

DAFTAR PUSTAKA

- Abbasi AR, Sarvestani R, Nargesi BM, Bagheri A. 2014. Drought stress induced changes at physiological and biochemical levels in some common Vetch (*Vicia sativa* L.) genotypes. *J Agric Sci Tech* 16 (3): 505-516.
- Abou-Khalifa, A.A.B., Misra A.N., Salem.A.E.A.K.M. 2008. Effect of leaf Cutting on Physiological Traits and Yield of Two Rice Cultivars. *Afr. J.Plant. Sci.* 2:147-150.
- Adisya Putra, Sudarsono, Setiawan K. 2011. Pewarisan sifat densitas stomata dan laju kehilangan air daun (rate leaf water loss RWL) pada kacang tanah (*Arachis hypogaea* L.). *Jurnal Natur Indonesia* 14 (1). Hal. 73-89.
- Agrawal, M. and Zhu J.K., 2005. *Integration of abiotic stress signaling pathways*. Pp 215-237. In M Jenks and M Hasegawa (Eds) *Plant Abiotic Stress*. Blackwell Publisher.
- Akram, H. M., A. Ali, A. Sattar, H.S.U. Rehman, and A. Bibi. 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.
- Alexander, A.K., D. Strete, dan M.J. Niles. 2003. *Laboratory Exercise in Organismal and Molecular Microbiology*. Mc. Graw-Hill Publishing. New York.
- Anjum, S.A., Xie X., Wang L.C., Saleem M.F., Man C., Lei W.. 2011. Morphological, physiological and biochemical responses of plants to drought stress. *Afr. J. Agr. Res.* 6:2026-2032.
- Anonim. 2018. <http://bbpadi.litbang.pertanian.go.id> . Diakses 23 Mei 2019.
- Arora, A., Sairam R.K., and Srivastava G.C. 2002.. Oxidative Stress and Antioxidative System in Plants. *Curr. Sci.* 82:1227-1238.
- Barret M, Morrissey JP, O'Gara F. 2011. Functional genomics analysis of plant growth-promoting rhizobacterial traits involved in rhizosphere competence. *Biol Fertil Soils* 47:729–743.
- Bartels, D., Sunkar R.. 2005. Drought and salt tolerance in plants. *Crit Rev in Plant Sel.* 24:23-58.
- Basu, S., Roychoudhury A., Saha P.P., Sengupta D.N.. 2010. Differential antioxidative responses of indica rice cultivars to drought stress. *Plant Growth Reg.* 60:51-59.
- Bates LS, Waldren RP, Teare ID (1973) Rapid Determination of Free Proline for Water Stress Studies. *Plant Soil* 39: 205-207.

- Besset, J. Genard, M., Girard, T., Serra, V., & Bussi, C. 2001. Effect of Water Stress Applied During the Final Stage of Rapid Growth on Peach Tress (c. Big Top). *Jour. Scientia Horticulturae*. Vol. 91. Pp : 289-303.
- Bhattacharjee, S. 2012. The Language of Reactive Oxygen Species Signaling in Plants. *J. Bot.* 2012:1-22.
- Bhattacharjee, S. 2005. Reactive Oxygen Species and Oxidative Burst: Roles in Stress, Senescence and Signal Transduction in Plant. *Curr. Sci.* 89: 1113-1121.
- Botsford, J.L. and T.A. Lewis. 1990. *Osmoregulation in Rhizobium meliloti ; Production of Glutamic Acid in response to Osmotic Stress*. *Applied & Environmental Microbiology*:488-494.
- Bouman, B.A.M., Tuong TP. 2001. *Field water management to save water and increase its productivity in irrigated rice*. *Agric Water Manage.* Page 49:11-30.
- Chaitanya KV, Sundar D, Jutur PP, Ramachandra Reddy A. 2003. Water stress effects on photosynthesis in different mulberry cultivars. *Plant Growth Regul.* 40: 75–80.
- Chandrashekar, K. R., Sandhyarani, S., 1996: Salinity induced chemical changes in *Crotalaria striata* Dc. plants. *Ind. J. Plant Physiol.* NS. 1, 44–48.
- Chugh, V., Kaur N., Gupta A.K., 2011. Evaluation of oxidative stress in maize (*Zea mize*) seedling in response to drought stress. *Indian J. Bioc. & Biophy.* 48:47-53.
- Csonka, L.N. 1989. *Physiological and genetic responses of Bacteria to osmotic Stress*. *Microbiological Reviews*. 199:121-147.
- Darajat, A.A., Sudiati S., Nafisah. 2009. *Ketersediaan Plasma Nutfah untuk Perbaikan Varietas Padi*. <http://bbpadi.litbang.pertanian.go.id>. Diakses 20 Mei 2019.
- Datta, S.K., & Khush, G.S. (2002). Improving rice to meet food and nutrient needs: Biotechnological approaches. *Journal of Crop Production*, 6(1), 229-247.
- Das, K. K., Panda D., Nagaraju M., Sharma S.G., and Sarkar R.K. 2004. Antioxidant enzymes and aldehyde releasing capacity of rice cultivars (*Oryza sativa* L.) as determinants of anaerobic seedling establishment capacity. *Bulg J. Plant Physiol.* 30:34;44.
- Donggulo, C.V., Iskandar M.L., Usman M.. 2017. Pertumbuhan dan hasil Tanaman Padi (*Oryza sativa* L.) pada Berbagai Pola Jajar Legowo dan Jarak Tanam. *J. Agroland*. Vol 24(1): 27-35.
- Du, H., Wang N., Cui F., Li X., Xiao J., Xiong L.. 2010. Characterization of the β -caroten hydroxylase gene DSM2 conferring drought and oxidative

stress resistance by increasing xanthophylls and abscisic acid synthesis in rice. *Plant Physiol.* 154:1304-1318.

Elango R , Parthasarathi R, MegalaS. 2013. Field level studies on the association of plant growth promoting rhizobacteria (PGPR) in Gloriosa Superba L. rhizosphere. *Indian Streams Research Journal* 3(10): 1-6.

Farag, M.A., Gad H.A., Heiss A.G., Wessjohann L.A. 2013. Metabolomics Driven Analysis of Six Nigella Species Seeds via UPLC-qTOF-MS and GC-MS Coupled to Chemometrics. *Food Chem.* 151:333-342.

Farooq M., Wahid A., Kobayashi N., Fujita D., Basra S.M.A. 2009. Plant drought stress: effects, mechanisms and management. *Agronomy for Sustainable Development.* 29: 185-212.

Froyer, C.H. and Noctor G. 2009. Redox Regulation in Photosynthetic Organism: Signaling, Acclimation, and Practical Implications. *Anti & Redox Signal.* 11:861-906.

Foyer, C.H. and Noctor, G. 2005. Redox Homeostasis and Antioxidant Signaling : a Metabolic Interface between Stress Preception and Physiological Responses. *Plant Cell.* 17:1866-1875.

Froyer, C.H. and Noctor G. 2003. Redox Sensing and Signaling Associated with reactive Oxygen in Chloroplast, Peroxisome and Mitochondria. *Physiol. Plant.* 119:355-364.

Gholami A, Biari A, Nezarat S. 2008. *Effect Of Seed Priming With Growth Promoting Rhizobacteria At Different Rhizosphere Condition On Growth Parameter Of Maize.* International Meeting On Soil Fertility Land Management and Agroclimatology. Turkey P: 851-856.

Gill, S.S., and Tuteja N. 2010. Reactive Oxygen Species and Antioxidant Machinery in Abiotic Stress Tolerance in Crop Plants. *Plant Physiol. Biochem.* 48: 909-930.

Guo, Z., Ou W., Lu S., Zhong Q. 2006. Differential responses of Antioxidative System to Chilling and Drought in for Rice Cultivars Differing in Sensitivity. *Plant Physiol Biochem.* 44:828-836.

Hale, M.G., & Orchutt, D.M.. 1987. *The Physiology of Plant Under Stress.* John and Sons, Inc. New York. Pp. 206.

Hall, R.D. 2006. Plant Metabolomics : from Holistic Hope, to Hype, to Hot Topic. *J. New Phytologist.* 169: 453-468.

Halliwell, B., J.Gutteridge. 2002. *Free Radicals in biology and Medicine.* 3rd edition. Oxford Univ. Press. p. 22.

Halliwell, B. 2006. Reactive species and antioxidants. Redox biology a fundamental theme of aerobic life. *Plant physiology* 141: 312-322.

- Harbone, J.B., 1984. *Phytochemical Methods: A Guide to Modern Technique of Plant Analysis*. 2nd ed. Chapman and Hall, London.
- Haupt-Herting S, Fock HP. Oxygen exchange in relation to carbon assimilation in water-stressed leaves during photosynthesis. *Ann Bot* 2002;89:851–9.
- Hiraga, S., Yamamoto, K. ito. H., Sasaki K., Matsui H., Honma M., Nagamura Y., Sasaki T., Ohashi Y.. 2000. Diverse Expression Profiles of 21 rice peroxidase genes. *FEBS Lett*. 1471:245-250.
- Hsu, Y.T. and Kao C.H. 2003. Role of Absciscic Acid in cadmium Tolerance of rice (*Oryza sativa* L.) Seedlings. *Plant, Cell Environ*. 6:867-875.
- Irchaiya, D., A. Kumar, A. Yadav, N. Gupta, S. Kumar, G. Nikhil, K. Santosh, Y. Vinay, A. Prakash, and H. Gurjar. 2015. Metabolite in plant and its classification. *Worl Journal of Pharmacy and Pharmaceutical Sciences* 4(1):287-305.
- Iswanto, E.H., R. heru P., Agus Guswara.. 2016. Peran Senyawa Metabolit Sekundr tanaman paddi terhadap Ketahanan Wereng Cokelat (*Nilaparvata ligens*). *Iptek Tanaman Pangan*. Vol. 11 No. 2.
- Jadid, M.N.. 2007. *Uji toleransi aksesori kapas (*Gossypium hirsutum* L.) terhadap cekaman kekeringan dengan menggunakan polietilena glikol (PEG)*. Skripsi. Fakultas Sains dan Teknologi Universitas Islam Negeri Malang, Malang.
- Jaleel, C.A., Manivannan P., Waid A., Faroo M., Somasundaram, R., Panneerselvam R.. 2009. Drought stress in plants : a review on morphological characteristics and pigments composition. *Int. J. Agric Biol*. 11:100-105.
- Ji, K. Wang Y., weining S., Qiaojun L., Hanwei M., Shihua S., Hui C. 2012. Drought-Responsive Mechanisms in Rice Genotypes with Contrasting Drought Tolerance. *J. Plant. Physiol*. 169:336-344.
- Johnson, C.H., Patterson A.D., Idle J.R., Gonzales F.J. 2012. Xenobiotic Metabolomics : Major Impact on The Metabolome. *Annual Review of Pharmacology and Toxicology*. Vol. 52:37-56.
- Joo, G.J., Kim Y.M., Kim J.T., Rhee I.K., Kim J.H., Lee I.J.. 2005. Gibberellins-producing rhizobacteria increase endogenous gibberellins content and promote growth of red peppers. *J Microbiol*. 43(6):510-5.
- Jordan WR, Dugas WR, Shouse PJ.1983. *Strategies for crop improvement for drought-prone regions*. Agric Water Manag. Page 7:281-299.
- Jutono, J. Soedarsono, S. Hartadi. S. Kabirun, Suhadi, dan Soesanto. 1973. *Pedoman Praktikum Mikrobiologi Umum Untuk Perguruan Tinggi*. Universitas Gadjah Mada, Yogyakarta.

- Kar, M.E., Mishra D. 1976. Catalase, Peroxidase and Polyphenooxidase Activities Druring Rice Leaf Senescens. *Plant Physiol.* vol. 57:315-319.
- Kartahadimaja, J., R. Wentasari, dan R.N. Sesanti. 2010. Pertumbuhan dan produksi polong segar edamame varietas rioko pada empat jenis pupuk. *AGROVIGOR* 3(2): 131-137.
- Khalid M, Arshad M, Shaharoona B, Mahmood T. 2009. Plant growth promoting rhizobacteria and sustainable agriculture. In: Khan MS, Zaidi A, Musarrat J (eds) *Microbial strategies for crop improvement*. Springer-Verlag, Berlin, Germany, pp 133–160.
- Kloepper, J.W. 1993 Plant growth-promoting rhizobacteria as biological control agents. In *Soil Microbial Ecology. Applications in Agricultural and Environmental Management*, ed. Metting Jr., F.B. New York: Marcel Dekker, Inc. ISBN 0-82478737-4.
- Kramer, P.J..1983. *Water Relations of Plants*. Academic Press Inc. New York.
- Kunin, C.M. & Rudy, J. 1991 Effect of NaCl-induced osmotic stress on intracellular concentrations of glycine betaine and potassium in *Escherichia coli*, *Enterococcus faecalis*, and staphylococci. *Journal of Laboratory Clinical Medicine*. 118, 217–224.
- Kurniawati, Siti, Nurul Khumaida, Sinthi Wahyuning Ardie, N. Sri Hartati, Enny Sudarmonowati. 2014. Pola Akumulasi Prolin dan Poliamin Beberapa Aksesori Tanaman Terung pada Cekaman Kekeringan. *J. Agron. Indonesia* 42 (2) : 136 – 141(2014). Bogor. Hal. 137.
- Lagrimini, L.M., Gingas V., Finger F., Rothstein S., and Liu T. 1997. Characterization of antisense transformed plants deficient in the tobacco anionic peroxidase. *Plant Physiol.* 114:1187-1196.
- Lawlor DW, Cornic G.2002. Photosynthetic carbon assimilation and associated metabolism in relation to water deficits in higher plants. *Plant Cell Environ.* 25: 275–94.
- Laxa, M., Michal L., Wilena T., Kamel C., Karl J.D.. 2019. The Role of The Plant Antioxidant System in Drought Tolerance. *Antioxidants*. 8, 94; doi:10.3390/antiox8040094.
- Li, R.P.G., M. Baum, S. Grando and S.Ceccarelli. 2006. Evaluation of Chlorophyll Content and Fluorescence Parameters as Indicators of Drought Tolerance in Barley. *Agricultural Sciences in China*. 5 (10): p.751-757.
- Loon LC. 2007. Plant responses to plant growthpromoting rhizobacteria. *Eur J. Plant Pathology* 119:243-254.

- Maclean, J.L., D.C. Dawe, B. Hardy, G.P. Hettel. 2002. *Rice Almanac : Source book for the most important economic activity on earth third edition*. CABI Publishing. ISBN 0 85199636 1.
- Maleki, M., Ebrahimzade H., Gholami Z., Niknam V. 2011. The Effect of Drought Stress and Exogenous Abscissic Acid on growth, Protein Content and Antioxidative Enzyme Activity in Saffron (*Crocus sativus* L.). *Afri J. Biotech.* 10:9068-9075.
- Marklund S, Marklund G. Involvement of superoxide anion radical in the auto-oxidation of pyrogallol and a convenient assay for superoxide dismutase. *Eur J Biochem.* 1974; 47: 469–474.
- Martinez-Ferri, E. Manrique E., Valladares F., Balaguer L.. 2004 Winter photoinhibition in the field involves different processes in four co-occurring Mediterranean tree species. *Tree Physiol.* 24:981-990.
- Memelink, J. 2004. Tailoring the Plant metabolome without a Loose Stich. *Trends in Plant Science.* 7:305-307.
- Menezes-Benavente, L., Teixeira F.K., Kamei C.L.A., Margis Pinheiro M. 2004. Salt Stress Induced Altered Expression of Genes Encoding Antioxidant Enzymes in Seedlings of a Brazilian Indica Rice (*Oryza sativa* L.). *Plant Sci.* 166:323-331.
- Miller, k.J. and J.M. Wood. 1996. Osmoadaptation by Rhizosphere bacteria. *Annual Review Microbiol.* 101-136.
- Miller, G., Shulaev, V. and Mittler R. 2008. Reactive Oxygen Signaling Abiotic Stress. *Physiol Plant.* 133:481-489.
- Mittler, G., Suzuki, N., Cifti-Yilmaz, S. and Mittler R., 2009. Reactive Oxygen Species Homeostasis and Sugnaling during Drought and Salinity Stresses. *Plant Cell Environ.* 33:453-467.
- Miranti, Sri Dewi. 2016. *Peran Inokulum Rhizobakteri Osmotoleran terhadap Pertumbuhan dan Produksi jagung Manis dalam Kondisi Cekaman Kekeringan di tanah Pasir Pantai*. Skripsi UGM.
- Mundree, S.G.. 2002. Physiological and Molecular insight into drought tolerance. *African J. Biotechnol.* 1:28-38
- Munro, P.M., Gauthier, M.J., Breittmayer, V.A. & Bongiovanni, J. 1989 Influence of osmoregulation processes on starvation survival of *Escherichia coli* in seawater. *Applied and Environmental Microbiology.* 55, 2017–2024.
- Nakano, Y. and Asada K. 1981. Changes in enzyme activities associated with carbohydrate metabolism during development of rice endosperm. *Plant Scii.* vol. 82:15-20.

- Naveed M, Birgit M, Sohail Y., Milica P., Muhammad A., Angela S. 2014. The endophyte *Enterobacter* sp. FD17: a maize growth enhancer selected based on rigorous testing of plant benefic traits and colonization characteristics. *Bio Fertil Soils* 50:249-262.
- Oikawa, A., Fumio M., Miyako K., Yozo O., Kazuki S. 2008. Rice Metabolomics. *Springer*. 1:63-71.
- Oukarroum A., S.E. Madidi, G. Schansker, and R.J. Strasser. 2007. Probing the response of barley cultivars (*Hordeum vulgare* L.) by chlorophyll a fluorescence OLKJIP under drought stress and rewatering. *Environmental and Experimental Botany* 60(3):438-446.
- Paleg. L.G., Aspinall D (ed). 1981. *The physiology and biochemistry of drought resistance in plants*. Academic Press. Sydney. Pp 15-37.
- Parent B, Hachez C, Redondo E, Simonneau T, Chaumont F, Tardieu F. 2009. Drought and Absciscic Acid Effects on Aquaporin Content Translate into Changes in Hydraulic Conductivity and Leaf Growth Rate: A Trans-Scale Approach. *Plant Physiology*. 149: 2000-2012.
- Parry, M.A.J., Andralojic PJ, Khan S, Lea PJ, Keys AJ. Rubisco activity: effects of drought stress. *Ann Bot* 2002;89:833–9. Patel, P.K., Hemantaranjan A., Sarma B.K. and Singh R.. 2011. Growth and antioxidant stress system under drought stress in Chickpea (*Cicer arietinum* L.) as sustained by salicylic acid. *J Stress Physiol & Bioch.* 7:130-144.
- Perez-Molphe-Balch EM et al.. 1996. Effect of Water Stress on Plant Growth and Root Protein Three Cultivar of Rice (*Oryza sativa*) with Different Levels of Drought Tolerance. *Physiol Plant*. 96: 284-290. Peter, H., Burkovski, A. & Kramer, R. 1996 Isolation, characterization, and expression of the *Corynebacterium glutamicum* betP gene encoding the transport system for the compatible solute glycine betaine. *Journal of Bacteriology*. 178, 5229–5234.
- Pham, J. and Desikan R. 2009. *Reactive Oxygen Species Signaling in Stomata*. pp. 55-72, In R. Puppo (ed). *Reactive Oxygen Species in Plant Signaling*. Springer Verlag.
- Putri, S.P., Yamamoto S., Tsugawa H., Fukusaki E. 2013. Current Metabolomics : Technological Advances. *Journal of Bioscience and Bioengineering*. Vol. 116 (1).9-16.
- Reddy, A.R., Chaitanya K.V., Vivekanandan M. 2004. Drought-induced Responses of Photosynthesis and Antioxidant Metabolism in Higher Plants. *J. Plant Physiol.* 161: 1189-1202.

- Refli, Purwestri YA (2016) The response of antioxidant genes in rice (*Oryza sativa*) seedling cv. Cempo Ireng under drought and salinity stresses. *AIP Conf Proc* 1744, 020047-1-020047-8.
- Sairam R.K., Tyagi A.. 2004 Physiology and molecular biology of salinity stress tolerance in plants. *Curr Sci.* 86:407-420.
- Salsinha, Y.C.F., Didik I., Yekti A.P., Diah R.. 2020. Selection of drought-tolerant local rice cultivar from East Nusa tenggara, Indonesia during vegetative stage. *Biodiversitas.* 21:170-178.
- Sasaki, K. Iwai T., hiraga S., Kuroda K., Seo S., Mitsuhara I., Miyasaka A. Iwano M., Hiroyuki Ito H., matsui H., Ohashi Y. 2004. Ten Rice Peroxidases Redundantly Repond to Multiple Stresses Including Infection with Rice Blast Fungus. *Plant Cell Physiol.* 45:1442-1452.
- Scandalios, J.G.. 2002. The Rise of ROS. *Trends Biochem Sci.* vol. 27:483-486.
- Selote, D.S. and Khanna-Chopra R. 2004. Drought-induced Spikelet Sterility is Associated with an Inefficient Antioxidant Defence in Rice Panicles. *Physiol Plant.* 121:462-471.
- Sharma, P. and Dubey S.D.. 2005. Drought induce oxidative stress and enhances the activities of antioxidant nzymes in growing rice seedlings. *Plant Growht Regul.* 46:209-221.
- Shehab GG, Ahmed OK, El-Beltagi HS, 2010, Effects of various chemical agents for alleviation of drought stress in rice plants (*Oryza sativa* L.), Not Bot Hort Agrobot Cluj 38 (1): 139-148.
- Singh B, Redddy KR, Redona ED, Walker T. 2017. Screening of rice cultivars for morpho-physiological responses to early season soil moisture stress. *Rice Sci* 24 (5): 322-335.
- Sitinjak, Haryanto, Idwar. 2015. Respons berbagai Varietas Padi Sawah (*Oryza sativa* L.) yang Ditanam dengan Pendekatan teknik Budidaya jajar Legowo dan Sistem Tegel. *JOM Faperta Vol. 2 No.2 Oktober 2015.*
- Sofo, A., Scopa, A. Nuzzaci, M., Vitti, A. Ascorbate peroxidase and catalase activities and their genetic regulation in plants subjected to drought and salinity stresses. *Int. J. Mol. Sci.* 2015, 16, 13561–13578.
- Solichatun, E. Anggarwulan., W. Mudyantini. 2005. Pengaruh Ketersediaan Air terhadap Pertumbuhan dan Kandungan Bahan Aktif Saponin Tanaman Gingseng Jawa. *Biofarma.* 3(2):47-51.
- Smith LT, Pocard J-A, Bernard T, Rudulier DL (1988) Osmotic control of glycine betaine biosynthesis and degradation in *Rhizobium meliloti*. *Journal of Bacteriology* 170, 3124–3149.

- Sujinah dan Ali Jamil. 2016. Mekanisme Respon Tanaman Padi terhadap Cekaman Kekeringan dan Varietas Toleran. *Iptek Tanaman Pangan*. Vol. 11 No.1.
- Suprihatno, B. Aan A.D., Satoto, Baehaki S.E. I N. Wdiarta, Agus S., S. Dewi I., Ooy S.L., Hasil S., 2009. *Deskripsi Varietas Padi*. Subang. Balai Besar Penelitian Tanaman Padi.
- Sutariati, GAK, Widodo, Sudarsono, Ilyas S. 2006. Pengaruh perlakuan rhizobakteri pemacu pertumbuhan tanaman terhadap viabilitas benih serta pertumbuhan bibit tanaman cabai. *Bul. Agron*. 34(1): 46-54.
- Swapna, S., Korukkanvilakath S. S., 2017. Screening for Osmotic Stress Responses in Rice Varieties under Drought Condition. *Rice Science*. Vol. 24, No. 5, 2017.
- Taiz L, Zeiger E. 2002. Plant Physiology 2nd ed. *The Benjamin/Cummings Publisher*. California. Tao, H., H. Brueck, K. Dittert, C. Kreye, S. Lin, and 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*. Vol. 95(1):1-12.
- Tamura T, Hara K, Yamaguchi Y, Koizumi N, Sano H. Osmotic stress tolerance of transgenic tobacco expressing a gene encoding a membrane-located receptor-like protein from tobacco plants. *Plant Physiol* 2003;131:454–62.
- Teixera, F.K., Menezes-Benavente L., Galvao V.C., Margis R., Margis P.M. 2006. Rice Ascorbate Peroxidase Gene Family Encodes Functionally Diverse Isoforms Localized in Different Subcellular Compartments. *Planta*. 224:300-314.
- Teixera, F.K., Menezes-Benavente L., Margis R., Margis P.M. 2004. Analysis of The Molecular Evolutionary History of The Ascorbate Peroxide Gene Family : Inferences from The Rice Genome. *J. Mol. Evol*. 59:761-770.
- Tezara W, Mitchell VJ, Driscoll SD, Lawlor DW. 1999. Water stress inhibits plant photosynthesis by decreasing coupling factor and ATP. *Nature*. 1401:914–7.
- Timmusk S, Grantcharova N, Wagner EGH. 2005. *Paenibacillus polymyxa* invades plant roots and forms biofilms. *Applied and Environmental Microbiology* 71(11): 7292–7300.
- Tsai, Y.C., Hong C.Y., Liu L.F. kao C.H.. 2005. Expression of Ascorbate Peroxidase and Glutathione Reductase in Roots of rice Seedlings in response to NaCl and H₂O₂. *J. Physiol*. 162:291-299.
- Tubur H.W.. 2011. *Respon beberapa genotipe padi terhadap periode kekeringan pada sistem sawah*. Tesis. Sekolah Pascasarjana. IPB. Bogor.

- Tyas, M.R. 2014. *Peranan Inokulum Ganda Rhizobia Pembintil Akar dan Rhizobakteri Osmotoleran terhadap Pertumbuhan Tanaman Kedelai (*Glycine max* L.) dalam Kondisi Cekaman Kekeringan*. Fakultas Pertanian Universitas Gadjah Mada. Skripsi.
- Usman M, Raheem ZF, Ahsan T, Iqbal A, Sarfaraz ZN, Haq Z. 2013. Morphological, physiological, and biochemical attributes as indicators for drought tolerance in rice (*Oryza sativa* L.). *Eur J Biol Sci* 5 (1): 23-38.
- Varnova, E., Inze D., Van Breusegem F. 2002. Signal Transduction during Oxidative Stress. *J. Exp. Bot.* 53:1227-1236.
- Wang, F.Z., Wang Q.B., Kwon S.Y., Kwak S.S., Su W.A.. 2005. Enhanced Drought Tolerance of Transgenic Rice Plants Expressing a Pea Manganese Superoxide Dismutase. *Plant Physiol.* vol. 162:465-472.
- Warsito, M.F., 2018. Analisis Metabolomik : Metode Modern dalam Pengujian Kualias Produk Herbal. *BioTrends*. Vol. 9 No. 2.
- Widowati, Wahyu, Ratu Safitri, Rymond Rumumpuk, Marlinda Siahaan. 2005. Penapisan Aktivitas Superoksida Dismutase pada Berbagai Tanaman. *JKM. Vol. 5, No1, Juli 2005*. Hal 35-40.
- Yancey, P.H., M.E. Clark, S.C. Hand, R.D. Bowlus & G.N. Somero. 1982. *Living with Water Stress : Evolution of Osmolyte System*. *Science* (217):1214-1222.
- Yoshida, S., D.A. Forno., J.H.Cock., and K.A. Gomez.. 1976. *Laboratory Manual for Physiological Studies of Rice*. Third Edition. The International Rice Research Institute. Philippines.
- Yusniawati, Sudarsono, Hajrial Aswidinnoor, Sri Hendrastuti, Djoko Santoso. 2008. Pengaruh Cekaman Kekeringan terhadap Pertumbuhan , Hasil dan Kandungan Prolina Daun Cabai. *Jurnal Agrista Vol. 12 No 1, 2008*. Hal. 19-20.
- Yuwono T, Susilowati LE, Ikhwan A, Ngadiman, Shovitri M, Mursyanti E, Soedarsono J. 1997. The potency of drought-tolerant rhizobacteria as inoculants for Gogo rice. In '*Proceedings of IC Biotech*'. (Osaka University: Osaka, Japan).
- Yuwono, Triwibowo. 2005. Metabolism of betain as carbon source by an osmotolerant bacterium isolated from the weed rhizosphere. *Worlds Journal of Microbiology & Biotechnology* 21: 69-73.

Yuwono, T., D. Handayani, dan J. Soedarsono. 2005. The role of osmotolerant rhizobacteria in rice growth under different drought conditions. *Australian Journal of Agricultural Research*. 56: 71.