

DAFTAR PUSTAKA

- Allard, R. W. 1960. Principle of Plant Breeding (Prinsip Pemuliaan Tanaman, alih bahasa : Mul Mulyadi). Edidi ke-1. PT Rineka Cipta.Jakarta. 336.
- Babu RC, Shashidhar HE, Lilley JM, Thanh ND, Ray JD,.2001. Variation in root penetration ability, osmotic adjustment and dehydration tolerance among accessions of rice to rainfed lowland and upland ecosystems. Plant Breed 120: 233-238.
- Badan Ketahanan Pangan. 2016. Laporan Tahunan BKP Tahun 2016. Badan Ketahanan Pangan. Jakarta Pusat.
- Badan Pusat Statistika. 2018. Statistika Indonesia Tahun 2018. Badan Pusat Statistika. Jakarta Pusat.
- Bernier J, Kumar A, Ramaiah V, Spaner D, Atlin G (2007) A largeeffect QTL for grain yield under reproductive stage drought stress in upland rice. Crop Sci 47(2): 507-518.
- Braseghello, F. 2013.Traditional and modern plant breeding methods with examples in rice (*Oryza sativa* L.). Journal Agric. Food Chem. 61 (35) : 8277–8286.
- Buhaira, Sosiawan, N., Ardiyaningsih, P.L., Yulia, A. 2014. Penampilan morfologi dan parameter genetik beberapa karakter morfologi agronomi dari 26 aksesori padi (*Oryza spp* L.) lokal jambi. Jurnal Penelitian Universitas Jambi Seri Sains. 16 (2) : 33-42.
- Bunnag, S., Prapaporn, P. 2013. Selection of rice (*Oryza sativa* L.) cultivars tolerant to drought stress at the vegetative stage under field conditions. American Journal of Plant Sciences. 4 : 1701-1708.
- Chaerani, Utami, D.W., Hidayatun, N., Abdullah, B., Suprihatno, B. 2014. Asosiasi antara mark SSR dengan ketahanan terhadap wereng batang cokelat pada varietas dan calon galur harapan padi. Jurnal Entomologi Indonesia. 11 (1) : 43-52
- Chakhonkaen, Pitnjam, K., Saisuk, W., Kittipat, U., Muangprom, A. 2012. Genetic structure of thai rice and rice accessions obtained from the International Rice Research Institute. Springer Open Journal . 5 (19).
- Chang, T dan Eliseo A.B. 1965. The morphology and varietal characteristics of rice plant. International Rice Research Institute. Filipina.
- Collard and Mackill. 2007. Marker-assisted selectin : an approach for precision plt breeding in the twenty-first century. Journal Philosophical Transctions of the royal society. 336 : 557-572.

- Collard, Casiana, Kenneth, Parminder, Mackkill. 2008. Rice Molecular Breeding Laboratories in the Genomics Era: Current Status and Future Considerations. International Journal of Plant Genomics.
- Crowder, L.V. 1986. Genetika tumbuhan. Edisi (Revisi ke-1). Gadjah Mada University Press, Yogyakarta. 499.
- FAOSTAT. 2017. FAOSTAT website. <http://www.fao.org/faostat/en/#data>. Diakses Desember 2018.
- Freeg, H. A., Anis, G. B., Abo-Shousha, A.A., El-Banna, A. N., Sabagh, A. E. 2016. Genetic diversity among some rice genotypes with different drought tolerance based on ssr markers. Cercetări Agronomice în Moldova. 3 : 39-50.
- Garris, A.J., Tai, T.H., Coburn J., Kresovich S., McCouch, M. 2005. Genetic structure and diversity in *Oryza sativa* L. Genetics. 169: 1631– 1638.
- Gramene. 2019. SSR Markers Resource. <http://gramene.org>. Diakses tanggal 20 Mei 2019.
- Handayani, F., Sumarmiyati, N.R., Ahmadi. 2017. Keragaman morfologi 20 kultivar padi lokal asal Kalimantan Timur. Seminar Nasional Masyarakat Biodiversiti Indonesia.3 (1) : 88-93.
- Hartl, Daniel. 2011. Essential Genetics: A Genomics Perspective. Havard University. London.
- Hikmatyar, M.H., Ishak, T.M., Pamungkas, A.P., Soffie, A., Rijaludin,A. 2015. Estimasi Karbon Tersimpan pada Tegakan Pohon di Hutan Pantai Pulau Kotok Besar. Biologi. 8(1): 40-45.
- Jing, R., Li, X., Yi, P., Zhu, Y. 2001. Mapping fertility restoring genes of rice wa cytoplasmic male sterility using SSLP markers. Botanical Bulletin of Academia Sinica. 42 : 167-171
- Joshi, M. dan Deshpande J.D. 2010. Polymerase chain reaction: methods, principles and application. Int J Biomedical Research. 1(5): 81-97.
- Kahani, F. and Shailaja H. 2015. genetic analysis and traits association in f2 intervarietal populations in rice under aerobic condition. Jurnal Rice Reserch. 3(4).
- Khush, Gurdev. 1987. Rice breeding: Past, present and future. Journal Genetica. 66 (3) : 195 216.
- Kumar, S., Shalabh D., T. Ram, R. B. Yadaw, K. K. Mishra , N. P. Mandal . 2014. Breeding high yielding drought-tolerant rice: genetic variations and conventional and molecular approaches. Journal of Experimental Botany. 65(21) : 6265–6278.

- Lestari, P., Reflinur, Dody D.H., Masturi. 2018. Keragaman genetik varietas padi japonica dan indica berdasarkan marka dna terkait mutu rasa. *Jurnal Scripta Biologica*. 5(1) : 21-25
- Lin, M.H., Lin C.W., Chen J.C., Len Y.C., Cheng S.Y., Liu T.H., Jan F.J., Wu S.T., Ku H.M., 2007 - Tagging rice drought-related QTL with SSR DNA markers. *Crop Environ. Bioinf.*, 4: 65-76.
- Liu, B., Shahid Q.M., Bai L., Lu Z., Chen Y., Jiang L., Diao M., Liu X., Lu Y. 2015. Evaluation of genetic diversity and development of a core collection of wild rice (*Oryza rufipogon* Griff.) Populations in China. *Journal plos*.
- Mackill dan Khush. 2018. IR64: a high-quality and high-yielding mega variety. *Jurnal Springer Open*. 11 (18).
- Matsuo T, Futsuhara Y, Kikuchi F, Yamaguchi H. 1997. *Science of the Rice Plant, Food and Agriculture*. Policy Research Center. Tokyo
- McCouch, S. R., Teytelman, L., Xu, Y., Lobos, K. B, Clare, K., Waon, M., Fu, B., Maghirang, R., Li, Z., Xing, Y., Zhang, O., Kono, I., Yano, M., Fjellstrom, R., DeClerck, G., Schneider, D., Cartinhour, S., Ware, D., Stein, L. 2002. Development and mapping of 2240 new SSR markers for rice (*Oryza sativa* L.). *DNA Research*. 9 : 199-207.
- Miah G., Mohd Y. Rafii, Mohd R. Ismail, Adam B. P., Harun A. Rahim, Kh. Nurul I, Mohammad A L. 2013. A review of microsatellite markers and their applications in rice breeding programs to improve blast disease resistance. *Journal Moleculer Science*. 14 : 22499 - 22528
- Millati T, Yudi Pranoto, Nursigit, Tyas Utami. 2017. Pengaruh suhu penyimpanan pada gabah basah yang baru dipanen terhadap perubahan mutu fisik beras giling. *Jurnal Agritech*. 37 (4).
- Mishra, K. K., Vikram, P., Yadaw, R. B., Swamy, B.P.M., Dixit, S., Cruz, M. T. S. C., Maturan, P., Marker, S., Kumar, A. 2013. qDTY12.1 : a locus with a consistent effect on grain yield under drought in rice. 2013. *BMC Genetics*. 14 : 1471-2156.
- Mohpatra S., Pandit, E., Barik, S.R., Patra, B.C., Meher, J., Pradhan, S.K. 2017. Genetic diversity and population structure using linked SSR markers for heat stress tolerance in rice. *Journal Oryza Vol. (2)* : 158-168.
- Napitupulu, M. O. W., Setyohadi, dan L.M. Lubis. 2015. Pengaruh variasi konsentrasi gula sukrosa dan lama fermentasi terhadap pembuatan kopi kombucha. *J. Rekayasa Pangan dan Pert*. 3(3):316-322.
- Nickolas dan Darshan. 2015. Futuristic trends in rice breeding. *Journal Oryza*. 52 (3) : 157-162.

- Nugroho, K. 2015. karakterisasi 14 kultivar padi beras ketan (*Oryza sativa* var. glutinosa) lokal Daerah Istimewa Yogyakarta. Jurnal Pertanian. Universitas Gadjah Mada. Yogyakarta.
- Nugroho, K., Slamet, Puji L. 2017. Keragaman genetik 24 varietas padi sawah dan padi gogo (*Oryza sativa* L.) Indonesia berdasarkan marka SSR. Jurnal Scripta biologica. 4(1).
- Poehlman, J.M., & Sleper, D.V. (1996). Breeding field crops 4th ed. Ames, Iowa, USA: Iowa State University Press.
- Powell, W., Morgante, M., Andre, C., Hanafey, M., Vogel, J., Tingey, S., and Rafalski, A. 1996. Polymorphism revealed by Sample Sequence Repeats. Trend Plant Sci. 1.
- Prasetyono, J., H. Aswidinnoor, S. Moeljopawiro, D. Sopandie, & M. Bustamam. 2008. Identifikasi marka polimorfik untuk pemuliaan padi toleran defisiensi fosfor. Jurnal Agro Biogen. 4 (2): 51-58.
- Reflinur dan P. Lestari. 2015. Penentuan lokus gen dalam kromosom tanaman dengan bantuan marka DNA. Jurnal Litbang Pertanian. 34 (4): 177-186.
- Rost T.L. 1997. [Section of Plant Biology Division of Biological Sciences](#). University of California.
- Sanyal, D.C dan Biswas, A. 2014. A mathematical model on genetic dihybrid and multihybrid. Journal App.Eng.Math. 4 (2) : 259 – 264.
- Shabanimofrad M., Yusop, M.R., Ashkani, S., Musa, M.H., Adam, N.A., Haifa, I., Harun, A.R., Latif, M.A. 2015. Marker-assisted selection for rice brown planthopper (*Nilaparvata lugens*) resistance using linked SSR markers. Turkish Journal of Biology 39.
- Singh, A.K., Singh, P.K., Arya, M., Singh, N.K., Singh, U.S. 2015. Molecular screening of blast resistance genes in rice using SSR markers. Journal Plant Pathology. 31 (1) : 12-24.
- Sinha, Sarawgi, A.K., Singh, A.K. 2017. Genetic analysis of blast resistant gene in rice (*Oryza sativa* L.) cultivars. Journal Oryza. 54 (2) : 148-157.
- Sitairesmi, T., Rina H. W., Ami T. R., Nani Y., dan Untung S. 2013. Pemanfaatan Plasma Nutfah Padi Varietas Lokal dalam Perakitan Varietas Unggul. Jurnal IPTEK Tanaman Pangan. 8 (1).
- Solis, J., Gutierrez, A., Mangu, V., Sanchez, E., Bedre, R., Linscombe, S., Baisakh, N. 2018. Genetic mapping of QTL for grain yield under drought in rice under controlled green house conditions. Frontiers in chemistry. 5 (129).

- Sraphet, S., Smith, D. R., Triwitayakorn, K. 2015. Isolation and characterization of microsatellite loci and genetic diversity in cassava (*Manihot esculenta* Crantz). *Journal of Crop Improvement*. 29.
- Suparyono, A. Setyono. 1993. Padi. Penebar Swadaya, Jakarta.
- Susanto, U., Sutrisno, Aswidinnor. 2009 Pemanfaatan Teknik Marka Molekuler untuk Perbaikan Varietas Padi. Balai Besar Penelitian Tanaman Padi.
- Sutoro, Tintin S., Mamik S., Kurniawan R., Trijatkiko. 2015. Keragaman malai anakan dan hubungannya dengan hasil padi sawah (*Oryza sativa*). *Jurnal Buletin Plasma Nutfah*. 21 (1) : 9–17.
- Sutton, W. S. 1903. The chromosomes in heredity. *Biological Bulletin*, 4:231-251.
- Swamy, B. P., Ahmed H. U., Henry, A., Mauleon, R., Dixit, S., Vikram, P., Tilatto, R., Verulkar, S. B., Perraju, P., Mandal, N. P., Variar, M., S. Robin., Chandrababu, R., Singh N. O., Dwivedi, J. L., Das, P. S., Mishra, K. K., Yadaw, R. B., Aditya, T. L., Karmakar, B., Satoh, K., Moumeni, A., Kikuchi, S., Leungh, H., Kumar, A. 2013. *Genetic, physiological and gene expression analyses reveal that multiple QTL enhance yield of rice megavariety IR64 under drought*. *Plusone*. 8.
- Syukur. M., Sriani, S., Rahmi, Y. 2012. Teknik Pemuliaan Tanaman. Penebar Swadaya. Jakarta.
- Syukur. M., Sriani, S., Rahmi, Y. 2015. Teknik Pemuliaan Tanaman. Edisi Revisi. Penebar Swadaya. Jakarta.
- Taryono .2013. Bioteknologi Pemuliaan Tanaman. UGM Press Yogyakarta
- Teare, J.M., Islam R, Flanagan, R., Gallagher S., Davies, M.G., Grabu, C. 1997. Measurement of nucleic acid concentration using the DyNa QuantTM and the GenequantTM. *Journal of BioTechniques*. 22(6) : 1170-1171.
- Vieira, M.L.C., Luciane S., Augusto L.D., Carla de F.M. 2016. Microsatellite markers: what they mean and why they are so useful. *Genetics and Molecular Biology*. 39 (3) : 312-328.
- Weishing, K., H. Nybon, K. Wolft. And W. Meyer. 1995. DNA Finger Printing in Plants and Fungi. CRC Press. London. 175-201.
- Xu, Yunbi. 2010. Molecular Plant Breeding. International Maize and Wheat Improvement Center (CIMMYT). Mexico
- Yang Y., Keming Z. H. X., Liang, C., Keping, C. 2014. Comparative proteomic analysis of indica and japonica rice varieties. *Journal of Genetics and molecular Biology*. 37 (4) : 652-661.

- Yoshida, H. dan Yasuo, N. 2011. Flower development in rice. *Journal of Experimental Botany*. 62 (14) : 4719–4730.
- Zecevic, B., R. Dordevic, A. Balkaya, J. Damjanovic, M. Dordevic, A. Vujoševic. 2011. Influence of parental germplasm for fruit characters in F1, F2 and F3 generations of pepper (*Capsicum annuum* L.). *Genetika* 43:209-216.
- Zhou, J., You, A., Ma, Z., Zhu, L., and He, G. 2012. Association analysis of important agronomic traits in japonica rice germplasm. *Afr. J. Biotechnol.* 11, 2957–2970. doi: 10.5897/AJB11.1912
- Zulfahmi. 2013. Penanda dna untuk analisis genetik tanaman. *Jurnal Agroteknologi*. 3 (2) : 41-52.