

## DAFTAR PUSTAKA

- Aazami, M. A., Rasouli, F., & Ebrahimzadeh, A. 2021. Oxidative damage, antioxidant mechanism and gene expression in tomato responding to salinity stress under in vitro conditions and application of iron and zinc oxide nanoparticles on callus induction and plant regeneration. *BMC Plant Biology*, 21(1), 597.
- Abobatta, W. F. 2019. Drought adaptive mechanisms of plants—a review. *Advances in Agriculture and Environmental Science*, 2(1), 62-65.
- Abukari, A. 2019. Influence of rice husk biochar on water holding capacity of soil in the Savannah Ecological Zone of Ghana. *Turkish Journal of Agriculture-Food Science and Technology*, 7(6), 888-891.
- Adebajo, S., Akintokun, P., Ojo, A., & Ajamu, I. 2019. Effects of rice husk biochar on the growth characteristics, rhizospheric microflora and yield of tomato plants. *Journal of Agricultural Science and Environment*, 19(1), 60-72
- Ahire, M. L., Mundada, P. S., Nikam, T. D., Bapat, V. A., & Penna, S. 2021. Multifaceted roles of silicon in mitigating environmental stresses in plants. *Plant Physiology and Biochemistry*, 169, 291-310.
- Akram, H. M., A. Ali, A. Sattar, H.S.U. Rehman, & A. Bibi. 2013. Impact of water deficit stress on various physiological and agronomic traits of three basmatirice (*oryza sativa* L.) cultivar. *The Journal Animal and Sciences* 23(5):1415-1423.
- Algita, N., Mulyadi, M., & Hidayat, M. 2021. *Karakteristik anatomi stomata aktinositik pada genus Mangifera*. Prosiding Biotik, 9(1).
- Alzahrani, Y., Kuşvuran, A., Alharby, H. F., Kuşvuran, S., & Rady, M. M. 2018. The defensive role of silicon in wheat against stress conditions induced by drought, salinity or cadmium. *Ecotoxicology and environmental safety*, 154, 187-196.
- Anee, T. I., Nahar, K., Rahman, A., Mahmud, J. A., Bhuiyan, T. F., Alam, M. U., ... & Hasanuzzaman, M. 2019. Oxidative damage and antioxidant defense in *Sesamum indicum* after different waterlogging durations. *Plants*, 8(7), 196.
- Asaeda, T., Senavirathna, M. D. H. J., Krishna, L. V., & Yoshida, N. 2019. Impact of regulated water levels on willows (*Salix subfragilis*) at a flood-control dam, and the use of hydrogen peroxide as an indicator of environmental stress. *Ecological Engineering*, 127, 96-102.
- Ashari, H., Hanif, Z., & Supriyanto, A. 2014. Kajian dampak iklim ekstrim curah hujan tinggi (La-Nina) pada jeruk siam (*Citrus nobilis* var. Microcarpa) di Kabupaten Banyuwangi, Jember dan Lumajang. *Planta Tropika Jurnal of Agrosains*. 2(1), 49-55.

- Ashkavand, P., Zarafshar, M., Tabari, M., Mirzaie, J., Nikpour, A., Bordbar, S. K., Daniel S., & Striker, G. G. 2018. Application of SiO<sub>2</sub> nanoparticles as pretreatment alleviates the impact of drought on the physiological performance of *Prunus mahaleb* (*Rosaceae*). *Boletín de la Sociedad Argentina de Botánica*, 53(2), 207-219.
- Ayi, Q., Zeng, B., Yang, K., Lin, F., Zhang, X., Van Bodegom, P. M., & Cornelissen, J. H. 2019. Similar growth performance but contrasting biomass allocation of root-flooded terrestrial plant *Alternanthera philoxeroides* (Mart.) Griseb. in response to nutrient versus dissolved oxygen stress. *Frontiers in plant science*, 10, 111.
- Bappeda Daerah Istimewa Yogyakarta. 2023. Jogja Dataku. [https://bappeda.jogjaprovo.go.id/dataku/data\\_dasar/index/710-iklim](https://bappeda.jogjaprovo.go.id/dataku/data_dasar/index/710-iklim) (Diakses tanggal 20 November 2023)
- Barid, B., & Lestari, D. 2015. Pengaruh Model Infiltrasi Sederhana Menggunakan Konsep Rain Garden terhadap Debit dan Kekeruhan Air Limpasan Akibat Hujan. *Media Komunikasi Teknik Sipil*, 20(1), 33-41.
- Bashar, K. K., Tareq, M. Z., Amin, M. R., Honi, U., Tahjib-Ul-Arif, M., Sadat, M. A., & Hossen, Q. M. M. 2019. Phytohormone-mediated stomatal response, escape and quiescence strategies in plants under flooding stress. *Agronomy*, 9(2), 43.
- Behboudi, F., Tahmasebi Sarvestani, Z., Kassaei, M. Z., Modares Sanavi, S. A. M., & Sorooshzadeh, A. 2018. Improving growth and yield of wheat under drought stress via application of SiO<sub>2</sub> nanoparticles. *Journal of Agricultural Science and Technology*, 20(7), 1479-1492.
- Ben-Noah, I., & Friedman, S. P. 2018. Review and evaluation of root respiration and of natural and agricultural processes of soil aeration. *Vadose Zone Journal*, 17(1), 1-47.
- Bertolino, L. T., Caine, R. S., & Gray, J. E. 2019. Impact of stomatal density and morphology on water-use efficiency in a changing world. *Frontiers in plant science*, 10, 225.
- Blum, A., & Tuberea, R. 2018. Dehydration survival of crop plants and its measurement. *Journal of Experimental Botany*, 69(5), 975-981.
- Bonomelli, C., Gil, P. M., & Schaffer, B. 2019. Effect of soil type on calcium absorption and partitioning in young avocado (*Persea americana* Mill.) trees. *Agronomy*, 9(12), 837.
- Bons, H. K., & Sharma, A. 2023. Impact of foliar sprays of potassium, calcium, and boron on fruit setting behavior, yield, and quality attributes in fruit crops: a review. *Journal of Plant Nutrition*, 1-15.
- Borghi, M., Perez de Souza, L., Yoshida, T., & Fernie, A. R. 2019. Flowers and climate change: a metabolic perspective. *New Phytologist*, 224(4), 1425-1441.

- Borrelli, P., Robinson D. A., Fleischer L. R., Lugato E., Ballabio C., Alewell C. & Panagos P. 2017. An assessment of the global impact of 21st century land use change on soil erosion. *Nature communications*, 8(1), 1-13.
- Boughalleb, F., Abdellaoui, R., Ben-Brahim, N., & Neffati, M. 2014. Anatomical adaptations of *Astragalus gombiformis* Pomel. under drought stress. *Open Life Sciences*, 9(12), 1215-1225.
- Buckley, T. N. 2019. How do stomata respond to water status? *New Phytologist*, 224(1), 21-36.
- Budiastuti, K., Chalida, N., & Mohamad, N. E. A. P. 2020. Seed priming alleviates crop growth inhibition by salinity. In IOP Conference Series: Earth and Environmental Science. *IOP Publishing*. Vol. 458, No. 1, p. 012006.
- Bueno, A., Alfarhan, A., Arand, K., Burghardt, M., Deininger, A. C., Hedrich, R., Leide., Seufert., Staiger., & Riederer, M. 2019. Effects of temperature on the cuticular transpiration barrier of two desert plants with water-spender and water-saver strategies. *Journal of Experimental Botany*, 70(5), 1613-1625.
- Chang, J. H. 2017. *Climate and agriculture: an ecological survey*. Routledge. ISBN 13: 978-0-202-36249-6.
- Cheng-xu S, C Hong-xing, S Hong-bo, L Xin-tao & X Yong. 2011. Growth and physiological responses to water and nutrient stress in oil palm. *Afr J Biotechnol* 10(51), 10465–10471.
- Clavijo-Herrera, J., Shahid, M. A., Rossi, L., & Sarkhosh, A. 2022. Exogenous Silicon Applications Enhance Peach Seedling Response to Flooding-Induced Hypoxia Stress. *europemc*.
- Copolovici, L., Lupitu, A., Moisa, C., Taschina, M., & Copolovici, D. M. 2021. The effect of antagonist abiotic stress on bioactive compounds from basil (*Ocimum basilicum*). *Applied Sciences*, 11(19), 9282.
- Cui, J., Shao, G., Lu, J., Keabetswe, L., & Hoogenboom, G. 2019. Yield, quality and drought sensitivity of tomato to water deficit during different growth stages. *Scientia agricola*, 77.
- Cunino, I. I., & Taolin, R. I. 2018. Pengrearuh Takaran Arang Sekam Padi dan Bokashi Cair terhadap Pertumbuhan dan Hasil Mentimun (*Cucumis sativus* L.). *Savana Cendana*, 3(02), 24-28.
- Dariah, A., Nurida N L, & Jubaedah. 2021. Utilization of cacao shell biochar and compost to improve cayenne pepper (*Capsicum frutescens* L.) in acid upland. In IOP Conference Series: Earth and Environmental Science. *IOP Publishing* Vol. 648, No. 1, p. 012182.
- Dariah, A., Nurida, N. L., Salma, S., & Santi, L. P. 2021. The use of soil ameliorants to improve soil quality and crop productivity of degraded semi-arid upland in Gunung Kidul, Yogyakarta, Indonesia. In *IOP Conference Series: Earth and Environmental Science*. *IOP Publishing* (Vol. 648, No. 1, p. 012159).

- De Camargo, M. S., Bezerra, B. K. L., Holanda, L. A., Oliveira, A. L., Vitti, A. C., & Silva, M. A. 2019. Silicon fertilization improves physiological responses in sugarcane cultivars grown under water deficit. *Journal of Soil Science and Plant Nutrition*, 19(1), 81-91.
- De Souza, B. C., Carvalho, E. C. D., Oliveira, R. S., de Araujo, F. S., de Lima, A. L. A., & Rodal, M. J. N. 2020. Drought response strategies of deciduous and evergreen woody species in a seasonally dry neotropical forest. *Oecologia*, 194, 221-236.
- Deng, L., Peng, C., Kim, D. G., Li, J., Liu, Y., Hai, X., ... & Kuzyakov, Y. 2021. Drought effects on soil carbon and nitrogen dynamics in global natural ecosystems. *Earth-Science Reviews*, 214, 103501.
- Dissanayaka, D. M. S. B., Maruyama, H., Masuda, G., & Wasaki, J. 2015. Interspecific facilitation of P acquisition in intercropping of maize with white lupin in two contrasting soils as influenced by different rates and forms of P supply. *Plant and Soil*, 390, 223-236.
- Djamaluddin, M., RamLan, A., & Jayadi, M. 2019. Monitoring Perubahan Areal Persawahan Menggunakan Aplikasi Sistem Informasi Geografis (Studi Kasus: Kecamatan Pallangga Kabupaten Gowa). *Jurnal Ecosolum*, 8(1), 1-14.
- Dong, X., Guan, L., Zhang, P., Liu, X., Li, S., Fu, Z., ... & Yang, H. 2021. Responses of maize with different growth periods to heat stress around flowering and early grain filling. *Agricultural and Forest Meteorology*, 303, 108378.
- Dos Santos, A. R., Melo, Y. L., de Oliveira, L. F., Cavalcante, I. E., de Souza Ferraz, R. L., da Silva Sá, F. V., de Lacerda C. F. & de Melo, A. S. 2022. Exogenous silicon and proline modulate osmoprotection and antioxidant activity in cowpea under drought stress. *Journal of Soil Science and Plant Nutrition*, 22(2), 1692-1699.
- Dowd, T. G., Braun, D. M., & Sharp, R. E. 2020. Maize lateral root developmental plasticity induced by mild water stress. II: Genotype-specific spatio-temporal effects on determinate development. *Plant, Cell & Environment*, 43(10), 2409-2427.
- Du, Y., Zhao, Q., Chen, L., Yao, X., Zhang, W., Zhang, B., & Xie, F. 2020. Effect of drought stress on sugar metabolism in leaves and roots of soybean seedlings. *Plant Physiology and Biochemistry*, 146, 1-12.
- Duan, M., Liu, G., Zhou, B., Chen, X., Wang, Q., Zhu, H., & Li, Z. 2021. Effects of modified biochar on water and salt distribution and water-stable macro-aggregates in saline-alkaline soil. *Journal of Soils and Sediments*, 21, 2192-2202.
- El-Halim, A. A., & Omae, H. 2020. Performance Assessment of Chlorophyll Meter to Determine When to Irrigate Wheat under Different Soil Moisture Deficit Conditions: An Initial Study. *Communications in Soil Science and Plant Analysis*, 51(7), 976-984.

- El-Mageed, A., Taia, A., Belal, E. E., Rady, M. O., El-Mageed, A., Mansour, E Shima, A., Awad, M.F. & Semida, W. M. 2021. Acidified biochar as a soil amendment to drought stressed (*Vicia faba* L.) plants: influences on growth and productivity, nutrient status, and water use efficiency. *Agronomy*, 11(7), 1290.
- Emmanuel A. Torres-Quezada, Lincoln Zotarelli, Danielle D. Treadwell & Bielinski M. Santos. 2021. Growth habit and in-row distance for bell pepper under protected culture. *International Journal of Vegetable Science*, 27:6, 561-573, DOI: 10.1080/19315260.2021.1888840
- Eshbaugh, W., H. 2012. *The taxonomy of the genus capsicum. Peppers: Botany, Production and Uses*. 14-28.
- Evans, J. R., & Santiago, L. S. 2014. Prometheus Wiki gold leaf protocol: gas exchange using LI-COR 6400. *Functional Plant Biology*, 41(3), 223-226.
- Fan, X., Cao, X., Zhou, H., Hao, L., Dong, W., He, C., ... & Zheng, Y. 2020. Carbon dioxide fertilization effect on plant growth under soil water stress associates with changes in stomatal traits, leaf photosynthesis, and foliar nitrogen of bell pepper (*Capsicum annuum* L.). *Environmental and Experimental Botany*, 179, 104203.
- Fang, Y., & Xiong, L. 2015. General mechanisms of drought response and their application in drought resistance improvement in plants. *Cellular and molecular life sciences*, 72(4), 673-689.
- FAO. 2021. World Food and Agriculture. Crops and livestock products. <http://www.fao.org/faostat/en/#data/QCL>. Diakses pada tanggal 1 september 2021.
- García-Gaytán, V., Gómez-Merino, F. C., Trejo-Téllez, L. I., Baca-Castillo, G. A., & García-Morales, S. 2017. The chilhuacle chili (*Capsicum annuum* L.) in Mexico: Description of the variety, its cultivation, and uses. *International Journal of agronomy*.
- Garruna-Hernandez, R., Orellana, R., Larque-Saavedra, A., & Canto, A. 2014. Understanding the physiological responses of a tropical crop (*Capsicum chinense* Jacq.) at high temperature. *PLoS one*, 9(11), e111402.
- Gentine, P., Green, J. K., Guérin, M., Humphrey, V., Seneviratne, S. I., Zhang, Y., & Zhou, S. 2019. Coupling between the terrestrial carbon and water cycles—a review. *Environmental Research Letters*, 14(8), 083003.
- Ghiloufi, W., Seo, J., Kim, J., Chaieb, M., & Kang, H. 2019. Effects of biological soil crusts on enzyme activities and microbial community in soils of an arid ecosystem. *Microbial ecology*, 77, 201-216.
- Ghosh, T., Maity, P., Das, T., Krishnan, P., Bhatia, A., Bhattacharya, P., & Sharma, D. K. 2020. Variation of porosity, pore size distribution and soil physical properties under conservation agriculture. *Indian J. Agric. Sci*, 90, 2051-2058.



- Ghosh, U. K., Islam, M. N., Siddiqui, M. N., Cao, X., & Khan, M. A. R. 2022. Proline, a multifaceted signalling molecule in plant responses to abiotic stress: understanding the physiological mechanisms. *Plant Biology*, 24(2), 227-239.
- Gomez, K. A. & A. A. Gomez. 2015. *Prosedur Statistik untuk Penelitian Pertanian (Statistical Procedures for Agricultural Research)* edisi kedua. Penerbit Universitas Indonesia. Jakarta
- Gómez-Paccard, C., Hontoria, C., Mariscal-Sancho, I., Pérez, J., León, P., González, P., & Espejo, R. 2015. Soil–water relationships in the upper soil layer in a Mediterranean Paleixerult as affected by no-tillage under excess water conditions—Influence on crop yield. *Soil and Tillage Research*, 146, 303-312.
- Gong, X., Xu, Y., Li, H., Chen, X., & Song, Z. 2022. Antioxidant activation, cell wall reinforcement, and reactive oxygen species regulation promote resistance to waterlogging stress in hot pepper (*Capsicum annum* L.). *BMC Plant Biology*, 22(1), 425.
- Goto, K., Yabuta, S., Ssenyonga, P., Tamaru, S., & Sakagami, J. I. 2021. Response of leaf water potential, stomatal conductance and chlorophyll content under different levels of soil water, air vapor pressure deficit and solar radiation in chili pepper (*Capsicum chinense*). *Scientia Horticulturae*, 281, 109943.
- Hamada, N., Fujimichi, Y., Iwasaki, T., Fujii, N., Furuhashi, M., Kubo, E., ... & Sato, H. 2014. Emerging issues in radiogenic cataracts and cardiovascular disease. *Journal of radiation research*, 55(5), 831-846.
- Hanpattanakita, P., Vanitchunga, S., Saeng-Ngamb, S., & Pearaksab, P. 2021. Effect of Biochar on Red Chili Growth and Production in Heavy Acid Soil. *Chemical Engineering*, 83.
- Hanum, H., & Setyawan, D. 2019. *Analisis Deskriptif Terhadap Curah Hujan Harian Kota Palembang*. In Seminar Nasional Hari Air Sedunia. Vol. 2, No. 1, pp. 52-58.
- Hawa, L. C., Diposari, R. P., & Lutfi, M. 2021. *Physical properties of dried red chili (Capsicum annum) var. Hot Beauty as a function of moisture content*. In IOP Conference Series: Earth and Environmental Science (Vol. 733, No. 1, p. 012010). IOP Publishing.
- Hidayati, N., Hendrati, R. L., Triani, A., & Sudjino, S. 2017. Pengaruh kekeringan terhadap pertumbuhan dan perkembangan tanaman nyamplung (*Callophylum inophyllum* L.) dan johar (*Cassia florida* Vahl.) dari provenan yang berbeda. *Jurnal Pemuliaan Tanaman Hutan*, 11(2), 99-111.
- Ho, S.-H., Zhu, S., Chang, J.-S., 2017. Recent advances in nanoscale-metal assisted biochar derived from waste biomass used for heavy metals removal. *Bioresour. Technol.* 246, 123e134.
- Hosseinfard, M., Stefaniak, S., Ghorbani Javid, M., Soltani, E., Wojtyla, Ł., & Garnczarska, M. 2022. Contribution of exogenous proline to abiotic stresses tolerance in plants: A review. *International Journal of Molecular Sciences*, 23(9), 5186.

- Hu, J., Li, Y., & Jeong, B. R. 2020. Silicon alleviates temperature stresses in poinsettia by regulating stomata, photosynthesis, and oxidative damages. *Agronomy*, 10(9), 1419.
- Huang, J., Hu, T., Yasir, M., Gao, Y., Chen, C., Zhu, R., ... & Yang, J. 2019. Root growth dynamics and yield responses of rice (*Oryza sativa* L.) under drought—Flood abrupt alternating conditions. *Environmental and Experimental Botany*, 157, 11-25.
- Huang, Z., Hejazi, M., Tang, Q., Vernon, C.R., Liu, Y., Chen, M., & Calvin, K. 2019. Global agricultural green and blue water consumption under future climate and land use changes. *J. Hydrol.* 574, 242–256.
- Husen, S. 2016. Pertumbuhan dan Hasil Cabai Merah (*Capsicum Annum* L.) Pada Sistem Bedeng Permanen dengan Beberapa Bahan Pembenah Tanah *Doctoral dissertation*. Universitas Mataram.
- Husnain., Ladiyani R. W., & Agus S. 2021. *Rekomendasi pupuk N, P, dan K untuk tanaman hortikultura (per kabupaten)*. Badan Penelitian Dan Pengembangan Pertanian. Kementerian Pertanian. Bogor.
- Hussain, M., Farooq, M., Nawaz, A., Al-Sadi, A. M., Solaiman, Z. M., Alghamdi, S. S., Ume A., Yong S. O. & Siddique, K. H. 2017. Biochar for crop production: potential benefits and risks. *Journal of Soils and Sediments*, 17(3), 685-716.
- Idaryani, Warda, Suriany, & Halil, W. 2021. Effect of mulch application and watering frequency on growth and production of chilli (*Capsicum annum* L). *IOP Conference Series. Earth and Environmental Science*, 807(4)
- Ide, R., Ichiki, A., Suzuki, T., & Jitsuyama, Y. 2022. Analysis of yield reduction factors in processing tomatoes under waterlogging conditions. *Scientia Horticulturae*, 295, 110840.
- IPCC, 2018. Impacts of 1.5°C of Global Warming on Natural and Human Systems [WWW.Document]. Glob. Warm. 1.5°C. An IPCC Spec. Rep. Impacts Glob. Warm. 1.5°C above Pre-industrial Levels Relat. Glob. Greenh. Gas Emiss. Pathways, Context Strength. Glob. Response to Threat Clim. Chang. URL <https://www.ipcc.ch/sr15> (diakses pada tanggal 24 Agustus 2021).
- Iqbal, Z.; Sarkhosh, A.; Balal, R.M.; Rauf, S.; Khan, N.; Altaf, M.A.; Camara-Zapata, J.M.; Garcia-Sanchez, F.; & Shahid, M.A. 2021. Silicon Nanoparticles Mitigate Hypoxia-Induced Oxidative Damage by Improving Antioxidants Activities and Concentration of Osmolytes in Southern Highbush Blueberry Plants. *Agronomy*, 11, 2143.
- Islam, S. J. M., Mannan, M. A., Khaliq, Q. A., & Rahman, M. M. 2018. Growth and yield response of maize to rice husk biochar. *Australian Journal of Crop Science*, 12(12), 1813-1819.
- Jabborova, D., Annapurna, K., Al-Sadi, A. M., Alharbi, S. A., Datta, R., & Zuan, A. T. K. 2021. Biochar and Arbuscular mycorrhizal fungi mediated enhanced drought tolerance in Okra (*Abelmoschus esculentus*) plant growth, root

morphological traits and physiological properties. *Saudi Journal of Biological Sciences*.

- Jacotot, A., Marchand, C., & Allenbach, M. 2019. Increase in growth and alteration of C: N ratios of *Avicennia marina* and *Rhizophora stylosa* subject to elevated CO<sub>2</sub> concentrations and longer tidal flooding duration. *Frontiers in Ecology and Evolution*, 7, 98.
- Jayanti, K. D. 2017. Analisis lengas tanah pada tanah regosol. *Agropet*, 14(2).
- Jeeatid, N., Techawongstien, S., Suriarn, B., Chanthai, S., & Bosland, P. W. 2018. Influence of water stresses on capsaicinoid production in hot pepper (*Capsicum chinense* Jacq.) cultivars with different pungency levels. *Food Chemistry*, 245, 792-797.
- Juan-juan, Z., P. Qiang, L. Yin-li, W. Xing, H. & Wang-lin. 2012. Leaf gas exchange, chlorophyll fluorescence, and fruit yield in hot pepper (*Capsicum annum* L) grown under different shade and soil moisture during the fruit growth stage. *J of Integrative Agriculture*. 11(6): 927-937
- Jumrani, K., Bhatia, V. S., & Pandey, G. P. 2017. Impact of elevated temperatures on specific leaf weight, stomatal density, photosynthesis and chlorophyll fluorescence in soybean. *Photosynthesis Research*, 131(3), 333-350.
- Kaiser, E., Correa Galvis, V., & Armbruster, U. 2019. Efficient photosynthesis in dynamic light environments: a chloroplast's perspective. *Biochemical Journal*, 476(19), 2725-2741.
- Kartika., Jun-Ichi S., Benyamin L., Shin Y., Isao A. Laily I. W., Erna S., Hibiki I., & Arinal H. I. N. 2021. Rice husk biochar effects on improving soil properties and root development in rice (*Oryza glaberrima* Steud.) exposed to drought stress during early reproductive stage. *AIMS Agriculture and Food*, 6(2), 737-751.
- Kaur, G., Singh, G., Motavalli, P. P., Nelson, K. A., Orlowski, J. M., & Golden, B. R. 2020. Impacts and management strategies for crop production in waterlogged or flooded soils: A review. *Agronomy Journal*, 112(3), 1475-1501.
- Khaerudin, D. N., Dinar, P., & Apriliyanti, A. 2020. *Pengaruh Pengembangan Penggunaan Lahan terhadap Pola Curah Hujan di Kota Malang*. Media Teknik Sipil, 18(1), 9-16.
- Khan, M. I. R., Trivellini, A., Chhillar, H., Chopra, P., Ferrante, A., Khan, N. A., & Ismail, A. M. 2020. The significance and functions of ethylene in flooding stress tolerance in plants. *Environmental and Experimental Botany*, 179, 104188.
- Kučerová, K., Henselová, M., Slováková, L., Bačovčinová, M., & Hensel, K. 2021. Effect of plasma activated water, hydrogen peroxide, and nitrates on lettuce growth and its physiological parameters. *Applied Sciences*, 11(5), 1985.



- Kumar, A., Bhattacharya, T., Mukherjee, S., & Sarkar, B. 2022. A perspective on biochar for repairing damages in the soil–plant system caused by climate change-driven extreme weather events. *Biochar*, 4(1), 22.
- Kume, A., Akitsu, T., & Nasahara, K. N. 2018. Why is chlorophyll b only used in light-harvesting systems? *Journal of Plant research*, 131, 961-972.
- Kurniawan, A. 2018. Produksi Mol (Mikroorganisme Lokal) dengan Pemanfaatan Bahan-Bahan Organik yang Ada di Sekitar. *Jurnal Hexagro*. 2(2).
- Kusumawati, R. D., Hariyono, D., & Aini, N. 2018. Pengaruh komposisi media tanam dan interval pemberian air sampai dengan kapasitas lapang terhadap produksi tanaman cabai rawit (*Capsicum frutescens* L.). *Plantropica: Journal of Agricultural Science*, 1(2).
- Lai, Y., & Dzombak, D. A. 2019. Use of historical data to assess regional climate change. *Journal of Climate*, 32(14), 4299-4320.
- Lee, Z. H., Hirakawa, T., Yamaguchi, N., & Ito, T. 2019. The roles of plant hormones and their interactions with regulatory genes in determining meristem activity. *International journal of molecular sciences*, 20(16), 4065.
- Lei, H., Jin, C., Xiao, Z., Chen, J., Leghari, S. J., & Pan, H. 2023. Relationship between pepper (*Capsicum annum* L.) root morphology, inter-root soil bacterial community structure and diversity under water–air intercropping conditions. *Planta*, 257(5), 98.).
- Limantara, L., Dettling, M., Indrawati, R., Indriatmoko, & Brotosudarmo, T. H. P. 2015. Analysis on the Chlorophyll Content of Commercial Green Leafy Vegetables. *Procedia Chemistry*, 14, 225–231.
- Listiana, I., Bursan, R., Jimad, H., Widyastuti, RAD., Rahmat, A., Rio T. P. & Agus, H. 2021. Pemanfaatan limbah sekam padi dalam pembuatan arang sekam di Pekon Bulurejo Kecamatan Gadingrejo Kabupaten Pringsewu. *Intervensi Komunitas*, 3(1), 1-12.
- Liu, G., Li, Y., Migliaccio, K., Olczyk, T., & Alva, A. 2013. Oxygen amendment on growth and nitrogen use efficiency of flooded Italian basil. *International Journal of Vegetable Science*, 19(3), 217-227.
- Liu, Y., Zhang, M., Meng, Z., Wang, B., & Chen, M. 2020. Research progress on the roles of cytokinin in plant response to stress. *International journal of molecular sciences*, 21(18), 6574.
- Liu, Z., Dugan, B., Masiello, C. A., & Gonnermann, H. M. 2017. Biochar particle size, shape, and porosity act together to influence soil water properties. *Plos one*, 12(6), e0179079.
- Lolomsait, Y. 2016. Pengaruh Takaran Arang Sekam Padi dan Frekuensi Penyemprotan Pupuk Organik Cair terhadap Pertumbuhan dan Hasil Tanaman Cabe Merah (*Capsicum annum* L.). *Savana Cendana*, 1(04), 125-127.

- Mahlangu, R. I. S., Maboko, M. M., Sivakumar, D., Soundy, P., & Jifon, J. 2016. Lettuce (*Lactuca sativa* L.) growth, yield and quality response to nitrogen fertilization in a non-circulating hydroponic system. *Journal of Plant Nutrition*, 39(12), 1766-1775.
- Mannan, M. A., & Shashi, M. A. 2019. Amelioration of Drought Tolerance in Maize Using Rice Husk Biochar. *Intech Open Limited*, London, UK.
- Mansoor, S., Kour, N., Manhas, S., Zahid, S., Wani, O. A., Sharma, V., Leonard W., Mohammed N. A., Abdulaziz A. A., Hamed A. E., Bilal A. P. Parvaiz A., & Ahmad, P. 2020. Biochar as a tool for effective management of drought and heavy metal toxicity. *Chemosphere*, <https://doi.org/10.1016/j.chemosphere.2020.129458>
- Martínez-Acosta, E., Lagunes-Espinoza, L. C., Castelán-Estrada, M., Lara-Viveros, F., & Trejo, C. 2020. Leaf gas exchange and growth of *Capsicum annum* var. *glabriusculum* under conditions of flooding and water deficit. *Photosynthetica*, 58(3).
- Martínez-Vilalta, J., Anderegg, W. R., Sapes, G., & Sala, A. 2019. Greater focus on water pools may improve our ability to understand and anticipate drought-induced mortality in plants. *New Phytologist*, 223(1), 22-32.
- Marx, C., Tetzlaff, D., Hinkelmann, R., & Soulsby, C. 2022. Seasonal variations in soil-plant interactions in contrasting urban green spaces: Insights from water stable isotopes. *Journal of Hydrology*, 612, 127998.
- Masoumi, Z., Haghighi, M., & Jalali, S. A. H. 2021. Flooding or drought which one is more offensive on pepper physiology and growth? *Molecular Biology Reports*, 48, 4233-4245.
- Mattioli, R., Biancucci, M., El Shall, A., Mosca, L., Costantino, P., Funck, D., & Trovato, M. 2018. Proline synthesis in developing microspores is required for pollen development and fertility. *BMC Plant Biology*, 18(1), 1-15.
- Mavrič Čermelj, A.; Golob, A.; Vogel-Mikuš, K.; & Germ, M. 2022. Silicon Mitigates Negative Impacts of Drought and UV-B Radiation in Plants. *Plants*, 11, 91. <https://doi.org/10.3390/plants11010091>
- Medyouni, I., Zouaoui, R., Rubio, E., Serino, S., Ahmed, H. B., & Bertin, N. 2021. Effects of water deficit on leaves and fruit quality during the development period in tomato plant. *Food Science & Nutrition*, 9(4), 1949-1960.
- Meriño-Gergichevich, C., Luengo-Escobar, A., Alarcón, D., Reyes-Díaz, M., Ondrasek, G., Morina, F., & Ogass, K. 2021. Combined spraying of boron and zinc during fruit set and premature stage improves yield and fruit quality of European hazelnut cv. Tonda di Giffoni. *Frontiers in plant science*, 12, 661542.
- Mishra, A., Taing, K., Hall, M. W., & Shinogi, Y. 2017. Effects of rice husk and rice husk charcoal on soil physicochemical properties, rice growth and yield. *Agricultural Sciences*, 8(9), 1014-1032.

- Misra, V., Solomon, S., Mall, A. K., Prajapati, C. P., Hashem, A., Abd\_Allah, E. F., & Ansari, M. I. 2020. Morphological assessment of water stressed sugarcane: A comparison of waterlogged and drought affected crop. *Saudi Journal of Biological Sciences*, 27(5), 1228-1236.
- Monostori, I., Árendás, T., Hoffman, B., Galiba, G., Gierczik, K., Szira, F., & Vágújfalvi, A. 2016. Relationship between SPAD value and grain yield can be affected by cultivar, environment and soil nitrogen content in wheat. *Euphytica*, 211, 103-112.
- Mulyani A, Priyono A, & Agus F. 2013. Chapters 24: Semiarid Soils of Eastern Indonesia: Soil Classification and Land Uses. Developments in Soil Classification, Landuse Planning and Policy Implications. *Springer*. pp 449-466.
- Mulyani A. & Mamat H.S 2019. Pengelolaan Lahan Kering Beriklim Kering untuk Pengembangan Jagung di Nusa Tenggara. Balai Besar Litbang Sumberdaya Lahan Pertanian. *Jurnal Sumber Daya Lahan*. Volume 13 Nomor 1.
- Mustroph, A. 2018. Improving flooding tolerance of crop plants. *Agronomy*, 8(9), 160.
- Nardini, A. 2022. Hard and tough: the coordination between leaf mechanical resistance and drought tolerance. *Flora*, 288, 152023.
- Nasrullah, Ali, S., Umar, M., Sun, L., Naeem, M., Yasmin, H., & Khan, N. 2022. Flooding tolerance in plants: from physiological and molecular perspectives. *Brazilian Journal of Botany*, 45(4), 1161-1176.
- Natasha, N., Shahid, M., Khalid, S., Bibi, I., Naeem, M. A., Niazi, N. K., ... & Rinklebe, J. 2022. Influence of biochar on trace element uptake, toxicity and detoxification in plants and associated health risks: A critical review. *Critical Reviews in Environmental Science and Technology*, 52(16), 2803-2843.
- Nedukha, O. 2022. Tolerance of Plant Cell Wall to Environment. In *Advances in Plant Defense Mechanisms*. *IntechOpen*.
- Ni, J., Cheng, Y., Wang, Q., Ng, C. W. W., & Garg, A. 2019. Effects of vegetation on soil temperature and water content: Field monitoring and numerical modelling. *Journal of Hydrology*, 571, 494-502.
- Nugroho, C. A., & Setiawan, A. W. 2022. Pengaruh Frekuensi Penyiraman dan Volume Air terhadap Pertumbuhan Sawi Pakcoy Pada Media Tanam Campuran Arang Sekam dan Pupuk Kandang. *AGRIUM: Jurnal Ilmu Pertanian*, 25(1).
- Nurwahyuni, E., & Putra, E. T. S. 2021. The role of calcium in drought stress response induced through antioxidant activity in oil palm (*Elaeis guineensis* Jacq.) seedlings. *Menara Perkebunan*, 89(1), 51-61.
- Ottolenghi, S., Rubino, F. M., Sabbatini, G., Coppola, S., Veronese, A., Chiumello, D., & Paroni, R. 2019. Oxidative stress markers to investigate the effects of hyperoxia in anesthesia. *International Journal of Molecular Sciences*, 20(21), 5492.

- Overman, A. R. & R. V. Scholtz. 2002. *Mathematical Models of Crop Growth and Yield*. Marcel Decker. New York. 328 pgs.
- Pacurar, D. I., Perrone, I., & Bellini, C. 2014. Auxin is a central player in the hormone cross-talks that control adventitious rooting. *Physiologia plantarum*, 151(1), 83-96.
- Parniani, F., Haghighi, M., & Mireei, S. A. 2022. The effect of adjusting fruit loading by pruning on the yield and quality of sweet pepper in low light conditions. *South African Journal of Botany*, 147, 903-914.
- Pedersen, O., Sauter, M., Colmer, T. D., & Nakazono, M. 2021. Regulation of root adaptive anatomical and morphological traits during low soil oxygen. *New Phytologist*, 229(1), 42-49.
- Piay, S. S., Ariarti T., Yuni E., & Rudi P. H. 2010. *Budidaya dan Pascapanen Cabai Merah (Capsicum annum L.)*. Balai Pengkajian Teknologi Pertanian Jawa Tengah. ISBN : 978-979-9007-54-4
- Pode, R. 2016. Potential applications of rice husk ash waste from rice husk biomass power plant. *Renewable and Sustainable Energy Reviews*, 53, 1468-1485.
- Ponting, J., Kelly, T. J., Verhoef, A., Watts, M. J., & Sizmur, T. 2021. The impact of increased flooding occurrence on the mobility of potentially toxic elements in floodplain soil—A review. *Science of The Total Environment*, 754, 142040.
- Pujotomo. I. 2017. Potensi pemanfaatan biomassa sekam padi untuk pembangkit listrik melalui teknologi gasifikasi. *Energi & Kelistrikan*, 9(2), 126-135.
- Purnama, S. 2016. Water infiltration into soil and its effect to surface runoff in subdistrict of Kasihan, Bantul regency. In 1st International Conference on Geography and Education (ICGE 2016) (pp. 87-91). *Atlantis Press*.
- Purwantara, S. 2018. Konservasi Sumberdaya Air Tanah di Wilayah Ngaglik Sleman. *Geo Media: Majalah Ilmiah dan Informasi Kegeografian*, 16(2).
- Putra, G. M. D., Sutiarto, L., Nugroho, A. P., & Chaer, M. S. I. 2022. *Application of Machine Learning to Study Effect of Environmental Manipulation in Frame of Smart Agriculture on the Stomata of Capsicum annum*. In IOP Conference Series: Earth and Environmental Science (Vol. 1059, No. 1, p. 012034). *IOP Publishing*.
- Qian, L., Chen, X., Wang, X., Huang, S., & Luo, Y. 2020. The effects of flood, drought, and flood followed by drought on yield in cotton. *Agronomy*, 10(4), 555.
- Qingjuan, Y., Wanyi, S., & Ziqi, L. 2022. A microclimate model for plant transpiration effects. *Urban Climate*, 45, 101240.
- Rahmiati, F., Amin, G., & German, E. 2019. Pelatihan pemanfaatan limbah padi menjadi arang sekam untuk menambah pendapatan petani. *Agrokreatif: Jurnal Ilmiah Pengabdian kepada Masyarakat*, 5(2), 159-164

- Rane, J., Singh, A. K., Tiwari, M., Prasad, P. V., & Jagadish, S. V. 2022. Effective use of water in crop plants in dryland agriculture: implications of reactive oxygen species and antioxidative system. *Frontiers in Plant Science*, 12, 778270
- Risnayah, S. 2021. Dampak La Nina 2020–2021 Terhadap Curah Hujan di Sulawesi Tenggara. *Buletin GAW Bariri*, 2(2), 97-104.
- Rosawanti P., Ghulamahdi M., & Khumaida N. 2016. Respon Anatomi dan Fisiologi Akar Kedelai terhadap Cekaman Kekeringan. *Jurnal Agronomi Indonesia Indonesian Journal of Agronomy*, 43(3), 186-192. <https://doi.org/10.24831/jai.v43i3.11243>
- Salvatierra, A., Toro, G., Mateluna, P., Opazo, I., Ortiz, M., & Pimentel, P. 2020. Keep calm and survive: Adaptation strategies to energy crisis in fruit trees under root hypoxia. *Plants*, 9(9), 1108.
- Sánchez-Reinoso, A. D., Colmenares-Jaramillo, A., Lombardini, L., & Restrepo-Díaz, H. 2023. Physiological response of 'Castillo el Tambo' coffee plants to biochar and chemical fertilization applications. *Chilean journal of agricultural research*, 83(3), 307-319.
- Sasmita, K. D., Anas, I., Anwar, S., Yahya, S., & Gunawan D. 2017. Effect of Organik Fertilizer and Biochar on Seedling Media Quality and Growth of Cacao Seedling. *J. TIDP* 4(2), 107-120.
- Saud, S., Fahad, S., Cui, G., Yajun, C., & Anwar, S. 2020. Determining nitrogen isotopes discrimination under drought stress on enzymatic activities, nitrogen isotope abundance and water contents of Kentucky bluegrass. *Scientific Reports*, 10(1), 6415.
- Senapati, N., Brown, H. E., & Semenov, M. A. 2019. Raising genetic yield potential in high productive countries: designing wheat ideotypes under climate change. *Agricultural and forest meteorology*, 271, 33-45.
- Sexton, T. M., Steber, C. M., & Cousins, A. B. 2021. Leaf temperature impacts canopy water use efficiency independent of changes in leaf level water use efficiency. *Journal of Plant Physiology*, 258, 153357.
- Sezen, S. M., Yazar, A., & Tekin, S. 2019. Physiological response of red pepper to different irrigation regimes under drip irrigation in the Mediterranean region of Turkey. *Scientia Horticulturae*, 245, 280-288.
- Shashi, M. A., Mannan, M. A., Islam, M. M., & Rahman, M. M. 2018. Impact of rice husk biochar on growth, water relations and yield of maize (*Zea mays* L.) under drought condition. *The Agriculturists*, 16(02), 93-101
- Simbolon, E., Suedy, S. W. A., & Darmanti, S. 2020. Pengaruh hidrogen peroksida dan ketersediaan air terhadap pertumbuhan vegetatif tanaman kedelai [*Glycine max* (L.) Merr.] varietas Deja 1. *Agric*, 32(1), 39-50.
- Singh, T., Singh, P., & Singh, A. 2021. Silicon significance in crop production: Special consideration to rice: An overview. *J. Pharm. Innov*, 10, 223-229.



- Striker, G. G., & Colmer, T. D., 2017. Flooding tolerance of for age legumes, *Journal of Experimental Botany*, 68 (8) 1851–1872.
- Striker, G. G., Kotula, L., & Colmer, T. D. 2019. Tolerance to partial and complete submergence in the forage legume *Melilotus siculus*: an evaluation of 15 accessions for petiole hyponastic response and gas-filled spaces, leaf hydrophobicity and gas films, and root phellem. *Annals of Botany*, 123(1), 169-180.
- Suharyanto, S., Zulham, A., Sidqi, M., Sudianto, A., Widiyanto, A., & Suraji, S. 2020. Pulau-pulau Kecil Sebagai Pusat Pertumbuhan Ekonomi di Wilayah Perbatasan Indonesia: Review Aspek Teknis, Sosial dan Ekonomi. *Buletin Ilmiah Marina Sosial Ekonomi Kelautan dan Perikanan*, 6(1), 73-84.
- Sujinah, S., & Jamil, A. 2016. Mekanisme respon tanaman padi terhadap cekaman kekeringan dan varietas toleran. *Iptek Tanaman Pangan*. 11(1). 1-7
- Sun, W., Shi, F., Chen, H., Zhang, Y., Guo, Y., & Mao, R. 2021. Relationship between relative growth rate and C: N: P stoichiometry for the marsh herbaceous plants under water-level stress conditions. *Global Ecology and Conservation*, 25, e01416.
- Supriadi, D. R., Susila, A. D., & Sulistyono, E. 2018. Penetapan Kebutuhan air tanaman cabai merah (*Capsicum annum* L.) dan cabai rawit (*Capsicum frutescens* L.). *Jurnal Hortikultura Indonesia*, 9(1), 38-46.
- Susilawati & Budi R. 2010. *Petunjuk teknis budidaya cabai merah ramah lingkungan (Materi Pelatihan Agribisnis bagi KMPH)*. Balai Pengkajian Teknologi Pertanian Sumatera Selatan. The report is acknowledged and approved for circulation by the MRPP. Management Unit Palembang, Palembang.
- Swastika. S., Dian P., Taufik H., & Kuntoro B. A. 2017. *Teknologi Budidaya Cabai Merah*. UR Press dan Kementerian Pertanian. Riau. ISBN 978-979-792-798-1
- Talbi, S., Rojas, J. A., Sahrawy, M., Rodríguez-Serrano, M., Cárdenas, K. E., Debouba, M., & Sandalio, L. M. 2020. Effect of drought on growth, photosynthesis and total antioxidant capacity of the saharan plant *Oudeneya africana*. *Environmental and Experimental Botany*, 176, 104099.
- Telaumbanua, S. F. 2018. Respons Pertumbuhan dan Produksi Tanaman Cabai (*Capsicum annum* L.) terhadap Pemangkasan Pucuk dan Pemberian Berbagai Jenis Mulsa. *Doctoral dissertation*. Universitas Sumatera Utara.
- Toral-Juárez, M. A., Avila, R. T., Cardoso, A. A., Brito, F. A., Machado, K. L., Almeida, W. L., ... & DaMatta, F. M. 2021. Drought-tolerant coffee plants display increased tolerance to waterlogging and post-waterlogging reoxygenation. *Environmental and Experimental Botany*, 182, 104311
- Vandegeer, R. K., Zhao, C., Cibils-Stewart, X., Wuhrrer, R., Hall, C. R., Hartley, S. E., & Johnson, S. N. 2021. Silicon deposition on guard cells increases stomatal sensitivity as mediated by K<sup>+</sup> efflux and consequently reduces stomatal conductance. *Physiologia Plantarum*, 171(3), 358-370.

- Verma, K. K., Verma, C. L., & Singh, M. 2021. Developing mathematical model for diurnal variations of photosynthetic responses in *Jatropha curcas* L. under soil flooding. *Vegetos*, 34, 212-219.
- Wahid, W., Tando, E., & Murni W.S. 2020. Optimalisasi Pengelolaan Lahan Suboptimal Melalui Aplikasi Teknologi Pertanian dalam Mendukung Ketersediaan dan Ketahanan Pangan. In *Seminar Nasional Lahan Suboptimal* (No. 1, pp. 1014-1021).
- Wang, Y., Huang, J., Wang, J., & Findlay, C. 2018. Mitigating rice production risks from drought through improving irrigation infrastructure and management in China. *Australian Journal of Agricultural and Resource Economics*, 62(1), 161-176.
- Wang, Y., Liang, X., Li, Y., Fan, Y., Li, Y., Cao, Y., ... & Guo, S. 2020. Changes in metabolome and nutritional quality of *Lycium barbarum* fruits from three typical growing areas of China as revealed by widely targeted metabolomics. *Metabolites*, 10(2), 46.
- Wasaya, A., Manzoor, S., Yasir, T. A., Sarwar, N., Mubeen, K., Ismail, I. A., ... & EL Sabagh, A. 2021. Evaluation of fourteen bread wheat (*Triticum aestivum* L.) genotypes by observing gas exchange parameters, relative water and chlorophyll content, and yield attributes under drought stress. *Sustainability*, 13(9), 4799
- Widayati, E. 2022. Oxidasi biologi, radikal bebas, dan antioxidant. *Majalah Ilmiah Sultan Agung*, 50(128), 26-32.
- Widiyanto, S. & Wenas G. K. 2020. Pendugaan musim tanam tanaman pangan di Kabupaten Parigi Moutong Provinsi Sulawesi Tengah. *Megasains*, Vol. 11, No. 1, 12-19. ISSN 2086-5589
- Widodo, W. D. 2012. *Memperpanjang umur produktif cabai (60 kali petik)*. Edisi revisi. Penebar Swadaya Grup. Surabaya.
- Widuri, L. I., Lakitan, B., Sakagami, J., Yabuta, S., Kartika, K., & Siaga, E. 2020. Short-term drought exposure decelerated growth and photosynthetic activities in chili pepper (*Capsicum annum* L.). *Annals of Agricultural Sciences*, 65(2), 149-158.
- Worldmeter. 2021. Countries in the world by population. <https://www.worldometers.info/world-population/population-by-country/>. Diakses pada tanggal 6 Agustus 2021.
- Wu, J., Wang, J., Hui, W., Zhao, F., Wang, P., Su, C., & Gong, W. 2022. Physiology of plant responses to water stress and related genes: A review. *Forests*, 13(2), 324.
- Xiang, K., Li, Y., Horton, R., & Feng, H. 2020. Similarity and difference of potential evapotranspiration and reference crop evapotranspiration – a review. *Agricultural Water Management*, 232, 106043. doi: 10.1016/j.agwat.2020.106043

- Xu, M. Y., Zhang, L., Li, W. W., Hu, X. L., Wang, M. B., Fan, Y. L., ... & Wang, L. 2014. Stress-induced early flowering is mediated by miR169 in *Arabidopsis thaliana*. *Journal of experimental botany*, 65(1), 89-101.
- Xu, M., Kinoshita, Y., Matsubara, S., & Tamiaki, H. 2016. Synthesis of chlorophyll-c derivatives by modifying natural chlorophyll-a. *Photosynthesis research*, 127, 335-345.
- Yamazaki, A., & Hosokawa, M. 2019. Increased percentage of fruit set of F1 hybrid of *Capsicum chinense* during high-temperature period. *Scientia Horticulturae*, 243, 421-427.
- Yang, R., Howe, J. A., & Golden, B. R. 2018. Calcium silicate slag reduces drought stress in rice (*Oryza sativa* L.). *Journal of Agronomy and Crop Science*. doi:10.1111/jac.12327
- Yang, W., Zhao, F., Wang, Y., Ding, Z., Yang, X., & Zhu, Z. 2020. Differences in uptake and accumulation of copper and zinc by *Salix* clones under flooded versus non-flooded conditions. *Chemosphere*, 241, 125059.
- Yin, L., Wang, S., Liu, P., Wang, W., Cao, D., Deng, X., & Zhang, S. 2014. Silicon-mediated changes in polyamine and 1-aminocyclopropane-1-carboxylic acid are involved in silicon-induced drought resistance in *Sorghum bicolor* L. *Plant Physiology and Biochemistry*, 80, 268-277.
- Yin, Q., Tian, T., Han, X., Xu, J., Chai, Y., Mo, J., ... & Yue, M. 2019. The relationships between biomass allocation and plant functional trait. *Ecological Indicators*, 102, 302-308.
- Zahedi, S. M., Moharrami, F., Sarikhani, S., & Padervand, M. 2020. Selenium and silica nanostructure-based recovery of strawberry plants subjected to drought stress. *Scientific reports*, 10(1), 1-18.
- Zamljen, T., Zupanc, V., & Slatnar, A. 2020. Influence of irrigation on yield and primary and secondary metabolites in two chilies species, *Capsicum annum* L. and *Capsicum chinense* Jacq. *Agricultural Water Management*, 234, 106104.
- Zargar, S. M., Gupta, N., Nazir, M., Mahajan, R., Malik, F. A., Sofi, N. R., ... & Salgotra, R. K. 2017. Impact of drought on photosynthesis: Molecular perspective. *Plant gene*, 11, 154-159.
- Zepka, L. Q., Jacob-Lopes, E., & Roca, M. 2019. Catabolism and bioactive properties of chlorophylls. *Current Opinion in Food Science*, 26, 94-100.
- Zhang, J., He, N., Liu, C., Xu, L., Chen, Z., Li, Y., ... & Reich, P. B. 2020. Variation and evolution of C: N ratio among different organs enable plants to adapt to N-limited environments. *Global Change Biology*, 26(4), 2534-2543.
- Zhang, X., Lei, L., Lai, J., Zhao, H., & Song, W. 2018. Effects of drought stress and water recovery on physiological responses and gene expression in maize seedlings. *BMC plant biology*, 18(1), 1-16.

- Zhao, L., Nan, H., Kan, Y., Xu, X., Qiu, H., & Cao, X. 2019. Infiltration behavior of heavy metals in runoff through soil amended with biochar as bulking agent. *Environmental Pollution*, 254, 113114.
- Zhou, G., Xu, S., Ciais, P., Manzoni, S., Fang, J., Yu, G., ... & Chen, X. 2019. Climate and litter C/N ratio constrain soil organic carbon accumulation. *National Science Review*, 6(4), 746-757.
- Zhou, H., Zhou, G., He, Q., Zhou, L., Ji, Y., & Lv, X. 2021. Capability of leaf water content and its threshold values in reflection of soil-plant water status in maize during prolonged drought. *Ecological Indicators*, 124, 107395.
- Zhu, G., Yong, L., Zhao, X., Liu, Y., Zhang, Z., Xu, Y., ... & Wang, L. 2022. Evaporation, infiltration and storage of soil water in different vegetation zones in the Qilian Mountains: A stable isotope perspective. *Hydrology and Earth System Sciences*, 26(14), 3771-3784.
- Zhu, Y., Jiang, X., Zhang, J., He, Y., Zhu, X., Zhou, X., ... & Liu, Y. 2020. Silicon confers cucumber resistance to salinity stress through regulation of proline and cytokinins. *Plant Physiology and Biochemistry*, 156, 209-220.
- Zia, R., Nawaz, M. S., Siddique, M. J., Hakim, S., & Imran, A. 2021. Plant survival under drought stress: Implications, adaptive responses, and integrated rhizosphere management strategy for stress mitigation. *Microbiological research*, 242, 126626.