Highly efficient in-situ cleaner degradation of difenoconazole by two novel dominant strains: Microflora diversity, monoclonal isolation, growth factor optimization, intermediates, and pathways. *Chemosphere*, 310, 136863.
- Cheng, J., Lee, X., Gao, W., Chen, Y., Pan, W., & Tang, Y. 2017. Effect of biochar onthe bioavailability of difenokonazol and microbial community composition in apesticide-contaminatedsoil. *Applied Soil Ecology*, 121, 185-192.
- Damayanti, N. F. (2016). Pengaruh Penambahan Bakteri *Pseudomonas Aeruginosa* Terhadap Biodegradasi Ddt Oleh Jamur Pelapuk Coklat *Gloeophyllum Trabeum* (Doctoral dissertation, Institut Teknologi Sepuluh Nopember Surabaya).
- De Figueirêdo, L. P., Athayde, D. B., Daam, M. A., van Gestel, C. A., da Silva Guerra, G., Duarte-Neto, P. J., & Espíndola, E. L. 2020. Impact of temperature on the toxicity of Kraft 36 EC® (as abamectin) and Score 250 EC® (as difenoconazole) to soil organisms under realistic environmental exposure scenarios. *Ecotoxicology and Environmental Safety*, 194, 110446.
- Dong, Y., Yan, X., Lu, F., Guo, M., Zhuang, Y., 2015. Development and Optimization of an

European Food Safety Authority, 2011. Conclusion on the peer review of the pesticide risk assessment of the active substance difenokonazol. *EFSA J.* 9(1), 1967-1967.

Fan, R.; Zhang, W.; Jia, L.; Li, L.; Zhao, J.; Zhao, Z.; Peng, S.; Chen, Y.; Yuan, X. Combined developmental toxicity of the pesticides difenokonazol and dimethomorphon embryonic zebrafish. *Toxins* 2021, 13, 854.

Filimon, M. N., Popescu, R., Verdes, D., Dumitrescu, G., Voia, O. S., Ahmadi, M., & Dronca, D. (2018). The effects of difenokonazol treatment on microorganism from soil. *communities*, 14(17), 20.

Greene, E. A., Kay, J. G., Jaber, K., Stehmeier, G., & Voordouw, G. (2000). Composition of soil microbial communities enriched on a mixture of aromatic hydrocarbons. *Applied and Environmental Microbiology*, 66 (12), 5282–5289

Halmi, M.I.E., Shukor, M.S., Shukor, M.Y., 2014. Evaluation of several mathematical models for fitting the growth and kinetics of the catechol-degrading *Candida parapsilopsis*: part 2. *J. Environ. Bioremed. Toxicol.* 2 (2), 53–57. <https://journal.hibiscuspublisher.com/index.php/JEBAT/article/view/218>.

He, M., Jia, C., Zhao, E., Chen, L., Yu, P., Jing, J., Zheng, Y. 2016. Concentrations and dissipation of difenoconazole and fluxapyroxad residues in apples and soil, determined by ultrahigh-performance liquid chromatography electrospray ionization tandem mass spectrometry. *Environmental science and pollution research*, 23, 5618-5626.

Heo, J., Park, I., You, J., Han, B. H., Kwon, S. W., Lee, S. W., & Ahn, J. H. (2019). Genome analysis of *Sphingomonas histidinilytica* C8-2 degrading a fungicide difenoconazole. 55(4), 428-431.

Huang, Y., Chen, W. J., Li, J., Ghorab, M. A., Alansary, N., El-Hefny, D. E., ... & Chen, S. (2022). Novel mechanism and degradation kinetics of allethrin using *Bacillus megaterium* strain HLJ7 in contaminated soil/water environments. *Environmental Research*, 214, 113940.

Janda, J. M. and Abbott, S. L. 2007. 16S rRNA gene sequencing for bacterial identification in the diagnostic laboratory: Pluses, perils, and pitfalls. *Journal of Clinical Microbiology*, 45(9): 2761–2764.

Kalay, A.M., Patty, J., & Sinay, M. (2015). Perkembangan *Alternaria solani* pada tiga varietas tanaman tomat. *Jurnal Agrikultura*, 26(1), 1-6. <https://doi.org/10.24198/agrikultura.v26i1.8455>

Kang, Y. S., Kim, Y. J., Jeon, C. O., & Park, W. J. 2006. Characterization of naphthalene-degrading *Pseudomonas* species isolated from pollutant-contaminated sites: oxidative stress during their growth on naphthalene. *Journal of microbiology and biotechnology*, 16(11), 1819-1825.

Kesavachandran, C. N., Fareed, M., Pathak, M. K., Bihari, V., Mathur, N., Srivastava, A. K. 2009. Adverse health effects of pesticides in agrarian populations of developing countries. *Reviews of environmental contamination and toxicology Vol 200*, 33-52.

Khalidah Ab, L., Nor Kartini, A.B., Nurzawani Md, I., 2010. Preliminary study of difenokonazol residues in ricepaddy water sheds. *Malays. J. Sci.* 29 (1), 73–79.

Khatoon, H., & Rai, J. P. N. 2020. Optimization studies on biodegradation of atrazine by *Bacillus badius* ABP6 strain using response surface methodology. *Biotechnology reports*, 26,

- Latiff, Khalidah Ab, Nor Kartini Abu Bakar, and Nurzawani Md Isa. "Preliminary Study of Difenonazole Residues in Rice Paddy Watersheds." *Malaysian Journal of Science* 29.1 (2010): 73-79.
- Le Borgne, S., Paniagua, D., & Vazquez-Duhalt, R. 2008. Biodegradation of organic pollutants by halophilic bacteria and archaea. *Microbial Physiology*, 15(2-3), 74-92.
- Luong, T. T., Nguyen, T. H. T., Nguyen, T. D., Pham, T. H. T., Ho, T. T., Nguyen, N. L. 2024. Degradation of Triazole Fungicides by Plant Growth-Promoting Bacteria from Contaminated Agricultural Soil. *Journal of Microbiology and Biotechnology*, 34(1), 56.
- Maier, R.M., Pepper, I.L., 2015. Bacterial growth. Environmental Microbiology. Academic Press, pp. 37–56. <https://doi.org/10.1016/B978-0-12-394626-3.00003-X>.
- Man, Y., Stenrød, M., Wu, C., Almvik, M., Holten, R., Clarke, J. L., ... & Liu, X. 2021. Degradation of difenokonazol in water and soil: Kinetics, degradation pathways, transformation products identification and ecotoxicity assessment. *Journal of Hazardous Materials*, 418, 126303.
- Man, Y., Stenrød, M., Wu, C., Almvik, M., Holten, R., Clarke, J. L., Liu, X. 2021. Degradation of difenonazole in water and soil: Kinetics, degradation pathways, transformation products identification and ecotoxicity assessment. *Journal of hazardous materials*, 418, 126303.
- Mohanty, M.P., Brahmacharimayum, B., Ghosh, P.K., 2018. Effects of phenol on sulfate reduction by mixed microbial culture: kinetics and bio-kinetics analysis. *Water Sci. Technol.* 77 (4), 1079–1088. <https://doi.org/10.2166/wst.2017.630>.
- Mu, X., Wang, K., Chai, T., Zhu, L., Yang, Y., Zhang, J., ... & Li, X. 2015. Sex specific response in cholesterol level in zebrafish (*Danio rerio*) after long-term exposure of difenonazole. *Environmental Pollution*, 197, 278-286.
- Mu, X., Pang, S., Sun, X., Gao, J., Chen, J., Chen, X., Li, X., Wang, C., 2013. Evaluation of acute and developmental effects of difenokonazol via multiple stage zebra fish assays. *Environ. Pollut.* 175, 147–157.
- Muloiwa, M., Nyende-Byakika, S., & Dinka, M. (2020). Comparison of unstructured kinetic bacterial growth models. *South African Journal of Chemical Engineering*, 33, 141-150.
- Panikov, N.S., 2009. Kinetics, microbial growth. Encyclopedia of Industrial Biotechnology: bioprocess, Bioseparation, and Cell Technology. pp. 1-34. <https://doi.org/10.1002/9780470054581.eib378>.
- Pemerintah Kabupaten Sleman Provinsi Daerah Istimewa Yogyakarta. 2008. Laporan Status Lingkungan Hidup Kabupaten Sleman. Yogyakarta.
- Rafsanjani, M. E. D., Sabdono, A., & Djunaedi, A. 2020. Uji Resistensi Bakteri Karang *Galaxea* sp. dan *Porites* sp. terhadap Pestisida Triazofos. *Journal of Marine Research*, 9(2), 186-192.
- Ren, X., Zeng, G., Tang, L., Wang, J., Wan, J., Liu, Y., ... & Deng, R. 2018. Sorption, transport and biodegradation—an insight into bioavailability of persistent organic pollutants in soil. *Science of the total environment*, 610, 1154-1163.
- Salunkhe, V. P., Sawant, I. S., Banerjee, K., Wadkar, P. N., Sawant, S. D., & Hingmire, S.

- A. 2014. Kinetics of degradation of carbendazim by *B. subtilis* strains: possibility of in situ detoxification. *Environmental monitoring and assessment*, 186, 8599-8610.
- Satapute, P., & Kaliwal, B. 2016. Biodegradation of propiconazole by newly isolated *Burkholderia* sp. strain BBK_9. *3 Biotech*, 6(1), 110.
- Shcherbakova, L., Mikityuk, O., Arslanova, L., Stakheev, A., Erokhin, D., Zavriev, S., Dzhavakhiya, V., 2021. Studying the ability of thymol to improve fungicidal effects of tebuconazole and difenokonazol against some plant pathogenic fungi in seed or foliar treatments. *Front. Microbiol.* 12, 629429.
- Sofiyanti, N. and Isda, M. N. 2019. Jenis – jenis tumbuhan paku (Pteridofita) dari Hutan Universitas Riau, Provinsi Riau dan Pola Pita DNA berdasarkan Penanda DNA M13Primer. *Biospecies*, 12(1): 24–32.
- Stackebrandt, E. and Goebel, B. M. 1994. Taxonomic note: A place for DNA-DNA 33 reassociation and 16S rRNA sequence analysis in the present species definition in bacteriology. *International Journal of Systematic Bacteriology*, 44(4): 846–849.
- Su, L., Zhao, J., Liao, C., Wang, H., Xiong, S., Deng, Y., & Gong, D. 2022. Dissipation, Residue Behavior and Dietary Risk Assessment of Difenonazole on Jujube (*Ziziphus jujuba* Mill.). *Agronomy*, 12(12), 3145.
- Takagi, K. 2020. Study on the biodegradation of persistent organic pollutants (POPs). *Journal of Pesticide Science*, 45(2), 119-123.
- Tazdaït, D., Salah, R., Grib, H., Abdi, N., Mameri, N., 2018. Kinetic study on biodegradation of glyphosate with unacclimated activated sludge. *Int. J. Environ. Health Res.* 28 (4), 448–459. <https://doi.org/10.1080/09603123.2018.1487043>.
- Teng, M., Qi, S., Zhu, W., Wang, Y., Wang, D., Yang, Y., Wang, C. 2017. Sex-specific effects of difenonazole on the growth hormone endocrine axis in adult zebrafish (*Danio rerio*). *Ecotoxicology and Environmental Safety*, 144, 402-408.
- Teng, M., Zhu, W., Wang, D., Qi, S., Wang, Y., Yan, J., ... & Wang, C. 2018. Metabolomics and transcriptomics reveal the toxicity of difenonazole to the early life stages of zebrafish (*Danio rerio*). *Aquatic Toxicology*, 194, 112-120.
- Wang ZH, Yang T, Qin DM, Gong Y, Ji Y. 2008. Determination and dynamics of difenokonazol residues in Chinese cabbage and soil.
- Wang, C., Wu, Q., Wu, C., & Wang, Z. 2011. Application of dispersion–solidification liquid–liquid microextraction for the determination of triazole fungicides in environmental water samples by high-performance liquid chromatography. *Journal of Hazardous Materials*, 185(1), 71-76.
- Wang, K., Sun, D. W., Pu, H., & Wei, Q. 2019. Surface-enhanced Raman scattering of core-shell Au@ Ag nanoparticles aggregates for rapid detection of difenonazole in grapes. *Talanta*, 191, 449-456.
- Wang, S., Zhang, Q., Yu, Y., Chen, Y., Zeng, S., Lu, P., & Hu, D. 2018. Residues, dissipation kinetics, and dietary intake risk assessment of two fungicides in grape and soil. *Regulatory Toxicology and Pharmacology*, 100, 72-79.
- Yun, Y., Yu, F., Wang, N., Chen, H., Yin, Y., Ma, Z., 2012. Sensitivity to silthiofam, tebuconazole and difenokonazol of *Gaeumannomyces graminis* var. *tritici* isolates from

- Zhang, W., Li, J., Zhang, Y., Wu, X., Zhou, Z., Huang, Y., ... & Chen, S. 2022. Characterization of a novel glyphosate-degrading bacterial species, *Chryseobacterium* sp. Y16C, and evaluation of its effects on microbial communities in glyphosate-contaminated soil. *Journal of Hazardous Materials*, 432, 128689.
- Zhao, F., Liu, J., Xie, D., Lv, D., & Luo, J. 2018. A novel and actual mode for study of soil degradation and transportation of difenoconazole in a mango field. *RSC advances*, 8(16), 8671-8677.
- Zhou, Y., Chen, F., Wang, L., Wang, P., Wang, T., Bhatt, P., ... & Zhang, W. Biodegradation of Difenconazole by *Pseudomonas Putida* A-3: Novel Degradation Pathway and Potential in the Bioremediation of Contaminated Water–Sediment Systems. Available at SSRN 4792540.