DAFTAR PUSTAKA

Abid, M., Hakeem, A., Shao, Y., Liu, Y., Zahoor, R., Fan, Y., Suyu, J., Tian, Z., Jiang, D., Snider, J. L., & Dai, T. 2018. Seed osmopriming invokes stress memory against post-germinative drought stress in wheat (*Triticum aestivum* L.). *Environmental and Experimental Botany* 145 : 12-20. https://doi.org/10.1016/j.envexpbot.2017.10.002

Acharya, P., Jayaprakasha, G. K., Crosby, K. M., Jifon, J. L., & Patil, B. S. 2020. Nanoparticle-mediated seed priming improves germination, growth, yield, and quality of watermelons (Citrullus lanatus) at multi-locations in Texas. *Scientific reports*, *10*(1), 5037. https://doi.org/10.1038/s41598-020-61696-7

Adhikari, B., Olorunwa, O. J., & Barickman, T. C. 2022. Seed priming enhances seed germination and morphological traits of Lactuca sativa L. under Salt Stress. *Seeds*, *1*(2), 74-86. https://doi.org/10.3390/seeds1020007.

Agustin, N. 2022. Pengaruh Priming Terhadap Perkecambahan Benih Jagung (*Zea Mays* L.) Pada Kondisi Media Cekaman Aluminium.

Aisyah, D. N., Kendarini, N., & Ashari, S. (2018). Efektifitas PEG-6000 Sebagai Media Osmoconditioning Dalam Peningkatan Mutu Benih Dan Produksi Kedelai (Glycine max L. Merr.). *Jurnal Produksi Tanaman*, *6*(7), 1344-1353.

Amartani, K. 2019. Respon Perkecambahan Benih Jagung (*Zea mays*. L) Pada Kondisi Cekaman Garam Germination Response of Corn Seeds (*Zea mays*. L) under Stressed Salt Conditions. *Agrosainstek*, 3 (1) 2019: 9-14. https://doi.org/10.33019/agrosainstek.v3i1.32.

Anggraini, N., Faridah, E., & Indrioko, S. 2015. Pengaruh Cekaman Kekeringan terhadap Perilaku Fisiologis dan Pertumbuhan Bibit *Black Locust* (*Robinia pseudoacacia*). *Jurnal Ilmu Kehutanan,* *9*(1), 40-56. https://doi.org/10.22146/jik.10183.

Arif, L., & Karmila, K. 2019. Pengaruh Pemberian Pupuk Organik Kompos Kandang Sapi Terhadap Pertumbuhan Dan Hasil Tanaman Cabe Keriting (Capsicum annum L). *Jurnal Agrotech*, *9*(1), 7-11. 10.31970/agrotech.v9i1.27

Armita, D., & Alawiyatun, N. A. W. 2020. Studi pertumbuhan dan aktivitas enzim antioksidan pada kultur in vitro tomat akibat cekaman salinitas. *Plantropica: Journal of Agricultural Science*, *5*(1), 64-73. https://doi.org/10.21776/ub.jpt.2020.005.1.8

Aswathi, K. R., Sen, A., & Puthur, J. T. 2023. Comparative study of cis-and trans-priming effect of PEG and BABA in cowpea seedlings on exposure to PEG-

induced osmotic stress. *Seeds*, *2*(1), 85-100. https://doi.org/10.3390/seeds2010007

Azani, F. K., Hakimi, R., & Hidayat, R. 2024. Trading Analysis Of The Kopay Chili. *Jurnal Agribisains, 10(1), 73-83. https://doi.org/10.30997/jagi.v10i1.10218*.

Bai, Y., Kissoudis, C., Yan, Z., Visser, R. G., & van der Linden, G. 2018. Plant behaviour under combined stress: tomato responses to combined salinity and pathogen stress. *The plant journal*, *93*(4), 781-793. https://doi.org/10.1111/tpj.13800

Balitbang Pertanian. 2015. Sumberdaya Lahan Pertanian Indonesia. Luas Penyebaran, dan Potensi Ketersediaan. IAARD Press.

Baque, A., Nahar, M., Yeasmin, M., Quamruzzaman, M., Rahman, A., Azad, M. J., & Biswas, P. K. 2016. Germination behavior of wheat (*Triticum aestivum* L.) as influenced by polyethylene glycol (PEG). *Universal J. Agril. Res*, *4*(3), 86-91. https://doi.org/10.13189/ujar.2016.040304.

Bourioug, M., Ezzaza, K., Bouabid, R., Alaoui-Mhamdi, M., Bungau, S., Bourgeade, P., Alaoui-Sosse, L., Alaoui-Sosse, B., & Aleya, L. 2020. Influence of hydro- and osmo-priming on sunflower seeds to break dormancy and improve crop performance under water stress. *Environmental Science and Pollution Research*, *27*, 13215-13226. https://doi.org/10.1007/s11356-020-07893-3

Cahyani, W., & Santika, P. 2024. Pengaruh Osmopriming Dengan PEG 6000 Terhadap Mutu Fisiologis Benih Jagung Manis (Zea mays saccharata Sturt). In *Agropross: National Conference Proceedings of Agriculture* (pp. 623-629). 10.25047/agropross.2024.780.

Debbarma, M. & Das, S. P. 2017. Priming of seed: Enhancing growth and development. *International Journal Current Microbiol and Applied Science, 6*, 2390-2396. 10.20546/ijcmas.2017.612.276

Debta, H., Kunhamu, T. K., Petrík, P., Fleischer Jr, P., & Jisha, K. C. 2023. Effect of hydropriming and osmopriming on the germination and seedling vigor of the East Indian Sandalwood (Santalum album L.). *Forests*, *14*(6), 1076. https://doi.org/10.3390/f14061076.

Ejaz, S., Anjum, M. A., Hussain, S., Azam, M., Ali, S., & Ahmad, S. 2019. Pretreatment of Seedlings with Exogenous Protectants for Abiotic Stress Tolerance. *Priming and Pretreatment of Seeds and Seedlings: Implication in Plant Stress Tolerance and Enhancing Productivity in Crop Plants, 573-593.* https://doi.org/10.1007/978-981-13-8625-1_28.

Elsayed, A. I., El-Hamahmy, M. A., Rafudeen, M. S., Mohamed, A. H., & Omar, A. A. 2019. The impact of drought stress on antioxidant responses and accumulation

of flavonolignans in milk thistle (Silybum marianum (l.) gaertn). *Plants*, *8*(12), 611. https://doi.org/10.3390/plants8120611

Eshkab, I. A., & Harris, P. J. 2020. Seed priming: Factors affecting efficacy. *International Review of Basic and Applied Sciences*, *8*(4), 31-52.

Fitri, F., & Alang, H. 2020. Analisis Aktivitas Enzim Antioksidan Katalase dan Peroksida. *Celebes Biodiversitas*, *3*(1), 12-16.

González-Klenner FJ, Albornoz M V, Ávila-Sákar G, Verdugo JA. 2022. Tomato defense against whiteflies under drought stress: Non-additive effects and cultivar-specific responses. *Plants 11: 1049*. https://doi.org/10.3390/plants11081049.

Gul, S., Hussain, A., Ali, Q., Alam, I., Alshegaihi, R. M., Meng, Q., Zaman, W., Manghwar, H., & Munis, M. F. H. 2022. Hydropriming and osmotic priming induce resistance against Aspergillus niger in wheat (Triticum aestivum L.) by activating β-1, 3-glucanase, chitinase, and thaumatin-like protein genes. *Life*, *12*(12), 2061. https://doi.org/10.3390/life12122061.

Guo, Y., Li, D., Liu, L., Sun, H., Zhu, L., Zhang, K., Zhao, H., Zhang, Y., Li, A., Bai, Z., Tian, L., Dong, H., & Li, C. 2022 Seed Priming with Melatonin Promotes Seed Germination and Seedling Growth of Triticale hexaploide L. Under PEG-6000 Induced Drought Stress. *Frontiers in Plant Science* 13: 932912. https://doi.org/10.3389/fpls.2022.932912.

Hamidah, K., Syahni, R., & Sari, R. 2020. Analisis Permintaan Cabai Merah Besar Di Kota Padang, Sumatra Barat Analysis of Demand for Large Red Chilli in Padang City, West Sumatra. *Journal of Extension and Development ISSN 02(01):62–68*. https://doi.org/10.23960/jsp.Vol2.No1.2020.49.

Hardiyanto, Devy, N. F., Yulianti, F., & Agisimanto, D. 2023. Seed priming of stored seeds on seed germination, vegetative performance, flowering, and proline content in chili under water stress condition. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1287, No. 1, p. 012007). IOP Publishing. https://dx.doi.org/10.1088/1755-1315/1287/1/012007.

Jafar, M. I., Tamrin, M. M., & Zulfiana, I. S. 2018. Pemanfaatan sistem irigasi tetes (SIT) organik pada tanaman cabai rawit (*Capsicum Frutescens* L.) di Kelurahan Dembe I, Kecamatan Dembe, Provinsi Gorontalo. In *Seminar Nasional Kolaborasi Pengabdian kepada Masyarakat* (Vol. 1, No. 1, pp. 201-205). https://proceeding.unnes.ac.id/index.php/snkppm.

Junglee, S., Urban, L., Sallanon, H., & Lopez-Lauri, F. 2014. Optimized Assay for Hydrogen Peroxide Determination in Plant Tissue Using Potassium Iodide. *Am. J. Analyt. Chem. 5, 730–736.* 10.4236/ajac.2014.511081

Kakar, H. A., Ullah, S., Shah, W., Ali, B., Satti, S. Z., Ullah, R., Muhammad, Z., Eldin, S. M., Ali, I., Alwahibi, M. S., Elshikh, M. S., & Ercisli, S. 2023. Seed Priming Modulates Physiological and Agronomic Attributes of Maize (*Zea mays* L.)

under Induced Polyethylene Glycol Osmotic Stress. *ACS omega*. 8(25): 22788–22808. https://doi.org/10.1021/acsomega.3c01715.

Karimi, S., Karami, H., Vahdati, K., & Mokhtassi-Bidgoli, A. 2020. Antioxidative responses to short-term salinity stress induce drought tolerance in walnut. *Scientia Horticulturae*, *267*, 109322. https://doi.org/10.1016/j.scienta.2020.109322

Kartika, K., Lakitan, B., & Ria, R. P. 2021. Hydro-and osmo-priming effects on upland rice exposed to drought conditions at vegetative and reproductive stages. CMUJ. *Nat. Sci*, *20*(3), e2021053. https://doi.org/10.12982/CMUJNS.2021.053

Khan, M. N., Zhang, J., Luo, T., Liu, J., Rizwan, M., Fahad, S., Xu, Z., & Hu, L. 2019. Seed priming with melatonin coping drought stress in rapeseed by regulating reactive oxygen species detoxification: Antioxidant defense system, osmotic adjustment, stomatal traits and chloroplast ultrastructure perseveration. *Industrial Crops and Products*, *140*, 111597. https://doi.org/10.1016/j.indcrop.2019.111597.

Lei, C., Bagavathiannan, M., Wang, H., Sharpe, S. M., Meng, W., & Yu, J. 2021. Osmopriming with polyethylene glycol (PEG) for abiotic stress tolerance in germinating crop seeds: A review. *Agronomy*, *11*(11), 2194. https://doi.org/10.3390/agronomy11112194.

Lemmens, E., Deleu, L. J., De Brier, N., De Man, W. L., De Proft, M., Prinsen, E., & Delcour, J. A. 2019. The impact of hydro-priming and osmo-priming on seedling characteristics, plant hormone concentrations, activity of selected hydrolytic enzymes, and cell wall and phytate hydrolysis in sprouted wheat (Triticum aestivum L.). *ACS omega*, *4*(26), 22089-22100. https://doi.org/10.1021/acsomega.9b03210.

Li, X., & Liu, F. 2016. Drought stress memory and drought stress tolerance in plants: biochemical and molecular basis. *Drought Stress Tolerance in Plants, Vol 1: Physiology and Biochemistry*, 17-44. https://doi.org/10.1007/978-3-319-28899-4_2.

Ma, L., Wei, J., Han, G., Sun, X., & Yang, X. 2024. Seed osmopriming with polyethylene glycol (PEG) enhances seed germination and seedling physiological traits of Coronilla varia L. under water stress. *Plos one*, *19*(5), e0303145. ttps://doi.org/10.1371/journal.pone.0303145

Mamedov, M. I., Pishnaya, O. N., Baikov, A. A., Pivovarov, V. F., Dzhos, E. A., Matykina, A. A., & Gins, M. S. 2017. Antioxidant contents of pepper *Capsicum* spp. for use in biofortification. *Sel'skokhozyaistvennaya biologiya [Agricultural Biology]*, *52*(5). https://doi.org/10.15389/agrobiology.2017.5.1021eng.

Marthandan, V., Geetha, R., Kumutha, K., Renganathan, V. G., Karthikeyan, A., & Ramalingam, J. 2020. Seed priming: a feasible strategy to enhance drought

tolerance in crop plants. *International journal of molecular sciences*, *21*(21), 8258. https://doi.org/10.3390/ijms21218258.

Melta, A. A., Yulianty, Y., Agustrina, R., Setiawan, W. A., Suratman, S., & Chrisnawati, L. 2022. Pertumbuhan Benih Cabai (*Capsicum annuum* L.) dengan Induksi Medan Magnet 0, 2 mT dan Infeksi Fusarium oxysporum. *Biota: Jurnal Ilmiah Ilmu-Ilmu Hayati*, 151-159. https://doi.org/10.24002/biota.v7i2.4731

Mouradi, M., Bouizgaren, A., Farissi, M., Makoudi, B., Kabbadj, A., Very, A. A., Sentenac, H., Qaddoury, A., & Ghoulam, C. 2016. Osmopriming improves seeds germination, growth, antioxidant responses and membrane stability during early stage of Moroccan alfalfa populations under water deficit. *Chilean journal of agricultural research*, *76*(3), 265-272. http://dx.doi.org/10.4067/S0718-58392016000300002.

Nie, L., Liu, H., Zhang, L., & Wang, W. 2020. Enhancement in rice seed germination via improved respiratory metabolism under chilling stress. *Food and Energy Security*, *9*(4), e234.https://doi.org/10.1002/fes3.234

Noli, Z. A., & Labukti, H. V. 2022. Pengaruh Ekstrak Paku Resam (*Gleichenia linearis*) sebagai Biostimulan terhadap Pertumbuhan dan Hasil Cabai Keriting (*Capsicum annum* L.) Kultivar Kopay. *Agro Bali: Agricultural Journal*, *5*(3), 492-497. https://doi.org/10.37637/ab.v5i3.999

Novanursandy, N. B., & Rachmawati, D. 2023. Pengaruh Osmopriming Benih terhadap Perkecambahan dan Pertumbuhan Tanaman Cabai Rawit (*Capsicum frutescens* L.) pada Cekaman Kekeringan. *Bioscientist: Jurnal Ilmiah Biologi*, *11*(2), 1001-1016. https://doi.org/10.33394/bioscientist.v11i2.8151

Prellia, A., Solichatun, S., & Pitoyo, A. 2023. Induction of drought resistance in bell pepper (*Capsicum annuum* var. *grossum*) with osmopriming Polyethylene Glycol (PEG) 4000. *Asian Journal of Agriculture*, *7*(1). https://doi.org/10.13057/asianjagric/g070105

Rachmawati, D., Aisy, S. P., & Novanursandy, N. B. 2023. Effect of seed priming on growth and physiological responses of chili pepper (*Capsicum frutescens* L.) under salinity stress. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1165, No. 1, p. 012016). IOP Publishing. https://doi.org/10.1088/1755-1315/1165/1/012016.

Raj, A. B., & Raj, S. K. 2019. Seed priming: An approach towards agricultural sustainability. *Journal of Applied & Natural Science*, *11*(1). https://doi.org/10.31018/jans.v11i1.2010.

Ren, M., Tan, B., Xu, J., Yang, Z., Zheng, H., Tang, Q., Zhang, X., & Wang, W. 2023. Priming methods affected deterioration speed of primed rice seeds by regulating reactive oxygen species accumulation, seed respiration and starch degradation. *Frontiers in Plant Science*, *14*, 1267103. https://doi.org/10.3389/fpls.2023.1267103

Roy, J., & Das, A. 2022. Study on influence of osmopriming by polyethylene glycol 6000 on germination of papaya seeds. *Plant Archives (09725210)*, *22*(2). : https://doi.org/10.51470/PLANTARCHIVES.2022.v22.no2.091

Roziqoh, W., Perdani, A. Y., Wahyuni, Y., & Su'udi, M. 2023. Upaya Peningkatan Ketahanan Cabai Merah (*Capsicum Annuum* L.) Terhadap Cekaman Kekeringan Dengan Iradiasi Gamma. *Jurnal Agrotek Tropika*, *11*(4), 547-554.

Ru, C., Hu, X., Chen, D., Wang, W., & Song, T. 2022. Heat and Drought Priming Induce Tolerance to Subsequent Heat and Drought Stress by Regulating Leaf Photosynthesis, Root Morphology, and Antioxidant Defense in Maize Seedlings. *Environmental and Experimental Botany, 202*(1), 1-16. https://doi.org/10.1016/j.envexpbot.2022.105010.

Rupiasih, N. N., Yanti, N. K. G. H., Sumadiyasa, M., & Manuaba, I. B. S. 2018. Pengaruh Berbagai Gangguan pada Benih terhadap Kadar Klorofil dan Karotenoin Daun serta Biomassa Tanaman Cabai Rawit pada Masa Perkecambahan. *Buletin Fisika*, *19*(1), 35-39. 10.24843/BF.2018.v19.i01.p07

Saha, D., Choyal, P., Mishra, U. N., Dey, P., Bose, B., Prathibna, D., Gupta, N. K., Mehta, B. K., Kumar, P., Pandey, S., Chauhan, J., & Singhal, R. K. 2022. Drought Stress Responses and Inducing Tolerance by Seed Priming Approach in Plants. *Plant Stress, 4*(1), 1-14. https://doi.org/10.1016/j.stress.2022.100066.

Salemi, F., Esfahani, M. N., & Tran, L. S. P. 2019. Mechanistic Insights into Enhanced Tolerance of Early Growth of Alfafa (*Medicago sativa* L.) Under Low Water Potential by Seed-Priming with Ascorbic Acid or Polyethylene Glycol Solution. *Industrial Crops and Products*, 137(1), 436- 445. https://doi.org/10.1016/j.indcrop.2019.05.049

Sheteiwy, M. S., Fu, Y., Hu, Q., Nawaz, A., Guan, Y., Li, Z., Huang, Y., & Hu, J. 2016. Seed priming with polyethylene glycol induces antioxidative defense and metabolic regulation of rice under nano-ZnO stress. *Environmental Science and Pollution Research.* 23(19): 19989–20002. https://doi.org/10.1007/s11356-016-7170-7.

Shohani, F., Fazeli, A., & Sarghein, S. H. 2023. The Effect of Silicon Application and Salicylic Acid on Enzymatic and Non-Enzymatic Reactions of *Scrophularia striata* L. Under Drought Stress. *Scientia Horticulture, 319*(1), 1-11. https://doi.org/10.1016/j.scienta.2023.112143.

Silveira, A. D. S., Pinheiro, D. T., Oliveira, R. M. D., Dias, D. C. F. D. S., & Silva, L. J. D. 2023. Osmopriming with selenium: Physical and physiological quality of tomato seeds in response to water deficit. *Journal of Seed Science*, *45*, e202345012. https://doi.org/10.1590/2317-1545v45267349

Syaiful, S. A., Dungga, N. E., Riadi, M., & Ridwan, I. 2015. Seed priming with PEG 8000 for improving drought stress tolerance of soybean (Glycine

max). *International Journal of Agriculture System*, *1*(1), 19-26. http://dx.doi.org/10.20956/ijas.v1i1.19

Tounekti, T., Mahdhi, M., Zarraq, A. F., & Khemira, H. 2020. Priming improves germination and seed reserve utilization, growth, antioxidant responses and membrane stability at early seedling stage of Saudi sorghum varieties under drought stress. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca*, *48*(2), 938-953. https://doi.org/10.15835/nbha48211841

Trisnawaty, A. R., Asra, R., Megasari, R., Arnama, I. N., & Yamin, M. 2024. Pertumbuhan dan Produksi Padi (*Oryza sativa* L.) Hasil Priming Berbagai Konsentrasi PEG-6000 pada Cekaman Kekeringan. *Journal Galung Tropika*, *13*(2), 267-277. https://doi.org/10.31850/jgt.v13i2.1272

Varshini, P. S., Reddy, K. B., Radhika, K., & Naik, V. S. 2018. Effect of concentration and duration of osmopriming on germination and vigor of aged seed of chickpea. *Int. J. Curr. Microbiol. Appl. Sci*, *7*(10), 2410-2421. https://doi.org/10.20546/ijcmas.2018.710.280

Vazilla, D., Nura, N., & Halimursyadah, H. 2023. Pengaruh Iradiasi Sinar Gamma Terhadap Viabilitas Dan Vigor Benih Serta Performansi Pada Fase Vegetatif Tanaman Cabai (*Capsicum annuum* L.) Lokal Aceh. *Jurnal Ilmiah Mahasiswa Pertanian*, *8*(2), 119-128. https://doi.org/10.17969/jimfp.v8i2.24467

Wahdah, R., & Susanti, H. 2020. Respon Viabilitas Benih Kacang Nagara (*Vigna unguiculata* ssp. Cylindrica) terhadap Osmoconditioning dengan Peg (Polietilen Glikol) pada Beberapa Lama Perendaman. In *Prosiding Seminar Nasional Lingkungan Lahan Basah* (Vol. 5, No. 3, pp. 143-151).

Wahyuni, W. 2022. Kajian Teknik Invigorasi Benih Kedelai (Glycine Max) Di Indonesia: Review Artikel. *Fruitset Sains: Jurnal Pertanian Agroteknologi*, *10*(4), 146-156.

Wang, W., Zhang, C., Zheng, W., Lv, H., Li, J., Liang, B., & Zhou, W. 2022. Seed priming with protein hydrolysate promotes seed germination via reserve mobilization, osmolyte accumulation and antioxidant systems under PEG induced drought stress. *Plant Cell Reports*. 2022; 41(11): 2173–2186. https://doi.org/10.1007/s00299-022-02914-6

Widiastuti, M. L., & Wahyuni, S. 2020. Penerapan teknik invigorasi dalam meningkatkan vigor benih padi. *Jurnal Penelitian dan Pengembangan Pertanian*, *39*(2), 96. http://dx.doi.org/10.21082/jp3.v39n2.2020.p96-104.

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 annuum* L.). *Ann Agric Sci 65 (2): 149-158*. https://doi.org/10.1016/j.aoas.2020.09.002

Xia, F. S., Chen, L. L., Yan, H. F., Sun, Y., Li, M. L., & Mao, P. S. 2016. Antioxidant and ultrastructural responses to priming with PEG in aged, ultra-dry oat

seed. *Seed science and Technology*, *44*(3), 556-568. https://doi.org/10.15258/sst.2016.44.3.12

Yustiningsih, M., Poto, A., & Ledheng, L. 2021. Seleksi Cekaman Kekeringan Secara In Vitro Tunas Jagung Putih (*Zea Mays* L.) Menggunakan PEG. *BIO-EDU: Jurnal Pendidikan Biologi*, *6*(2), 142-147. https://doi.org/10.32938/jbe.v6i2.1521.

Zhang, F., Yu, J., Johnston, C. R., Wang, Y., Zhu, K., Lu, F., Zhang, Z., & Zou, J. 2015. Seed priming with polyethylene glycol induces physiological changes in sorghum (*Sorghum bicolor* L. Moench) seedlings under suboptimal soil moisture environments. *PLoS One*, *10*(10), e0140620. https://doi.org/10.1371/journal.pone.0140620

Zhang, X., Xing, R., Ding, Y., Yu, J., Wang, R., Li, X., Yang, Z., & Zhuang, L. 2023. Overexpression of Gibberellin 2-Oxidase 4 from Tall FescueAffected Plant Height, Tillering, and Drought Tolerance in Rice. *Environmental and Experimental Botany, 205*(1), 1-11. https://doi.org/10.1016/j.envexpbot.2022.105118.