DAFTAR PUSTAKA

Ahmad, M.S., B. Wu, H. Wang, D. Kang. 2020. Field screening of rice germplasm (*oryza sativa* l.ssp. japonica) based on days to flowering for drought escape. Plants Journal (9): 609.

Akbar, M.R., B.S. Purwoko, I.S. Dewi & W.B. Suwarno, 2018. Penentuan indeks seleksi kekeringan galur dihaploid padi sawah tadah hujan pada fase perkecambahan. *J. Agron. Indonesia* 46 (2):133-139

Akram, H. M., Ali, A., Sattar, A., Rehman, H. S. U., & Bibi, A. 2013. impact of water deficit stress on various physiological and agronomic traits of three Basmati Rice (*Oryza sativa* L.) Cultivar. *The Journal Animal and Sciences* 23(5):1415-1423.

Ashikari, M. & M. Matsuoka. 2006. Identification, isolation and pyramiding of quantitative trait loci for rice breeding. Trends Plant Sci. 11:344-350.

Babu, R. C., 2010. Breeding for drought resistence in rice: an integrated view from physiology to genomics. Electronic Journal of Plant Breeding, 1(4): 1133-1141.

Badan Penelitian & Pengembangan Pertanian. 2019. *Deskripsi varietas padi*. Balai Besar Tanaman Padi. Badan Litbang Pertanian. Kementerian Pertanian. 105 hal.

Badan Penelitian & Pengembangan Pertanian. 2014. *Kumpulan deskripsi varietas padi*. Balai Besar Pengkajian dan Pengembangan Teknologi Pertanian. Balai Pengkajian Teknologi Pertanian. Jawa Tengah, 114 hal.

Bakhtiar, H. & T. Hidayat. 2013. Identifikasi Beberapa Varietas Unggul Padi Gogo di Aceh Besar. Jurnal Agrista 17 (2): 49

Balai Besar Penelitian Tanaman Padi. 2009. *Deskripsi varietas padi*. Badan Penelitian dan Pengembangan Pertanian. Departemen Pertanian, 108 hal.

Bi, J., D. Hou, X. Zhang, J. Tan, Q. Bi, K. Zhang, Y. Liu, F. Wang, A. Zhang, L. Chen.. G. Liu, Z. Liu, X. Yu, L. Luo. 2021. A novel water-saving and drought-resistance rice variety promotes phosphorus absorption through root secreting organic acid compounds to stabilize yield under water-saving condition. Journal of Cleaner Production 315 (1): 127-136

Bin Rahman, A.N.M.R. & J.H. Zhang. 2016. Flood and drought tolerance in rice: Opposite but may coexist. Food Energy Security 5 (2) (2016): 76-88

Bouman, B. A. M., & Tuong, T. P. 2001. Field water management to save water and increase its productivity in irrigated rice. *Agric. Water Manage*. 49:11-30.

Borromeu, M. D. R., I. G. R. Sadimantara, & Y. B. Pasolon. 2018. respon pertumbuhan dan produksi beberapa kultivar padi gogo lokal Sultra terhadap Volume pemberian Air. J. Berkala Penelitian Agronomi, 6 (2): 25-36.

Ćalić, I., S.C. Groen, J.Y. Choi, Z.J. Lopez, E. Hamann, M.A. Natividad, K. Dorph, C.L.U. Cabral, R.O. Torres, G.V. Vergara, A. Henry, M.D. Purugganan, S.J. Franks. 2022. The influence of genetic architecture on responses to selection under drought in rice. Journ. Evolutionary Application 15 (10):1670-1690

Chen, D. Q., S. W. Wang, B. B. Cao, D. Cao, G. H. Leng, H. B. Li, L. N. Yin, L. Shan, & X. P. Deng. 2015. genotypic variation in growth and physiological response to drought stress and re-watering reveals the critical role of recovery in drought adaptation in maize seedlings. *Front Plant Sci.* 6:1-15.

Cockram, J., H. Jones, F.J. Leigh, D. O'Sullivan, W. Powell, D.A. Laurie, A.J. Greenland. 2007. Control of flowering time in temperate cereals: genes, domestication, and sustainable productivity. Journal of Experimental Botany, 58, Issue (6): 1231–1244

Colebrook, E. H., Thomas, S. G., Phillips, A. L., and Hedden, P. 2014. The role of gibberellin signalling in plant responses to abiotic stress. J. Exp. Biol. 217: 67–75.

Davatgar, N., M.R. Neishabouri, A.R. Sepaskhah, & A. Soltani. 2009. Physiological and morphological responses of rice (Oriza sativa L.) to varying water stress management strategies. *Int. J. Plant* Prod. 3:19-31.

Du H, Huang F, Wu N, Li X H, Hu H H, Xiong L Z. 2018. Integrative regulation of drought escape through ABA-dependent and-independent pathways in rice. Mol Plant, 11(4):584–597.

Fan, X, J. Liu, Z. Zhang, Y. Xi, S. Li, L. Xiong, Y. Xing. 2022. A long transcript mutant of the rubisco activase gene RCA upregulated by the transcription factor Ghd2 enhances drought tolerance in rice. The Plant Journal 110 (3): 673-687.

Fang, Y., & Xiong, L. 2015. general mechanisms of drought response and their application in drought resistance improvement in plants. Cell. Mol. Life Sci. 72 (4): 673-689.

Farooq, M.F., Wahid, A., Kobayashi, N., Fujita, D., & Basra, S.M.A.. 2009. Plant drought stress: effects, mechanisms and management. *Agron*. Sustain. Dev. 29:185-212.

Fen, L.L, Ismail, M.R., Zulkarami, B., Rahman, M.S.A., & Ismail, R.M. 2015. Physiological and molecular characterization of drought responses and screening of drought tolerant rice varieties. *Biosci. J*. 31:709-718.

Fischer, K.S. & Fukai, S. 2003. *How rice respond to drought*. Breeding rice for drought-prone environment. IRRI.

Gaballah, M.M., A.M. Ghoneim, H.U. Rehman, M.M. Shehab, M.I. Ghazy, A.S. El-Iraqi, A. E. Mohamed, M. Waqas, N.A.A. Shamsudin, Y. Chen. 2022. evaluation of morpho-physiological traits in rice genotypes for adaptation under irrigated and water-limited environments. Agronomy Journal 12: 1-14

Ghazy, M. I., K.F.M. Salem, A. Sallam. 2020. Utilization of genetic diversity and marker-trait to improve drought tolerance in rice (Oryza sativa L.). Molecular Biology Reports (48): 157–170

Golmoghani, A., K. A. Hamdollah, Y. Mehrdad, A. Golamreza, G. A. Leila, & G. Taregh. 2011. evaluation of drought tolerance indices and grain yield in wheat genotypes using principal components analysis. Middle-East J. Sci. Res. 8:880-884.

Groen, S.C, Z.J. Lopez, A. E Platts, M. Natividad, Z. Fresquez, W.M Mauck, M.R Quintana, C.L.U. Cabral, R.O. Torres, R. Satija, M.D Purugganan, A. Henry. 2022. Evolutionary systems biology reveals patterns of rice adaptation to drought-prone agro-ecosystems. The Plant Cell 34 (2):759–783

Gunarsih C. & A.A. Daradjat. 2007. variabilitas kecepatan senesens pada sejumlah genotip padi sawah serta korelasinya dengan hasil dan komponen hasil. Apresiasi Hasil Penelitian Padi 2007: 571-693.

He, H., Q. Wang, L. Wang, K. Yang, R. Yang, C. You, J. Ke, L. Wu. 2021. Photosynthetic physiological response of water-saving and drought-resistant rice to severe drought under wetting-drying alternation irrigation. Physiologia Plantarum Journal 173 (4): 2191-2206

Ishimaru, T. K. Sasaki, P.D. Lumanglas, C.LU. Cabral, C. Ye, M. Yoshimoto, A. Kumar, A. Henry. 2022. Effect of drought stress on flowering characteristics in rice (*Oryza sativa L.*): a study using genotypes contrasting in drought tolerance and flower opening time. Plant. Prod. Science 25 (3): 359-370

Iqbal, S., X. Wang I. Mubeen, M. Kamran, I. Kanwal, G. A. Díaz, A. Abbas, A. Parveen, M.N Atiq, H. Alshaya, T. K. Z. El-Abedin and S. Fahad. 2022. phytohormones trigger drought tolerance in crop plants: outlook and future perspectives. Front. Plant Sci. Sec. Plant Biotechnology 12: 20-21

IRRI (International Rice Research Institute). 2014. *Standard Evaluation System for Rice*. Inger-IRRI, Manila, Philipine. 65 hal.

Jagadish, S.V.K., P. Q. Craufurd and T. R. Wheeler, 2007. High temperature stress and spikelet fertility in rice (Oryza sativa L.). Journal of Experimental Botany 58, No. 7: 1627-1635.

Jeki, J. 2016. Indeks sensitifitas stres beberapa varietas padi gogo pada cekaman kekeringan. e-J. Agrotekbis 4 (4) : 369-373.

Kang, S.-M., Hamayun, M., Khan, M. A., Iqbal, A., and Lee, I.-J. 2019. Bacillus subtilis JW1 enhances plant growth and nutrient uptake of Chinese cabbage through gibberellins secretion. J. Appl. Bot. Food Qual. 92, 172–178.

Kang, D.J & K. Futakuchi. 2019. Effect of moderate drought-stress on flowering time of interspecific hybrid progenies (*Oryza sativa L.* × *Oryza glaberrima* Steud.). Crop. Sci. Biotech (March) 22 (1): 75-81

Kartina, N., Purwoko, B. S., Dewi, I. S., Wirnas, D., & Nindita, A. 2019. Skrining awal galur-galur dihaploid padi gogo terhadap cekaman kekeringan pada stadia bibit. *J. Agron. Indonesia* 47(1):1-8

Kartina, N., B. P. Wibowo, I. A. Rumanti, & Satoto. 2017. Korelasi hasil gabah dan komponen hasil padi hibrida. Penelitian Pertanian Tanaman Pangan, 1(1):11-20.

Khan, M. I R., S. R. Palakolanu, P. Chopra, A. B. Rajurkar, R. Gupta, N. Iqbal, C. Maheshwari. 2021. Improving drought tolerance in rice: Ensuring food security through multi-dimensional approaches. Physiologia Plantarum Journal Vol. 172 (2): 645-668

Kumar, M., S. K. Raina, V. Govindasamy A.K. Singh, R.L. Choudhary, J. Rane, P.S. Minhas. 2017. Assimilates mobilization, stable canopy temperature and expression of expansing stabilizes grain weight in wheat cultivar LOK-1 under different soil moisture conditions.Botanical Study (2017) 58:14-20

Kumar, A., R. S. Sengar, R. K. Pathak, A.K Singh. 2022. Integrated approaches to develop drought-tolerant rice: demand of era for global food security. Journal of Plant Growth Regulation 42: 96–120

Lafitte, R. 2003. Managing water for controlled drought in breeding plots. In K.S. Fischer, R. Lafitte, S. Fukai, G. Atlin and B. Hardy. Breeding Rice for Drought-Prone Environments. International Rice Research Institute. Los Banos: 23-26.

Lee, S. & C. Masclaux-Daubresse. 2021. Current understanding of leaf senescence in rice. Int. J. Mol. Sci. (22) 4515: 1-19.

Maisura1, M. A. Chozin, I. Lubis, A. Junaedi & H. Ehara. 2017. Studi karakter morfologi dan fisiologi varietas padi toleran terhadap cekaman kekeringan pada sistem sawah. Jurnal Agrium 14(1): 8 -16.

Man, D., Y. X. Bao, & L. B. Han. 2011. Drought tolerance associate with proline and hormone metabolism in two tall fescue cultivars. Hort Science 46(7): 1027-1032.

Mostajeran, A. & Eichi, V.R. 2009. Effects of drought stress on growth and yields of rice (*Oryza sativa* L.) cultivars and accumulation of proline and soluble sugars in sheath and blades of their different ages leaves. American-Eurasian *J. Agric. & Environ. Sci*. 5 (2) : 264-272.

Nakao, Y., M. Yoshino, K. Miyamoto, S. Yabuta, R. Kamioka, K. Hatanaka, J. Sakagami. 2022. Drought escape during the late growth stage through early recovery from initial drying stress by hydropriming of upland rice. Plant Prod. Science (3): 269–279

Nguyen HT, Fischer KS, & Fukai S. 2009. Physiological responses to various water saving systems in rice. *Field Crops Research*. 112 (3): 189 198.

Oladosu, Y., M. Y. Rafii, C. Samuel, A. Fatai, U. Magaji, I. Kareem, Z. S. Kamarudin, I. Muhammad, K. Kolapo. 2019. Drought resistance in rice from conventional to molecular breeding: A review. Int J Mol Sci. 20 (14): 3519.

Panda, D., S. Sakambari, M. Prafulla, K. Behera. 2021. Drought tolerance in rice: focus on recent mechanisms and approaches. Rice Science Vol. 28, Issue 2, March 2021: 119-132

Pandey, V., & A. Shukla. 2015. Acclimation and tolerance strategies of rice under drought stress. Rice Sci, 22 (4) (2015): 147-161

Park, J.R., E.G. Kim, Y.H. Jang, R. Jan, M. Farooq, M. Ubaidillah, K.M. Kim. 2022. Applications of crispr/cas9 as new strategies for short breeding to drought gene in rice. Front Plant Sci. 2022; 13: 85-97.

Park, S.I.J.H.J. Kwon, M.H. Cho, J.S Song, B.G. Kim, J. H. Baek, S. L. Kim, H.S. Ji, T.R. Kwon, K.H. Kim, I.S. Yoon. 2021. The OsERF115/AP2EREBP110 Transcription factor is involved in the multiple stress tolerance to heat and drought in rice plants. Int. J. Mol. Sci. 2021, 22(13): 71-81

Priyanto, S. B., Azrai, M., & Syakir, M. 2018. Analisis ragam genetik, heritabilitas, dan sidik lintas karakter agronomik jagung hibrida silang tunggal. *Jurnal Informatika Pertanian*, 27(1): 1-8.

Rahman, A. & R.H. Ellis. 2019. Seed quality in rice is most sensitive to drought and high temperature in early seed development. Seed Science Research, 29 (4): 238-249.

Rahayu, E.S., Guhardja, E., Ilyas, S., & Sudarsono. 2005. Polietilena glikol (PEG) dalam media in vitro menyebabkan kondisi cekaman yang menghambat tunas kacang tanah (Arachis hypogaea L.). Berk. Pen. Hayati 11:39-48.

Ramachandran, M., D. Arulbalachandran, S. Dilipan, S. Ramya. 2022. Comparative analysis of abscisic acid recovery on two varieties of rice (Oryza sativa L.) under drought condition. Journ. Biocatalysis and Agricultural Biotechnology 33: 102-112.

Ruminta, S. Rosniawaty, A. Wahyudin. 2016. Pengujian sensitivias kekeringan dan daya adaptasi tujuh varieas padi di wilayah dataran medium Jatinangor. Jurnal Kultivasi 15 (2): 114 – 120.

Sabouri, A., A.R. Dadras, M. Azari, A.S. Kouchesfahani, M. Taslimi, R. Jalalifar. 2022. Screening of rice drought-tolerant lines by introducing a new composite selection index and competitive with multivariate methods. Nature. Scientifc Reports | (2022) 12:2163 | https://doi.org/10.1038/s41598-022-06123-9.

Salleh, M.S., M.S Nordin, A. Puteh, R. Shahari, Z. Zainuddin, M. Bahagia A. Ghaffar, N.A.A. Shamsudin. 2022. Drought-Induced Changes in The Flowering Capacity, Anthesis Quality and Seed Set in Rice (Oryza sativa L.). Trop Life Sci Res. Vol. 33(2): 239–256.

Sandhu, N., K. A. Raman, R. O. Torres, A. Audebert, A. Dardou, A. Kumar, & Amelia Henry. 2016. Rice root architectural plasticity traits and genetic regions for adaptability to variable cultivation and stress conditions. Plant Physiology (August) Vol. 171: 2562–2576.

Sehgal, A., S. Kumari, K. H. M. Siddique, R. Kumar, S. Bhogireddy, R. K. Varshney, B. HanumanthaRao, R.M. Nair, P. V. V. Prasad & H. Nayyar. 2018. Drought or/and heat-stress effects on seed filling in food crops:

impacts on functional biochemistry, seed yields, and nutritional quality. Front. Plant Sci. (27) Sec. Plant Abiotic Stress: 1-19.

Serraj, R. A. Kumar, K. L. McNally, I. Slamet-Loedin, R. Bruskiewich, R. Mauleon, J. Cairns, and R. J. Hijmans. 2009. Improvement of drought resistance in rice. in donald sparks, editor: advances in agronomy, Vol. 103,Burlington: Academic Press: 41-99

Sugiarto, R., Kristanto, B. A. & Lukiwati, D. R.. 2018. Respon pertumbuhan dan produksi padi beras merah (*Oryza nivara*) terhadap cekaman kekeringan pada fase pertumbuhan berbeda dan pemupukan nanosilika. *J. Agro Complex* 2(2):169-179.

Sujinah & Jamil, A. 2016. Mekanisme Respon tanaman padi terhadap cekaman kekeringan dan varietas toleran. *Iptek Tanaman Pangan* 11(1): 1 – 7.

Sulistyono, E., Suwarno, & Lubis, I. 2011. Karakterisasi morfologi dan fisiologi untuk mendapatkan marka morfologi dan fisiologi padi sawah tahan kekeringan (-30 kPa) dan produktivitas tinggi (> 8 t/ha). *Agrovigor* 6 (2):92-102.

Suprayogi, Y., JM Clarke, R Bueckert, FR Clarke, CJ Pozniak. 2011. Nitrogen remobilization and post-anthesis nitrogen uptake in relation to elevated grain protein concentration in durum wheat. Canadian Journal of Plant Science 91 (2): 273-282.

Supriyanto, B. 2013. Pengaruh cekaman kekeringan terhadap pertumbuhan dan hasil padi gogo lokal kultivar jambu (*Oryza Sativa L.*). *Jurnal AGRIFOR* Vol:7(1): 77 – 82.

Syaputra, A., Nurhayati & Ichsan, C. N. 2018. Pengaruh kekeringan terhadap karakteristik pertumbuhan berbagai varietas padi (*Oryza sativa L.*). *JIMPertanian – AGT*, 3(2): 128 – 135.

Tao, H., H. Brueck, K. Dittert, C. Kreye, S. Lin, & B. Sattelmacher. 2006. Growth and Yield Formation For Rice (Oryza sativa L.) in the Water-Saving Ground Cover Rice Production System (GCRPS). Field Crops Research, 95 (1): 1-12.

Torres, R.O., K.L. McNally, C.V. Cruz, R. Serraj, A. Henry. 2013. Screening of rice genebank germplasm for yield and selection of new drought tolerance donors. Field Crops Res, 147 (2013): 12-22

Tubur H.W., Chozin, M.A., Santosa, E. & Junaedi, A. 2012. Respon agronomi varietas padi terhadap periode kekeringan pada sistem sawah. *J.Agron. Indonesia* 40 (3):167-173.

Vikram, P., A. Kumar, A. Singh, N. K. Singh. 2012. Improving crop resistance to abiotic stress. Wiley-VCH Verlag GmbH & Co. KGaA. Chapter (31): 715-731.

Zhang, J., S. Zhang, M. Cheng, H. Jiang, X. Zhang, C. Peng, X. Lu, M. Zhang, J. Jin. 2018. Effect of drought on agronomic traits of rice and wheat: a meta-analysis. J. Environ Res Public Health. 2018 May; 15(5): 839 – 846.

Zhang, X., S. Zhou, J. Bi, H. Sun, C. Wang, J. Zhang. 2021. Drought-resistance rice variety with water-saving management reduces greenhouse gas emissions from paddies while maintaining rice yields. Agriculture, Ecosystems & Environment 320 (15): 107-118.

Zhou, L., Z. Liu, Y. Liu, D. Kong, T. Li, S. Yu, H. Mei, X. Xu, H. Liu, L. Chen & L. Luo. 2016. A novel gene OsAHL1 improves both drought avoidance and drought tolerance in rice. Scientific Reports (6):30264: 1 – 15.