

DAFTAR KEPUSTAKAAN

- Alen, Y., Adriyani, F., Suharti, N., Nakajima, S., & Djamaan, A. (2016). Determination of profenofos pesticide residue in tomato (*Solanum lycopersicum* L.) using gas chromatography technique. *Der Pharmacia Lettre*, 8(8), 137–141.
- Amelia, F., Safni, & Suyani, H. (2015). Degradasi senyawa imidakloprid secara advanced oxidation processes dengan penambahan TiO₂-anatase. *Jurnal Riset Kimia*, 8(2), 108. <https://doi.org/10.25077/jrk.v8i2.225>
- Antos, P., Kurdziel, A., Sadło, S., & Balawejder, M. (2013). Preliminary study on the use of ozonation for the degradation of dithiocarbamate residues in the fruit drying process: Mancozeb residue in blackcurrant is the example used. *Journal of Plant Protection Research*, 53(1), 48–52. <https://doi.org/10.2478/jppr-2013-0007>
- Arfi, F., Safni, S., & Abdullah, Z. (2017). Degradasi senyawa paraquat dalam pestisida gramoxone secara sonolisis dengan penambahan ZnO. *Lantanida Journal*, 3(1), 71. <https://doi.org/10.22373/lj.v3i1.1442>
- Azam, S. M. R., Ma, H., Xu, B., Devi, S., Bakar, A., Stanley, S. L., Bhandari, B., & Zhu, J. (2020). Trends in Food Science & Technology Efficiency of ultrasound treatment in the and removal of pesticide residues from fresh vegetables: A review. *Trends in Food Science & Technology*, 97(301), 417–432. <https://doi.org/10.1016/j.tifs.2020.01.028>
- Bajwa, U., & Sandhu, K. S. (2014). Effect of handling and processing on pesticide residues in food- A review. *Journal of Food Science and Technology*, 51(2), 201–220. <https://doi.org/10.1007/s13197-011-0499-5>
- Calumpang, S. M. F., Medina, M. J. B., Roxas, N. P., & Magallona, E. D. (1993). Movement and degradation of mancozeb fungicide and its metabolites, ethylenethiourea and ethyleneurea in silty clay loam soil. *International Journal of Pest Management*, 39(2), 161–166. <https://doi.org/10.1080/09670879309371783>
- Catalkaya, E. C., & Kargi, F. (2008). Advanced oxidation of diuron by photo-fenton treatment as a function of operating parameters. *Journal of Environmental Engineering*, 134(12), 1006–1013. [https://doi.org/10.1061/\(ASCE\)0733-9372\(2008\)134:12\(1006\)](https://doi.org/10.1061/(ASCE)0733-9372(2008)134:12(1006))
- Cengiz, M. F., Başlar, M., Basançelebi, O., & Kılıçlı, M. (2018). Reduction of pesticide residues from tomatoes by low intensity electrical current and ultrasound applications. *Food Chemistry*, 267, 60–66. <https://doi.org/10.1016/j.foodchem.2017.08.031>
- Chen, C., Qian, Y., Chen, Q., Tao, C., Li, C., & Li, Y. (2011). Evaluation of

pesticide residues in fruits and vegetables from Xiamen, China. *Food Control*, 22(7), 1114–1120. <https://doi.org/10.1016/j.foodcont.2011.01.007>

Chen, J. Y., Lin, Y. J., & Kuo, W. C. (2013). Pesticide residue removal from vegetables by ozonation. *Journal of Food Engineering*, 114(3), 404–411. <https://doi.org/10.1016/j.jfoodeng.2012.08.033>

Chiron, S. (2000). Pesticide chemical oxidation: state-of-the-art. *Water Research*, 34(2), 366–377. [https://doi.org/10.1016/S0043-1354\(99\)00173-6](https://doi.org/10.1016/S0043-1354(99)00173-6)

Cui, M., Jang, M., Cho, S.-H., Elena, D., & Khim, J. (2011). Enhancement in mineralization of a number of natural refractory organic compounds by the combined process of sonolysis and ozonolysis (US/O₃). *Ultrasonics Sonochemistry*, 18(3), 773–780. <https://doi.org/10.1016/j.ultsonch.2010.11.009>

Deising, H. B., Reimann, S., & Pascholati, S. F. (2008). Mechanisms and significance of fungicide resistance. *Brazilian Journal of Microbiology*, 39(2), 286–295. <https://doi.org/10.1590/S1517-83822008000200017>

Direktorat Jenderal Prasarana dan Sarana. (2018). *Pedoman Pengawasan Pupuk Pestisida*.

Djodjosumarno, P. (2000). Teknik Aplikasi Pestisida Pertanian. Kanisius, Yogyakarta, hlm: 46-47.

Gligorovski, S., Strekowski, R., Barbati, S., & Vione, D. (2015). Environmental implications of hydroxyl radicals ($\bullet\text{OH}$). *Chemical Reviews*, 115(24), 13051–13092. <https://doi.org/10.1021/cr500310b>

Gogate, P. R., & Pandit, A. B. (2004). A review of imperative technologies for wastewater treatment I: Oxidation technologies at ambient conditions. *Advances in Environmental Research*, 8(3–4), 501–551. [https://doi.org/10.1016/S1093-0191\(03\)00032-7](https://doi.org/10.1016/S1093-0191(03)00032-7)

Heleno, F. F., De Queiroz, M. E. L. R., Neves, A. A., Faroni, L. R. A., De Sousa, F. A., & De Oliveira, A. F. (2015). Ozone treatment for the removal of residual chlorothalonil and effects on the quality of table grapes. *Journal of the Brazilian Chemical Society*, 26(4), 687–694. <https://doi.org/10.5935/0103-5053.20150027>

Henry, A., & Yanuar, A. (2002). Influenza dengan menggunakan aplikasi sistem persamaan linier spektrofotometri UV-Vis. *Proceedings, Komputer Dan Sistem Intelijen (KOMMIT 2002)*, A1-11.

Heshmati, A., & Nazemi, F. (2018). Dichlorvos (DDVP) residue removal from tomato by washing with tap and ozone water, a commercial detergent solution and ultrasonic cleaner. *Food Science and Technology*, 38(3), 441–446. <https://doi.org/10.1590/1678-457x.07617>

- Hudayya, A. (2012). Pengelompokan pestisida berdasarkan cara kerjanya (Mode of Action). Yayasan Bina Tani Sejahtera.
- Ikeura, H., Kobayashi, F., & Tamaki, M. (2011a). Removal of residual pesticide , fenitrothion , in vegetables by using ozone microbubbles generated by different methods. *Journal of Food Engineering*, 103(3), 345–349. <https://doi.org/10.1016/j.jfoodeng.2010.11.002>
- Ikeura, H., Kobayashi, F., & Tamaki, M. (2011b). Removal of residual pesticides in vegetables using ozone microbubbles. *Journal of Hazardous Materials*, 186(1), 956–959. <https://doi.org/10.1016/j.jhazmat.2010.11.094>
- Ikeura, H., Kobayashi, F., & Tamaki, M. (2013). Ozone microbubble treatment at various water temperatures for the removal of residual pesticides with negligible effects on the physical properties of lettuce and cherry tomatoes. *Journal of Food Science*, 78(2), T350–T355. <https://doi.org/10.1111/1750-3841.12007>
- Jiang, Q., Zhang, M., & Xu, B. (2020). Application of ultrasonic technology in postharvested fruits and vegetables storage: A review. In *Ultrasonics Sonochemistry* (Vol. 69). Elsevier B.V. <https://doi.org/10.1016/j.ultsonch.2020.105261>
- Khoiriah, K., Wellia, D. V., Gunluardi, J., & Safni, S. (2020). Photocatalytic degradation of commercial diazinon pesticide using C,N-codoped TiO₂ as photocatalyst. *Indonesian Journal of Chemistry*, 20(3), 587. <https://doi.org/10.22146/ijc.43982>
- Khoiriah, K., Wellia, D. V., & Safni, S. (2019). Degradasi pestisida diazinon dengan proses fotokatalisis sinar matahari menggunakan katalis C,N-codoped TiO₂. *Jurnal Kimia Dan Kemasan*, 41(1), 17. <https://doi.org/10.24817/jkk.v41i1.3834>
- Kim, S. W., Abd El-Aty, A. M., Rahman, M. M., Choi, J. H., Lee, Y. J., Ko, A. Y., Choi, O. J., Jung, H. N., Hacimüftüođlu, A., & Shim, J. H. (2015). The effect of household processing on the decline pattern of dimethomorph in pepper fruits and leaves. *Food Control*, 50, 118–124. <https://doi.org/10.1016/j.foodcont.2014.08.023>
- Kusvuran, E., Yildirim, D., Mavruk, F., & Ceyhan, M. (2012). Removal of chloropyrifos ethyl, tetradifon and chlorothalonil pesticide residues from citrus by using ozone. *Journal of Hazardous Materials*, 241–242, 287–300. <https://doi.org/10.1016/j.jhazmat.2012.09.043>
- Liang, H., Li, L., Li, W., Wu, Y., Zhou, Z., & Liu, F. (2011). Dissipation and residue of dimethomorph in pepper and soil under field conditions. *Ecotoxicology and Environmental Safety*, 74(5), 1331–1335. <https://doi.org/10.1016/j.ecoenv.2011.02.009>

- Lin, L., Xie, M., Liang, Y., He, Y., Yuk, G., Chan, S., & Luan, T. (2012). Degradation of cypermethrin, malathion and dichlorvos in water and on tea leaves with O₃ / UV / TiO₂ treatment. *Food Control*, 28(2), 374–379. <https://doi.org/10.1016/j.foodcont.2012.05.009>
- Lindsay, S., John W., Sons. 1992. High performance liquid chromatography, 2nd (ed). New York: Chiscer.
- Liu, T., Xu, S., Lu, S., Qin, P., Bi, B., Ding, H., Liu, Y., Guo, X., & Liu, X. (2019). Science of the total environment a review on removal of organophosphorus pesticides in constructed wetland: Performance, mechanism and influencing factors. *Science of the Total Environment*, 651, 2247–2268. <https://doi.org/10.1016/j.scitotenv.2018.10.087>
- López-Fernández, O., Rial-Otero, R., & Simal-Gándara, J. (2013). Factors governing the removal of mancozeb residues from lettuces with washing solutions. *Food Control*, 34(2), 530–538. <https://doi.org/10.1016/j.foodcont.2013.05.022>
- Lozano-Sánchez, J., Borrás-Linares, I., Sass-Kiss, A., & Segura-Carretero, A. (2018). Chromatographic Technique: High-Performance Liquid Chromatography (HPLC). In *Modern Techniques for Food Authentication* (pp. 459–526). <https://doi.org/10.1016/b978-0-12-814264-6.00013-x>
- Lozowicka, B., Jankowska, M., Hrynko, I., & Kaczynski, P. (2016). Removal of 16 pesticide residues from strawberries by washing with tap and ozone water, ultrasonic cleaning and boiling. *Environmental Monitoring and Assessment*, 188(1), 51. <https://doi.org/10.1007/s10661-015-4850-6>
- Marzouk, E. M. A., & Mohamed, M. S. (2014). Effect of ozonated water in reducing insecticides residues from potato tubers. *Middle East Journal of Agriculture Research*, 3(4), 1214–1220.
- Mishra, N. S., Reddy, R., Kuila, A., Rani, A., Mukherjee, P., Nawaz, A., & Pichiah, S. (2017). A review on advanced oxidation processes for effective water treatment. *Current World Environment*, 12(3), 470–490.
- Özen, T., Koyuncu, M. A., & Erbaş, D. (2020). Effect of ozone treatments on the removal of pesticide residues and postharvest quality in green pepper. *Journal of Food Science and Technology*. <https://doi.org/10.1007/s13197-020-04729-3>
- Pandiselvam, R., Kaavya, R., Jayanath, Y., Veenuttranon, K., Lueprasitsakul, P., Divya, V., Kothakota, A., & Ramesh, S. V. (2020). Ozone as a novel emerging technology for the dissipation of pesticide residues in foods—a review. In *Trends in Food Science and Technology* (Vol. 97, pp. 38–54). Elsevier Ltd. <https://doi.org/10.1016/j.tifs.2019.12.017>
- Patil, P. N., & Gogate, P. R. (2015). Degradation of dichlorvos using hybrid

advanced oxidation processes based on ultrasound. *Journal of Water Process Engineering*, 8, e58–e65. <https://doi.org/10.1016/j.jwpe.2014.10.012>

Pirsaheb, M., & Moradi, N. (2020). Sonochemical degradation of pesticides in aqueous solution: Investigation on the influence of operating parameters and degradation pathway-a systematic review. *RSC Advances*, 10(13), 7396–7423. <https://doi.org/10.1039/c9ra11025a>

Putri, R. A., Safni, S., Wellia, D. V., Septiani, U., & Jamarun, N. (2019). Degradasi zat warna orange-F3R dan violet-3B secara sonolisis frekuensi rendah dengan penambahan katalis C-N-codoped TiO₂. *Jurnal Kimia Valensi*, 5(1), 35–43. <https://doi.org/10.15408/jkv.v5i1.7801>

Roede, J. R., & Miller, G. W. (2014). Mancozeb. In *Encyclopedia of Toxicology* (Vol. 3, pp. 144–146). Elsevier. <https://doi.org/10.1016/B978-0-12-386454-3.00157-3>

Rukmana, R. (1994). Bertanam Petsay dan Sawi. Yogyakarta: Kanisius.

Saeedi Saravi, S., & Shokrzadeh, M. (2016). Effects of washing, peeling, storage, and fermentation on residue contents of carbaryl and mancozeb in cucumbers grown in greenhouses. *Toxicology and Industrial Health*, 32(6), 1135–1142. <https://doi.org/10.1177/0748233714552295>

Safni, Amelia, F., Liansari, O., Suyani, H., & Yusuf, Y. (2009). Penggunaan katalis ZnO-H₂O₂ untuk degradasi zat warna Rhodamin B dan Alizarin-S. *J. Ris. Kim.*, 3(1), 75–82.

Safni, S., Anggraini, D., Wellia, D., & Khoiriah, K. (2015). Degradation of direct Red-23 and Direct Violet dyes by ozonolysis and photolysis methods with UV Light and solar irradiation using N-Doped TiO₂ catalyst. *Jurnal Litbang Industri*, 5(2), 123–130. <http://ejournal.kemenperin.go.id/jli/article/view/675>

Safni, S., Deliza, Anggraini, D., Dewi, R. S., Ulia, H., & Wellia, D. V. (2016). Degradation of direct red-81 and direct yellow-27 by photolysis with UV-light and solar irradiation using C-N-Codoped TiO₂. *Der Pharma Chemica*, 8(12), 30–35.

Savi, G. D., Piacentini, K. C., Bortolotto, T., & Scussel, V. M. (2016). Degradation of bifenthrin and pirimiphos-methyl residues in stored wheat grains (*Triticum aestivum* L.) by ozonation. *Food Chemistry*, 203, 246–251. <https://doi.org/10.1016/j.foodchem.2016.02.069>

Skoog, D.A and West, D.M. (1997). Principle of instrument analysis. New York: Rinehart and Winston Inc.

Silverstein, R.M., Webster, F.X., & Kiemble, D.J. (2005). Spectrometric identification of organic compounds 7th.

Souza, L. P. de, Faroni, L. R. D. A., Heleno, F. F., Pinto, F. G., Queiroz, M. E. L.

- R. de, & Prates, L. H. F. (2018). Ozone treatment for pesticide removal from carrots: Optimization by response surface methodology. *Food Chemistry*, 243, 435–441. <https://doi.org/10.1016/j.foodchem.2017.09.134>
- Stefan, M. I. (2019). *Advanced oxidation processes for water treatment*. IWA Publishing.
- Walorczyk, S. (2013). Improved method for determination of the fungicide dimethomorph in vegetables. *Acta Chromatographica*, 25(4), 725–733. <https://doi.org/10.1556/AChrom.25.2013.4.10>
- Wang, B., Zhu, C. ping, Gong, R. hang, Zhu, J., Huang, B., Xu, F., Ren, Q. gong, Han, Q. bang, & He, Z. bing. (2015). Degradation of acephate using combined ultrasonic and ozonation method. *Water Science and Engineering*, 8(3), 233–238. <https://doi.org/10.1016/j.wse.2015.03.002>
- Wang, S., Wang, J., Li, C., Xu, Y., & Wu, Z. (2021). Ozone treatment pak choi for the removal of malathion and carbosulfan pesticide residues. *Food Chemistry*, 337(August 2020), 127755. <https://doi.org/10.1016/j.foodchem.2020.127755>
- Wang, S., Wang, J., Wang, T., Li, C., & Wu, Z. (2019). Effects of ozone treatment on pesticide residues in food: a review. *International Journal of Food Science & Technology*, 54(2), 301–312. <https://doi.org/10.1111/ijfs.13938>
- Wei, J., Chen, Y., Tiemur, A., Wang, J., & Wu, B. (2018). Degradation of pesticide residues by gaseous chlorine dioxide on table grapes. *Postharvest Biology and Technology*, 137(September 2017), 142–148. <https://doi.org/10.1016/j.postharvbio.2017.12.001>
- WHO. (2007). Production and protection production and protection. In *World Health*. Food and Agriculture Organization Of The United Nations.
- Wu, J., Luan, T., Lan, C., Wai, T., Lo, H., Yuk, G., & Chan, S. (2007). Removal of residual pesticides on vegetable using ozonated water. *Food Control*, 18, 466–472. <https://doi.org/10.1016/j.foodcont.2005.12.011>
- Xu, X. W., Shi, H. X., & Wang, D. H. (2005). Ozonation with ultrasonic enhancement of p-nitrophenol wastewater. *Journal of Zhejiang University: Science*, 6 B(5), 319–323. <https://doi.org/10.1631/jzus.2005.B0319>
- Zilfa, Z., Suyani, H., Safni, S., & Jamarun, N. (2011). Degradasi senyawa permetrin dengan menggunakan zeolit alam terpilar TiO₂-anatase secara sonolisis. *Jurnal Ecolab*, 5(1), 35–43. <https://doi.org/10.20886/jklh.2011.5.1.35-43>