DAFTAR PUSTAKA

Abd-Elrahman, S., H, and Shalaby, O. A. 2017. Response of Wheat to Irrigation with *Magnetized water* under Egyptian Soil Condition. *Egypt. J. Soil Sci*. 57(4): 477-488.

Abdolmaleki, P., Ghanati, F., Sahebjamei, H., SabetSarvestani, A. 2007. Peroxidase activity, Lignification and Promotion of Cell Death in Tobacco Cell Exposed to Static Magnetic Field. *The environmentalist.* 27:435-440.

Abobatta, F. W. 2019. Overview of Role of Magnetizing Treated Water in Agricultural Sector Development. *Advances in Agricultural Technology & Plant Sciences*. 2(1): 1-7

Ahanger, M. A., and Agarwal, R. M., 2017. Salinity Stress Induced Alterations in Antioxidant Metabolism and Nitrogen Assimilation in Wheat (*Triticum aestivum* L.) as Influenced by Potassium Supplementation. *Plant PHysiol Biochem*. 115: 449–60.

Ajithkumar, I. P., and Panneerselvam, R. 2014. ROS Scavenging System, Osmotic Maintenance, Pigment and Growth Status of Panicum Sumatrense Roth. Under Drought Stress. *Cell Biochemistry and BiopHysics*. 68(3): 587–95.

Amer, M.M., El-Sanat, A. G., and Rashed, S. H. 2014. Effects of Magnetized Low Quality Irrigation Water on Some Soil Properties and Soybean Yield (*Glycine max* L.) Under Salt Affected Soil Condition. *J. Soil Sci. Agric. Eng., Mansoura Univ.* 5:1377-1388.

Amirjani, R. M. 2010. Effect of NaCl on Some PHysiological Parameters of Rice. *EJBS*, 3(1): 6-16.

Anand, A., Nagarajan, S., Verma, A. P., Joshi, D. K., Pathak, P. C., and Bhardwaj, J. 2012. Pre-Treatment of Seeds With Static Magnetic Field Ameliorates Soil Water Stress in Seedlings of Maize (*Zea mays* L.). *Indian J Biochem BiopHys.* 49(1): 63–70.

Ali, Y., Samaneh, R., and Kavakebian, F. 2014. Application of Magnetic Water Technology in Farming and Agriculture Development: A Review of Recent Advances. *Current World Environment.* 9:695-703.

Alikamanoglu, S., and Sen, A. 2011. Stimulation of Growth and Some Biochemichal Parameters by Magnetic Fields in Wheat (*Triticum aestivum* L.) Tissue Cultures. *African Journal Biotech*. 10:10957-10963.

Atzori, G., Mancuso, S., and Masi, E. 2019. Seawater Potential Use in Soilless Culture: A Review. *Scientia Holticulture.* 249:199-207.

Araguchi, H., and Uwa, K. 1982. Marine Analysis By Atomic Absorption Spectrometry. *Techniques and Instrumental in Analytical Chemistry*, 5(1982): 95-122.

Arnon. 1949. Copper Enzymes in Isolated Chloroplast. PolypHenoloxidase in *Beta vulgaris*. *Plant pHysiology*. 24 (1):1.

Arvin, M. J., and Donnelly, D. J. 2008. Screening Potato Cultivars and Wild Species to Abiotic Stresses Using an Electrolyte Leakage Bioassay. *J. Agric. Sci. Technol.* 10: 33-42.

Ayala, Antonio, Mario, F., Muñoz, and Sandro, A. 2014. Lipid Peroxidation: Production, Metabolism, and Signaling Mechanisms of Malondialdehyde and 4-Hydroxy-2-Nonenal. *Oxidative Medicine and Cellular Longevity*.

8:76-88.

Babaloo, F., Majd, A., Arbabian, S., Sharifnia, F., and Ghanati F (2018) The Effect of *Magnetized water* on Some Characteristics of Growth and Chemical Constituent in Rice (*Oryza sativa* L.)Var Hashemi. Eurasia J Biosci 12: 129-137

Bahiyah, A., Wirasatriya, A., Marwoto, J., Handoyo, G., and Anugrah D.S.P.A. 2019. Study of Seasonal Variation of Sea Surface Salinity in Java Sea and its Surrounding Seas using SMAP Satellite. *IOP Conf.Ser.: Earth Environ. Sci*. 246 012043

Bates, L. S., Waldren, R.C., and Teare, I.D. 1973. Rapid Determination of Free Proline for Water Stress Studies. *Plant Soil*, 39(1):205-207.

Berwal, K. M., and Ram, C. 2018. Superoxide Dismutase: A Stable Biochemichal Marker for Abiotic Stress Tolerance in Higher Plants. *Intech*, 22(3):1-10.

Brinkman, R., and Singh, V. P. 1982. *Rapid Reclamation of Brackish Water Fishponds in Acid Sulfate Soils*. ILRI. Publ. Wageningen. Netherlands. 318-330.

Budi, S., and Sari, S. 2015. *Ilmu dan Implementasi Kesuburan Tanah*. Malang: UMM Press

Carolli, P., Annunziata, G., M. Pontercorvo, G., Fuggi, A., and Woodrow, P. 2011. Salinity Stress and Salt Tolerance, Abiotic Stress in Plant – Mechanism and Adaptations. *InTech*, 35(2): 20-38.

Castan, E., Satti, P., Gonzales, P. M., Iglesias, M. C., and Mazzarino, M. J. 2016. Managing the Value of Compost as Organic Amendment and Fertilizers in Sandy Soils. *Agriculture, Ecosystems and Environment*. 224:29-38

Cakmak, T., Cakmak, Z. E., Dumlupinar, R., and Tekinay, T. 2012. Analysis of Apoplastic and Symplastic Antioxidant System in Shallot Leaves: Impacts of Weak Static Electric and Magnetic Field. *J. Plant PHysiol* . 169: 1066-1072.

Chutipaijit, S., Cha-um, S., and Kanokporn, S. 2011. High Contents of Proline and Anthocyanin Increase Protective Response to Salinity in Oryza. *Australian Journal of Crop Science.* 5(10): 1191–98.

Dhawi, F. 2013. Why Magnetics Fields are Used to Enhance a Plant's Growth and Productivity?. *Annual Research & Review in Biology*. 4 (6):886-896.

Dhawi, F., and Al-Khayri, J. 2009. Magnetic Fields Induce Changes in PHotocynthetic Pigments Date Palm (*PHoenix dactylifera* L.) Seedlings. *The Open Agric J*. 3: 1-5.

Demiral, M. A., Aydin, M., and Yorulmaz, A. 2005. Effect of Salinity on Growth Chemical Composition and Antioxidative Enzyme Activity of Two Malting Barley (Hordeum vulgare L.) Cultivars Turk. *J. Biol*. 29:117–123.

Dewi, S. M., Yuwariah, Y., Qosim, W. A., and Ruswandi, D. 2019. Effect of Water Stress on Yield and Sensitivity of Three Genotypes of Millet (*Setaria italica* L. Beauv). *Jurnal Kultivasi*. 18(3): 933-941.

Evelin, H., Thockhom, S. D., Samta, G., and Rupam, K. 2019. Mitigation of Salinity Stress in Plants by Arbuscular Mycorrhizal Symbiosis. *Frontiers in Plant Science*. 10(1): 35-43.

El-Mageed, T. A. A., Semida, W. M., Howladar, S. M., Zaki, S. S., and Rady, M. M. 2016. Hydrogen Peroxide Improves the Antioxidant Defence System in Salt Stressed-Allium cepa Plants. *Plant.* 4 (6): 91-100.

FAO. 1995. *Dimensions of Need an Atlas of Food and Agriculture.* The Food and Agriculture Organization of the United Nations and Earthscan, Rome.

Fakhri, N., Mehdaoui, H. Y., Elloumi, N., and Kallel, M. 2018. Magnetic Treatment Effects on Salt Water and Tomato Plants Growth. *Advances in Science, Technology & Innovation.* 1095-1097.

Fitter A.H. and R.K.M. Hay. 1998. *Fisiologi Lingkungan Tanaman*. Terjemahan: Sri Andani dan Purbayanti. Yogyakarta: Gajah Mada University Press.

Fujimura, Y., and Iino, M. 2009. Magnetic Field Increases the Surface Tension of Water. *Journal of PHysics:Conference Series*. 156:12-28.

Garcia-Reina F, and Arza-Pascual L (2001) Influence of A Stationary Magnetic Field on Water Relations in Lettuce Seeds. Part I: Theoretical Considerations. *Bioelectromagnetics*. 22:589–595.

Gill, S. S., Anjum N. A., Gill, R., Yadav, S., Hasanuzzaman, M., Fujita, M., Mishra, P., Sabat, S. C., and Tuteja, N. 2015. Superoxide Dismutase—Mentor of Abiotic Stress Tolerance in Crop Plants. *Environmental Science and Pollution Research*. 22(14): 10375–94.

Grewal, H.S., and Maheshwari, B. L. 2011. Magnetic Treatment of Irrigation Water and Snow Pea and Chickpea Seeds Enhances Early Growth and Nutrien Contents of Seedlings. *Bioelectromagnetics*. 32:58–65.

Hames, B. D., Hooper, N. M., and Houghton, J. D. 1997. *Instant Notes on Biochemistry*. Bios Scientific Publisher LTD. New York.

Hamuna, B., Paulangan, Y. P ., and Dimara, L. 2018. Kajian Suhu Permukaan Laut Menggunakan Data Satelit Aqua MODIS di Perairan Jayapura, Papua. *Depik*, 4(3):160-167.

Hamuna, B., Tanjung, R. H. R., Suwito, Maury, H. K., d and Alianto. Kajian Kualitas Air dan Indeks Pencemaran Fisika-Kimia di Perairan Distrik Depapre, Jayapura. *Jurnal Ilmu Lingkungan*, 16(1):35-43.

Hanafiah, K. 2009. *Dasar-dasar Ilmu Tanah*. Jakarta (ID): Raja Grafindo Perkasa.

Handayani, T., Basunanda, P., Murti, H. R., and Sofiari, E. 2013. Cell Membrane Stability Assay and ChloropHyll Content Measurement to Evaluate Heat Stress Tolerance on Potato. *J. Hort.* 23(1): 28-35.

Hasan, M. Md., Alharby, F. H., Uddin, N. Md., Ali, A. Md., Anwar, Y., Fang, Xw., Hakeem, R. H., Alzahrani, Y., and Hajar, S. A. 2019. *Magnetized water* Confers Drought Stress Tolerance in *Moringa* Biotype via Modulation of Growth, Gas Exchange, Lipid Peroxidation and Antioxidant Activity. *Pol. J. Environ. Stud.* 29 (2): 1625-1636.

Hendriyani, I., S and Setiari, N. 2009. Kandungan Klorofil dan Pertumbuhan Kacang Panjang (*Vigna sinensis*) pada Tingkat Penyediaan Air yang Berbeda. J. *Sains & Mat*. 17(3): 145-150.

Herawati, M. S. 2015. Kajian Status kesuburan Tanah di Lahan Kakao Kampung Klain Distrik Mayamuk Kabupaten Sorong. *Jurnal Agroforestri*. 10: 201-208

Hilal, M. H., El-Fakhrani, Y. M., Mabrouk, S. S., Mohamed, A. I., and Abead, B. M. 2013. Effect of Magnetic Treated Irrigation Water on Salt Removal From Sandy Soil and on Availability of Certain Nutriens. *International Journal Eng. Application Sci.* 2: 35-44.

Hoshida, H., Tanaka, Y., Hibono, T., Hayashi, Y., and Tanaka, A. 2000. Enhances Tolerance to Salt Stress in Transgenic Rice that Over Expresses Chloroplast

Glutamine Synthesase. *Plant Mol. Biol.* 43:103–111.

Huang, B and Gupta B. 2014. Review Article: Mechanism of Salinity Tolerance in Plants- PHysiological, Biochemical, and Molecular Characterization. *International Journal Genomics*, 2014(2):1-18.

Ighodaro, M. O., and Akinloye, A. O. 2018. First Line Defence Antioxidants-Superoxide Dismutase (SOD), Catalase (CAT) and Glutathione Peroxidase (GPX): Their Fundamental Role in the Entire Antioxidant Defence Grid. *Alexandria Journal of Medicine* 54(4): 287–93.

IWCA. 2018. Water Resource and Comsumption. Diakses pada Januari 2020. https://sites.google.com/site/isat380eindonesia/project-definition

Jamil, M., Ashraf, M., Rehman, ur, S., Ahmad, M., and Rha, S. E. 2012. Slainity Induced Changes in Cell Membrane Stability, Protein, and RNA Contents. *African Journal of Biotechnology*. 11(24): 6476-6483.

Jaworski, E.G. 1971. Biochemistry, BiopHys. *Ress. Commun.* 43: 1274-1279.

Javed, N., Ashraf, M., Akram, N. A., and Al-Qurainy, F. 2011. Alleviation of Adverse Effects of Drought Stress on Growth and Somepotential PHysiological Attributes in Maize (*Zea mays* L.) by Seedelectromagnetic Treatment. *PHotochem PHotobiol*. 87:1354–1362.

Jedlicka, J., Paulen, O., and Ailer, S. 2014. Influence Of Magnetic Field on Germination, Growth, and Production of Tomato. *Potravinarstvo*. 8(1): 150-154

Kementerian Pertanian. 2014. Produksi Padi, Menurut Provinsi. Diakses pada 8 Oktober 2019 https://www.pertanian.go.id/Data5tahun/TPATAP-2017(pdf)/20-ProdPadi.pdf

Khan, M. I. R., Asgher, M., and Khan, N.A. 2014. Alleviation of Salt-Induced PHotosynthesis and Growth Inhibition by Salicylic Acid Involves Glycine Betaine and Ethylene in Mungbean (*Vigna radiata* L.). *Plant PHysiol Biochem.* 80:67–74.

Khazan, M. M., and Abdullatif, B. M. 2009. Effect of Irrigation with *Magnetized water* on Growth, PHotosynthesis Pigments And Proline Accumulation In Jojoba Plants (*Simmondsia chinensis* L.) seedlings. *Saudi J. Biol. Sci.* 16(3): 107-113.

Latef, A. A. H. A., Dawood, A. F. M., Hassanpour, H., Rezayian, M., and Younes, N. A. 2020. Impact of the Static Magnetic Field on Growth, Pigments, Osmolytes, Nitric Oxide, Hydrogen Sulfide, PHenylalanine Ammonia-Lyase Activity, Antioxidant Defense System, and Yield in Lettuce. *Biology*. 9(172):1-18.

Li, R., Guo, P., Baum, M., Grando, S., and Ceccarelli, S. 2006. Evaluation of ChloropHyll Content and Fluorescence Parameters as Indicators of Drought Tolerance in Barley. *Agricultural Sciences in China.* 5 (10): 751-757.

Li, J., Gao, Y., Zhang, X., Tian, P., Li-Juan, and Tian, Y. 2019. Comprehensive Comparison of Different Saline Water Irrigation Strategies For Tomato Production: Soil Properties, Fruit Yield and Fruit Quality. *Agrcultural Water Management*. 213(2019): 521-533

Liang, Y., Bu, C., Guo, S., X., and Li, J. 2007. Effect of Nutrien Solution With Sea Water at Different Concentration on Lettuce Cultivated. *National Science Education*. 3:20-35.

Liu, X., and Huang, B. 2000. Heat Stress Injury in Relation to Membrane Lipid Peroxidation in Creeping Bentgrass. *Crop Sci.* 40: 503-10.

Lotkowska, E. M., Tohge, T., Fernie, R. A., Xue, P-G, Balazadeh, S., and Roeber, M. B. 2015. The Arabidopsis Transcription Factor MYB112 Promotes Anthocyanin Formation during Salinity and under High Light Stress. *Plant PHysiology*. 169(3): 1862–80.

Maheswari, B. L., and Grewal, H. S. 2009. Magnetic Treatment of Irrigation Water: Its Effect on Vegetables Crop Yield and Water Productivity. *Agriculture Water Manage.* 96:1229-1236.

Mahmood, A., Latif, T., and Khan, M.A., 2009. Effect of Salinity on Growth, Yield and Yield Components in Basmati Rice Germplasm. *Pak. J. Bot.* 41:3035–3045.

Mansour, M. M. F., Salama, Karima, H. A., and Allam, H. Y. H. 2015. Role of The Plasma Membrane in Saline Condition: Lipids And Proteins. *Botanicals Review.* 81: 416-451.

Mansour, M. M. F. 2013. Plasma Membrane Permeability as an Indicator of Salt Tolerance in Plants. *Biologia Plantarum.* 57:651-681.

Marklund, S., and Marklund, G. 1974. Inovolvement of the Superoxide Anion Radical in the Autoxidation of Pyrogallol and a Convient Assay for Superoxide Dismutase. *Europe Journal Biochemistry*. 47(1974):469-474.

Munns, R., Schachman, D., and Condon, A. 1995. The Significance of Two-PHase Growth Response to Salinity in Wheat and Barley. *Functional Plant Biology,* 22(4): 561-569.

Munns, R., and Tester, M., 2008. Mechanisms of Salinity Tolerance. *Ann. Rev. Plant Biol*. 59:651–681.

Nasher, S. H. 2008. The effect of magnetic water on growth of chickpea seeds. *Eng. & Tech.* 26(9) 4-33.

Noran, R., Shani, R., and Lin, I., 1996. The effect of irrigation with magnetically treated water on the translocation of minerals in the soil. *Magn. Electr*. 7:109–122.

OmniEnviro. 2019. *Magnetized water: Omni Enviro's Properietary Hydrodynamic Magnetic Resonance Technology*. Diakses pada 18 September 2019. https://www.omnienviro.com.au/magnetized-water/

Prayoga, M. K. N., Rostini, M. R., Setiawati, T., Simarmata, S., Stoeber, K., and Adinata. 2018. Preferences of Farmers to Superior Rice (*Oryza sativa*) for Rice Fields in Pangandaran and Cilacap Regions. *Jurnal Kultivasi.* 17 (1): 523- 541.

Quan, L. J., Zhang, B., Shi, W. W., and Li, H. Y. 2008. Hydrogen peroxide in plants: a versatile molecule of the reactive oxygen species network. *Journal of Integrative Plant Biology.* 50: 2–18.

Radanielson, A. M., Angeles, O., Li Tao., Ismail, A. M., and Gaydon, D.S. 2018. Describing the PHysiological Responses of Different Rice Genotypes to Salt Stress Using Sigmoid and Piecewise Linear Functions. *Field Crops Research, Elsevier*. 220 (2018):46-56

Radhakrishnan, R. 2019. Magnetic Field Regulation, Plant Function, Growth, and Enhance Tolerance Againts Evironmental Stress. PHysiol Mol Biol Plants. 25(5): 1107-1119.

Rana, R. M., Khan, S. H., Ali, Z., Khan, A. I., and Khan, I. A. 2011. Elucidation of Thermotolerance Diversity in Cotton (*Gossypium hirsutum* L.) using PHysio-molecular Approaches. *Genet. and Mol. Research*. 10 (2): 1156-67.

RudolpH, A. S., Crowe, J. H., and Crowe, L. M. 1986. Effects of three stabilizing agents: proline, betaine, and trehalose on membrane pHospHolipids. *Arch Biochem BiopHys.* 245:134–143

Sadeghipour, O., and Aghaei P. 2013. Improving the Growth of Cowpea (*Vigna unguiculata L. Walp*.) by *Magnetized water. J. Bio. & Env. Sci*. 3:37-43.

Safitri, H., Purwoko, B. S., Dewi, I. S., and Ardie, S.W. 2017. Salinity Tolerance of Several Rice Genotype at Seedling Stage. *Indonesian Journal of Agriculture Science*. 18 (2): 63-68.

Sairam, R. K., Rao, K. V., and Srivastava, G. C. 2002. Differential Response of Wheat Genotypes to Long Term Salinity Stress in Relation to Oxidative Stress, Antioxidant Activity and Osmolyte Concentration. *Plant Sci*. 163: 1037–1046

Selim, A. F. H., and El-Nady, M. F. 2011. PHysio-Anatomical Responses of Drought Stressed Tomato Plants to Magnetic Field. *Acta Astronaut*. 69:387–396.

Sen, A., and Alikamanoglu, S. 2014. Effects of Static Magnetic Field Pretreatment with and without PEG 6000 or Nacl Exposure on Wheat Biochemical Parameters. *Russ J Plant PHysiol*. 61(5):646–655.

Shalaby, O. A. 2012. Magnetic Bio-stimulation and its Relevance to Fertilizer Requirements of Tomato Plants. *Egypt. J. Soil Sci*. 24(9): 776-790.

Sharma, P., Jha, A. B., Dubey, R. S., and Pessarakli, M. 2012. Reactive Oxygen Species, Oxidative Damage, and Antioxidant Defense Mechanism in Plants Under Stressful Condition. *J. Botany*. 1-26.

Silva, J. A. T., and Dobranszki, J. 2014. Review: Impact of Magnetic Water on Plant Growth. *Environmental and Experimental Biology*. 12:137-142.

Sitinjak and Idwar. 2015. Respons of Paddy Rice (*Oryza sativa* L.) Varieties that Planted with Cultivation Approachment of Jajar Legowo and Tegel System. *JOM Faperta*. 2(2): 1-15.

Smart, R.E. and G.E. Bingham, 1974. Rapid Estimates Of Relative Water Content. *Plant PHysiol.* 53: 258 – 260.

Souza, A.D., Garcia, D., Suiero, L. and Gilart, F. 2014. Improvement of The Seed Germination, Growth and Yield of Onion Plants by Extremely Low Frequency Non-Uniform Magnetic Fields. *Scientia Horticulturae*. 176 (2014): 03-09

Souza, A.D., Gracia, D., Suiero, L., Licea L. and Porras, E. 2005. Pre-sowing Magnetic Treatment of Tomato Seeds:Effects on The Growth And Yield Of Plants Cultivated Late In The Season. *Spanish Journal of Agricultural Research*. 3(1): 113-122

Suprihatno, B., Daradjat, A. A., Satoto. A. E., Baehaki. Widiarta, E., and Setyono, A. 2009. Deskripsi Kultivar Padi. *Balai Besar Penelitian Padi*. ISBN 979-540-026-6.

Swapna, S., and Korukkanvilakath S. S., 2017. Screening for Osmotic Stress Responses in Rice Varieties under Drought Condition. *Rice Sciencce*, 24(5):1-8.

Szczes, A., Chibowskia, E., Hołysza, L., and Rafalski, P. 2011. Effects of Static Magnetic Field on Water at Kinetic Condition. *Chemical Engineering and Processing.* 50:124–127.

Taslim, H., Partohardono and Djunainah. 2010. *Bercocok Tanam Padi Sawah*. Bogor (ID): Pusat Penelitian dan Pengembangan Tanaman Pangan.

Tian, W. X., Kuang, Y. L., and Mei, Z. P. 1989. Effect of magnetic water on seed germination, seedling growth and grain yield of rice. *J Jilin Agric Univ*. 11-16.

Yano, A., Ohashi, Y., Hirasaki, T., and Fujiwara, K. 2004. Effect of 60 hz Magnetic Field on PHotosynthesis Uptake and Early Growth of Radish Seedlings. *Bioelectromagnetics.* 25(8): 572-581.

Yancey, P. H. 1994. *Compatible and counteracting solutes. In: Strange K (ed) Cellular and molecular pHysiology of cell volume regulation*. CRC Press, Boca Raton, pp 81–109.

Yermiyahu, U., Tal, A., Ben-Gal, A., Bar-Tal, A., Tarchitzky, J., and Lahav, O., 2007. Rethinking Desalinated Water uality and agriculture. *Science*. 318 (80-), 920–921.

Yoshida, S., Forno, A. D., Cock, H. J., and Gomez, A. K. 1976. *Laboratory Manual for PHysiologcal Studies of Rice*. Third Edition. The International Rice Research Institute. PHilippines.

Wang, Y., Zhang, B., Gong, Z., Gao, K., Ou, Y., and Zhang, J. 2013. The Effect of a Static Magnetic Field on The Hydrogen Bonding in Water Using Fractional Experiments. *J. Molecular Structure.* 1052: 102—104.

Wang, W., Li, Y., Dang, P., Zhao, S., Lai, D., and Zhou, L. 2018. Review: Rice Secondary Metabolites: Structures, Roles, Biosynthesis, and Metabolic Regulation. *Molecules*. 23, 3098: 1-50.