Daftar Pustaka

Ahmad, S., Fook, C. W. K., Vadamalai, G., Wahab, M. A., Saidi, N. B., & Zulperi, D. (2020). Molecular characterization of Fusarium oxysporum f. sp. cubense Tropical Race 4 (Foc-TR4) isolates from Malaysian banana using secreted in Xylem (SIX) effector genes. *Archives of Phytopathology and Plant Protection*, *53*(11–12), 524–539. https://doi.org/10.1080/03235408.2020.1761766

Bouwmeester, H., Schuurink, R. C., Bleeker, P. M., & Schiestl, F. (2019). The role of volatiles in plant communication. *The Plant Journal*, *100*(5), 892–907. https://doi.org/10.1111/tpj.14496

Bragard, C., Baptista, P., Chatzivassiliou, E., Di Serio, F., Gonthier, P., Jaques Miret, J. A., Justesen, A. F., MacLeod, A., Magnusson, C. S., Milonas, P., Navas-Cortes, J. A., Parnell, S., Potting, R., Stefani, E., Thulke, H., Van der Werf, W., Civera, A. V., Yuen, J., Zappalà, L., … Reignault, P. L. (2022). Pest categorisation of Fusarium oxysporum f. sp. cubense Tropical Race 4. *EFSA Journal*, *20*(1). https://doi.org/10.2903/j.efsa.2022.7092

Brown, J. L., Gierke, T., Butkovich, L. V., Swift, C. L., Singan, V., Daum, C., Barry, K., Grigoriev, I. V., & O'Malley, M. A. (2023). High-quality RNA extraction and the regulation of genes encoding cellulosomes are correlated with growth stage in anaerobic fungi. *Frontiers in Fungal Biology*, *4*. https://doi.org/10.3389/ffunb.2023.1171100

Cannon, S., Kay, W., Kilaru, S., Schuster, M., Gurr, S. J., & Steinberg, G. (2022). Multi-site fungicides suppress banana Panama disease, caused by Fusarium oxysporum f. sp. cubense Tropical Race 4. *PLOS Pathogens*, *18*(10), e1010860. https://doi.org/10.1371/journal.ppat.1010860

Cheng, C., Liu, F., Sun, X., Tian, N., Mensah, R. A., Li, D., & Lai, Z. (2019). Identification of Fusarium oxysporum f. sp. cubense tropical race 4 (Foc TR4) responsive miRNAs in banana root. *Scientific Reports*, *9*(1), 13682. https://doi.org/10.1038/s41598-019-50130-2

Chitarra, W., Pagliarani, C., Abbà, S., Boccacci, P., Birello, G., Rossi, M., Palmano, S., Marzachì, C., Perrone, I., & Gambino, G. (2018). miRVIT: A Novel miRNA Database and Its Application to Uncover Vitis Responses to Flavescence dorée Infection. *Frontiers in Plant Science*, *9*. https://doi.org/10.3389/fpls.2018.01034

Dai, X., Zhuang, Z., & Zhao, P. X. (2018). psRNATarget: a plant small RNA target analysis server (2017 release). *Nucleic Acids Research*, *46*(W1), W49–W54. https://doi.org/10.1093/nar/gky316

Das, P. R., & Sherif, S. M. (2020). Application of Exogenous dsRNAs-induced RNAi in Agriculture: Challenges and Triumphs. *Frontiers in Plant Science*, *11*. https://doi.org/10.3389/fpls.2020.00946

de Fougerolles, A., Vornlocher, H.-P., Maraganore, J., & Lieberman, J. (2007). Interfering with disease: a progress report on siRNA-based therapeutics. *Nature Reviews Drug Discovery*, *6*(6), 443–453. https://doi.org/10.1038/nrd2310

Fei, S., Czislowski, E., Fletcher, S., Peters, J., Batley, J., Aitken, E., & Mitter, N. (2019). Small RNA profiling of Cavendish banana roots inoculated with Fusarium oxysporum f. sp. cubense race 1 and tropical race 4. *Phytopathology Research*, *1*(1), 22. https://doi.org/10.1186/s42483-019-0029-3

Ghag, S. B., & Ganapathi, T. R. (2019). RNAi-mediated protection against banana diseases and pests. *3 Biotech*, *9*(3), 112. https://doi.org/10.1007/s13205-019-1650-7

Ghag, S. B., Shekhawat, U. K. S., & Ganapathi, T. R. (2014a). Host-induced post-transcriptional hairpin RNA-mediated gene silencing of vital fungal genes confers efficient resistance against Fusarium wilt in banana. *Plant Biotechnology Journal*, *12*(5), 541–553. https://doi.org/10.1111/pbi.12158

Ghag, S. B., Shekhawat, U. K. S., & Ganapathi, T. R. (2014b). Transgenic banana plants expressing a Stellaria media defensin gene (Sm-AMP-D1) demonstrate improved resistance to Fusarium oxysporum. *Plant Cell, Tissue and Organ Culture (PCTOC)*, *119*(2), 247–255. https://doi.org/10.1007/s11240-014-0529-x

Ghosh, S., Biswas, A., Nanda, S., Das, S., Basak, S., Mandal, S., Biswas, A., Sen, D. J., Mahanti, B., & Saha, D. (2020). Gene silencing is one of the most efficient and promising functional genomics tools. *Research Journal of Science and Technology*, *12*(3), 222. https://doi.org/10.5958/2349-2988.2020.00030.3

Haile, Z. M., Gebremichael, D. E., Capriotti, L., Molesini, B., Negrini, F., Collina, M., Sabbadini, S., Mezzetti, B., & Baraldi, E. (2021). Double-Stranded RNA Targeting Dicer-Like Genes Compromises the Pathogenicity of Plasmopara viticola on Grapevine. *Frontiers in Plant Science*, *12*. https://doi.org/10.3389/fpls.2021.667539

Halwiyah, N., Ferniah, R. S., Raharjo, B., & Purwantisari, S. (2019). Uji Antagonisme Jamur Patogen Fusarium solani Penyebab Penyakit Layu pada Tanaman Cabai dengan Menggunakan Beauveria bassiana Secara In Vitro. *Jurnal Akademika Biologi*, *8*(2), 8–17.

Hou, Y., Zhai, Y., Feng, L., Karimi, H. Z., Rutter, B. D., Zeng, L., Choi, D. S., Zhang, B., Gu, W., Chen, X., Ye, W., Innes, R. W., Zhai, J., & Ma, W. (2019). A Phytophthora Effector Suppresses Trans-Kingdom RNAi to Promote Disease Susceptibility. *Cell Host & Microbe*, *25*(1), 153-165.e5. https://doi.org/10.1016/j.chom.2018.11.007

Huang, S., Zhou, J., Gao, L., & Tang, Y. (2021). Plant miR397 and its functions. *Functional Plant Biology*, *48*(4), 361. https://doi.org/10.1071/FP20342

Isenmann, M., Stoddart, M. J., Schmelzeisen, R., Gross, C., Della Bella, E., & Rothweiler, R. M. (2023). Basic Principles of RNA Interference: Nucleic Acid Types and In Vitro Intracellular Delivery Methods. *Micromachines*, *14*(7), 1321. https://doi.org/10.3390/mi14071321

Ismail, H. D. (2022). *Bioinformatics*. Chapman and Hall/CRC. https://doi.org/10.1201/9781003226611

Ji, H., Mao, H., Li, S., Feng, T., Zhang, Z., Cheng, L., Luo, S., Borkovich, K. A., & Ouyang, S. (2021). Fol-milR1, a pathogenicity factor of Fusarium oxysporum, confers tomato wilt disease resistance by impairing host immune responses. *New Phytologist*, *232*(2), 705–718. https://doi.org/10.1111/nph.17436

Kalariya, K. A., Meena, R. P., Saran, P. L., & Manivel, P. (2019). Identification of microRNAs from transcriptome data in gurmar (Gymnema sylvestre). *Horticulture, Environment, and Biotechnology*, *60*(3), 383–397. https://doi.org/10.1007/s13580-019-00135-7

Kaur, R., Gupta, M., Singh, S., Joshi, N., & Sharma, A. (2020). Enhancing RNAi Efficiency to Decipher the Functional Response of Potential Genes in Bemisia tabaci AsiaII-1 (Gennadius) Through dsRNA Feeding Assays. *Frontiers in Physiology*, *11*. https://doi.org/10.3389/fphys.2020.00123

Kema, G. H. J., Drenth, A., Dita, M., Jansen, K., Vellema, S., & Stoorvogel, J. J. (2021). Editorial: Fusarium Wilt of Banana, a Recurring Threat to Global Banana Production. *Frontiers in Plant Science*, *11*. https://doi.org/10.3389/fpls.2020.628888

Kozomara, A., Birgaoanu, M., & Griffiths-Jones, S. (2019). miRBase: from microRNA sequences to function. *Nucleic Acids Research*, *47*(D1), D155–D162. https://doi.org/10.1093/nar/gky1141

Kumar, M., Yadav, P., Manjunatha, L., & Kumar, M. (2022). LCM-based xylem-specific RNA extraction from Fusarium oxysporum infected Cicer arietinum roots. *Journal of Plant Pathology*, *104*(2), 749–760. https://doi.org/10.1007/s42161-022-01106-1

Kwon, M., Song, J., Ha, J. K., Park, H.-S., & Chang, J. (2009). Analysis of Functional Genes in Carbohydrate Metabolic Pathway of Anaerobic Rumen Fungus Neocallimastix frontalis PMA02. *Asian-Australasian Journal of Animal Sciences*, *22*(11), 1555–1565. https://doi.org/10.5713/ajas.2009.80371

Li, K., Zhu, X., Qiao, C., Zhang, L., Gao, W., & Wang, Y. (2023). The Gray Mold Spore Detection of Cucumber Based on Microscopic Image and Deep Learning. *Plant Phenomics*, *5*. https://doi.org/10.34133/plantphenomics.0011

Li, M., Shi, J., Xie, X., Leng, Y., Wang, H., Xi, P., Zhou, J., Zhong, S., & Jiang, Z. (2013). Identification and application of a unique genetic locus in diagnosis of Fusarium oxysporum f. sp. cubense tropical race 4. *Canadian Journal of Plant Pathology*, *35*(4), 482–493. https://doi.org/10.1080/07060661.2013.828321

Liu, S., Wu, B., Lv, S., Shen, Z., Li, R., Yi, G., Li, C., & Guo, X. (2019). Genetic Diversity in FUB Genes of Fusarium oxysporum f. sp. cubense Suggests Horizontal Gene Transfer. *Frontiers in Plant Science*, *10*. https://doi.org/10.3389/fpls.2019.01069

Luis David, M.-B. (2018). Secreted in Xylem (Six) Genes in Fusarium oxysporum f. sp. cubense and Their Potential Acquisition by Horizontal Transfer. *Advances in Biotechnology & Microbiology*, *10*(1). https://doi.org/10.19080/AIBM.2018.10.555779

Luna Buitrago, D., Lovering, R. C., & Caporali, A. (2023). Insights into Online microRNA Bioinformatics Tools. *Non-Coding RNA*, *9*(2), 18. https://doi.org/10.3390/ncrna9020018

Ma, X., Yin, X., Tang, Z., Ito, H., Shao, C., Meng, Y., & Xie, T. (2020). The RNA degradome: a precious resource for deciphering RNA processing and regulation codes in plants. *RNA Biology*, *17*(9), 1223–1227. https://doi.org/10.1080/15476286.2020.1757898

Mahanty, B., Mishra, R., & Joshi, R. K. (2023). Cross-kingdom small RNA communication between plants and fungal phytopathogens-recent updates and prospects for future agriculture. *RNA Biology*, *20*(1), 109–119. https://doi.org/10.1080/15476286.2023.2195731

Majumdar, R., Rajasekaran, K., & Cary, J. W. (2017). RNA Interference (RNAi) as a Potential Tool for Control of Mycotoxin Contamination in Crop Plants: Concepts and Considerations. *Frontiers in Plant Science*, *8*. https://doi.org/10.3389/fpls.2017.00200

Maryani, N., Lombard, L., Poerba, Y. S., Subandiyah, S., Crous, P. W., & Kema, G. H. J. (2019). Phylogeny and genetic diversity of the banana Fusarium wilt pathogen Fusarium oxysporum f. sp. cubense in the Indonesian centre of origin. *Studies in Mycology*, *92*, 155–194. https://doi.org/10.1016/j.simyco.2018.06.003

Maymon, M., Sela, N., Shpatz, U., Galpaz, N., & Freeman, S. (2020). The origin and current situation of Fusarium oxysporum f. sp. cubense tropical race 4 in Israel and the Middle East. *Scientific Reports*, *10*(1), 1590. https://doi.org/10.1038/s41598-020-58378-9

Neumeier, J., & Meister, G. (2021). siRNA Specificity: RNAi Mechanisms and Strategies to Reduce Off-Target Effects. *Frontiers in Plant Science*, *11*. https://doi.org/10.3389/fpls.2020.526455

O'Brien, J., Hayder, H., Zayed, Y., & Peng, C. (2018). Overview of MicroRNA Biogenesis, Mechanisms of Actions, and Circulation. *Frontiers in Endocrinology*, *9*. https://doi.org/10.3389/fendo.2018.00402

Olivares, B. O., Rey, J. C., Lobo, D., Navas-Cortés, J. A., Gómez, J. A., & Landa, B. B. (2021). Fusarium Wilt of Bananas: A Review of Agro-Environmental Factors in the Venezuelan Production System Affecting Its Development. *Agronomy*, *11*(5), 986. https://doi.org/10.3390/agronomy11050986

Panwar, V., Jordan, M., McCallum, B., & Bakkeren, G. (2018). Host-induced silencing of essential genes in Puccinia triticina through transgenic expression of RNAi sequences reduces severity of leaf rust infection in wheat. *Plant Biotechnology Journal*, *16*(5), 1013–1023. https://doi.org/10.1111/pbi.12845

Park, M., Um, T. Y., Jang, G., Choi, Y. Do, & Shin, C. (2022). Targeted gene suppression through double-stranded RNA application using easy to use methods in Arabidopsis thaliana. *Applied Biological Chemistry*, *65*(1), 4. https://doi.org/10.1186/s13765-022-00675-0

Patel, P., Yadav, K., Srivastava, A. K., Suprasanna, P., & Ganapathi, T. R. (2019). Overexpression of native Musa-miR397 enhances plant biomass without compromising abiotic stress tolerance in banana. *Scientific Reports*, *9*(1), 16434. https://doi.org/10.1038/s41598-019-52858-3

Poon, N. K., Teo, C. H., & Othman, R. Y. (2020). Differential gene expression analysis of Secreted in Xylem (SIX) genes from Fusarium oxysporum f. sp. cubense tropical race 4 in Musa acuminata cv. Berangan and potential application for early detection of infection. *Journal of General Plant Pathology*, *86*(1), 13–23. https://doi.org/10.1007/s10327-019-00882-6

Pourrajab, F., & Hekmatimoghaddam, S. (2021). Transposable elements, contributors in the evolution of organisms (from an arms race to a source of raw materials). *Heliyon*, *7*(1), e06029. https://doi.org/10.1016/j.heliyon.2021.e06029

Qiao, L., Lan, C., Capriotti, L., Ah-Fong, A., Nino Sanchez, J., Hamby, R., Heller, J., Zhao, H., Glass, N. L., Judelson, H. S., Mezzetti, B., Niu, D., & Jin, H. (2021). Spray-induced gene silencing for disease control is dependent on the efficiency of pathogen RNA uptake. *Plant Biotechnology Journal*, *19*(9), 1756–1768. https://doi.org/10.1111/pbi.13589

R, D. S., KK, K., S, V., K, K., C, S., T R, U., P, M., J, A., L, A., E, K., S, N., D, S., & K, E. A. A. (2022). RNAi Mediated Silencing of ftf1 Gene Enhances Resistance in Banana to Fusarium Wilt. *Madras Agricultural Journal*, *109*(september). https://doi.org/10.29321/MAJ.10.000709

Rajam, M. V., & Chauhan, S. (2021). *Host-Induced Gene Silencing (HIGS): An Emerging Strategy for the Control of Fungal Plant Diseases* (pp. 97–116). https://doi.org/10.1007/978-3-030-63372-1_4

Ray, P., Sahu, D., Aminedi, R., & Chandran, D. (2022). Concepts and considerations for enhancing RNAi efficiency in phytopathogenic fungi for RNAi-based crop protection using nanocarrier-mediated dsRNA delivery systems. *Frontiers in Fungal Biology*, *3*. https://doi.org/10.3389/ffunb.2022.977502

SIGMA-ALDRICH. (2020). *TECHNICAL BULLETIN*.

Silver, K., Cooper, A. M., & Zhu, K. Y. (2021). Strategies for enhancing the efficiency of RNA interference in insects. *Pest Management Science*, *77*(6), 2645–2658. https://doi.org/10.1002/ps.6277

Singh, G., Verma, A. K., & Kumar, V. (2016). Catalytic properties, functional attributes and industrial applications of β-glucosidases. *3 Biotech*, *6*(1), 3. https://doi.org/10.1007/s13205-015-0328-z

Taylor, A., Vágány, V., Jackson, A. C., Harrison, R. J., Rainoni, A., & Clarkson, J. P. (2016). Identification of pathogenicity-related genes in Fusarium oxysporum f. sp. cepae. *Molecular Plant Pathology*, *17*(7), 1032–1047. https://doi.org/10.1111/mpp.12346

Teo, C. H. (2019). Fusarium Wilt Disease of Banana: Current Development of Fusarium Resistant Banana. *Open Access Journal of Microbiology & Biotechnology*, *4*(1). https://doi.org/10.23880/oajmb-16000134

Thagun, C., Horii, Y., Mori, M., Fujita, S., Ohtani, M., Tsuchiya, K., Kodama, Y., Odahara, M., & Numata, K. (2022). Non-transgenic Gene Modulation via Spray Delivery of Nucleic Acid/Peptide Complexes into Plant Nuclei and Chloroplasts. *ACS Nano*, *16*(3), 3506–3521. https://doi.org/10.1021/acsnano.1c07723

Ulilalbab, A. R., Widinugraheni, S., Masanto, M., Subandiyah, S., & Wibowo, A. (2022). Expression of SIX1b and SIX1c effector genes and banana resistance genes during Foc TR4 infection on banana cultivars. *Biodiversitas Journal of Biological Diversity*, *23*(10). https://doi.org/10.13057/biodiv/d231041

Widinugraheni, S., Niño-Sánchez, J., van der Does, H. C., van Dam, P., García-Bastidas, F. A., Subandiyah, S., Meijer, H. J. G., Kistler, H. C., Kema, G. H. J., & Rep, M. (2018). A SIX1 homolog in Fusarium oxysporum f.sp. cubense tropical race 4 contributes to virulence towards Cavendish banana. *PLOS ONE*, *13*(10), e0205896. https://doi.org/10.1371/journal.pone.0205896

Zhang, T., Zhao, Y.-L., Zhao, J.-H., Wang, S., Jin, Y., Chen, Z.-Q., Fang, Y.-Y., Hua, C.-L., Ding, S.-W., & Guo, H.-S. (2016). Cotton plants export microRNAs to inhibit virulence gene expression in a fungal pathogen. *Nature Plants*, *2*(10), 16153. https://doi.org/10.1038/nplants.2016.153

Zhao, J., Missihoun, T. D., & Bartels, D. (2017). The role of Arabidopsis aldehyde dehydrogenase genes in response to high temperature and stress combinations. *Journal of Experimental Botany*, *68*(15), 4295–4308. https://doi.org/10.1093/jxb/erx194

Zhou, X., Cui, J., Meng, J., & Luan, Y. (2020). Interactions and links among the noncoding RNAs in plants under stresses. *Theoretical and Applied Genetics*, *133*(12), 3235–3248. https://doi.org/10.1007/s00122-020-03690-1