

BIBLIOGRAPHY

- Abdullah, M. Z., Rahim, H., Sariam, O., Marziah, M., Sayed Zain, S. H., Adzemi, A., & Ismail, M. (2010). MR219-4, An efficient water-use mutant developed through mutation breeding. In *Proceedings National Rice Conference*. 511-514.
- Acharjee, S. N.R. Chakraborty. S.P.Das. (2021). Marker based genetic variability analysis of rice (*Oryza sativa* L.) landraces for drought tolerance. *African J. Biol. Sci.*, 17 (1): 117-136.
- Adhikari, S., Sah, S. K., Gautam, S., & Subedi, D. (2022). Leaf Color Chart-Based Nitrogen Management in Spring Rice at Rajapur, Bardiya, Nepal. *Bardiya, Nepal*. DOI:10.2139/ssrn.4231116
- Ahmad, F., Hasan, N., Hisham, S. N., Yusof, S. N., Hassan, A. A., Hussein, S., Harun, A. R., & Shamsudin, N. A. (2023). Data on genome resequencing of the rice cultivar MR219 and its abiotic stress tolerant mutant lines, NMR152 and NMR151. *Data in Brief*, 46, 108815. <https://doi.org/10.1016/j.dib.2022.108815>.
- Ahmed, N., Hornbuckle, J., & Turchini, G. M. (2022). Blue–green water utilization in rice–fish cultivation towards sustainable food production. *Ambio*, 51(9), 1933-1948. <https://doi.org/10.1007/s13280-022-01711-5>
- Al Azzawi, T. N. I., Khan, M., Hussain, A., Shahid, M., Imran, Q. M., Mun, B. G., & Yun, B. W. (2020). Evaluation of Iraqi rice cultivars for their tolerance to drought stress. *Agronomy*, 10(11),1782.DOI:<https://doi.org/10.3390/agronomy10111782>.
- Almeida, D. M., Gregorio, G. B., Oliveira, M. M., & Saibo, N. J. M. (2016). Five novel transcription factors as potential regulators of OsNHX1 gene expression in a salt tolerant rice genotype. *Plant Molecular Biology*, 93(1–2), 61–77. DOI: <https://doi.org/10.1007/s11103-016-0547-7>.
- Anjum, S. A., Ashraf, U., Zohaib, A., Tanveer, M., Naeem, M., Ali, I., Tabassum, I., & Nazir, U. (2017). Growth and developmental responses of crop plants under Drought stress: A review. *Zemdirbyste-Agriculture*, 104(3), 267–276. <https://doi.org/10.13080/z-a.2017.104.034>.
- Banjade, D., & Shrestha, A. (2023). Analysis of the Economic of Rice (*Oryza sativa* L.) Farming in Nepal’s Kapilvastu District. *Food and Agribusiness Management*, 4(1), 01–03. DOI:10.26480/fabm.01.2023.01.03
- Bayu, W., Rethman, N., Hammes, P., Pieterse, P., Grimbeek, J., & Van Der Linde, M. (2006). Water stress affects the germination, emergence, and growth of different sorghum cultivars. *SINET Ethiopian Journal of Science*, 28(2). DOI: <https://doi.org/10.4314/sinet.v28i2.18248>.

- Bhandari, U., Gajurel, A., Khadka, B., Thapa, I., Chand, I., Bhatta, D., & Shrestha, J. (2023). Morpho-physiological and biochemical response of rice (*Oryza sativa* L.) to drought stress: A review. *Heliyon*, 9(3), e13744. DOI: [https://doi.org/ 10.1016/j.heliyon.2023.e13744](https://doi.org/10.1016/j.heliyon.2023.e13744).
- Birthal, P. S., Negi, D. S., Khan, M. T., & Agarwal, S. (2015). Is Indian agriculture becoming resilient to droughts? Evidence from rice production systems. *Food Policy*, 56, 1–12. DOI: <https://doi.org/10.1016/j.foodpol.2015.07.005>.
- Chia, S.Y. & Lim, M. W. (2022). A critical review on the influence of humidity for plant growth forecasting. *IOP Conf. Series: Materials Science and Engineering*, 1257, 012001. DOI: <https://doi.org/10.1088/1757-899X/1257/1/012001>.
- Chrisnawati, L., Ernawati, E., Yulianti, Y., & Hariri, M. R. (2022). Polymorphism analysis of drought tolerance gene OsDREB2A in Indonesian local rice from Lampung, Indonesia. *Biodiversitas Journal of Biological Diversity*, 23(12). <https://doi.org/10.13057/biodiv/d231232>.
- Christian, Ross, Yue, Liu, Qingxi, & Shen. (2007). The WRKY Gene Family in Rice(*Oryza sativa*), *J. Integr. Plant Biol.* 49(6), 827–842. <https://doi.org/10.1111/j.1744-7909.2007.00504.x>
- Cui, M., Zhang, W., Zhang, Q., Xu, Z., Zhu, Z., Duan, F., & Wu, R. (2011). Induced over-expression of the transcription factor OsDREB2A improves drought tolerance in rice. *Plant Physiology and Biochemistry*, 49(12), 1384-1391. DOI: 10.1016/j.plaphy.2011.09.012
- Diana, S., Sakalena, F., Nurshanti, D. F., & Rahim, S. E. (2017). Drought tolerance estimation of several rainfed rice (*Oryza sativa* L.) of lokal variety using polyethylene glycol (PEG). In *MATEC Web of Conferences* (Vol. 97, p. 01115). <https://doi.org/10.1051/mateconf/20179701115>EDP Sciences.
- Dowd, T. G., Braun, D. M., & Sharp, R. E. (2018). Maize lateral root developmental plasticity induced by mild water stress. I: Genotypic variation across a high-resolution series of water potentials. *Plant, Cell & Environment*, 42(7), <https://doi.org/10.1111/pce.13399>.
- Fan, T., Lv, T., Xie, C., Zhou, Y., & Tian, C. (2021). Genome-Wide Analysis of the IQM Gene Family in Rice (*Oryza sativa* L.). *Plants*, 10(9), 1949. DOI: 10.3390/plants10091949
- FAO Rice Market Monitor. (2017). Vol.XX(1), Rome, Itali.
- Franco-Zorrilla, J. M., López-Vidriero, I., Carrasco, J. L., Godoy, M., Vera, P., & Solano, R. (2014). DNA-binding specificities of plant transcription factors and their potential to define target genes. *Proceedings of the National Academy of Sciences*, 111(6), 2367–2372. <https://doi.org/10.1073/pnas.1316278111>.

- Geng, A., Lian, W., Wang, Y., Liu, M., Zhang, Y., Wang, X., & Chen, G. (2024). Molecular mechanisms and regulatory pathways underlying drought stress response in Rice. *International Journal of Molecular Sciences*, 25(2), 1185. <https://doi.org/10.3390/ijms25021185>.
- Green, M. R., & Sambrook, J. (2020). Quantifying and Storing RNA. *Cold Spring Harbor protocols*, 2020(3), 101709. <https://doi.org/10.1101/pdb.top101709>.
- Ha, T. V., Uereyen, S., & Kuenzer, C. (2023). Agricultural drought conditions over mainland Southeast Asia: Spatiotemporal characteristics revealed from MODIS-based vegetation time-series. *International Journal of Applied Earth Observation and Geoinformation*, 121, 103378. <https://doi.org/10.1016/j.jag.2023.103378>
- Hartyanto, A. a. S. P., Triharyanto, E., & Pujiasmanto, B. (2024). Drought tolerance testing of paddy variety Inpari 4 with PEG-6000 in the germination phase. *IOP Conference Series Earth and Environmental Science*, 1323(1), 012024. <https://doi.org/10.1088/1755-1315/1323/1/012024>.
- Hassan, N., El-Shafey, N. M., Khodary, S. E. A., El-Shabrawi, H., & Badr, A. (2021). Expression of OSDREB2A in transgenic tomato improves drought tolerance. *Romanian Biotechnological Letters*, 26(6), 3145–3154. DOI:10.25083/rbl/26.6/3145-3154
- Herath, V. (2016). Small family, big impact: In silico analysis of DREB2 transcription factor family in Rice. *Computational Biology and Chemistry*, 65, 128–139. <https://doi.org/10.1016/j.compbiolchem.2016.10.012>.
- Hrmova, M., & Hussain, S. S. (2021). Plant transcription factors involved in drought and associated stresses. *International journal of molecular sciences*, 22(11), 5662. DOI: 10.3390/ijms22115662
- Hussain, M., Farooq, M., & Lee, D. -J. (2017). Evaluating the role of seed priming in improving drought tolerance of pigmented and non-pigmented rice. *Journal of Agronomy and Crop Science*, 203(4), 269–276. <https://doi.org/10.1111/jac.12195>.
- Jadhao, K. R., Samal, K. C., Pradhan, S. K., & Rout, G. R. (2014). Studies on molecular characterization of DREB gene in indica rice (*Oryza sativa* L.). *Hereditary Genet*, 3(3), 1-12. DOI:10.4172/2161-1041.1000133
- Jain, M., Nijhawan, A., Tyagi, A. K., & Khurana, J. P. (2006). Validation of housekeeping genes as internal control for studying gene expression in rice by quantitative real-time PCR. *Biochemical and Biophysical Research Communications*, 345(2), 646–651. <https://doi.org/10.1016/j.bbrc.2006.04.140>

- Jeong, J. S., Kim, Y. S., Baek, K. H., Jung, H., Ha, S. H., Do Choi, Y., ... & Kim, J. K. (2010). Root-specific expression of OsNAC10 improves drought tolerance and grain yield in rice under field drought conditions. *Plant physiology*, 153(1), 185-197. <https://doi.org/10.1104/pp.110.154773>
- Ji, H., Liu, L., Li, K., Xie, Q., Wang, Z., Zhao, X., & Li, X. (2014). PEG-mediated osmotic stress induces premature differentiation of the root apical meristem and outgrowth of lateral roots in wheat. *Journal of Experimental Botany*, 65(17), 4863–4872. <https://doi.org/10.1093/jxb/eru255>
- Joseph, J. T., Poolakkalody, N. J., & Shah, J. M. (2018). Plant reference genes for development and stress response studies. *Journal of Biosciences*, 43(1), 173–187. <https://doi.org/10.1007/s12038-017-9728-z>
- Joshi, R., Wani, S. H., Singh, B., Bohra, A., Dar, Z. A., Lone, A. A., ... & Singla-Pareek, S. L. (2016). Transcription factors and plants response to drought stress: current understanding and future directions. *Frontiers in plant science*, 7, 1029. <https://doi.org/10.3389/fpls.2016.01029>
- Kang, J., Peng, Y., & Xu, W. (2022). Crop root responses to drought stress: Molecular mechanisms, nutrient regulations, and interactions with microorganisms in the rhizosphere. *International Journal of Molecular Sciences*, 23(16), 9310. <https://doi.org/10.3390/ijms23169310>.
- Khush, G. S. (2005). What it will take to Feed 5.0 Billion Rice consumers in 2030. *Plant Molecular Biology*, 59(1), 1–6. <https://doi.org/10.1007/s11103-005-2159-5>.
- Kim, J. H., Kim, J. H., Jung, K., & Jang, C. S. (2021). OsSIRH2-23, a rice salt-induced RING finger protein H2-23, contributes to insensitivity to salinity stress. *Environmental and Experimental Botany*, 194, 104715. <https://doi.org/10.1016/j.envexpbot.2021.104715>
- Kim, Y., Chung, Y. S., Lee, E., Tripathi, P., Heo, S., & Kim, K.-H. (2020). Root response to drought stress in rice (*Oryza sativa* L.). *International Journal of Molecular Sciences*, 21(4), 1513. <https://doi.org/10.3390/ijms21041513>.
- Kumar, A., Basu, S., Ramegowda, V., & Pereira, A. (2017). Mechanisms of drought tolerance in rice. In *Burleigh Dodds series in agricultural science* (pp. 131–164). <https://doi.org/10.19103/as.2016.0003.08>.
- Lee, H., Sasaki, K., Kang, J., Sato, T., Song, W., & Ahn, S. (2017). Mesocotyl Elongation is Essential for Seedling Emergence Under Deep-Seeding Condition in Rice. *Rice*, 10(1). <https://doi.org/10.1186/s12284-017-0173-2>.
- Lei, L., Han, Z., Cui, B., Yang, L., Liu, H., Wang, J., Zhao, H., Xin, W., Li, X., Li, J., Cui, J., Xu, S., Zou, D., & Zheng, H. (2021). Mapping of a major QTL for salinity

- tolerance at the bud burst stage in rice (*Oryza sativa* L) using a high-density genetic map. *Euphytica*, 217(8). <https://doi.org/10.1007/s10681-021-02901-0>.
- Leng, B., Li, M., Mu, C., Yan, Z., Yao, G., Kong, X., ... & Liu, X. (2022). Molecular mechanism of gibberellins in mesocotyl elongation response to deep-sowing stress in sweet maize. *Current Issues in Molecular Biology*, 45(1), 197-211. <https://doi.org/10.3390/cimb45010015>
- Livak K.J. & Schmittgen T.D. (2001). Analysis of Relative Gene Expression Data Using Real-Time Quantitative PCR and the 2- $\Delta\Delta$ CT Method. *Method.* 25, 402-408. DOI: 10.1006/meth.2001.1262
- Marchin, R.M., Ossola, A., Leishman, M.R. & Ellsworth, D.S. (2020). A Simple Method for Simulating Drought Effects on Plants. *Frontiers in Plant Science*, 10, 1715. DOI: <https://doi.org/10.3389/fpls.2019.01715>.
- Mishra, N., Sun, L., Zhu, X., Smith, J., Srivastava, A. P., Yang, X., Pehlivan, N., Esmaeili, N., Luo, H., Shen, G., Jones, D., Auld, D., Burke, J., Payton, P., & Zhang, H. (2017). Overexpression of the Rice SUMO E3 Ligase Gene OsSIZ1 in Cotton Enhances Drought and Heat Tolerance, and Substantially Improves Fiber Yields in the Field under Reduced Irrigation and Rainfed Conditions. *Plant and Cell Physiology*, 58(4), 735–746. <https://doi.org/10.1093/pcp/pcx032>.
- Mishra, S. S., & Panda, D. (2017). Leaf traits and antioxidant defense for drought tolerance during early growth stage in some popular traditional rice landraces from Koraput, India. *Rice Science*, 24(4), 207-217. <https://doi.org/10.1016/j.rsci.2017.04.001>
- Mohapatra, P. K., & Sahu, B. B. (2021). Botany of rice plant. In *Springer eBooks* (pp. 27–48). https://doi.org/10.1007/978-3-030-67897-5_2.
- Moumeni, A., & Kikuchi, S. (2016). Analyses of Drought-Tolerance Mechanism of Rice based on the transcriptome and gene ontology data. In *Springer eBooks* (pp. 415–432). https://doi.org/10.1007/978-3-319-32423-4_15.
- Mustamu, N. E., Tampubolon, K., Alridiwersah, N., Basyuni, M., Al-Taey, D. K., Janabi, H. J. K. A., & Mehdizadeh, M. (2023). Drought stress induced by polyethylene glycol (PEG) in local maize at the early seedling stage. *Heliyon*, 9(9), e20209. <https://doi.org/10.1016/j.heliyon.2023.e20209>.
- Muthayya, S., Sugimoto, J. D., Montgomery, S., & Maberly, G. F. (2014). An overview of global rice production, supply, trade, and consumption. *Annals of the new york Academy of Sciences*, 1324(1), 7-14. DOI: 10.1111/nyas.12540

- Oladosu, Y., Rafii, M. Y., Samuel, C., Fatai, A., Magaji, U., Kareem, I., ... & Kolapo, K. (2019). Drought resistance in rice from conventional to molecular breeding: a review. *International journal of molecular sciences*, 20(14), 3519. DOI: 10.3390/ijms20143519
- Orimoloye, I. R., Belle, J. A., Orimoloye, Y. M., Olusola, A. O., & Ololade, O. O. (2022). Drought: a common environmental disaster. *Atmosphere*, 13(1), 111. <https://doi.org/10.3390/atmos13010111>.
- Pabuayon, I. M., Yamamoto, N., Trinidad, J. L., Longkumer, T., Raorane, M. L., & Kohli, A. (2016). Reference genes for accurate gene expression analyses across different tissues, developmental stages and genotypes in rice for drought tolerance. *Rice*, 9(1). <https://doi.org/10.1186/s12284-016-0104-7>
- Panda, D., Mishra, S. S., & Behera, P. K. (2021). Drought tolerance in Rice: Focus on recent mechanisms and approaches. *Rice Science*, 28(2), 119–132. <https://doi.org/10.1016/j.rsci.2021.01.002>.
- Pandey, V., & Shukla, A. (2015). Acclimation and Tolerance Strategies of Rice under Drought Stress. *Rice Science*, 22(4), 147–161.
- Rahayu, S. E., & Febriaty, H. (2019). Analisis Perkembangan Produksi Beras dan Impor Beras di Indonesia. *Prosiding Seminar Nasional Kewirausahaan*, 1(1), 219–226. <https://doi.org/10.30596/snk.v1i1.3613>.
- Rana, V., Singh, M., & Rana, A. (2024). Variability and diversity studies using morpho-physiological traits in wheat (*triticum aestivum* L.) under irrigated and rainfed conditions. *International Journal of Bio-Resource and Stress Management*, 15(Aug, 8), 01–15. <https://doi.org/10.23910/1.2024.5428>.
- Ranjan, A., Sinha, R., Singla-Pareek, S. L., Pareek, A., & Singh, A. K. (2022). Shaping the root system architecture in plants for adaptation to drought stress. *Physiologia Plantarum*, 174(2). <https://doi.org/10.1111/ppl.13651>.
- Rasheed, A., Hassan, M. U., Aamer, M., Batool, M., Fang, S., Wu, Z., & Li, H. (2020). A critical review on the improvement of drought stress tolerance in rice (*Oryza sativa* L.). *Notulae Botanicae Horti Agrobotanici Cluj-Napoca*, 48(4), 1756-1788. DOI: <https://doi.org/10.15835/nbha48412128>
- Ren, N., Sun, Y., Shen, C., Zhu, S., Li, H., Zhang, Z., & Chen, K. (2025). 水稻中胚轴研究进展. *Rice Science*, 39(1), 11–23. <https://doi.org/10.16819/j.1001-7216.2025.240504>
- RStudio Team. 2020. RStudio: Integrated Development for R. RStudio, PBC, Boston, MA.

- Sabar, M., Naveed, S. A., Shah, S. M., Khan, A. R., Shah, M. M., Awan, T., Khan, M. R., Abbas, Z., & Arif, M. (2023). Introgression of Drought Tolerance into Elite Basmati Rice Variety through Marker-Assisted Backcrossing. *Phyton*, 92(5), 1421–1438. <https://doi.org/10.32604/phyton.2023.025801>.
- Sachdev, S., Ansari, S. A., Ansari, M. I., Fujita, M., & Hasanuzzaman, M. (2021). Abiotic stress and reactive oxygen species: generation, signaling, and defense mechanisms. *Antioxidants*, 10(2), 277. <https://doi.org/10.3390/antiox10020277>
- Sadhukhan, D., Mukherjee, T., Sarkar, A., Devi, N. D., Bisarya, D., Kumar, V., & Jincy, M. (2024). A Comprehensive Analysis of Drought Stress Responses in Rice (*Oryza sativa* L.): Insights into Developmental Stage Variations from Germination to Grain Filling. *International Journal of Environment and Climate Change*, 14(7), 141–158. <https://doi.org/10.9734/ijecc/2024/v14i74260>
- Safety Assessment of Transgenic Organisms in the Environment, Volume 10. 2023. In *Harmonisation of regulatory oversight in biotechnology*. <https://doi.org/10.1787/62ed0e04-en>.
- Sandhu, N., Yadav, S., & Kumar, A. (2020). Recent efforts in developing high-yield, drought-tolerant rice varieties. In *Elsevier eBooks* (pp. 111–128). <https://doi.org/10.1016/b978-0-12-818581-0.00008-5>.
- Sarkar, N. K., Kotak, S., Agarwal, M., Kim, Y., & Grover, A. (2019). Silencing of class I small heat shock proteins affects seed-related attributes and thermotolerance in rice seedlings. *Planta*, 251(1). DOI: 10.1007/s00425-019-03318-9
- Sarma, B., Kashtoh, H., Lama Tamang, T., Bhattacharyya, P. N., Mohanta, Y. K., & Baek, K.-H. (2023). Abiotic stress in Rice: Visiting the physiological response and its tolerance mechanisms. *Plants*, 12(23), 3948. <https://doi.org/10.3390/plants12233948>.
- Sato, Y., & Yokoya, S. (2007). Enhanced tolerance to drought stress in transgenic rice plants overexpressing a small heat-shock protein, sHSP17.7. *Plant Cell Reports*, 27(2), 329–334. <https://doi.org/10.1007/s00299-007-0470-0>.
- Schroeder, A.B., Dobson, E.T.A., Rueden, C.T., Tomancak, P., Jug, F. & Eliceiri, K.W. (2020). The ImageJ ecosystem: Open-source software for image visualization, processing, and analysis. *Protein Science*, 30(1), 234–249.
- Shahbandeh, M. (2025). Rice- Statistics & Facts. Rice - statistics & facts | Statista. 30 April 2025.
- Shanmugam, V., Tyagi, V. C., R, G., Chimmili, S. R., S, A. K., Arulanandam, M., Kumar, V., Peramaiyan, P., Murugaiyan, V., & Sundaram, R. M. (2025). Perennial rice – an alternative to the “One-sow, one-harvest” rice production:

- benefits, challenges, and future prospects. *Farming System*, 100137. <https://doi.org/10.1016/j.farsys.2025.100137>.
- Singh, D., & Laxmi, A. (2015). Transcriptional regulation of drought response: A tortuous network of transcriptional factors. *Frontiers in Plant Science*, 6. <https://doi.org/10.3389/fpls.2015.00895>.
- Singh, S., Chopperla, R., Shingote, P., Chhapekar, S. S., Deshmukh, R., Khan, S., Padaria, J. C., Sharma, T. R., & Solanke, A. U. (2021). Overexpression of ECDREB2A transcription factor from finger millet in tobacco enhances tolerance to heat stress through Ros scavenging. *Journal of Biotechnology*, 336, 10–24. <https://doi.org/10.1016/j.jbiotec.2021.06.013>.
- Sujiman, S. (2019). Screening of rice varieties (*Oryza sativa*) for drought tolerance using Polyethylene Glycol (PEG 800). Thesis Biology Universiti Teknologi MARA. Negeri Sembilan.
- Sun, S., Wang, T., Wang, L., Li, X., Jia, Y., Liu, C., Huang, X., Xie, W., & Wang, X. (2018). Natural selection of a GSK3 determines rice mesocotyl domestication by coordinating strigolactone and brassinosteroid signaling. *Nature Communications*, 9(1). <https://doi.org/10.1038/s41467-018-04952-9>
- Susilawati, P. N., Tajima, R., Giamerti, Y., Yang, Y., Yufdy, M. P., Lubis, I., & Homma, K. (2022). Application of consecutive polyethylene glycol treatments for modeling the seminal root growth of rice under water stress. *Scientific Reports*, 12(1). <https://doi.org/10.1038/s41598-022-06053-6>.
- Todaka, D., Nakashima, K., Shinozaki, K., & Yamaguchi-Shinozaki, K. (2012). Toward understanding transcriptional regulatory networks in abiotic stress responses and tolerance in rice. *Rice*, 5, 1-9. <https://doi.org/10.1186/1939-8433-5-6>
- Vibhuti, V., Shahi, C., Bargali, K., & Bargali, S. S. (2015). Seed germination and seedling growth parameters of rice (*Oryza sativa*) varieties as affected by salt and water stress. *The Indian Journal of Agricultural Sciences*, 85(1), 102–108. <https://doi.org/10.56093/ijas.v85i1.46046>.
- Vinona, D. CH. & Jalaja, N. (2021). Enhanced Drought Tolerance and Yield in Cry1ac and APX Co-Transformed Transgenic Rice (*Oryza Sativa* L.). *Research Square*. DOI: <https://doi.org/10.21203/rs.3.rs-427250/v1>.
- Wei, N., Zhang, S., Liu, Y., Wang, J., Wu, B., Zhao, J., Qiao, L., Zheng, X., Wang, J., & Zheng, J. (2022). Genome-wide association study of coleoptile length with shanxi wheat. *Frontiers in Plant Science*, 13. <https://doi.org/10.3389/fpls.2022.1016551>.

- Wilson, L.T. R.E. Tabien. S.O.PB. Samonte. X. G. Zhou. L. Tarpley. F. Dou. And Y. Yang. (2023). Rice Crop. *Texas Rice Production*. Texas. 3-11.
- Xu, Y., Zhang, Y., Ma, F., Zhao, J., Yang, H., Song, S., & Zhang, S. (2024). Identification of DreB family genes in banana and their function under drought and cold stress. *Plants*, 13(15), 2119. <https://doi.org/10.3390/plants13152119>.
- Yavas, I., Jamal, M. A., Ul Din, K., Ali, S., Hussain, S., & Farooq, M. (2023). Drought-induced changes in leaf morphology and anatomy: Overview, implications and Perspectives. *Polish Journal of Environmental Studies*, 33. <https://doi.org/10.15244/pjoes/174476>.
- Yoshida, T., & Yamaguchi-Shinozaki, K. (2021). Metabolic engineering: Towards water deficiency adapted crop plants. *Journal of Plant Physiology*, 258, 153375. <https://doi.org/10.1016/j.jplph.2021.153375>
- Yue, B., Xue, W., Xiong, L., Yu, X., Luo, L., Cui, K., Jin, D., Xing, Y., & Zhang, Q. (2005). Genetic basis of drought resistance at reproductive stage in rice: Separation of drought tolerance from drought avoidance. *Genetics*, 172(2), 1213–1228. <https://doi.org/10.1534/genetics.105.045062>.
- Yuliza, Y., Salamah, A., & Puspitaningrum, H. (2024). Exploration of *Oryza sativa* drought-responsive element binding protein 2A (OsDREB2A) gene in several local Indonesian rice varieties. *Biodiversitas Journal of Biological Diversity*, 25(2). <https://doi.org/10.13057/biodiv/d250216>.
- Zafar, S. A., Arif, M. H., Uzair, M., Rashid, U., Naeem, M. K., Rehman, O. U., Rehman, N., Zaid, I. U., Farooq, M. S., Zahra, N., Saleem, B., Xu, J., Li, Z., Ali, J., Ali, G. M., Yang, S. H., & Khan, M. R. (2022). Agronomic and physiological indices for reproductive stage heat stress tolerance in green Super rice. *Agronomy*, 12(8), 1907. <https://doi.org/10.3390/agronomy12081907>.
- Zhan, J., Lu, X., Liu, H., Zhao, Q., & Ye, G. (2019). Mesocotyl elongation, an essential trait for dry-seeded rice (*Oryza sativa* L.): a review of physiological and genetic basis. *Planta*, 251(1), 27. <https://doi.org/10.1007/s00425-019-03322-z>.
- Zhang, X., Tang, Y., Ma, Q., Yang, C., Mu, Y., Suo, H., Luo, L., & Nian, H. (2013). OSDREB2A, a rice transcription factor, significantly affects salt tolerance in transgenic soybean. *PLoS ONE*, 8(12), e83011 <https://doi.org/10.1371/journal>
- Zhao, M., Lin, Y., & Chen, H. (2020). Improving nutritional quality of rice for human health. *Theoretical and Applied Genetics*, 133, 1397-1413. DOI: 10.1007/s00122-019-03530-x

- Zhao, X., Zhong, Y., & Zhou, W. (2021). Molecular mechanisms of mesocotyl elongation induced by brassinosteroid in maize under deep-seeding stress by RNA-sequencing, microstructure observation, and physiological metabolism. *Genomics*, 113(6), 3565–3581. <https://doi.org/10.1016/j.ygeno.2021.08.020>.
- Zheng, Y., Zhang, S., Luo, Y., Li, F., Tan, J., Wang, B., Zhao, Z., Lin, H., Zhang, T., Liu, J., Liu, X., Guo, J., Xie, X., Chen, L., Liu, Y., & Chu, Z. 2022. Rice OsUBR7 modulates plant height by regulating histone H2B monoubiquitination and cell proliferation. *Plant Communications*, 3(6), 100412.

