

## PUSTAKA ACUAN

- Almeida, A.C., Gomes, T., Langford, K., Thomas, K. V., and Tollefsen, K. E. 2019. Oxidative stress potential of the herbicides bifenox and metribuzin in the microalgae *Chlamydomonas reinhardtii*, *Aquatic Toxicology*, 210, 117–128.
- Al-Naggar, A. M. M., Shabana, R. A., Atta, M. M. M., and Al-Khalil, T. H. 2015. Maize response to elevated plant density combined with lowered N-fertilizer rate is genotype-dependent. *Crop Journal*. 3(2): 96–109.
- Asuhadi, S., Arafah, N., dan Amir, A. B. 2019. Kajian terhadap potensi bahaya senyawa fenol di perairan laut wangi-wangi. *Jurnal Ecogreen*, 5(1), 49-55.
- Bailey, D. C., Todt, C. E., Burchfield, A. S., Pressley, A. S., Denney, R. D., Snapp, I. B., Negga, R., Traynor, W. L., and Fitsanakis, V. A. 2018. Chronic exposure to a glyphosate-containing pesticide leads to mitochondrial dysfunction and increased reactive oxygen species production in *Caenorhabditis elegans*. *Environmental Toxicology and Pharmacology*, 57, 46–52 .
- Bashir, F., Siddiqi, TO., Mahmooduzzafar., Iqbal, M. 2007. The antioxidative response system in *Glycine max* (L.) Merr. Exposed to deltamethrin, a synthetic pyrethroid insecticide. *Environ Pollut* 147:94–100.
- Benincasa, P., Wojtyla, L., Kubala, S., Pace, R., Lechowska, K., Quinet, M., Garnaczarska, M. 2016. *Seed Priming : New Comprehensive Approaches for an Old Empirical Technique*. IntechOpen. Pp: 1-46.
- Bergmeyer, H. U. 1970. Methoden der enzymatischen Analyse. *Weinheim, Verlag Chemie* pp. 1610-1682.
- Bragança, I., Grosso, C., Rede, D., Sousa, S. R., Lemos, P. C., Domingues, V. F., & Delerue-Matos, C. 2018. *Ecotoxicological effects of insecticides in plants assessed by germination and other phytotoxicity tools In Biotic and abiotic stress tolerance in plants*. Springer, Singapore. pp. 47-76.
- Brown, A. W. A. 1951. *Insect Control by Chemicals*. Plenum Press. New York. Page: 112.
- Budiyanto, A. K. 2018. *Membuat Fungisida Organik*. UMM Press. Malang. Hal: 1-5.

- Cai, D. W. 2008. Understand the role of chemical pesticides and prevent misuses of pesticides. *Bulletin of Agricultural Science and Technology*, 1(2): 36-38.
- Datta, S., Singh, J., Singh, J., Singh, S., & Singh, S. 2018. Assessment of genotoxic effects of pesticide and vermicompost treated soil with *Allium cepa* test. *Sustainable Environment Research*, 28(4), 171-178.
- Devendra, K. C., Durgesh K., Tripathi, Samiksha, S., Sheo, M. P., and Vijay P. S. 2017. *Reactive Oxygen Species in Plants: Boon Or Bane - Revisiting the Role of ROS*. Wiley. Germany. Page 26.
- Djojosumarto, P. 2008. *Panduan Lengkap Pestisida & Aplikasinya*. PT AgroMedia Pustaka. Jakarta. Hal: 1-17.
- DuRant, J. A. 1977. Methomyl on cotton: Evaluation of use patterns for phytotoxicity and efficacy against the bollworm and tobacco budworm. *Journal of Economic Entomology*, 70(5), 641-643.
- EPA, U. 2000. *National water quality inventory: 1998 Report to Congress*. EPA-841-R-00-001. Office of Water Washington DC.
- Fatma, F., Verma, S., Kamal, A. & Srivastava, A. 2018. Phytotoxicity of pesticides mancozeb and chlorpyrifos: correlation with the antioxidative defence system in *Allium cepa*. *Physiology and Molecular Biology of Plants*, 24(1):115–123.
- Fayez, K.A., & Kristen, U. 1996. The influence of herbicides on the growth and proline content of primary roots and on the ultrastructure of root caps. *Environmental and Experimental Botany*, 36(1), 71- 81.
- Fernandez, G.C. 1992. *Effective selection criteria for assesing plant stress tolerance*. In Proceedings of the international symposium on adaption of vegetable and other food crops in temperature and water stress. Taiwan. pp. 257–270.
- Glover-Amengor, M., & Tetteh, F. M. 2008. Effect of pesticide application rate on yield of vegetables and soil microbial communities. *West African Journal of Applied Ecology*, 12(1), 1–7.
- Guanggang, X., Diqu, L., Jianzhong, Y., Jingmin, G., Huifeng, Z., Mingan, S., and Liming, T. 2013. Carbamate insecticide methomyl confers cytotoxicity through DNA damage induction. *Food and Chemical Toxicology*, 53(1): 352– 358.

- Guo, X. F., Zhang, H. F., and Li, J. G. 2007. The importance of fungicides/bactericides in American agriculture. *World Pesticides*, 9(3): 21-25.
- Hajjar, M. J., Alsaikhan, M. S., & Soliman, A. M. 2014. The phytotoxic effects of methomyl and imidacloprid insecticides on tomato local variety in Al-Hassa, Saudi Arabia. *Annual Research & Review in Biology*, 4181-4189.
- Harvard School of Public Health. 2015. Pesticides found in most pollen collected from foraging bees in Massachusetts. <https://phys.org/news/2015-07-pesticides-pollen-foraging-bees-massachusetts.html>. Accessed on September 26, 2021.
- Hasibuan, R. 2015. *Insektisida Organik Sintetik dan Biorasional*. Xplantaxia, Yogyakarta. Hal: 1-5.
- Hatamleh, A. A., Danish, M., Al-Dosary, M. A., El-Zaidy, M., & Ali, S. 2022. Physiological and oxidative stress responses of *Solanum lycopersicum* (L.)(tomato) when exposed to different chemical pesticides. *Royal Society and Chemistry advances*, 12(12), 7237-7252.
- He, L., He, T., Farrar, S., Ji, L., Liu, T., & Ma, X. 2017. Antioxidants maintain cellular redox homeostasis by elimination of reactive oxygen species. *Cellular Physiology and Biochemistry*, 44(2), 532-553.
- ITIS. 2021. *Allium ascalonicum* L. . <https://www.itis.gov/> . Diakses tanggal 25 September 2021, jam 21.40 WIB.
- Jianga, L., Maa, L., Suia, Y., Hna, S.Q., Wua, Z.Y., Fenga, Y.X., & Yanga, H. 2010. Effect of manure compost on the herbicide prometryne bioavailability to wheat plants. *J Hazard Mater*, 184:337–344.
- Jogaiah, S. (Ed.). 2020. *Biocontrol Agents and Secondary Metabolites: Applications and Immunization for Plant Growth and Protection*. Woodhead Publishing. United Kingdom. Pages 347-382.
- Kapgate, V. K., Raut, B. T., & Pawar, N. B. 2008. Studies on translocation, persistence and phytotoxicity of systemic and contact fungicides in chilli crop. *Journal of Plant Disease Sciences*, 3,197–200.
- M Abd-Allah, S., A Goud, N., & M Talha, M. 2012. Ecological Hazards of Some Pesticides on Unicellular Freshwater Green Alga; *Pseudokirchneriella subcapitata*. *Alexandria Science Exchange Journal*, 33, 18-25.

- Mahardika, A., dan Fajjriyah, N. 2017. *Kiat Sukses Budidaya Bawang Merah*. Bio Genesis. Yogyakarta. Hal: 12-17.
- Mahmood, Q., Bilal, M., and Jan, S. 2014. Herbicides, Pesticides, and Plant Tolerance: An Overview. An Overview. In *Emerging Technologies and Management of Crop Stress Tolerance: Biological Techniques*, (Vol. 1).
- Manalu, J. N. 2019. Potensi Cendawan Dark Septate Endophyte sebagai Agens Bioremediasi Residu Fungisida Berbahan Aktif Mankozeb. (*Doctoral dissertation*. IPB (Bogor Agricultural University). Hal: 1-2.
- Mesran, M., Pristiwanto, P., dan Sinaga, I. 2018. Implementasi Promethee II Dalam Pemilihan Pestisida Terbaik Untuk Perawatan Daun Pada Tanaman Cabe. *CESS (Journal of Computer Engineering, System and Science)*, 3(2), 139-146.
- Mhike, X., Okori, P., Magorokosho, C., and Ndlela, T. 2012. Validation of the use of secondary traits and selection indices for drought tolerance in tropical maize (*Zea mays* L.). *African Journal of Plant Science*. 6(2): 96–102.
- Moreno, C., Seal, CE., & Papenbrock, J. 2018. Seed priming improves germination in saline conditions for *Chenopodium quinoa* and *Amaranthus caudatus*. *Journal of Agronomy and Crop Science*. 204(1), 40– 48. <https://doi.org/10.1111/jac.12242>
- Mutia, E. Sari., Suwirnen., dan Zozi, A.N. 2014. Pengaruh Penggunaan Fungisida (Dithane M-45) Terhadap Pertumbuhan Tanaman Jagung (*Zea mays* L.) dan Kepadatan Spora Fungi Mikoriza Arbuskula (FMA). *Jurnal Biologi Universitas Andalas*, 3(3): 188-194.
- Mwabulambo, S. G., Mrema, E. J., Ngowi, A. V., & Mamuya, S. 2018. Health Symptoms Associated with Pesticides Exposure among Flower and Onion Pesticide Applicators in Arusha Region. *Annals of global health*, 84(3), 369–379. <https://doi.org/10.29024/aogh.2303>.
- Nakano, Y., and Asada, K. 1981. Hydrogen peroxide is scavenged by ascorbate-specific peroxidase in spinach chloroplasts. *Plant and Cell Physiology* 22, 867-880.
- Nesiaty, S., dan Sitanggang, M. 2016. *Kiat Sukses Membungkakan Anggrek*. AgroMedia. Jakarta. Hal: 41-47.
- Noctor, G., & Foyer, C. H. 1998. Ascorbate and glutathione: keeping active oxygen under control. *Annual review of plant biology*, 49(1), 249-279.

- Obidola, S., Ibrahim, I. I., Yaroson, A., & Henry, U. 2019. Phytotoxicity of cypermethrin pesticide on seed germination, growth and yield parameters of cowpea (*Vigna unguiculata*). *Asian Journal Agriculture and Horticultural Research*, 3(2), 1-10.
- Panda, S. K., and Choudhury. 2005. Chromium Stress in Plants. *Braz J Plant Physiol*, 17(1): 95-102.
- Pandey, K. B., & Rizvi, S.I. 2010. Markers of oxidative stress in erythrocytes and plasma during aging in humans. *Oxid Med Cell Longev*, 3: 2–12.
- Paraviz, A., and Saiema, R. 2014. *Emerging Technologies and Management of Crop Stress Tolerance 1<sup>st</sup> Edition*. Academic Press. London. Page: 215-248.
- Pechová, R., Kutík, J., Holá, D., Kočová, M., Haisel, D. and Vičánková, A. 2003. The ultrastructure of chloroplasts, content of photosynthetic pigments, and photochemical activity of maize (*Zea mays* L.) as influenced by different concentrations of the herbicide amitrole. *Photosynthetica*, 41, 127–136.
- Petrovic, B., Kopta, T., & Pokluda, R. 2019. Effect of biofertilizers on yield and morphological parameters of onion cultivars. *Folia Horticulturae*, 31(1), 51-59.
- Potvin, C. 2020. *ANOVA: experiments in controlled environments. In Design and analysis of ecological experiments*. Chapman and Hall/CRC. New York. pp.46-68.
- Prasad, M. N. V., and Freitas, H. M. D. O. 1999. Feasible Biotechnological and Bioremediation Strategies for Serpentine Soils and Mine Spoils. *Electronic Journal of Biotechnology*, 2(1):1-7.
- Prasetyowati, K., Kartikasari, R. D., & Prasetyo, A. 2021. A feasibility study on cultivating shallots (*Allium ascalonicum* L) in Selo District, Boyolali Regency, Indonesia. *In IOP Conference Series: Earth and Environmental Science*, 824(1), 1-2.
- Purba, D. W., Surjaningsih, D. R., Simarmata, M. M., Wati, C., Zakia, A., Arsi, A., Purba, S. R., Wahyuni, A., Herawati, J., dan Sitawati, S. 2021. *Agronomi Tanaman Hortikultura*. Yayasan Kita Menulis Press. Jakarta. Hal: 59-61.
- Purnamasari, Y., Hoesain, M., dan Haryadi, N. T. 2015. Kajian Konsentrasi Pestisida Karbamat (Karbofuran dan Metomil) di Perairan Mlonggo, Kabupaten Jepara. *Journal of Oceanography*, 4 (2):451 – 456.

- Rahayu, R., Mujiyo, M., & Arini, R. U. 2018. Land suitability evaluation of shallot (*Allium ascalonicum* L.) at production centres in Losari District, Brebes. *Journal of Degraded and Mining Lands Management*, 6(1), 1505.
- Saladin, G., & Clément, C. 2005. Physiological side effects of pesticides on non-target plants. *Agriculture and soil pollution: New research*, 53-86.
- Santoferrara, L. F., Guida, S., Zhang, H., & McManus, G. B. 2014. De novo transcriptomes of a mixotrophic and a heterotrophic ciliate from marine plankton. *PLoS One*, 9(7), e101418.
- Shahid, M., Manoharadas, S., Chakdar, H., Alrefaei, A. F., Albeshr, M. F., and Almutairi, M. H. 2021. Biological toxicity assessment of carbamate pesticides using bacterial and plant bioassays: An in-vitro approach. *Chem*, 278, 130372.
- Shakir, S. K., Kanwal, M., Murad, W., ur Rehman, Z., ur Rehman, S., Daud, M. K., & Azizullah, A. 2016. Effect of some commonly used pesticides on seed germination, biomass production and photosynthetic pigments in tomato (*Lycopersicon esculentum*). *Ecotoxicology*, 25(2), 329-341.
- Shao, H., and Zhang, Y. 2017. Non-target effects on soil microbial parameters of the synthetic pesticide carbendazim with the biopesticides cantharidin and norcantharidin, *Scientific Report*, 7.
- Sharma, A., Kumar, V., Shahzad, B., Tanveer, M., Sidhu, G. P. S., Handa, N., Kohli, S. K., Yadav, P., Bali, A. S., Parihar, R. D., and Dar, O. I. 2019. Worldwide pesticide usage and its impacts on ecosystem. *SN Appl. Sci.*, 1, 1-16.
- Shigeoka, S., Ishikawa, T., Tamoi, M., Miyagawa, Y., Takeda, T., Yabuta, Y., & Yoshimura, K. 2002. Regulation and function of ascorbate peroxidase isoenzymes. *Journal of experimental botany*, 53(372), 1305-1319.
- Siahaya, V. G. 2021. Effect of Sublethal Dose/Concentration on Various Insect Behaviors. *Agrologia*, 10(1): 25-38.
- Stephenie, S., Chang, Y. P., Gnanasekaran, A., Esa, N. M., & Gnanaraj, C. 2020. An insight on superoxide dismutase (SOD) from plants for mammalian health enhancement. *Journal of Functional Foods*, 68, 103917.
- Suminah, S., dan Setyawan, A. D. 2002. Induksi poliploidi bawang merah (*Allium ascalonicum* L.) dengan pemberian kolkisin. *Biodiversitas*, 3(1), 174-180.



- Surendran, S., & Rajasankar, S. 2010. Parkinson's disease: oxidative stress and therapeutic approaches. *Neurological Sciences*, 31(5), 531-540.
- Tevini, M. & Teramura, A.H. 1989. UV-B effects on terrestrial plants. *Photochem Photobiol*, 50: 479-487.
- Uijaya, C. D. 2022. Efek Morfotoksik dan Genotoksik Campuran Pestisida Berbahan Aktif Metomil dan Mankozeb pada Bawang Merah (*Allium ascalonicum* L.'Tuktuk') (Doctoral dissertation, Universitas Gadjah Mada).
- Wahedally, S. F., Mamboya, F. A., Lyimo, T. J., & Bhikajee, M. 2012. Short-term effects of three herbicides on the maximum quantum yield and electron transport rate of tropical seagrass *Thalassodendron ciliatum*. *TaJONAS: Tanzania Journal of Natural and Applied Sciences*, 3(1), 458-466.
- Weston, D. P., Ding, Y., Zhang, M., & Lydy, M. J. 2013. Identifying the cause of sediment toxicity in agricultural sediments: the role of pyrethroids and nine seldom measured hydrophobic pesticides. *Chemosphere*, 90, 958-964.
- Widayati, E. 2021. Oxidasi biologi, radikal bebas, dan antioxidant. *Ilmiah*, 50(128), 26-32.
- Widiastuti, A., Simarmata, R. F., dan Sumardiyono, C. 2020. Potensi Ekstrak Lengkuas sebagai Fungisida Nabati untuk Mengendalikan Penyakit Karat Daun Anggur (*Phakopsora euvitis*). *Jurnal Fitopatologi Indonesia*, 16(3), 135-143.
- Willekens., Hilde, S. C., Mark, D., Martina, S., and Christian, L. 1997. Catalase Is A Sink For H<sub>2</sub>O<sub>2</sub> And Is Indispensable For Stress Defence In C3 Plants. *The EMBO Journal*, 16(16): 4806-4816.
- Wu, G.L., Cui, E.J., Tao, E.L., & Yang, E.H. 2010. Fluroxypyr triggers oxidative damage by producing superoxide and hydrogen peroxide in rice (*Oryza sativa*). *Ecotoxicology*, 19:24-132.
- Yan, M. 2015. Seed Priming Stimulate Germination and Early Seedling Growth of Chinese Cabbage Under Drought Stress. *South African Journal of Botany*. 99(1), 88-92.
- Zhang, W. J., and Liu, G. H. 2017. Situation and development of worldwide agri-environment: Agricultural land uses, fertilizers consumption and carbon dioxide equivalent emissions. *Environmental Skeptics and Critics*, 6(1): 1-8.

- Zhang, W.J., Jiang, F.B., and Ou, J. F. 2011. Global pesticide consumption and pollution: with China as a focus. *Proceedings of the International Academy of Ecology and Environmental Sciences*, 1(2): 125-144.
- Zhao, X., Joo, J. C., & Kim, J. Y. 2021. Evaluation of heavy metal phytotoxicity to *Helianthus annuus* L. using seedling vigor index-soil model. *Chemosphere*, 275, 130026.
- Zou K.H., Tuncali K., & Silverman S.G. 2003. Correlation and simple linear regression. *Radiology*, 227: 617–622.