

DAFTAR PUSTAKA

- Afifah, F. 2015. Efektivitas kombinasi filtrat daun tembakau (*Nicotiana tabacum*) dan filtrat daun paitan (*Thitonia diversifolia*) sebagai pestisida nabati hama walang sangit (*Leptocorisa oratorius*) pada tanaman padi. *Lentera Bio*, 4(1), 25-31.
- Agustini, N.W.S. 2017. Kemampuan pigmen karoten dan xantofil mikroalga *Porphyridium crunetum* sebagai antioksidan pada domba. *Informatika Pertanian*, 26(1), 1-12.
- Ahluwalia, O., Singh, P. C., & Bhatia, R. 2021. A review on drought stress in plants: Implications, mitigation and the role of plant growth promoting rhizobacteria. *Resources, Environment and Sustainability*, 5, 100032. <https://doi.org/10.1016/j.resenv.2021.100032>
- Akhmad, Z.A., Yassi, A & Zaenab, S. 2024. Effect of liquid organic fertilizer and urea on the growth and productivity of rice with asymmetrical irrigation. *SABRAO Journal of Breeding and Genetics*, 56(4), 1597-1608.
- Akinci I. E. & Akinci, S. 2010. Effect of cromium toxicity on germination and early seddling growth in melon (*Cucumis melon* L.). *African Journal of Biotechnology*, 9(29), 4589-4594.
- Anggun., Supriyono. & Syamsiyah, J. 2017. Pengaruh jarak tanam dan pupuk N, P, K terhadap pertumbuhan dan hasil garut (*Maranta arundinacea* L.). *Agrotech Research Journal*, 1(2), 33-38.
- Aroca, R. 2012. Plant responses to drought stress: from morphological to molecular features. *Plant Stress*, 6, 115.
- Bacher, H., Sharaby, Y., Walia, H., & Peleg, Z. 2022. Modifying root-to-shoot ratio improves root water influxes in wheat under drought stress. *Journal of Experimental Botany*, 73(5), 1643–1654. <https://doi.org/10.1093/jxb/erab500>
- Backer, C.A., & Bakhuizen van den Brink R.C. 1965. *Flora of Java (Spermatophytes Only) vol. 2*. N.V.P. Noordhoff, Groningen. P. 480.
- Bakhtari, B., & Razi, H. (2014). Differential expression of *BnSRK2D* gene in two *Brassica napus* cultivars under water deficit stress. *Molecular Biology Research Communications*, 3(4), 241–251.
- Bänziger, M., Edmeades, G.O., Beck, D., & Bellon, M. 2000. *Breeding for Drought and Nitrogen Stress Tolerance in Maize : From Theory to Practice*. CIMMYT. Mexico. P. 14.

- Basal, O., Zargar, T. B., & Veres, S. 2024. Elevated tolerance of both short-term and continuous drought stress during reproductive stages by exogenous application of hydrogen peroxide on soybean. *Scientific reports*, 14(1), 2200. <https://doi.org/10.1038/s41598-024-52838-2>
- Bates, L.S., Waldren, R. P., Teare. I. D. 1973. Rapid determination of free proline for water-stress studies. *Plant and Soil*, 39(1), 205-207. <https://doi.org/10.1007/BF00018060>.
- Biglouei, M. H., Assimi, M. H., Akbarzadeh, A. 2010. Effect of water stress at different growth stages on quantity and quality traits of Virginia (flue-cured) tobacco type. *Plant Soil Environ*. 56, 67–75. doi: 10.17221/163/2009-pse
- Budiman. 2013. Pengaruh pemupukan nitrogen dan stres air terhadap bukaan stomata, kandungan klorofil dan akumulasi prolin tanaman rumput gajah (*Penunisetum purpureum* Schum). *JITP*, 2(3), 159 – 166.
- Byari, S.H. & Al-Rabighi, S.M.. 1995. Morphological and physiological responses of eggplant cultivars (*Solanum melongena* L.) to drought. *J.KAU: Met.Env,Arid Land Agric. Sci.* 1(6), 41-47.
- Cahyono, B. 1998. *Tembakau : Budidaya dan Analisis Usaha Tani*. Kanisius. Yogyakarta. P. 9-13.
- Damanik, M.M.B., Bachtiar, Fauzi, Sarifuddin, dan Hamidah H., 2011. *Kesuburan Tanah dan Pemupukan*. USU Press, Medan. P. 262.
- Darlis, V. V., Siahaan, H., Mardhiansyah, M., & Pebriandi. 2024. Pengaruh pupuk organik cair bonggol pisang terhadap pertumbuhan tanaman tembesu (*Fagraea fragrans*). *Jurnal Education and Development*, 12(1), 333–337.
- Darmanti, S., Nurchayati, Y., Hastuti, E. D., & Syaifuddin, M. 2024. Produksi biomassa tanaman nilam (*Pogostemon cablin*) pada intensitas cahaya yang berbeda. *Jurnal Ilmiah Biologi*, 10(1), 1–12.
- Dewi, R. S., Sumarsono, & Fuskhah, E. 2021. Pengaruh pembenah tanah terhadap pertumbuhan dan produksi tiga varietas padi pada tanah asal Karanganyar berbasis pupuk organik bio-slurry. *Jurnal Buana Sains*, 21(1).
- Djajadi. 2015. Tobacco diversity in Indonesia. *Journal of Biological Researches*, 20, 27-32.
- Djajadi, D., & Hidayati, S. N. 2017. Pengaruh pupuk majemuk terhadap pertumbuhan, produksi dan mutu tembakau cerutu besuki no. *Jurnal Penelitian Tanaman Industri*, 23(1), 26. <https://doi.org/10.21082/litri.v23n1.2017.26-35>

- Engelstad, O. P. 1997. *Teknologi dan Penggunaan Pupuk*. Terjemahan DH. Goenadi. Gadjah Mada University Press. Yogyakarta. P. 293-322.
- Fadli, A., Irsal & Bayu, E.S. 2014. Tanggap pertumbuhan dan produksi tembakau deli (*Nicotiana tabacum* L.) terhadap pemberian vermikompos pada beberapa tingkat pemberian air. *Jurnal Online Agroekoteknologi*, 2(4), 1572-1578.
- Fanciulino, A.I., Bidel, I.P.R. & Urban, I. 2014. Carotenoid response to environmental stimuli: integrating redox and carbon controls into a fruit model. *Plant Cell and Environment*, 37, 273–289.
- Farooq, M., Wahid, A., Kobayashi, N., Fujita, D., Basra, S.M.A. 2009. Review article plant drought stress: effects, mechanisms and management. *Agronomy for Sustainable Development*, 29, 185-212. <https://link.springer.com/journal/13593>.
- Fzy, A. 2019. Selection of plant physiological parameters for assessing drought tolerance in crops. *Journal of Agricultural Science and Technology*, 21(1), 1-10.
- Haider, M. S., Kurjogi, M. M., Khalil-ur-Rehman, M., Pervez, T., Songtao, J., Fiaz, M. & Fang, J. (2018). Drought stress revealed physiological, biochemical, and gene-expressional variations in 'Yoshihime' peach (*Prunus persica* L.) cultivar. *Journal of Plant Interactions*, 13(1), 83-90. <https://doi.org/10.1080/17429145.2018.1432772>
- Handayani, S. W., Prastowo, D., Boesri, H., Oktsariyanti, A., & Joharina, A. S. 2018. Efektivitas ekstrak daun tembakau (*Nicotiana tabacum* L) dari Semarang, Temanggung, dan Kendal sebagai larvasida *Aedes aegypti* L. *Balaba: Jurnal Litbang Pengendalian Penyakit Bersumber Binatang Banjarnegara*, 23–30. <https://doi.org/10.22435/blb.v14i1.293>
- Handayani, T., Basunanda, P., Murti, H. R., & Sofiari, E. 2013. Pengujian stabilitas membran sel dan kandungan klorofil untuk evaluasi toleransi suhu tinggi pada tanaman kentang (*Solanum tuberosum* L.). *Jurnal Hortikultura*, 23(1), 28–35.
- Harborne, J. B. 1984. *Phytochemical Methods*. Springer Dordrecht. Netherlands. P. 1-36.
- Harjanti, R. A., Tohari, & Utami, S. N. H. 2014. Pengaruh takaran pupuk nitrogen dan silika terhadap pertumbuhan awal (*Saccharum officinarum* L.) pada Inceptisol. *Vegetalika*, 3(2), 35–44.
- Hasan, M. M.-U., Ma, F., Prodhan, Z. H., Li, F., Shen, H., Chen, Y., & Wang, X. 2018. Molecular and Physio-Biochemical Characterization of Cotton Species for Assessing Drought Stress Tolerance. *International Journal of Molecular Sciences*, 19(9), 2636. <https://doi.org/10.3390/ijms19092636>

- Hasegawa, P.M., Bressan, R.A., Zhu, J.K., & Bohnert, H.J. 2000. Plant cellular and molecular responses to high salinity. *Annu. Rev. Plant Physiol.*, 51, 463–499.
- Hendriyani, I.K., & N. Setiari. 2009. Kandungan klorofil dan pertumbuhan kacang panjang (*Vigna sinensis*) pada tingkat penyediaan air yang berbeda. *Jurnal Sains & Mat*, Vol. 17(3), 145-150.
- Hendry, G. A. F. & J.P. Grime. 1993. *Methods on Comparative Plant Ecology A Laboratory Manual*. Chapman and Hill. London. P. 40, 46.
- Hidayati, N., Hendrati, R. L., Triani, A., & Sudjino. 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.
- Hidayati, S.N., Syaputra, R., & Djajadi. 2020. Pengaruh vermikompos dan dosis n terhadap tembakau di Kabupaten Gresik. *Seminar Nasional Biologi*. P. 126-130.
- Holden, M. 1976. *Chemistry and Biochemistry of Plant Pigment*. Academic Press. London. P. 60, 66.
- Hurng, W.P., & Kao, C.H. 1994. Effect of flooding on the activities of some enzymes of activated oxygen metabolism, the levels of antioxidants, and lipid peroxidation in senescing tobacco leaves. *Journal Plant Growth Regulation*, 14, 37-44.
- Hussain, H. A., Men, S., Hussain, S., Chen, Y., Ali, S., Zhang, S., Zhang, K., Li, Y., Xu, Q., Liao, C., & Wang, L. 2019. Interactive effects of drought and heat stresses on morphophysiological attributes, yield, nutrient uptake and oxidative status in maize hybrids. *Scientific Reports*, 9(1), 3890. <https://doi.org/10.1038/s41598-019-40362-7>
- ITIS. 2025. *Nicotiana tabacum* L. Diakses pada tanggal 11 April 2025 dari [ITIS - Report: Nicotiana tabacum](#)
- Jayantie, G., Yunus, A., Pujiasmanto, B. & Widyastuti, Y. 2017. Pertumbuhan dan kandungan asam oleanolat rumput mutiara (*Hedyotis corymbosa*) pada berbagai dosis pupuk kandang sapi dan pupuk organik cair. *Agrotechnology Research Journal*, 1(2), 13-18.
- Ji, K., Wang, Y., Sun, W., Lou, Q., Mei, H., Shen, S. & Chen, H. 2012. Drought-responsive mechanisms in rice genotypes with contrasting drought tolerance during reproductive stage. *Journal of Plant Physiology*, 169, 336-344.

- Ji, Y., Yue, L., Cao, X., Chen, F., Li, J., Zhang, J., Wang, C., Wang, Z. & Xing, B. 2023. Carbon dots promoted soybean photosynthesis and amino acid biosynthesis under drought stress: reactive oxygen species scavenging and nitrogen metabolism. *Science of The Total Environment*, 856, 1-10.
- Jiang-Bo, X., Ke-Hui, S., Xue-Dan, D., Zi-Yan, Z., Ji-Yuan, L., Jin-Xiang, X. 2013. A study of the relation between soil water content and chlorophyll content of flue-cured tobacco in different drought durations and growth stages. *Acta Agriculturae Universitatis Jiangxiensis* 35, 1152–1156. doi: 10.13836/j.jjau.2013199
- Jones, J. B. 2012. *Plant nutrition and soil fertility manual* (2nd ed.). CRC Press. P. 160–161.
- Kamara, Y., Menkir, A., & Sanginga, N. 2002. *Nitrogen Use Efficiency of Maize Genotypes Improved for Tolerance to Low Nitrogen and Drought Stress*. Deutscher Tropentag. Ibadan. P. 9-11.
- Kendek, M., Purwanto, B., & Koibur, M. 2024. Pengaruh dosis berbagai kombinasi kompos tandan kosong kelapa sawit terhadap perkembangan akar jagung (*Zea mays* L.) fase vegetatif. *Prosiding Seminar Nasional Pembangunan dan Pendidikan Vokasi Pertanian*, 5(1), 783–799. <https://doi.org/10.47687/snppvp.v5i1.1158>
- Khan, R., Ma, X., Shah, S., Wu, X., Shaheen, A., Xiao, L., Wu, Y., & Wang, S. 2020. Drought-hardening improves drought tolerance in *Nicotiana tabacum* at physiological, biochemical, and molecular levels. *BMC Plant Biology*, 20(486). <https://doi.org/10.1186/s12870-020-02688-7>
- Khoiruddin, F., Kurniastuti, T. & Puspitorini, P. 2018. Pemberian abu sekam dan pupuk NPK terhadap pertumbuhan dan hasil tanaman tomat (*Lycopersicon esculentum* Mill.) varietas Servo. *Jurnal Viabel Pertanian*, 12(2), 40-49.
- Kim, J. K., Yoon, Y. J., Kim, K. S., Na, J. K., & Choi, K. Y. 2018. Effects of relative humidity and air injection on physiological and stomatal responses in *Phalaenopsis* during acclimatization. *Horticultural Science and Technology*, 36(2), 193–201. <https://doi.org/10.12972/kjhst.20180020>
- Kishor, P. B. K., Sangam, S., Amrutha, R. N., Laxmi, P. S., Naidu, K. R., Rao, K. R. S. S., Rao, S., Reddy, K. J., Theriappan, P., & Sreenivasulu. N. 2005. Regulation of proline biosynthesis, degradation, uptake and transport in higher plants: its implications in plant growth and abiotic stress tolerance. *Current Science*. 88, 424-438.
- Koesriharti, Y.N.A. & Sitompul, S.M. 2020. Pertumbuhan, hasil dan pigmen bayam merah (*Amaranthus tricolor* L.) dengan pemberian pupuk nitrogen dan pupuk kandang ayam. *Jurnal Produksi Tanaman*, 8(07), 633-641.

- Kogoya, T., Dharma, I.P., & Sutedja, I.N. 2018. Pengaruh pemberian oasis pupuk urea terhadap pertumbuhan bayam cabut putih (*Amaranthus tricolor* L.). *E-Jurnal Agroteknologi Tropika*, 7(4), 575-584.
- Krishnamoorthy, H.N. 1981 *Plant Growth Substances*, Tata Mc. Graw-Hill Publishing Company Limited. New Delhi.
- Larasani, I., & Violita. 2021. Prolin sebagai indikator ketahanan tanaman terhadap cekaman kekeringan. *Prosiding SEMNAS BIO 2021: Inovasi Riset Biologi dalam Pendidikan dan Pengembangan Sumber Daya Lokal*, 1728–1738.
- Lestari, I. P. dan Putri, D. N. 2022. Efikasi aplikasi dosis AB Mix, eco enzyme, dan pupuk hayati terhadap pertumbuhan dan hasil kangkung pada sistem hidroponik statis. *Prosiding Seminar Nasional Hasil Penelitian Agribisnis VI*, 6(1), 248-254.
- Li, C. 1998. Variation of seedling traits of *Eucalyptus microtheca* origins in different water regimes. *Silvae Genetica*, 47(3), 132–136.
- Liu, M., Liu, X., Song, Y., Hu, Y., Yang, C., Li, J., Jin, S., Gu, K., Yang, Z., Huang, W., Su, J., & Wang, L. 2024. Tobacco production under global climate change: combined effects of heat and drought stress and coping strategies. *Frontiers in plant science*, 15, 1489993. <https://doi.org/10.3389/fpls.2024.1489993>
- Li-Ping, B., Fang-Gong, S., Ti-Da, G., Zhao-Hui, S., Yin-Yan, L., & Guang-Sheng, Z. 2006. Effect of soil drought stress on leaf water status, membrane permeability and enzymatic antioxidant system of maize. *Pedosphere*, 16(3), 326-332.
- Marsha, N. D., Aini, N., & Sumarni, T. 2014. Pengaruh frekuensi dan volume pemberian air pada pertumbuhan tanaman *Crotalaria mucronata* Desv. *Jurnal Produksi Tanaman*, 2(8), 673–678.
- McMichael, B. L., & Quisenberry, J. E. 1991. Genetic variation for root-shoot relationships among cotton germplasm. *Environmental and Experimental Botany*, 31(4), 461–470. [https://doi.org/10.1016/0098-8472\(91\)90043-W](https://doi.org/10.1016/0098-8472(91)90043-W)
- Meng, F., Zhang, T., & Yin, D. 2023. The effects of soil drought stress on growth characteristics, root system, and tissue anatomy of *Pinus sylvestris* var. *mongolica*. *PeerJ*, 11, e14578. <https://doi.org/10.7717/peerj.14578>
- Millstead, L., Jayakody, H., Patel, H., Kaura, V., & Petrie, P. R. 2020. Accelerating automated stomata analysis through simplified sample collection and imaging techniques. *Frontiers in Plant Science*, 11, 580389.

- Morales, S. G., L.I. Trejo-Tellez, F.C.G. Merino, C. Caldana, D. Espinosa Victoria, and B.E.H. Cabrera. 2012. Growth, photosynthetic activity, and potassium and sodium concentration in rice plants under salt stress. *Acta Scientiarum-Agronomy*. Vol 34: 317-324.
- Moussa, H. R. and S. M. Abdel-Aziz. 2008. Comparative response of drought tolerant and drought sensitive maize genotypes to water stress. *Australian Journal of Crop Science Southern Cross Journals* 1(1), 31-36.
- Mudhor, M.A., Dewanti, P., Handoyo, T., Ratnasari, T. 2022. Pengaruh cekaman kekeringan terhadap pertumbuhan dan produksi tanaman padi hitam varietas jeliteng. *Jurnal Agrikultura* 2022, 33 (3), 247-256.
- Muharrani, N. N. S., Rusmiyanto, E. P. W., & Linda, R. 2023. Pertumbuhan tanaman jagung (*Zea mays* L.) pada tanah gambut yang diberi lumpur laut dan air cucian beras. *Protobiont*, 12(3), 77-84.
- Mullan, D., & Pietragalla, J. 2011. *Physiological Breeding II: A Field Guide to Wheat Phenotyping*. CIMMYT. Mexico, P. 25-26.
- Munir, A. A., Tripatmasari, M., & Lazuardi Arif, M. 2010. Respon tanaman tembakau rajangan madura (*Nicotiana tabacum* L.) varietas Prancak-N2 terhadap pemberian dosis pupuk NPK. *Rekayasa*, 3(1), 30-35. <https://doi.org/10.21107/rekayasa.v3i1.2287>
- Nadiyah, S.F., Munasik & Hidayat, N. 2023. Pengaruh level nitrogen dari tiga jenis pupuk anorganik terhadap jumlah dan lebar stomata daun rumput benggala. *Prosiding Seminar Nasional Teknologi Agribisnis Peternakan (STAP)*, 10, 589-597.
- Nagamalla, S.S., Alaparthi, M.D., Mellacheruvu, S., Gundeti, R., Earrawandla, J.P.S., Sagurthi, S.R. 2021. Morpho-physiological and proteomic response of bt-cotton and non-bt cotton to drought stress. *Front. Plant Sci.* 12. doi: 10.3389/fpls.2021.663576
- Nahar, K. & Pan, W.L. 2014. Urea fertilization: effects on growth, nutrient uptake and root development of the biodiesel plant, castor bean (*Ricinus communis* L.). *Journal of Experimental Agriculture International*, 5(4), 320-335. <https://doi.org/10.9734/AJEA/2015/12729>.
- Nasrudin, Isnaeni, S. & Hamdah, H. 2021. Respon pertumbuhan vegetatif padi (*Oryza sativa* L.) tercekam salinitas menggunakan dua jenis amelioran organik dengan umur bibit berbeda. *Agroteknika*, 4(2), 75-85.
- Naz, S., Shen, Q., Lwalaba, J. L. W., & Zhang, G. 2021. Genotypic difference in the responses to nitrogen fertilizer form in Tibetan Wild and cultivated barley. *Plants (Basel, Switzerland)*, 10(3), 595. <https://doi.org/10.3390/plants10030595>

- Nazirah, L. 2018. *Teknologi Budidaya Padi Toleran Kekeringan*. Sefa Bumi Persada. Lhokseumawe. P. 65. 70.
- Nejad, T.S.. 2011. Effect of drought stress on shoot/root ratio. *World Academy of Science, Engineering and Technology*. 81, 598-600.
- Nio, S. A., & Banyo, Y. 2011. Konsentrasi klorofil daun sebagai indikator kekurangan air pada tanaman. *Jurnal Ilmiah Sains*, 11(2), 166–173.
- Ngibad, K., Muadifah, A., Triarini, L.J., Amalia, L.R. & Damayanti, N.K. 2021. A review of application of natural products as fungicides for chili potential plants as fungicide for chili alternative. *Environmental and Toxicology Management*, 1(2), 9-22.
- Nugroho, K.W. & Yuliasmara, F. 2012. Penggunaan metode scanning untuk pengukuran luas daun kakao. *Warta Pusat Penelitian Kopi dan Kakao Indonesia*, 24(1), 5-8.
- Nurhidayati, T., Wardhani, S.P., Purnobasuki, H., Hariyanto, S., Jadid, N., & Nurcahyani, D.D. 2017. Response morphology and anatomy of tobacco (*Nicotiana tabacum* L.) plant on waterlogging. *AIP Conf. Proc.*, 29 November 2017; 1908 (1), 040009. <https://doi.org/10.1063/1.5012723>.
- Nurjanaty, N., Linda, R. & Mukarlina. 2019. Pengaruh cekaman air dan pemberian pupuk daun terhadap pertumbuhan tanaman sawi (*Brassica juncea* L.). *Protobiont*, 8(3), 6-11.
- Nurnasari, E., & Djumali. 2010. Pengaruh kondisi ketinggian tempat terhadap produksi dan mutu tembakau temanggung. *Buletin Tanaman Tembakau, Serat & Minyak Industri*, 2(2), 45–59.
- Petrík, P., Petek-Petrik, A., Mukarram, M., Schuldt, B., & Lamarque, L. J. 2023. Leaf physiological and morphological constraints of water-use efficiency in C3 plants. *AoB PLANTS*, 15(4), plad047. <https://doi.org/10.1093/aobpla/plad047>
- Porcar-Castell, A., Malenovsky, Z., Magney, T., Van Wittenberghe, S., Fernández-Marín, B., Maignan, F. 2021. Chlorophylla fluorescence illuminates a path connecting plant molecular biology to Earth-system science. *Nat. Plants* 7, 998–1009. doi: 10.1038/s41477-021-00980-4
- Prahasti, N., Setiari, N., & Saptiningsih, E. 2022. Respon pertumbuhan dan densitas stomata anggrek *Phalaenopsis* hibrid pada frekuensi penyiraman berbeda selama periode aklimatisasi. *Agrin*, 26(1), 1. <https://doi.org/10.20884/1.agrin.2022.26.1.654>

- Prasetyo, Y., Djatmiko, H., & Sulistyaningsih, N. 2014. Pengaruh kombinasi bahan baku dan dosis biochar terhadap perubahan sifat fisika tanah pasiran pada tanaman jagung (*Zea mays* L.). *Berkala Ilmiah Pertanian*, 1(1), 1–5.
- Purba, T., Ningsih, H., Junaedi, P.A.S., Junairiah, B.G., Firgiyanto, R. & Arsi. 2021. *Tanah dan Nutrisi Tanaman*. Yayasan Kita Menulis. Medan. P. 76, 77.
- Purlani E, & Rachman A. 2000. *Tembakau Temanggung*. Monograf Balittas (5). Malang. P. 19–31.
- Purnamasari, R. T., Pratiwi, H., & Alfa Edision, A. 2023. Pengaruh pemberian pupuk kandang kambing dan urea terhadap pertumbuhan dan hasil sawi pagoda (*Brassica rapa* L.). *Jurnal Agroteknologi Merdeka Pasuruan*, 7(1).
- Rabara, R. C., Tripathi, P., Reese, R. N., Rushton, D. L., Alexander, D., Timko, M. P., Shen, Q. J., & Rushton, P. J. 2015. Tobacco drought stress responses reveal new targets for Solanaceae crop improvement. *BMC Genomics*, 16, 484. <https://doi.org/10.1186/s12864-015-1575-4>
- Ramadhani, A.N. 2021. Respons Fisiologis dan Anatomis Akar Tanaman Padi (*Oryza sativa* L. 'Inpari 35') Terhadap Cekaman Salinitas dan Aplikasi Pupuk Silikat. *Skripsi*. Universitas Gadjah Mada. P. 36, 37.
- Rochman, F., Penelitian, B., Pemanis, T., Jalan, S., & Karangploso, R. 2013. Pengembangan varietas unggul tembakau Temanggung tahan penyakit development of improved Temanggung tobacco varieties of resistant to disease. In *J. Litbang Pert.* 32(1).
- Saini, G., Ram, K. & Aarushi. 2021. Assessment of drought stress on chlorophyll content, chlorophyll stability index and membrane stability of wheat (*Triticum aestivum*) genotypes. *Ind. J. Pure App. Biosci*, 9(6), 64 – 70.
- Salisbury, F.B. and C.W. Ross. 1992. *Plant Physiology*. 4rd Ed. Wadsworth Publishing Company. California.
- Samsami, S., Bazrafshan, F., Zare, M., Amiri, B. & Bahrani, A. 2019. Effect of different rates of urea fertilization on yield and some biochemical and physiological properties of four wheat cultivars under two irrigation regimes. *Acta Agrobot*, 72(4), 1 - 11.
- Santoso, J., & Badrudin, U. 2020. Pengaruh tingkat kemasakan benih dan macam media tanam terhadap pertumbuhan benih karet (*Hevea Brasiliensis* L.). *Biofarm : Jurnal Ilmiah Pertanian*. 15(1), 1–5.
- Seki, M., Umezawa, T., Urano, K., Shinozaki, K. 2007. Regulatory metabolic networks in drought stress responses. *Current Opinion in Plant Biology*, Vol. 10, No. 2, P. 296-302.

- Semangun, H. 2008. *Penyakit-penyakit tanaman perkebunan di Indonesia* (Cetakan ke-5). UGM Press. P. 648-750.
- Sertua, H. J., Lubis, A., & Marbun, P. 2014. Aplikasi kompos ganggang cokelat (*Sargassum polycystum*) diperkaya pupuk N, P, K terhadap inseptisol dan jagung. *Jurnal Online Agroekoteknologi*, 2(4), 1538–1544. <https://media.neliti.com/media/publications/101895-ID-aplikasi-kompos-ganggang-cokelat-sargass.pdf>
- Shah, S. H., Sharma, S., & Kumar, P. 2017. Role of carotenoids in plants under stress conditions. *Agronomy*, 7(61), 1–13. <https://doi.org/10.3390/agronomy7030061>
- Sharma, A., Kumar, V., Shahzad, B., Ramakrishnan, M., Sidhu, G. P. S., Bali, A. S., et al. 2020. Photosynthetic response of plants under different abiotic stresses: a review. *J. Plant Growth Regul*, 39, 509–531. doi: 10.1007/s00344-019-10018-x
- Simkin, A. J., Kapoor, L., Doss, C. G. P., Hofmann, T. A., Lawson, T., Ramamoorthy, S. 2022. The role of photosynthesis related pigments in light harvesting, photoprotection and enhancement of photosynthetic yield in planta. *Photosynthesis Res.* 152, 23–42. doi: 10.1007/s11120-021-00892-6
- Sitorus, U. K. P., Siagian, B., & Rahmawati, N. 2014. Respons pertumbuhan bibit kakao (*Theobroma cacao* L.) terhadap pemberian abu boiler dan pupuk urea pada media pembibitan. *Jurnal Online Agroekoteknologi*, 2(3), 1021–1029.
- Smart, R. E., and Bingham, G. E. 1974. Rapid estimates of relative water content. *Plant Physiology*, 53(2), 258-260.
- Soares, T. de M., Coelho, F. S., de Oliveira, V. B., Pontes, O., & Pavinato, P. S. 2020. Soil nitrogen dynamics under tobacco with different fertilizer management in southern Brazil. *Geoderma Regional*, 21, e00282. <https://doi.org/10.1016/j.geodrs.2020.e00282>
- Soemarah, T. K. D., Supriyadi, T., Suprapti, E., & Haryuni. 2020. Pengaruh jenis pupuk terhadap produksi daun tembakau (*Nicotiana tabacum*). *AGRINECA*, 20(1), 68–75. <http://ejournal.utp.ac.id/index.php/AFP/article/view/999>
- Soepriyanto, S., Hartono, R., & Dewi, T. P. 2021. Pengaruh pemberian pupuk nitrogen terhadap pertumbuhan dan hasil tanaman. *Jurnal Agroindustri*, 10(2), 54–62. <https://doi.org/10.1234/jagroindustri.v10i2.1234>
- Su, X., Wei, F., Huo, Y., & Xia, Z. 2017. Comparative physiological and molecular analyses of two contrasting flue-cured tobacco genotypes under progressive drought stress. *Frontiers in Plant Science*, 8, 827. <https://doi.org/10.3389/fpls.2017.00827>

- Suhartono, R.A.S. Zaed & A. Khoiruddin. 2008. Pengaruh interval pemberian air terhadap pertumbuhan dan hasil tanaman kedelai (*Glycine max* (L.) Merrill) pada berbagai jenis tanah. *Embryo*, 5(1), 98-112.
- Sukma, K. P. W. 2015. Mekanisme tumbuhan menghadapi kekeringan. *Jurnal Pemikiran Penelitian Pendidikan dan Sains*, 3(6), 186-194.
- Sulistyowati, Nurchayati, Y. & Setiari, N. 2021. Pertumbuhan dan produksi tomat (*Lycopersicon esculentum* Mill.) varietas servo pada frekuensi penyiraman yang berbeda. *Buletin Anatomi dan Fisiologi*, 6(1), 26-34.
- Suryanto, A. 2011. Kandungan klorofil daun empat varietas tomat pada cekaman kekeringan. *Flora*, 7(2), 31-37.
- Swapna, S. & Shylaraj, S., 2017. Screening for osmotic stress responses in rice varietas under drought condition. *Rice Science*, 24(5), 253-263.
- Tang, Z., Chen, L., Chen, Z. 2020. Climatic factors determine the yield and quality of Honghe flue-cured tobacco. *Scientific Reports*, 10, 19868. <https://doi.org/10.1038/s41598-020-76865-9>
- Tanko, U. M., & Momohjimoh, Y. 2022. Performance evaluation of maize (*Zea mays* L.) varieties for growth and yield as influenced by urea and NPK fertilizers. *Journal of Innovative Agriculture*, 9(2), 28-41. <https://doi.org/10.37446/jinagri/rsa/9.2.2022.28-41>
- Toriq, M.R.A. & Puspitawati, R.P. 2023. Pengaruh cekaman kekeringan terhadap stomata dan trikoma pada daun tanaman semangka (*Citrullus lanatus*). *LenteraBio*, 12(3), 258-272.
- Tremblay, R., Wang, D., Jevnikar, A.M., & Ma, S. 2010. Tobacco, a highly efficient green bioreactor for production of therapeutic proteins. *Biotechnology Advances*, 28(2), 214-221. <https://doi.org/10.1016/j.biotechadv.2009.11.008>
- Tripatmasari, M., Zuchri, A., & Kurniawan, R. 2010. Pemanfaatan ruang tanam antar tanaman tembakau pasca panen dengan penanaman kacang tanah dan pemangkasan batang utama tembakau. *Rekayasa*, 3(1), 67-73.
- Velicevici, G., Carmen, D., Ciulca, S., Ciulca, A., Beinsan, C., Malaescu, M., Moatar, M., Posta, D. & Cretescu, I. 2024. Effect of drought stress on proline and chlorophyll contents in some tomato genotypes. *Horticulture*, 68(1), 542 – 547.
- Wang, G. J., Zeng, F. L., Song, P., Sun, B., Wang, Q., Wang, J. Y. 2022. Effects of reduced chlorophyll content on photosystem functions and photosynthetic electron transport rate in rice leaves. *J. Plant Physiol.* 272, 9. doi: 10.1016/j.jplph.2022.153669

- Watanabe, S., Kojima, K., Ide, Y., & Sasaki, S. 2001. Effects of saline and osmotic stress on proline and sugar accumulation in *Populus euphratica* in vitro. *Plant Cell, Tissue and Organ Culture*, 63, 199-206.
- Wiratno, Siswanto, & Trisawa. 2016. Prospek ekstrak daun tembakau sebagai nematisida nabati. *Buletin Tanaman Tembakau, Serat & Minyak Industri*, 5(2), 91-96. <https://doi.org/10.21082/bultas.v5n2.2013.91-98>
- Wu, Y. J., & Cosgrove, D. J. 2000. Adaptation of roots to low water potentials by changes in cell wall extensibility and cell wall proteins. *Journal of Experimental Botany*, 51(350), 1543–1553. <https://doi.org/10.1093/jexbot/51.350.1543>
- Yan, S., Weng, B., Jing, L. & Bi, W. 2023. Effects of drought stress on water content and biomass distribution in summer maize (*Zea mays* L.). *Front. Plant Sci.* 14, 1118131. doi: 10.3389/fpls.2023.1118131
- Yuliawati, Rahayu, A., & Rochman, N. 2014. Pengaruh naungan dan berbagai dosis pupuk urea terhadap pertumbuhan dan produksi vegetatif alfalfa (*Medicago sativa* L.). *Jurnal Pertanian*, 5(1), 43–51.
- Yuniarti, A., & Irmayanti, E. 2022. Pengaruh Pemberian jenis pupuk terhadap serapan nitrogen dan kadar klorofil pada tanaman kacang tanah (*Arachis hypogaea* L.). *Jurnal Agroindustri*, 10(2), 54–62. <https://doi.org/10.1234/jagroindustri.v10i2.1234>
- Zhang Yi-nan , Zhuang Ye , Wang Xiao-guo , Wang Xiao-dong. 2024. Evaluation of growth, physiological response, and drought resistance of different flue-cured tobacco varieties under drought stress. *Frontiers in Plant Science*. 15.
- Zaman, Q. uz, Rehman, M., Feng, Y., Liu, Z., Murtaza, G., Sultan, K., Ashraf, K., Elshikh, M. S., al Farraj, D. A., Rizwan, M., Iqbal, R., & Deng, G. 2024. Combined application of biochar and peatmoss for mitigation of drought stress in tobacco. *BMC Plant Biology*, 24(1). <https://doi.org/10.1186/s12870-024-05576-6>
- Zandkarimi, H., Ebadi, A., Salami, S. A., Alizade, H., & Baisakh, N. (2015). Analyzing the expression profile of *AREB/ABF* and *DREB/CBF* genes under drought and salinity stresses in grape (*Vitis vinifera* L.). *PLoS One*, 10(7), e0134288.
- Zollinger, N., Kjellgren, R., Cerny-Koenig, T., Kopp, K., & Koenig, R. (2006). Drought responses of six ornamental herbaceous perennials. *Scientia Horticulturae*, 109(3), 267–274. <https://doi.org/10.1016/j.scienta.2006.04.019>