

DAFTAR PUSTAKA

- Akhtar, I. dan Nazir, N. 2013. Effect of Waterlogging and Drought Stress in Plants. *International Journal of Water Resources and Environmental Sciences*. 2(2): 34 - 40.
- Akram, M., Iqbal, R.M., dan Jamil, M. 2014. The Response of Wheat (*Triticum aestivum* L.) to Integrating Effects of Drought Stress and Nitrogen Management. *Bulg. J. Agric. Sci.* 20: 275 - 286.
- Albert, B., Johnsons, A., Lewis, J., Raff, M., Roberts, K., dan Walter, P. 2002. *Molecular Biology of The Cell* ^{4th} Edition. Garland Science, New York.
- Almeselmani, M., Abdullah, F., Hareri, F., Naaesan, M., Ammar, M.A., Kanbar, O.Z., dan Saud, A.A. 2011. Effect of Drought on Different Physiological Characters and Yield Component in Different Varieties of Syrian Durum Wheat. *Journal of Agricultural Science*. 3(3): 127 - 133.
- Amini, R. 2011. Effects of Osmopriming on Drought Stress Tolerance of Perennial Rye (*Secale montanum* Guss.) during Germination. *Journal of Food, Agriculture & Environment*. 9(3&4): 305 - 308.
- Amini, R. 2013. Drought Stress Tolerance of Barley (*Hordeum vulgare* L.) Affected by Priming with PEG. *Intl J Farm & Alli Sci*. 2 (20): 803 - 808.
- Anjum, S.A., Xie, X.Y., Wang, L.C., Saleem, M.F., Man, C., dan Lei, W. 2011. Morphological, Physiological and Biochemical Responses of Plants to Drought Stress. *African Journal of Agricultural Research*. 6(9): 2026 - 2032.
- Anonim. 2011. *A Guide to Polyacrylamide Gel Electrophoresis and Detection*. Bio-Rad Laboratories, Inc, California.
- Ansari, O. dan Zadeh, F.S. 2012. Osmo and Hydro priming Improvement Germination Characteristics and Enzyme Activity of Mountain Rye (*Secale montanum*) Seeds Under Drought Stress. *Journal Of Stress Physiology & Biochemistry*. 8(4): 2012.
- Arif, M., Jan, M.T., Mian, I.A., Khan, S.A., Hollington, P., dan Harris, D. 2014. Evaluating The Impact of Osmopriming Varying with Polyethylene Glycol Concentrations and Durations on Soybean. *Int. J. Agric. Biol.* 16: 359 - 364.

- Arjmand, H.S., Sharafi, S., Jouyban, Z., dan Akhlaghi, S. 2014. Effects of Priming on Seed Germination, Emergence and Field Performance. *Journal of Applied Science and Agriculture*. 9(4): 1569 - 1573.
- Barker, A.V. dan Pilbeam, D.J. 2007. *Handbook of Plant Nutrition*. Taylor and Francis Group LLC, Boca Raton.
- Basu, R.N. dan Rudrapal, A.B. 1982. Post Harvest Seed Physiology and Seed Invigoration Treatment. *Seed Sci. and Technol.* 8: 151 - 160.
- Bates, L.S. 1973. Rapid Determination of Free Proline for Water-Stress Studies. *Plant and Soil*. 39: 205 - 207.
- Bewley, J.D. 1997. Seed Germination and Dormancy. *The Plant Cell*. 9: 1055 - 1066.
- Bey, A., Pawitan, H., Las, I., Tjasyono, B., dan Winarso, F. 1992. Evaluation of Indonesian Climate and Anticipation of Dry Season. Prosiding Seminar Nasional Antisipasi Iklim 1992 dan Dampaknya terhadap Pertanian Tanaman Pangan. PERHIMPI-Badan Litbang Pertanian. pp. 23 - 49.
- Bolat, I., Dikilitas, M., Ercisli, S., İkinci, A., dan Tonkaz, T. 2014. The Effect of Water Stress on Some Morphological, Physiological, and Biochemical Characteristics and Bud Success on Apple and Quince Rootstocks. *The Scientific World Journal*. 4: 1 - 8.
- Bray, E.A. 1997. Plant Responses to Water Deficit. *Trends in Plant Sci.* 2: 48 - 54.
- Chawla, N., Kaur, H., Pathak, M., dan Chawla, R. 2014. Effect of Different Seed Priming Treatments on Activity and Isozyme Pattern of Antioxidant Enzymes in Okra. *International Journal of Advanced Research*. 2(10): 662 - 670.
- Chen, K. dan Arora, R. 2011. Dynamics of the Antioxidant System during Seed Osmopriming, Post-Priming Germination, and Seedling Establishment in Spinach (*Spinacia oleracea*). *Plant Science*. 180: 212 - 220.
- Chafi, A.A., Amiri, E., dan Gohari, A.A. 2014. Effect of Various Irrigation Regimes and Nitrogen Fertilizer on Yield and Water Use Efficiency in Soybean (*Glycin max*). *International Journal of Natural Sciences Research*. 2(9): 147 - 155.
- Copeland, L.O. dan McDonald, M.B. 2001. *Principles of Seed Science and Technology 4th ed.* Springer, New York.
- Corbineau, F. dan Come, D. 2006. Priming: a Technique for Improving Seed Quality. *Seed Testing International*. 132: 38 - 40.

- Delfine, S., Loreto, F., dan Alvino, A. 2001. Drought-Stress Effects on Physiology, Growth and Biomass Production of Rainfed and Irrigated Bell Pepper Plants in the Mediterranean Region. *J. Amer. Soc. Hort. Sci.* 126(3): 297 - 304.
- Eivazi, A. 2012. Induction of Drought Tolerance with Seed Priming in Wheat Cultivars (*Triticum aestivum* L.). *Acta Agriculturae Slovenica*. 99(1): 21 - 29.
- El-Sarag, E.I. 2013. Response of Fodder Beet Cultivars to Water Stress and Nitrogen Fertilization in Semi-Arid Regions. *American-Eurasian J. Agric. & Environ. Sci.* 13(9): 1168 - 1175.
- Esmaeili, M., dan Farahmanfar, E. 2013. Osmoconditioning as a Useful Technique for Better Stand of Barley. *International Journal of Agronomy and Plant Production*. 4(12): 3171 - 3175.
- Farhadi, E., Daneshyan, J., Hamidi, A., Radand, A.H.S., dan Valadabadi, H.R. 2014. Effects of Parent Plant Nutrition with Different Amounts of Nitrogen and Irrigation on Seed Vigor and Some Characteristics Associated with Hybrid 704 in Kermanshah Region. *J Nov. Appl Sci.* 3(5): 551 - 556.
- Fitter, A.H. dan Hay, R.K.M. 1991. *Fisiologi Lingkungan Tanaman*. Yogyakarta: Gadjah Mada University Press. Terjemahan.
- Foth, H.D. 1994. *Dasar-dasar Ilmu Tanah*. Jakarta: Erlangga.
- Foyer, C.H. dan Zhang, H. 2011. *Nitrogen Metabolism in Plants in the Post-genomic Era*. Blackwell Publishing Ltd, UK.
- Ghiyasi, M. dan Tajbakhsh, M. 2013. Osmopriming Alleviates Drought Stress in Soybean (*Glycine max* L.) Seeds during Germination and Early Growth Stages. *Journal of Applied Biological Sciences*. 7(1): 27 - 32.
- Gholinezhad, E. dan Sajedi, N. 2012. Evaluation of Water Deficit Stress Effects, Different Rates of Nitrogen and Plant Density on Remobilization, Current Photosynthesis and Grain Yield in Sunflower Var. Iroflor. *World Applied Sciences Journal*. 19(5): 650 - 658.
- Gregg, B. dan Billups, G. 2010. *Seed Conditioning Volume 2 Technology-Part A*. CRC Press Taylor and Francis Group, Boca Raton.
- Handriatni, A. dan Susilo. 2010. Upaya Peningkatan Produksi Tanaman Kangkung Darat (*Ipomoea reptans* Poir) dengan Pemangkasan dan Pemberian Pupuk N di Lahan Pantai. *PENA Akuatika*. 1(1): 1 - 11.

- Harb, A., Krishnan, A., Ambavaram, M.M.R., dan Pereira, A. 2010. Molecular and Physiological Analysis of Drought Stress in Arabidopsis Reveals Early Responses Leading to Acclimation in Plant Growth. *Plant Physiology*. 154: 1254 - 1271.
- Harborne, J.B. 1987. *Metode Fitokimia: Penuntun Cara Modern Menganalisis Tumbuhan*, Cetakan ke-2. (terj. K. Padmawinata dan I. Soediro). Bandung: ITB Press.
- Hussian, I., Ahmad, R., Farooq, M., Rehman, A., Amin, M., dan Abu Bakar, M. 2014. Seed Priming: A Tool To Invigorate The Seeds. *Sci. Agri*. 7(3): 122 - 128.
- Hussian, I., Ahmad, R., Farooq, M., Rehman, A., dan Amin, M. 2014. Seed Priming Improves The Performance of Poor Quality Wheat Seed Under Drought Stress. *App. Sci. Report*. 7(1): 12 - 18.
- Ibrahim, E.A. 2016. Seed Priming to Alleviate Salinity Stress in Germinating Seeds. *Journal of Plant Physiology*. 192: 38 - 46.
- Iseri, O.D., Korpe, D.A., Sahin, F.I., dan Haberal, M. 2015. Seed Priming to Increase Germination, Drought Tolerance, and Yield of Cucumber. *Advances in Applied Agricultural Science*. 2: 42 - 53.
- Jaleel, C.A., Manivannan, P., Wahid, A., Farooq, M., Somasundaram, R., dan Panneerselvam, R. 2009. Drought Stress in Plants: a Review on Morphological Characteristics and Pigments Composition. *Int. J. Agric. Biol*. 11: 100 - 105.
- Jalilian, J., Khalilzadeh, R., dan Khanpaye, E. 2014. Improving of Barley Seedling Growth by Seed Priming Under Water Deficit Stress. *Journal of Stress Physiology & Biochemistry*. 10(2): 125 - 134.
- Kadkhodaie, A. dan Bagheri, M. 2012. Seed Treatment to Overcome Salt and Drought Stresses during Germination in Linseed (*Linum usitatissimum* L.). *Journal of Research in Agricultural Science*. 8(2): 141 - 151.
- Kering, M.K. dan Zhang, B. 2015. Effect of Priming and Seed Size on Germination and Emergence of Six-Type Soybean Varieties. *International Journal of Agronomy*. 2015: 21 - 26.
- Khan, A.A. 1992. Preplant Physiological Seed Conditioning. *Horticultural Review*. 13: 131 - 181.
- Khan, M.B., Hussain, M., Raza, A., Farooq, S., dan Jabran, K. 2015. Seed Priming with CaCl_2 and Ridge Planting for Improved Drought Resistance in Maize. *Turk. J. Agric. For*. 39: 193 - 203.

- Kristina, N.N., Kusumah, E.D., dan Lailani, P.K. 2009. Analisis Fitokimia dan Penampilan Pola Pita Protein Tanaman Pegagan (*Centella asiatica*) Hasil Konservasi *In Vitro*. *Bul. Littro*. 20(1): 11 - 20.
- Kumar, Y. dan Matta, N.K. 2011. Changing Protein Profiles in Developing and Germinating Barley Seeds. *Annals of Biological Research* 2(6): 318-329.
- Kuswanto, H. 1996. *Dasar-dasar Teknologi, Produksi dan Sertifikasi Benih*. Yogyakarta: Andi Offset.
- Laily, A.N., Suranto dan Sugiyarto. 2012. Characterization of *Carica pubescens* in Dieng Plateau, Central Java Based on Morphological Characters, Antioxidant Capacity, and Protein Banding Pattern. *Nusantara Bioscience*. 4(1): 16 - 21.
- Lalelou, F.S., Shakiba, M.R., Nassab, A.D.M., dan Mohammadi, S.A. 2010. Effects of Drought Stress and Nitrogen Nutrition on Seed Yield and Proline Content in Bread and Durum Wheat Genotypes. *Journal of Food, Agriculture & Environment*. 8(3&4): 857 - 860.
- Lea, P.J. dan Leegood, R.C. 1993. *Plant Biochemistry and Molecular Biology*. John Wiley & Sons Ltd, England.
- Liming, S., Orecutt, D.M., dan Foster, J.G. 1992. Influence of PEG & Aeration Method during Imbibition on Germination and Subsequent Seedling Growth of Flatpea (*Lathyrus sylvestris*). *Seed Sci. & Techn.* 20: 349 - 357.
- Liu, B., Cheng, L., Li, M., Liang, D., Zou, Y., dan Ma, F. 2012. Interactive Effects of Water and Nitrogen Supply on Growth, Biomass Partitioning, and Water-Use Efficiency of Young Apple Trees. *African Journal of Agricultural Research*. 7(6): 978 - 985.
- Medeiros, D.B., Silva, E.C., Santos, H.R.B., Pacheco, C.M., Musser, R.S., Nogueira, R.J.M.C. 2012. Physiological and Biochemical Responses to Drought Stress in Barbados Cherry. *Braz. J. Plant Physiol.* 24(3): 181-192.
- Miransari, M. dan Smith, D.L. 2014. Plant Hormones and Seed Germination. *Environmental and Experimental Botany*. 99: 110 - 121.
- Moghanibashi, M., Karimmojeni, H., dan Nikneshan, P. 2013. Seed Treatment to Overcome Drought and Salt Stress during Germination of Sunflower (*Helianthus annuus* L.). *J. Agrobiol.* 30(2): 89 - 96.
- Moosavi, S.G. 2014. Effect of Water Stress and N Fertilizer Levels on Yield and Water Use Efficiency of Forage Millet. *Annual Research & Review in Biology*. 4(14): 2318 - 2326.

- Nasab, H.M., Siadat, S.A., Naderi, A., Lack, S., dan Modhej, A. 2014. The Effects of Drought Stress and Nitrogen Levels on Yield, Stomatal Conductance and Temperature Stability of Rapeseed (Canola) Genotypes. *Advances in Environmental Biology*. 8(10): 1239 - 1247.
- Nawaz, J., Hussain, M., Jabbar, A., Nadeem, G.A., Sajid, M., Subtain, M., Shabbir, I. 2013. Seed Priming a Technique. *International Journal of Agriculture and Crop Sciences*. 6(20): 1373 - 1381.
- Parera, C.A. dan Cantliffe, D. J. 1994. Pre-sowing Seed Priming. *Horticultural Reviews*. 16: 109 - 141.
- Rahimi, A., Sayadi, F., Dashti, H., dan Pour, A.T. 2013. Effects of Water and Nitrogen Supply on Growth, Water-Use Efficiency and Mucilage Yield of Isabgol (*Plantago ovata* Forsk). *Journal of Soil Science and Plant Nutrition*. 13(2): 341 -354.
- Rao, K.V.M., Raghavendra, A.S., dan Reddy, K.J. 2006. *Physiology and Molecular Biology of Stress Tolerance in Plants*. Springer, Netherlands.
- Razaji, A., Farzanian, M., dan Sayfzadeh, S. 2014. The Effects of Seed Priming by Ascorbic Acid on Some Morphological and Biochemical Aspects of Rapeseed (*Brassica napus* L.) Under Drought Stress Condition. *International Journal of Biosciences*. 4(1): 432 - 442.
- Rouhi, H.R., Aboutalebian, M.A., Zadeh, S.F. 2011. Effects of Hydro and Osmopriming on Drought Stress Tolerance during Germination in Four Grass Species. *International Journal of AgriScience*. 1(2): 701 - 774.
- Rusmin, D., Suwarno, F.C., Darwati, I., dan Ilyas, S. 2014. Pengaruh Suhu dan Media Perkecambahan terhadap Viabilitas dan Vigor Benih Purwoceng untuk Menentukan Metode Pengujian Benih. *Bul. Littro*. 25(1): 45 - 52.
- Salisbury, F.B. dan Ross, C.W. 1995. *Fisiologi Tumbuhan, Jilid III*. Terjemahan dari *Plant Physiology* 4th Edition oleh Diah R. Lukman dan Sumaryono. Bandung: ITB.
- Santoso, H.B. 2008. *Ragam dan Khasiat Tanaman Obat Sehat Alami dari Halaman Asri*. Jakarta: Agromedia Pustaka.
- Sapeta, H., Costa, J.M., Lourencço, T., Maroco, J., Piet van der L., dan Oliveira, M.M. 2013. Drought Stress Response in *Jatropha curcas*: Growth and Physiology. *Environmental and Experimental Botany*. 85: 76 - 84.

- Sedghi, M., Balaneji, B.A., dan Bakhsh, J. 2014. Physiological Enhancement of Medicinal Pumpkin Seeds (*Cucurbita pepo*. Var. *Styriaca*) with Different Priming Methods. *Iranian Journal of Plant Physiology*. 5(1): 1209 - 1216.
- Setyaningrum, H.D. dan Saparinto, C. 2011. *Panen Sayur secara Rutin di Lahan Sempit*. Jakarta: Penebar Swadaya.
- Singh, H., Jassal, R.K., Kang, J.S., Sandhu, S.S., Kang, H., Grewal, K. 2015. Seed Priming Techniques in Field Crops- A Review. *Agri. Review*. 36(4): 251 - 264.
- Soulange, J.G. dan Levantard, M. 2008. Comparative Studies of Seed Priming and Pelleting on Percentage and Meantime to Germination of Seeds of Tomato (*Lycopersicon esculentum* Mill.). *African Journal of Agricultural Research*. 3(10): 725 - 731.
- Sunarjono, H. 2003. *Bertanam 30 Jenis Sayur*. Jakarta: Penebar Swadaya.
- Supari. 2015. *Sejarah Dampak El Nino di Indonesia*. (http://www.bmkg.go.id/BMKG_Pusat/Publikasi/Artikel/Sejarah_Dampak_El_Nino_di_Indonesia.bmkg). Diakses tanggal 20 Maret 2015.
- Supriati, Y. dan Herliana, E. 2010. *Bertanam 15 Sayuran Organik dalam Pot*. Jakarta: Penebar Swadaya.
- Syaiful, S.A., Dungga, N.E., Riadi, M., dan Ridwan, I. 2014. Seed Priming with PEG 8000 for Improving Drought Stress Tolerance of Soybean (*Glycine max*). *International Journal of Agriculture Systems*. 2(1): 19 - 26.
- Tabatabaei, S.A. 2013. Effect of Osmo-priming on Germination and Enzyme Activity in Barley (*Hordeum vulgare* L.) Seeds under Drought Stress Conditions. *Journal of Stress Physiology & Biochemistry*. 9(4): 25 - 31.
- Taiz, L. dan Zeiger, E. 2002. *Plant Physiology Third Edition*. Sinauer Associates, Sunderland.
- Tian, Y., Guan, B., Zhou, D., Yu, J., Li, G., dan Lou, Y. 2014. Responses of Seed Germination, Seedling Growth, and Seed Yield Traits to Seed Pretreatment in Maize (*Zea mays* L.). *The ScientificWorld Journal*. 4: 1 - 8.
- Umair, A., Ali, S., Tareen, M.J., Ali, I., dan Tareen, M.N. 2012. Effects of Seed Priming on the Antioxidant Enzymes Activity of Mungbean (*Vigna radiata*) Seedlings. *Pakistan Journal of Nutrition*. 11(2): 140 - 144.

United Nations Industrial Development Organization (UNIDO) dan International Fertilizer Development Center (IFDC). 1998. *Fertilizer Manual*. Kluwer Academic Publishers, Netherlands.

Ware, E.W. 1975. *Producing Vegetable Crops*. The Interstate Printer Publisher Inc, England.

Widoretno, W., Guhardja, E., Ilyas, S., dan Sudarsono. 2002. Efektifitas Polietilena Glikol untuk Mengevaluasi Tanggapan Genotipe Kedelai terhadap Cekaman Kekeringan pada Fase Perkecambahan. *J. Hayati*. 9(2): 33 - 36.

Wiedenhoeft, A.C. 2006. *Plant Nutrition*. Chelsea House Publishers, New York.

Zhou, Z. dan Oosterhuis, D.M. 2012. Physiological Mechanism of Nitrogen Mediating Cotton (*Gossypium hirsutum* L.) Seedlings Growth under Water-Stress Conditions. *American Journal of Plant Sciences*. 3: 721 - 730.