

## DAFTAR PUSTAKA

- Ahn, J.C., Kim, D-W., You, Y.N., Seok, M.S., Park, J.M., Hwang, H., Kim, B-G., Luan, S., Park H-S, dan Cho, H.S. 2010. Classification of Rice (*Oryza sativa* L. Japonica Nipponbare) Immunophilins (fkbps, cyps) and Expression Patterns Under Water Stress. *BMC Plant Biol.* 10 (235): 1-22.
- Aidy, E.A. N., Emery, E.M. I., Draz, A. E. and Badawi, A. T. 2000. Chemical and Morphological Characters of Some Local Rice Genotypes. *Egyptian Journal of Agricultural Research.* 78(2): 693-716.
- Apitz, J., Schmied, J., Lehmann, M., Hedtke, B. and Grimm, B. 2014. GluTR2 Complements a hemal Mutant Lacking Glutamyl-tRNA Reductase 1, but is Differently Regulated at the Post-Translational Level. *Plant Cell Physiology.* 55(3): 645-657.
- Bajracharya, J., Steele, K.A., Jarvis, D.I., Sthapit, B.R., and Witcombe, J.R. 2006. Rice Landrace Diversity in Nepal: Variability of Agro-Morphological Traits and SSR Markers in Landraces from a High-Altitude Site. *Field Crops Res.* 95: 327-335.
- Bioversity International. 2007. *Descriptros for Wild and Cultivated Rice (Oryza spp.)*. Biodiversity International: Roma. 63 p.
- Byers, R.L., Harker, D.B., Yourstone, S.M., Maughan, P.J., and Udall, J.A. 2012. Development and Mapping of SNP Assays in Allotetraploid Cotton. *Theor Appl Genet.* 124: 1201-1214.
- Chang, T.T and Bardenas, E.A. 1965. *The Morphology and Varietal Characteristics of the Rice Plant*. The International Rice Research Institute: Manila. 5-11 pp.
- Chen, Q., Mao, X., Zhang, Z., Zhu, R., Yin, Z., Yu, H., Jia, H., Jiang, S., Ni, Z., Jiang, H., Han, X., Liu, C., and Qi, Z. 2016. SNP-SNP Interaction Analysis on Soybean Oil Content Under Multi-Environments. *Plos One.* 11(12):1-13.
- Cho, Y-C., Shin, Y-S., Ahn, S-N., Gregorio, G.B., Kang, K-H., Brar, D., Moon, H-P. 1999. DNA Fingerprinting of Rice Cultivars using AFLP and RAPD Markers. *Korean J. Crop Sci.* 44 (1): 26-31.
- Cole-Rodgers, P., Smith, D.W. and P. W. Bosland. 1997. A Novel Statistical Approach to Analyze Genetic Resource Evaluations Using *Capsicum* as an example. *Crop Sci.* 37: 1000-1002.
- Cui, D., Tang C., Li, J., A. X., Yu, T., Ma, X., Zhang, E., Wang, Y., Cao, G., Xu, F., Dai, L., Han, L., and Koh, H.J. 2017. Genetic Structure and Isolation by Altitude in Rice Landraces of Yunnan, China Revealed by Nucleotide and Microsatellite Marker Polymorphisms. *PLoS ONE.* 12(4): 1-17.
- da Silva, L.R and Silva, B.M. 2016. *Natural Bioactive Compounds from Fruits and Vegetables as Health Promoters*. Bentham Science Publisher: Sharjah, UAE. 222-223 pp.
- Deng, G-F., Xu, X-R., Zhang, Y., Li, D., Gan, R-Y., and Li H-B. 2013. Phenolic Compounds and Bioactivities of Pigmented Rice. *Crit Rev Food Sci Nutr.* 53(3): 296-306.

- Du, H., Ouyang, Y., Zhang, C., Zhang, Q. 2011. Complex Evolution Of S5, A Major Reproductive Barrier Regulator, in The Cultivated Rice *Oryza sativa* and Its Wild Relatives. *New Phytol.* 191: 275–287.
- Ebana, K., Yonemaru, J-I., Fukuoka1, S., Iwata, H., Kanamori, H., Namiki, N., Nagasaki, H., and Yano, M. 2010. Genetic Structure Revealed by A Whole-Genome Single-Nucleotide Polymorphism Survey of Diverse Accessions of Cultivated Asian Rice (*Oryza sativa*). *Breeding Science.* 60: 390–397.
- Falconer, D. S., and Mackay, T.F.C. 1996. *Introduction to Quantitative Genetics.* Addison-Wesley Longman: Harlow, UK.
- FAO, 2017. FAO Rice Market Mo 60 (<http://www.fao.org/economic/est/publications/rice-publications/rice-market-monitor-rmm/en/>). Diakses tanggal 9 Agustus 2017.
- Feltus, F.A., Wan, J., Schulze, S.R., Estill, J.C., Jiang, N., and Paterson, A.H. 2004. An SNP Resource for Rice Genetics and Breeding. *Genome Res.* 14: 1812–1819.
- Feng, S., Chen, X., Wu, S., and Chen, X. 2015. Recent Advances in Understanding Plant Heterosis. *Agricultural Sciences.* 6 :1033-1038.
- Garris, T., Coburn, T. H., Kresovichn, J. and McCouch, S. 2004. Genetic Structure and Diversity in *Oryza sativa* L. *Genetics.* 169: 1631-1638.
- Ghosh, S.K. and Sarkar, C.K.G. 2001. Molecular Markers for Cultivar Identification and PBR. *Journal of Intellectual Property Rights.* 6: 377-388.
- Goufo, P. and Trindade, H. 2014. Rice Antioxidants: Phenolic Acids, Flavonoids, Anthocyanins, Proanthocyanidins, Tocopherols, Tocotrienols,  $\gamma$ -oryzanol, and Phytic Acid. *Food Sci Netr.* 2(2): 75-104.
- Guo, J., Xu, X., Li, W., Zhu, W., Zhu, H., Liu, Z., Luan, X., Dai, Z., Liu, G., Zhang, Z., Zeng, R., Tang, G., Fu, X., Wang, S. and Zhang, G. 2016. Overcoming inter-subsoecific Hybrid Sterility in Rice by Developing Indica-Compatible Japonica lines. *Scientific Reports.* 6: 1-8.
- Handayani, A.P., Karim, R., and Muhammad, K. 2015. Optimization of Processing Conditions for Aqueous Pigmented Rice Extracts as Bases for Antioxidans Drinks. *J. Rice Res.* 3(2): 1-7.
- Hebert, P.D.N, Cywinska, C., Ball, S.I and deWaard, J.R. 2003. Biological Identification Throught DNA Barcodes. *Proc Biol Sci.* 270 (1512): 313-321.
- Heim, E. 2015. *Flora and Vegetation of Bali Indonesia: An illustrated Field Guide.* BoD – Books on Demand : Norderstedt. 188 pp.
- Henderson, A. 2006. Traditional Morphometrics in Plant Systematic and its Role in Palm Systemtic. *Bot. J.Linn. Soc.* 151:103-111.
- Herve, P and Kayano, T. 2006. Japonica Rice Varieties (*Oryza sativa*, Nipponbare, and others). *Methods Mol Biol.* 343: 213-222.
- Hou, Z., Qin, P., Zhang, Y., Cui, S., and Ren, G. 2013. Identification of Anthocyanins Isolated from Black Rice (*Oryza sativa* L.) and Their Degradation Kinetics. *Food Research International.* 50: 691-697.

- Huang, T.J., Kirk, B., Favis, R., Soussi, T., Paty, P. 2002. An Endonuclease/Ligase Based Mutation Scanning Method Especially Suited for Analysis of Neoplastic Tissue. *Oncogene*. 21: 1909-1921.
- Huq, Md. A., Akter, S. Nou, I.S., Kim, H.T., Jung Y.J., and Kang, K.K. 2016. Identification of Functional SNPs in Genes and Their Effects on Plant Phenotypes. *J Pant Biotechnol*. 43:1-11.
- Kadkhodaei, s. Shanazari, M., Nekouei, M.K., Ghasemi, M., Etmnani, H., Imani, A., Ariff, A.B. 2011. A Comparative Study of Morphological and Molecular Diversity Analysis Among Cultivated Almonds (*Prunus dulcis*). *AJCS*. 5(1):82-9.
- Kato, S., Kosaka, H. and Hara, S. 1928. On the Affinity of Rice Varieties as Shown by the Fertility of Hybrid Plants. *Science Bulletin College of Agriculture*. 3 : 132-147
- Kharabian-Masouleh, A., Waters, D.L.E., Reinke, R.F., Ward, R., Henry, R.J. 2012. SNP in Starch Biosynthesis Genes Associated with Nutritional and Functional Properties of Rice. *Sci Rep*. 2:557.
- Klimko M, Kluza M, Kreft A. 2000. *Morphology of Pollen Grains in Three Varieties of Helianthus annuus L.* Roczniki Akademii Rolniczej W: Poznaniu.135–142.
- Kovach, M.J., Sweeney, M.T., McCouch, S.R. 2007. New Insights into the History of Rice Domestication. *Trends Genet*. 23: 578–587.
- Kumar, B., Abdel-Ghani, A.H., Pace, J., Reyes-Matamoros, J., Hochholdinger, F., Lübberstedt, T. 2014. Association Analysis of Single Nucleotide Polymorphisms in Candidate Genes with Root Traits in Maize (*Zea mays* L.) Seedlings. *Plant Science*. 224: 9-1.
- Le Heron R., Campbell, H., Lewis, N. and Carolan, M. 2016. *Biological Economies: Experimentation and the Politics of Agri-food Frontiers*. London: Routledge. 85-87 pp.
- Lee, J.H. 2010. Identification and Quantification of Anthocyanins from the Grains of Black Rice (*Oryza sativa* L.) Varieties. *Food Science and Biotechnology*. 19 (2): 391-397.
- Lee, K-S., Choi, W-Y., Ko, J-C., Kim, T-S., Gregorio, G.B. 2003. Salinity Tolerance of Japonica and Indica Rice (*Oryza sativa* L.) at the Seedling Stage. *Planta*. 216(6): 1043-1046
- Lestari, P., Utami, D.W., Rosdianti, I., dan Sabran, M. 2016. Morphological Variability of Indonesian Rice Germplasm and the Associated SNP Markers. *Emirates Journal of Food and Agriculture*. 28(9): 660-670.
- Lu, B-R., Cai, X., and Jin, X. 2009. Efficient Indica and Japonica Rice Identification Based on the Indel Molecular Method: Its Implication in Rice Breeding and Evolutionart Research. *Natural Science*. 19: 1241-1252.
- Ma, J. Chen, W.X, and Ling, W.H. 2000. The Health Efficacy of Red Rice and Black Rice. *Journal of Food Science*. 21: 139-140.
- Mackill, D.J. 1994. Classifying Japonica Rice Cultivars with RAPD Markers. *Crop Science*. 35(4): 889-894.

- Mani, P., Bastin, T.M.M.J, Kumar, R.A., and Bakrudeen, A.B.A. 2010. Rapd-Analysis of Genetic Variation of Four Important Rice Varieties Using Two Opr Primers. *ARPJ Journal of Agricultural and Biological Science*. 5(4): 12-15.
- Manurung, S.O. dan Ismunaji, M. 1988. Morfologi dan Fisiologi Padi. 55-72 . dalam Ismunaji,M.; Partohardjono, S., Syam, M., dan Widjono, A.Padi 1. Pusat Penelitian dan Pengembangan Tanaman Pangan: Bogor.
- Matsumoto, T., Wu, J., Itoh, T., Numa, H. Antonio, B and Sasaki, T. 2016. The Nipponbare Genome and the Nextgeneration of Rice Genomics Research In Japan. *Rice*. 9 (33): 1-11.
- McCouch , S.R, Zhao, K., Wright, M., Tung, C-W., Ebana, K., Thomson, M., Reynolds, A., Wang, D., DeClerck, G., Ali, M.L. 2010. Development of Genome-Wide SNP Assays for Rice. *Breed Sci*. 60(5):524–535.
- McNally, K.L., Childs, K.L., Bohnert, R., Davidson, R.M., Zhao, K., Ulat, V.J., Zeller, G., Clark, R.M., Hoen, D.R., Bureau, T.E., Stokowski, R., Ballinger, D.G., Frazerh, K.A., Cox, D.R., Padhukasahasram, Bustamante, C.D., Weigel, D., Mackill, D.J., Bruskiewich, R.M., Ratsch, G., Buell, R., Leung, H., and Leach, J.E. 2009. Genomewide SNP Variation Reveals Relationships. *Pnas*. 106 (30): 12273–12278.
- Mondini, L., and Pagnotta, M.A. 2015 . *Using Molecular Technique to Dissect Plant Genetic Diversity*. Pp 125-134. In Ahuja, M.R., and Jain, S.M. *Genetic Diversity and Erosion in Plants: Indicators and Prevention*. Vol.1. Springer Cham Heidelberg: New York.
- Moose, S.P. and Mumm, R.H. 2008. Molecular Plant Breeding as the Foundation for 21st Century Crop Improvement. *Plant Physiol*. 147: 969–977.
- Nasu, S., Suzuki, J., Ohta R., Hasegawa, K., Yui, R., Kitazawa, N., Monna, L., and Minobe, Y.** 2002. Search for and Analysis of Single Nucleotide Polymorphisms (SNPs) in Rice (*Oryza sativa*, *Oryza rufipogon*) and Establishment of SNP Markers. *DNA Res*. 9: 163–171.
- Ogunbayo, S.A., Ojo, D.K., Guei, R.G., Oyelakin, O.O., and Sanni, K.A. 2005. Phylogenetic Diversity and Relationships among 40 Rice Accessions Using Morphological and RAPD Techniques. *African Journal of Biotechnology*. 4(11) : 1234-1244.
- Rahman, H.N., Islam, Md.S., Alam, Md.S., and Nasiruddin, K.M. 2007. Genetic polymorphism in rice (*Oryza sativa* L.) through RAPD analysis. *Indian Journal of Biotechnology*. 6: 224-229.
- Rahman, M.M., Hussain, A., Syed, M.A., Ansari, A., and Mahmud, M.A.A. 2011. Comparison among Clustering in Multivariate Analysis of Rice Using Morphological Traits, Physiological Traits and Simple Sequence Repeat Marker. *American-Eurasian J. Agric. & Environ. Sci*. 11 (6): 876-882.
- Samy, D., Das, A.B., and Deka, S.C. 2017. Pigmented Rice A Potential Source of Bioactive Compounds: A Review. *International Journal of Food Science & Technology*. 52 (5): 1073-1081.
- Schreiber, L., Nader-Nieto, A.C., Schönhals, E.M., Walkemeier, B., Gebhardt, C.2014. Snps In Genes Functional in Starch-Sugar Interconversion. *Genet. Sel. Evol*. 34: 275-305.

- Seng-jun, W., Zuo-mei, L., and Jian-min, W. 2016. Genetic Diversity among Parents of Hybrid Rice Based on Cluster Analysis of Morphological Traits and Simple Sequence Repeat Markers. *Rice Science*. 13(2): 155-160.
- Shen, Y.J., Jiang, H., Jin, J-P., Zhang, Z-B., Xi, B., He, Y-Y., Wang, G., Wang, C., Qian, L., Li, X., Yu, Q-B., Liu, H-J., Chen, D-H., Gao, J-H., Huang, H., Shi, T-L., and Yang, Z-N. 2004. Development of Genome-Wide DNA Polymorphism Database for Map-Based Cloning of Rice Genes. *Plant Physiol*. 135: 1198–1205.
- Silitonga, T.S., Somantri, I.H., Daradjat, A.A., dan Kurniawan, H. 2003. *Panduan Sistem Karakterisasi dan Evaluasi Tanaman Padi*. Bogor: Departemen Pertanian Badan Penelitian dan pengembangan Pertanian Komisi Nasional Plasma Nutfah. 3-22 p.
- Singh, N., Choudhury, D.R., Singh, A.K., Kumar, S., Srinivasan, K., Tyagi, R.K., Singh, N.K., and Singh, R. 2013. Comparison of SSR and SNP Marker in Estimation of Genetic Diversity and Population Structure of Indian Rice Varieties. *Plos One*. 8(12): 1-14.
- Siregar, H. 1978. *Budidaya Tanaman Padi di Indonesia*. Sastra Hudaya: Bogor.
- Sivarajan, V.V. 1984. *Introduction to the Principles of Plant Taxonomy*. Cambridge University Press: Cambridge. 137-140
- Supriyanti, A., Supriyanta, Kristamtini. 2015. Karakterisasi Dua Puluh Padi (*Oryza sativa*. L) Lokal Di Daerah Istimewa Yogyakarta. *Vegetalika*. 4(3): 29-41.
- Tang, W., Wu, T., Ye, J., Sun, J., Jiang, Y., Yu, J., Tang, J., Chen, G., Wang, C., and Wan, J. 2016. SNP-Based Analysis of Genetic Diversity Reveals Important Alleles Associated with Seed Size in Rice. *BMC Plant Biology*. 16(93): 1-14.
- Thippeswamy, S., Chandramohan, Y., Madhavalatha, B., Pravalika, K., Samreen, Z., Bhoomeshwar, K., Vinod, G. and Kalpana, E. 2014. Identification of Rice (*Oryza sativa* L.) Varieties for Prevention of Type II Diabetes. *International Journal of Current Research*. 6 (10): 9123-9128.
- Thomson, M and Chin, J.H. 2014. Application of Indica–Japonica Single Nucleotide Polymorphism Markers for Diversity Analysis of *Oryza* AA Genome Species. *Genetic Resources: Characterization and Utilization*. 12(1): 36–40.
- Thomson, M.J., Septingsih, E.M., Suwardjo, F., Santoso, T.J., Silitonga, T.S., McCouch, S.R. 2007. Genetic Diversity Analysis Of Traditional and Improved Indonesian Rice (*Oryza Sativa* L.) Germplasm Using Microsatellite Markers. *Theor Appl Genet*. 114(3): 559-568.
- Toding, M.M., Tallei, T.E, and Utami, D.W. 2017. Simple Sequence Repeat (SSR) and Single Nucleotide Polymorphism (SNP) Markers for Genetic Characterization of North Sulawesi Local Rice Varieties, Super win Burungan. *J.Biol.Sci*. 20(9): 447-456.
- Tripathi, K.K., Warriar, R., Govila, O.P., and Ahuja, V. 2011. *Biologi of Oryza Sativa* L. (*Rice*). New Delhi: Departemen Of Biotechnology Government of India and Ministry of Environment & Forests Government of India. pp 1-16.

- Vignal, A., Millan, D., SanCristobal, M., and Eggen, A. 2002. A Review on SNP and Other Types of Molecular Markers and Their Use in Animal Genetics. *Genet. Sel. Evol.* 34: 275-305.
- Wang, S-W., Liu, X., Xu, C-G., Shi, L-L., Zhang, X, Ding, D-L., and Wang, Y. 2007. Genome Polymorphisms Between Indica and Japonica Revealed by RFLP. *Elsevier.* 6(1): 108-114.
- Xie, R.J., Zhou J., Wang G.Y., Zhang S.M., Chen L., and Gao Z.S. 2011. Cultivar Identification and Genetic Diversity of Chinese Bayberry (*Myrica rubra*) Accessions Based on Fluorescent SSR Markers. *Plant Mol Biol Rep.* 29: 554-56.
- Yu L.X. and Nguyen, N.T. 1994. Genetic Variation Detected with RAPD Markers among Upland and Lowland Rice Cultivars (*Oryza sativa* L.). *Theor. Appl. Genet.* 87: 668-672.
- Zhang, Q., Maroof, S., Lu, T.Y. and Shen, .Z. 1992. Genetic diversity and differentiation of indica and japonica rice detected by RFLP analysis. *Theoretical and Applied Genetics.* 83(4):495-499.
- Zhu, Y-F., Qin G-C., Hu, J., Wang, Y., Wang J-C and Zhu, S-J. 2012. Fingerprinting and Variety Identification of Rice (*Oryza sativa* L.) Based on Simple Sequence Repeat. *POJ.* 5(4):421-426.