

DAFTAR PUSTAKA

- Acquaah, G. (2012). Molecular Genetic Modifications and Genome-Wide Genetics. *Principles of Plant Genetics and Breeding*, 470–487. <https://doi.org/10.1002/9781118313718.ch25>
- Adhi, S. R., Widiyanti, F., & Yulia, E. (2022). Variasi Morfometri dan Patogenesis Peronosclerospora spp. Penyebab Penyakit Bulai Jagung di Pulau Jawa, Indonesia. *Jurnal Fitopatologi Indonesia*, 17(5), 173–182. <https://doi.org/10.14692/jfi.17.5.173-182>
- Adhiyanto, C., Hendarmin, L., & Puspitaningrum, R. (2020). Pengenalan Dasar Teknik Bio-Molekuler. *Teknik Biomolekuler*, 23–34.
- Adriansyah, F., Hanum, L., Muharni, M., & Windusari, Y. (2019). Analisis Polimorfisme Padi Varietas Lokal Sumatera Selatan Berdasarkan Pendekatan PCR-RAPD. *Jurnal Lahan Suboptimal: Journal of Suboptimal Lands*, 7(1), 50–58. <http://jlsuboptimal.unsri.ac.id/index.php/jlso/article/view/347>
- Agung, M. B., Budiarsa, I. M., & Suwastika, I. N. (2016). Analisa “In Silico” Gen Kakao (*Theobroma cacao* L.) yang Terlibat dalam Sistem Ketahanan Terhadap Hama dan Penyakit. *Natural Science: Journal of Science and Technology*, 5(2), 234–250. <https://doi.org/10.22487/25411969.2016.v5.i2.6710>
- Ali, S., Mir, Z. A., Tyagi, A., Bhat, J. A., Chandrashekar, N., Papolu, P. K., Rawat, S., & Grover, A. (2017). Identification and comparative analysis of Brassica juncea pathogenesis-related genes in response to hormonal, biotic and abiotic stresses. *Acta Physiologiae Plantarum*, 39(12), 1–15. <https://doi.org/10.1007/s11738-017-2565-8>
- AMANDA, U. D. (2015). Isolasi RNA total dari mesokarp buah kelapa sawit (*Elaeis guineensis* Jacq. var. *Tenera*). 1(April), 171–176. <https://doi.org/10.13057/psnmbi/m010201>
- Andayani, N. N., Isnaini, M., Aqil, M., Muis, A., Pabendon, M. B., & Azrai, M. (2020). Evaluation of Genetic Diversity of QPM, Provit-A, and Elite Maize Inbreds Resistant to Downy Mildew Disease Using Simple Sequence Repeats. *Jurnal Penelitian Pertanian Tanaman Pangan*, 4(3), 161. <https://doi.org/10.21082/jpntp.v4n3.2020.p161-170>
- Aqil, M. dan Y. R. (2014). *Deskripsi Varietas Unggul Jagung*. Balai Penelitian Tanaman Serealia, Badan Penelitian dan Pengembangan Pertanian.
- Ashan, M. D. y, Miftahudin, & Reflinur. (2020). Identifikasi Marka Molekuler Terpaut Gen Ketahanan Bulai Pada Tanaman Jagung (*Zea mays* L.) MUH. *DZULKIFLY ASHAN*. 1, 9–10.
- Bani, P. W., Daryono, B. S., & Purnomo, P. (2017). Penanda Molekuler Inter Simple Sequence Repeat untuk Menentukan Ketahanan Tanaman Jagung terhadap Penyakit Bulai. *Jurnal Fitopatologi Indonesia*, 13(4), 127–135. <https://doi.org/10.14692/jfi.13.4.127>
- Bhadauria, V., & Zhao, W. (2024). The Molecular Genetics and Genomics of Plant–

- Pathogen Interactions. *International Journal of Molecular Sciences*, 25(7), 10–13. <https://doi.org/10.3390/ijms25073970>
- Borges, O. L. F. (1987). Diallel Analysis of Maize Resistance to Sorghum Downy Mildew 1. *Crop Science*, 27(2), 178–180. <https://doi.org/10.2135/cropsci1987.0011183X002700020006x>
- Crouch, J. A., Davis, W. J., Shishkoff, N., Castroagudín, V. L., Martin, F., Michelmores, R., & Thines, M. (2022). Peronosporaceae species causing downy mildew diseases of Poaceae, including nomenclature revisions and diagnostic resources. *Fungal Systematics and Evolution*, 9(June), 43–86. <https://doi.org/10.3114/fuse.2022.09.05>
- Dalimunthe, S. R., Siregar, L. A. M., Putri, L. A. P., Chairunnisa, T., & Hairmansis, A. (2020). Polymorphism levels of some SSR markers (Simple Sequence Repeat) for parental line identification on low temperature tolerance. *IOP Conference Series: Earth and Environmental Science*, 454(1). <https://doi.org/10.1088/1755-1315/454/1/012165>
- Dash, P. K. (2013). High quality RNA isolation from ployphenol-, polysaccharide and protein-rich tissues of lentil (*Lens culinaris*). 3 *Biotech*, 3(2), 109–114. <https://doi.org/10.1007/s13205-012-0075-3>
- De Jesus Miranda, V., Porto, W. F., Da Rocha Fernandes, G., Pogue, R., Nolasco, D. O., Guerra Araujo, A. C., Cota, L. V., De Freitas, C. G., Dias, S. C., & Franco, O. L. (2017). Comparative transcriptomic analysis indicates genes associated with local and systemic resistance to *Colletotrichum graminicola* in maize. *Scientific Reports*, 7(1), 1–14. <https://doi.org/10.1038/s41598-017-02298-8>
- Dempewolf, H., Eastwood, R. J., Guarino, L., Khoury, C. K., Müller, J. V., & Toll, J. (2014). Adapting Agriculture to Climate Change: A Global Initiative to Collect, Conserve, and Use Crop Wild Relatives. *Agroecology and Sustainable Food Systems*, 38(4), 369–377. <https://doi.org/10.1080/21683565.2013.870629>
- Dewanata, P. A., & Mushlih, M. (2021). Differences in DNA Purity Test Using UV-Vis Spectrophotometer and Nanodrop Spectrophotometer in Type 2 Diabetes Mellitus Patients. *Indonesian Journal of Innovation Studies*, 15, 1–10. <https://doi.org/10.21070/ijins.v15i.553>
- Edy. (2022). *Pengantar Teknologi Budidaya Tanaman Serealia* (P. Susapti (ed.)). Nas Media Pustaka. <https://sinta.kemdikbud.go.id/authors/profile/6007661/?view=books#!>
- Edy, Numba, S., & Ibrahim, B. (2019). Increased Amylopectin Content Potential in Corn Grains of Quality Protein Maize (QPM). *IOP Conference Series: Earth and Environmental Science*, 334(1). <https://doi.org/10.1088/1755-1315/334/1/012011>
- El-kereamy, A., El-sharkawy, I., Ramamoorthy, R., Taheri, A., Errampalli, D., Kumar, P., & Jayasankar, S. (2011). *Prunus domestica* pathogenesis-related protein-5 activates the defense response pathway and enhances the resistance to fungal infection. *PLoS ONE*, 6(3), 1–11. <https://doi.org/10.1371/journal.pone.0017973>
- Farrell, R. E. (2005). *RNA Methodologies*. Elsevier. <https://doi.org/10.1016/B978-0-12->

249696-7.X5000-8

Foster, B. (2024). *A Guide to DNA and RNA Quantification*.

Frankham, R., Ballou, J. D., & Briscoe, D. A. (2010). *Introduction to Conservation Genetics*. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511809002>

Geneaid. (2017). *Total RNA Mini Kit (Plant)* (pp. 1–2). www.geneaid.com

Genesiska, G., Susanto, B., & Mulyono, M. (2020). Karakter Fenotip Tanaman Jagung (*Zea mays* L.) Lokal Varietas Pulut Sulawesi di Daerah Istimewa Yogyakarta. *PLANTROPICA: Journal of Agricultural Science*, 5(1), 85–94.
<https://doi.org/10.21776/ub.jpt.2020.005.1.10>

Goredema-matongera, N., Ndhlela, T., Magorokosho, C., Kamutando, C. N., van Biljon, A., & Labuschagne, M. (2021). Multinutrient biofortification of maize (*Zea mays* L.) in africa: Current status, opportunities and limitations. *Nutrients*, 13(3), 1–24.
<https://doi.org/10.3390/nu13031039>

Govindaraj, M., Vetriventhan, M., & Srinivasan, M. (2015). Importance of genetic diversity assessment in crop plants and its recent advances: An overview of its analytical perspectives. *Genetics Research International*, 2015(Figure 1).
<https://doi.org/10.1155/2015/431487>

Grandgirard, J., Poinot, D., Krespi, L., Nénon, J. P., & Cortesero, A. M. (2002). Costs of secondary parasitism in the facultative hyperparasitoid *Pachycrepoideus dubius*: Does host size matter? *Entomologia Experimentalis et Applicata*, 103(3), 239–248.
<https://doi.org/10.1023/A>

Hakim, Ullah, A., Hussain, A., Shaban, M., Khan, A. H., Alariqi, M., Gul, S., Jun, Z., Lin, S., Li, J., Jin, S., & Munis, M. F. H. (2018). Osmotin: A plant defense tool against biotic and abiotic stresses. *Plant Physiology and Biochemistry*, 123(December 2017), 149–159. <https://doi.org/10.1016/j.plaphy.2017.12.012>

Hamamouch, N., Li, C., SEO, P. J., PARK, C., & DAVIS, E. L. (2011). Expression of *Arabidopsis* pathogenesis-related genes during nematode infection. *Molecular Plant Pathology*, 12(4), 355–364. <https://doi.org/10.1111/j.1364-3703.2010.00675.x>

Han, Z., & Schneiter, R. (2024). Dual functionality of pathogenesis-related proteins: defensive role in plants versus immunosuppressive role in pathogens. *Frontiers in Plant Science*, 15(August). <https://doi.org/10.3389/fpls.2024.1368467>

Herlinda, G., DAS, S. S., & Syafi, S. (2018). Keragaman dan Heritabilitas Genotip Jagung Merah(*Zea Mays* L.) Lokal. *Techno: Jurnal Penelitian*, 7(2), 191.
<https://doi.org/10.33387/tk.v7i2.793>

Hildebrand, C. E., Torney, D. C., & Wagner, R. P. (1992). Informativeness of Polymorphic DNA Markers. *Los Alamos Science*, 20, 100–102.

Huo, T., Wang, C. T., Yu, T. F., Wang, D. M., Li, M., Zhao, D., Li, X. T., Fu, J. D., Xu, Z. S., & Song, X. Y. (2021). Overexpression of ZmWRKY65 transcription factor from

- maize confers stress resistances in transgenic *Arabidopsis*. *Scientific Reports*, 11(1), 1–15. <https://doi.org/10.1038/s41598-021-83440-5>
- Hussein, M. A. A., Eid, M., Rahimi, M., Filimban, F. Z., & El-Moneim, D. A. (2023). Comparative Assessment of SSR and RAPD markers for genetic diversity in some Mango cultivars. *PeerJ*, 11, 1–22. <https://doi.org/10.7717/peerj.15722>
- Ihwan, Uslan, Widodo, & Hakim, L. (2019). Genetic diversity of *Rhizophora mucronata* in eastern region of Timor Island, Indonesia as revealed by RAPD. *Biodiversitas*, 20(11), 3364–3371. <https://doi.org/10.13057/biodiv/d201133>
- Islam, M. A., Alam, M. S., Maniruzzaman, M., & Haque, M. S. (2023). Microsatellite marker-based genetic diversity assessment among exotic and native maize inbred lines of Bangladesh. *Saudi Journal of Biological Sciences*, 30(8), 103715. <https://doi.org/10.1016/j.sjbs.2023.103715>
- Iswari, P., Prasetyo, J., Nurdin, M., & Dirmawati, S. R. (2021). PENGARUH *Trichoderma* spp. DALAM BEBERAPA JENIS BAHAN ORGANIK TERHADAP PENYAKIT BULAI (*Peronosclerospora* spp.). *Jurnal Agrotek Tropika*, 9(1), 25. <https://doi.org/10.23960/jat.v9i1.4786>
- Jhansi Rani, K., & Vanisri, S. (2022). *The Pharma Innovation Journal 2022; SP-11(6): 765-770 Genetic diversity assessment of inbred lines in maize through SSR markers.* 11(6), 765–770. www.thepharmajournal.com
- Jones Dangl. J.L., J. D. G. (2006). The Plant Immun System. *Nature*, 444(7117), 323–329. <https://doi.org/doi:10.1038/nature05286>
- Jones, N., Ougham, H., Thomas, H., & PaÅ-akinskien, I. (2009). Markers and mapping revisited: Finding your gene. *New Phytologist*, 183(4), 935–966. <https://doi.org/10.1111/j.1469-8137.2009.02933.x>
- Juhriah., Baharuddin., Yunus Musa., Marcia B. Pabendon., dan M. (2012). *PLASMA NUTFAH JAGUNG LOKAL SULAWESI SELATAN UNTUK SELEKSI JAGUNG KHUSUS PROVITAMIN A Detection of phytoene synthase 1 (PSY1) gene and carotene content of south sulawesi local corn germplasm for selection of specific provitamine A of corn.* 11(April), 152–160.
- Kalia, R. K., Rai, M. K., Kalia, S., Singh, R., & Dhawan, A. K. (2011). Microsatellite markers: An overview of the recent progress in plants. *Euphytica*, 177(3), 309–334. <https://doi.org/10.1007/s10681-010-0286-9>
- Kalqutny, S. H., Pakki, S., & Muis, A. (2020). Potensi Pemanfaatan Teknik Molekuler Berbasis DNA dalam Penelitian Penyakit Bulai pada Jagung. *AGROSAINSTEK: Jurnal Ilmu Dan Teknologi Pertanian*, 4(1), 17–27. <https://doi.org/10.33019/agrosainstek.v4i1.107>
- Kanaka, K. K., Sukhija, N., Goli, R. C., Singh, S., Ganguly, I., Dixit, S. P., Dash, A., & Malik, A. A. (2023). On the concepts and measures of diversity in the genomics era. *Current Plant Biology*, 33(December 2022), 100278. <https://doi.org/10.1016/j.cpb.2023.100278>
- Kapa Biosystem. (2025). Kapa Biosystems PCR Reagents. In *Biosystems* (pp. 1–2).

- Kasiamdari, R. S., & Putri, R. K. (2023). Ketahanan tiga varietas jagung (*Zea mays* L.) terhadap infeksi jamur penyakit bulai *Peronosclerospora maydis*. *Berkala Ilmiah Biologi*, 14(1), 21–31. <https://doi.org/10.22146/bib.v14i1.5658>
- Khan, I. A., Awan, F. S., Ahmad, A., & Khan, A. A. (2004). A modified mini-prep method for economical and rapid extraction of genomic DNA in plants. *Plant Molecular Biology Reporter*, 22(1), 89–89. <https://doi.org/10.1007/BF02773355>
- Lawyer, F. C., Stoffel, S., Saiki, R. K., Myambo, K., Drummond, R., & Gelfand, D. H. (1989). Isolation, characterization, and expression in *Escherichia coli* of the DNA polymerase gene from *Thermus aquaticus*. *Journal of Biological Chemistry*, 264(11), 6427–6437. [https://doi.org/10.1016/s0021-9258\(18\)83367-1](https://doi.org/10.1016/s0021-9258(18)83367-1)
- Li, F., Vallabhaneni, R., Yu, J., Rocheford, T., & Wurtzel, E. T. (2008). The maize phytoene synthase gene family: Overlapping roles for carotenogenesis in endosperm, photomorphogenesis, and thermal stress tolerance. *Plant Physiology*, 147(3), 1334–1346. <https://doi.org/10.1104/pp.108.122119>
- Li, S., Wang, Z., Tang, B., Zheng, L., Chen, H., Cui, X., Ge, F., & Liu, D. (2021). A Pathogenesis-Related Protein-Like Gene Is Involved in the *Panax notoginseng* Defense Response to the Root Rot Pathogen. *Frontiers in Plant Science*, 11(January). <https://doi.org/10.3389/fpls.2020.610176>
- Lucena-Aguilar, G., Sánchez-López, A. M., Barberán-Aceituno, C., Carrillo-Ávila, J. A., López-Guerrero, J. A., & Aguilar-Quesada, R. (2016). DNA Source Selection for Downstream Applications Based on DNA Quality Indicators Analysis. *Biopreservation and Biobanking*, 14(4), 264–270. <https://doi.org/10.1089/bio.2015.0064>
- Mahmood, T., & Yang, P. C. (2012). Western blot: Technique, theory, and trouble shooting. *North American Journal of Medical Sciences*, 4(9), 429–434. <https://doi.org/10.4103/1947-2714.100998>
- Mathiang, E. A., Sa, K. J., Park, H., Kim, Y. J., & Lee, J. K. (2022). Genetic Diversity and Population Structure of Normal Maize Germplasm Collected in South Sudan Revealed by SSR Markers. *Plants*, 11(20). <https://doi.org/10.3390/plants11202787>
- Matlock, B. (2015). Assessment of Nucleic Acid Purity. *Thermoscientific Technical Bulletin NanoDrop Spectrophotometers*, 1–2. <https://assets.thermofisher.com/TFS-Assets/CAD/Product-Bulletins/TN52646-E-0215M-NucleicAcid.pdf>
- Molin, D., Coelho, C. J., Máximo, D. S., Ferreira, F. S., Gardingo, J. R., & Matiello, R. R. (2013). Genetic diversity in the germplasm of tropical maize landraces determined using molecular markers. *Genetics and Molecular Research*, 12(1), 99–114. <https://doi.org/10.4238/2013.January.22.8>
- Muhammad, R. W., Qayyum, A., Ahmad, M. Q., Hamza, A., Yousaf, M., Ahmad, B., Younas, M., Malik, W., Liaqat, S., & Noor, E. (2017). Characterization of maize genotypes for genetic diversity on the basis of inter simple sequence repeats. *Genetics and Molecular Research*, 16(1), 1–9. <https://doi.org/10.4238/GMR16019438>
- Mukhlif, F. H., Hammadi, H. J., & Latiff, N. I. (2020). Genetic Diversity Analysis In Maize

- (Zea Mays L.) Using Ssr Markers. *Biochemical and Cellular Archives*, 20(1), 2215–2220. <https://doi.org/10.35124/bca.2020.20.1.2215>
- Nkhata, S. G., Chilungo, S., Memba, A., & Mponela, P. (2020). Biofortification of maize and sweetpotatoes with provitamin A carotenoids and implication on eradicating vitamin A deficiency in developing countries. *Journal of Agriculture and Food Research*, 2(July), 100068. <https://doi.org/10.1016/j.jafr.2020.100068>
- Nyaligwa, L., Hussein, S., Amelework, B., & Ghebrehiwot, H. (2015). Genetic diversity analysis of elite maize inbred lines of diverse sources using SSR markers. *Maydica*, 60(3).
- Palumbo, F., Galla, G., Martínez-Bello, L., & Barcaccia, G. (2017). Venetian local corn (Zea mays L.) germplasm: Disclosing the genetic anatomy of old landraces suited for typical cornmeal mush production. *Diversity*, 9(3), 1–15. <https://doi.org/10.3390/d9030032>
- Pradnyawathi, N. L. M., Wijaya, I. K. A., & Sutedja, I. N. (2022). Eksplorasi Sumber Daya Genetik Jagung Lokal Bali. *Agrotrop : Journal on Agriculture Science*, 12(2), 240. <https://doi.org/10.24843/ajoas.2022.v12.i02.p06>
- Prasetyo, R., Sari, M. K., & Lestari, Y. kurnia. (2024). Penguatan Ekosistem Jagung: Isu, Tantangan, dan Kebijakan. *Policy Brief Pertanian, Kelautan, Dan Biosains Tropika*, 6(1), 749–753. <https://doi.org/10.29244/agro-maritim.0601.749-753>
- Pratiwi, E., & Widodo, L. I. (2020). Kuantifikasi Hasil Ekstraksi Gen Sebagai Faktor Kritis Untuk Keberhasilan Pemeriksaan Rt Pcr. *Indonesian Journal for Health Sciences*, 4(1), 1. <https://doi.org/10.24269/ijhs.v4i1.2293>
- Ragunath, S. (2022). *Application of Bioinformatics resources for mining of simple sequence repeats (SSRs) marker in plant genomes: An Overview*. August. <https://doi.org/10.25303/1708rjbt1360143>
- Ramlah, R., Aziz, I. R., Muthiadin, C., Masri, M., Mustami, M. K., & Pabendon, M. B. (2018). Genetic Diversity of Local Maize Germplasm of Tana Toraja South Sulawesi Using SSR (Simple Sequence Repeat) Markers. *Ilmu Pertanian (Agricultural Science)*, 2(3), 144. <https://doi.org/10.22146/ipas.33085>
- Rashid, Z., Zaidi, P. H., Vinayan, M. T., Sharma, S. S., & Srirama Setty, T. A. (2013). Downy mildew resistance in maize (Zea mays L.) across Peronosclerospora species in lowland tropical Asia. *Crop Protection*, 43, 183–191. <https://doi.org/10.1016/j.cropro.2012.08.007>
- Retnaningati, D. (2021). Optimasi Metode Ekstraksi DNA pada Melon (Cucumis melo L.) Berdasarkan Suhu, Lama Inkubasi, dan Kondisi Daun. *Biota : Jurnal Ilmiah Ilmu-Hayati*, 5(2), 109–114. <https://doi.org/10.24002/biota.v5i2.4096>
- Rohlf, F. J. (2015). *NTSYS-pc-Numerical Taxonomy and Multivariate Analysis System Version 22* (Issue March). <https://www.researchgate.net/publication/246982444%0ANTSYS-pc>
- Salazar, E., González, M., Araya, C., Mejía, N., & Carrasco, B. (2017). Genetic diversity and intra-racial structure of Chilean Choclero corn (Zea mays L.) germplasm

- revealed by simple sequence repeat markers (SSRs). *Scientia Horticulturae*, 225(January), 620–629. <https://doi.org/10.1016/j.scienta.2017.08.006>
- Salgotra, R. K., & Chauhan, B. S. (2023). Genetic Diversity, Conservation, and Utilization of Plant Genetic Resources. *Genes*, 14(1). <https://doi.org/10.3390/genes14010174>
- Sasi, S., Krishnan, S., Kodackattumannil, P., Shamisi, A. Al, Aldarmaki, M., Lekshmi, G., Kottackal, M., & Amiri, K. M. A. (2023). DNA-free high-quality RNA extraction from 39 difficult-to-extract plant species (representing seasonal tissues and tissue types) of 32 families, and its validation for downstream molecular applications. *Plant Methods*, 19(1), 1–13. <https://doi.org/10.1186/s13007-023-01063-5>
- Sato, S. K. and F. (1999). *Plant Pathogenesis-Related Proteins.pdf*. 125(1), 1–8.
- Semagn, K., Bjørnstad, Å, & Ndjioudjop, M. N. (2006). An overview of molecular marker methods for plants. *African Journal of Biotechnology*, 5(25), 2540–2568.
- Setiadi Daryono, B., Parazulfa, A., & Purnomo, P. (2018). Uji Ketahanan Tujuh Kultivar Jagung (*Zea mays* L.) Terhadap Penyakit Bulai (*Peronosclerospora* spp.). *Biogenesis: Jurnal Ilmiah Biologi*, 6(1), 11–17. <https://doi.org/10.24252/bio.v6i1.4175>
- Sireesha, Y., & Velazhahan, R. (2017). Analysis of defense genes expression in maize upon infection with peronosclerospora sorghi. *Cereal Research Communications*, 45(2), 272–283. <https://doi.org/10.1556/0806.45.2017.010>
- Sophian, A., & Yustina, Y. (2023). Analisis Nilai Kemurnian DNA Menggunakan Nano Fotometer pada Rasio 260/230 yang Diisolasi dari Produk Nugget. *Muhammadiyah Journal of Nutrition and Food Science (MJNF)*, 3(2), 82. <https://doi.org/10.24853/mjnf.3.2.82-86>
- Tachi, H., Fukuda-Yamada, K., Kojima, T., Shiraiwa, M., & Takahara, H. (2009). Molecular characterization of a novel soybean gene encoding a neutral PR-5 protein induced by high-salt stress. *Plant Physiology and Biochemistry*, 47(1), 73–79. <https://doi.org/10.1016/j.plaphy.2008.09.012>
- Thermo Fisher, S. (2013). *Product information: RevertAid First Strand cDNA Synthesis Kit, #K1621* (pp. 1–2). Thermo Fisher Scientific Inc. www.thermoscientific.com/onebio
- Verma, V., & Aggarwal, R. K. (2019). A New Similarity Measure Based on Simple Matching Coefficient for Improving the Accuracy of Collaborative Recommendations. *International Journal of Information Technology and Computer Science*, 11(6), 37–49. <https://doi.org/10.5815/ijitcs.2019.06.05>
- Vieira, M. L. C., Santini, L., Diniz, A. L., & Munhoz, C. de F. (2016). Microsatellite markers: What they mean and why they are so useful. *Genetics and Molecular Biology*, 39(3), 312–328. <https://doi.org/10.1590/1678-4685-GMB-2016-0027>
- Weising, K., Nybom, H., Pfenninger, M., Wolff, K., & Kahl, G. (2005). DNA Fingerprinting in Plants. In *DNA Fingerprinting in Plants*. <https://doi.org/10.1201/97814200440043>
- Widiantini, F., Yulia, E., & Purnama, T. (2015). Morphological Variation of

- Peronosclerospora maydis, the Causal Agent of Maize Downy Mildew from Different Locations in Java-Indonesia. *Journal of Agricultural Engineering and Biotechnology*, May 2015, 23–27. <https://doi.org/10.18005/jaeb0302002>
- Wilson, I. G. (1997). Inhibition and facilitation of nucleic acid amplification. *Applied and Environmental Microbiology*, 63(10), 3741–3751. <https://doi.org/10.1128/aem.63.10.3741-3751.1997>
- Wulandari, E., Prasetyo, J., Nurdin, M., & Maryono, T. (2022). Penyakit Bulai dan Pertumbuhan Tanaman Jagung Effect of Mefenoxam and Trichoderma sp . of Downy. *Jurnal Agrotek Tropika*, 10(1), 43–49.
- Yang, W., Cai, H., Zhang, Y., Hao, J., Ma, Y., He, Q., Zhao, K., Li, H., Fang, A., Hou, D., & Ren, X. (2025). Functional Analysis of the ZmPR5 Gene Related to Resistance Against Fusarium verticillioides in Maize. *Plants*, 14(5). <https://doi.org/10.3390/plants14050737>
- Yang, Z., Cao, Y., Shi, Y., Qin, F., Jiang, C., & Yang, S. (2023). Genetic and molecular exploration of maize environmental stress resilience: Toward sustainable agriculture. *Molecular Plant*, 16(10), 1496–1517. <https://doi.org/10.1016/j.molp.2023.07.005>
- Yani, A., Chasani, A. R., & Daryono, B. S. (2022). Genetic diversity of eight maize (Zea mays) cultivars from East Nusa Tenggara (Indonesia) based on inter simple sequence repeat markers. *Biodiversitas*, 23(8), 4124–4130. <https://doi.org/10.13057/biodiv/d230833>
- Yasmin, N., Saleem, M., Naz, M., Gul, R., & Rehman, H. M. (2017). Molecular Characterization, Structural Modeling, and Evaluation of Antimicrobial Activity of Basrai Thaumatin-Like Protein against Fungal Infection. *BioMed Research International*, 2017. <https://doi.org/10.1155/2017/5046451>
- Ye, X. Y., Wang, H. X., & Ng, T. B. (1999). First chromatographic isolation of an antifungal thaumatin-like protein from French bean legumes and demonstration of its antifungal activity. *Biochemical and Biophysical Research Communications*, 263(1), 130–134. <https://doi.org/10.1006/bbrc.1999.1166>
- Zhang, J., Wang, F., Liang, F., Zhang, Y., Ma, L., Wang, H., & Liu, D. (2018). Functional analysis of a pathogenesis-related thaumatin-like protein gene TaLr35PR5 from wheat induced by leaf rust fungus. *BMC Plant Biology*, 18(1). <https://doi.org/10.1186/s12870-018-1297-2>
- Zhang, Y., Chen, W., Sang, X., Wang, T., Gong, H., Zhao, Y., Zhao, P., & Wang, H. (2021). Genome-wide identification of the thaumatin-like protein family genes in Gossypium barbadense and analysis of their responses to verticillium dahliae infection. *Plants*, 10(12). <https://doi.org/10.3390/plants10122647>
- Zhu, M., Tong, L., Xu, M., & Zhong, T. (2021). Correction to: Genetic dissection of maize disease resistance and its applications in molecular breeding (Molecular Breeding, (2021), 41, 5, (32), 10.1007/s11032-021-01219-y). *Molecular Breeding*, 41(9). <https://doi.org/10.1007/s11032-021-01250-z>