

DAFTAR PUSTAKA

- Adeleke, B. S., & Babalola, O. O. 2021. Biotechnological overview of agriculturally important endophytic fungi. *Horticulture Environment and Biotechnology*, 62(4), 507–520. <https://doi.org/10.1007/S13580-021-00334-1>
- Agoncillo, E. S. 2018. Control bacterial wilt disease caused by *Ralstonia solanacearum* in Pepper using Arbuscular Mycorrhizal Fungi (Mykovam). *Journal of Natural Science Research*, 8(6), 62–66. <https://www.iiste.org/Journals/index.php/JNSR/article/view/41641>
- Agrios, G. 2005. Plant pathology: Fifth edition. In *Plant Pathology: Fifth Edition* (Vol. 9780080473789). Academic Press. <https://doi.org/10.1016/C2009-0-02037-6>
- Aguk, J. A., Karanja, N., Schulte-Geldermann, E., Bruns, C., Kinyua, Z., & Parker, M. 2018. Control of bacterial wilt (*Ralstonia solanacearum*) in potato (*Solanum tuberosum*) using rhizobacteria and arbuscular mycorrhiza fungi. *African Journal of Food, Agriculture, Nutrition and Development*, 18(2), 13371–13387. <https://doi.org/10.18697/AJFAND.82.16905>
- Ahmed, W., Yang, J., Tan, Y., Munir, S., Liu, Q., Zhang, J., Ji, G., & Zhao, Z. 2022. *Ralstonia solanacearum*, a deadly pathogen: Revisiting the bacterial wilt biocontrol practices in tobacco and other Solanaceae. In *Rhizosphere* (Vol. 21, pp. 1–8). Elsevier B.V. <https://doi.org/10.1016/j.rhisph.2022.100479>
- Akköprü, A., & Demir, S. 2005. Biological control of Fusarium wilt in tomato caused by *Fusarium oxysporum* f. sp. *lycopersici* by AMF *Glomus intraradices* and some rhizobacteria. *Journal of Phytopathology*, 153(9), 544–550. <https://doi.org/10.1111/j.1439-0434.2005.01018.x>
- Alejo-Iturvide, F., Márquez-Lucio, M. A., Morales-Ramírez, I., Vázquez-Garcidueñas, M. S., & Olalde-Portugal, V. 2008. Mycorrhizal protection of chili plants challenged by *Phytophthora capsici*. *European Journal of Plant Pathology*, 120(1), 13–20. <https://doi.org/10.1007/s10658-007-9188-7>
- Álvarez, B., Biosca, E. G., & López, M. M. 2010. On the life of *Ralstonia solanacearum*, a destructive bacterial plant pathogen. In *Technology and education topics in applied microbiology and microbial biotechnology* (pp. 267–279). https://pdfs.semanticscholar.org/aa85/77e213e2977a0e4eb739795e3fea51187181.pdf?_ga=2.156465595.1055873898.1504096691-1311319012.1504096691
- Anshori, M. F., Purwoko, B. S., Dewi, I. S., Suwarno, W. B., & Ardie, S. W. 2020. Cluster heatmap for detection of good tolerance trait on doubled-haploid rice lines under hydroponic salinity screening. *IOP Conference Series: Earth and Environmental Science*, 484(1), 1–7. <https://doi.org/10.1088/1755-1315/484/1/012001>
- Antoine, S., Hériché, M., Boussageon, R., Noceto, P. A., van Tuinen, D., Wipf, D., & Courty, P. E. 2021. A historical perspective on mycorrhizal mutualism emphasizing arbuscular mycorrhizas and their emerging challenges. *Mycorrhiza*, 31(6), 637–653. <https://doi.org/10.1007/S00572-021-01053-2>
- Arwiyanto, T. 2014a. Biological Control of Bacterial Wilt in South East Asia. *Jurnal Perlindungan Tanaman Indonesia*, 18(2), 55–64.
- Arwiyanto, T. 2014b. *Ralstonia solanacearum: Biologi, Penyakit yang Ditimbulkan, dan Pengelolaannya*. Gadjah Mada University Press.

- Ashfaq, M., Saeed, U., Mukhtar, T., & ul Haq, M. I. 2015. First report of Zucchini yellow mosaic virus in ridge gourd in Pakistan. *Plant Disease*, 99(12), 1870. <https://doi.org/10.1094/PDIS-05-15-0553-PDN>
- Aslam, M. N., Mukhtar, T., Ashfaq, M., & Hussain, M. A. 2017. Evaluation of chili germplasm for resistance to bacterial wilt caused by *Ralstonia solanacearum*. *Australasian Plant Pathology*, 46(3), 289–292. <https://doi.org/10.1007/s13313-017-0491-2>
- Aslam, M. N., Mukhtar, T., Hussain, M. A., & Raheel, M. 2017. Assessment of resistance to bacterial wilt incited by *Ralstonia solanacearum* in tomato germplasm. *Journal of Plant Diseases and Protection*, 124(6), 585–590. <https://doi.org/10.1007/s41348-017-0100-1>
- Azcón-Aguilar, C., & Barea, J. M. 1997. Arbuscular mycorrhizas and biological control of soil-borne plant pathogens - An overview of the mechanisms involved. *Mycorrhiza*, 6(6), 457–464. <https://doi.org/10.1007/s005720050147>
- Azcón, R., & Ocampo, J. A. 1981. Factors Affecting the Vesicular- Arbuscular Infection and Mycorrhizal Dependency of Thirteen Wheat Cultivars. *New Phytologist*, 87(4), 677–685. <https://doi.org/10.1111/j.1469-8137.1981.tb01702.x>
- Bååth, E., & Hayman, D. S. 1984. No effect of VA mycorrhiza on red core disease of strawberry. *Transactions of the British Mycological Society*, 82(3), 534–536. [https://doi.org/10.1016/s0007-1536\(84\)80018-2](https://doi.org/10.1016/s0007-1536(84)80018-2)
- Barea, J. M., Pozo, M. J., Azcón, R., & Azcón-Aguilar, C. 2005. Microbial co-operation in the rhizosphere. *Journal of Experimental Botany*, 56(417), 1761–1778. <https://doi.org/10.1093/JXB/ERI197>
- Barman, J., Samanta, A., Saha, B., & Datta, S. 2016. Mycorrhiza: The oldest association between plant and fungi. *Resonance*, 21(12), 1093–1104. <https://doi.org/10.1007/s12045-016-0421-6>
- Bazzaz, M. M., Khaliq, Q. A., Karim, M. A., Al-Mahmud, A., & Khan, M. S. A. 2015. Canopy Temperature and Yield Based Selection of Wheat Genotypes for Water Deficit Environment. *OALib*, 02(10), 1–11. <https://doi.org/10.4236/oalib.1101917>
- Beltrano, J., Ruscitti, M., Arango, M. C., & Ronco, M. 2013. Effects of arbuscular mycorrhiza inoculation on plant growth, biological and physiological parameters, and mineral nutrition in pepper grown under different salinity and p levels. *Journal of Soil Science and Plant Nutrition*, 13(1), 123–141. <https://doi.org/10.4067/s0718-95162013005000012>
- Bittner, R. J., Arellano, C., & Mila, A. L. 2016. Effect of temperature and resistance of tobacco cultivars to the progression of bacterial wilt, caused by *Ralstonia solanacearum*. *Plant and Soil*, 408(1–2), 299–310. <https://doi.org/10.1007/S11104-016-2938-6>
- Bonfante, P., & Genre, A. 2010. Mechanisms underlying beneficial plant - fungus interactions in mycorrhizal symbiosis. In *Nature Communications* (Vol. 1, Issue 4). <https://doi.org/10.1038/ncomms1046>
- Boonlue, S., Surapat, W., Pukahuta, C., Suwanarit, P., Suwanarit, A., & Morinaga, T. 2012. Diversity and efficiency of arbuscular mycorrhizal fungi in soils from organic chili (<i>Capsicum frutescens</i>) farms. *Mycoscience*, 53(1), 10–16. <https://doi.org/10.1007/s10267-011-0131-6>

- Bosland, P. W., & Votava, E. J. 2012. Peppers: vegetable and spice capsicums. *Hort. Technology*, 2, 1–230. <https://doi.org/10.1079/9781845938253.0000>
- Bousslama, M., & Schapaugh, W. T. 1984. Stress Tolerance in Soybeans. I. Evaluation of Three Screening Techniques for Heat and Drought Tolerance 1. *Crop Science*, 24(5), 933–937. <https://doi.org/10.2135/cropsci1984.0011183x002400050026x>
- Brundrett, M. C., & Tedersoo, L. 2018. Evolutionary history of mycorrhizal symbioses and global host plant diversity. *New Phytologist*, 220(4), 1108–1115. <https://doi.org/10.1111/nph.14976>
- Bryla, D. R., & Koide, R. T. 1990. Role of mycorrhizal infection in the growth and reproduction of wild vs. cultivated plants - II. Eight wild accessions and two cultivars of *Lycopersicon esculentum* Mill. *Oecologia*, 84(1), 82–92. <https://doi.org/10.1007/BF00665599>
- Buddenhagen, I. W. 1962. Designations of races in *Pseudomonas solanacearum*. *Phytopathology*, 52, 726.
- Caldwell, D., Kim, B. S., & Iyer-Pascuzzi, A. S. 2017. *Ralstonia solanacearum* differentially colonizes roots of resistant and susceptible tomato plants. *Phytopathology*, 107(5), 528–536. <https://doi.org/10.1094/PHYTO-09-16-0353-R>
- Cameron, D. D., Neal, A. L., van Wees, S. C. M., & Ton, J. 2013. Mycorrhiza-induced resistance: More than the sum of its parts? *Trends in Plant Science*, 18(10), 539–545. <https://doi.org/10.1016/j.tplants.2013.06.004>
- Carillo, P., Kyriatzis, A., Kyriacou, M. C., Dell'Aversana, E., Fusco, G. M., Corrado, G., & Roupahel, Y. 2020. Biostimulatory action of arbuscular mycorrhizal fungi enhances productivity, functional, and sensory quality in 'Piennolo del Vesuvio' cherry tomato landraces. *Agronomy*, 10(6), 1–21. <https://doi.org/10.3390/agronomy10060911>
- Caruso, T., Mafrica, R., Bruno, M., Vescio, R., & Sorgonà, A. 2021. Root architectural traits of rooted cuttings of two fig cultivars: Treatments with arbuscular mycorrhizal fungi formulation. *Scientia Horticulturae*, 283(March). <https://doi.org/10.1016/j.scienta.2021.110083>
- Carvalho, S. I. C., Bianchetti, L. B., Ragassi, C. F., Ribeiro, C. S. C., Reifschneider, F. J. B., Buso, G. S. C., & Faleiro, F. G. 2017. Genetic variability of a Brazilian capsicum frutescens germplasm collection using morphological characteristics and SSR markers. *Genetics and Molecular Research*, 16(3), 1–18. <https://doi.org/10.4238/gmr16039689>
- Castillo R, C., Sotomayor S, L., Ortiz O, C., Leonelli C, G., Borie B, F., & Rubio H, R. 2009. Effect of Arbuscular Mycorrhizal Fungi on an Ecological Crop of Chili Peppers (*Capsicum annuum* L.). *Chilean Journal of Agricultural Research*, 69(1), 79–87. <https://doi.org/10.4067/s0718-58392009000100010>
- Cesaro, P., Massa, N., Cantamessa, S., Todeschini, V., Bona, E., Berta, G., Barbato, R., & Lingua, G. 2020. Tomato responses to *Funnelliformis mosseae* during the early stages of arbuscular mycorrhizal symbiosis. *Mycorrhiza*, 30(5), 601–610. <https://doi.org/10.1007/s00572-020-00973-9>
- Champoiseau, P. G., Jones, J. B., & Allen, C. 2009. *Ralstonia solanacearum* Race 3 Biovar 2 Causes Tropical Losses and Temperate Anxieties. *Plant Health Progress*, 10(1), 35. <https://doi.org/10.1094/php-2009-0313-01-rv>

- Cimen, I., Pirinc, V., Sagir, A., Akpinar, C., & Guzel, S. 2009. Effects of solarization and vesicular arbuscular mycorrhizal fungus (VAM) on phytophthora blight (*Phytophthora capsici leoniana*) and yield in pepper. *African Journal of Biotechnology*, 8(19), 4884–4894. <https://doi.org/10.5897/AJB09.199>
- Dai, O. 2011. Effect of arbuscular mycorrhizal (AM) inoculation on growth of Chili plant. *African Journal of Microbiology Research*, 5(28). <https://doi.org/10.5897/ajmr11.628>
- De Geyter, N., Gholami, A., Goormachtig, S., & Goossens, A. 2012. Transcriptional machineries in jasmonate-elicited plant secondary metabolism. *Trends in Plant Science*, 17(6), 349–359. <https://doi.org/10.1016/J.TPLANTS.2012.03.001>
- Devi, J., Sood, S., Vidyasagar, & Singh, Y. 2015. Inheritance of bacterial wilt resistance and performance of horticultural traits in bell pepper (*Capsicum annuum* var. *grossum*). *Indian Journal of Agricultural Sciences*, 85(11), 1498–1503.
- Dia, M., Wehner, T. C., & Arellano, C. 2017. RGxE: An R Program for Genotype x Environment Interaction Analysis. *American Journal of Plant Sciences*, 08(07), 1672–1698. <https://doi.org/10.4236/AJPS.2017.87116>
- Díaz Franco, A., Alvarado Carrillo, M., Ortiz Chairez, F., & Grageda Cabrera, O. 2018. Plant nutrition and fruit quality of pepper associated with arbuscular mycorrhizal in greenhouse. *Revista Mexicana de Ciencias Agrícolas*, 4(2), 315–321. <https://doi.org/10.29312/remexca.v4i2.1251>
- Douds, D. D. J., & Reider, C. 2003. Inoculation eighth Mycorrhizal Increases the Yield of Green Peppers in a High P Soil. *Biological Agriculture & Horticulture: An International Journal for Sustainable Production Systems*, 21, 91–102.
- Dowarah, B., Gill, S. S., & Agarwala, N. 2022. Arbuscular Mycorrhizal Fungi in Conferring Tolerance to Biotic Stresses in Plants. In *Journal of Plant Growth Regulation* (Vol. 41, Issue 4, pp. 1429–1444). Springer. <https://doi.org/10.1007/s00344-021-10392-5>
- Du, H., Chen, B., Zhang, X., Zhang, F., Miller, S. A., Rajashekara, G., Xu, X., & Geng, S. 2017. Evaluation of *Ralstonia solanacearum* infection dynamics in resistant and susceptible pepper lines using bioluminescence imaging. *Plant Disease*, 101(2), 272–278. <https://doi.org/10.1094/PDIS-05-16-0714-RE>
- Elahi, F. E., Mridha, M. A. U., & Aminuzzaman, F. M. 2012. Role of AMF on plant growth, nutrient uptake arsenic toxicity and chlorophyll content of chili grown in arsenic amended soil. *Bangladesh J. Agril. Res.*, 37(December), 635–644.
- Enebe, M. C., & Babalola, O. O. 2019. The impact of microbes in the orchestration of plants' resistance to biotic stress: a disease management approach. In *Applied Microbiology and Biotechnology* (Vol. 103, Issue 1, pp. 9–25). <https://doi.org/10.1007/s00253-018-9433-3>
- Estrada-Luna, A. A., Davies, F. T., & Egilla, J. N. 2019. 207 Mycorrhizal Enhancement of the Physiology and Growth of Micropropagated Chile Ancho Pepper (*Capsicum annuum* L. cv. *San Luis*) Plantlets during Acclimatization and Post-acclimatization. *HortScience*, 35(3), 426E – 426. <https://doi.org/10.21273/hortsci.35.3.426e>
- Faisal, M. O. H., Ahmad, T., & Srivastava, N. K. 2010. Influence of different levels of *Glomus macrocarpum* on growth and yield of chilli (*Capsicum annum* L.). *Indian J. Sci. Res.*, 1(2), 97–99.

- FAO. 2020. *FAOSTAT*. <https://www.fao.org/faostat/en/#compare>
- Fernandes, A. 2008. *Structural Equation Modeling Approach PLS and SEM; Application of Smart PLS and AMOS Software*. Laboratory of Statistics, Faculty of Mathematics and Natural Sciences, Brawijaya University, Malang, Indonesia.
- Fernandez, G. C. J. 1992. Effective selection criteria for assessing stress tolerance. In: Kuo C.G. (Ed.), *Proceedings of the International Symposium on Adaptation of Vegetables and Other Food Crops in Temperature and Water Stress*. In *Publication, Tainan, Taiwan*.
[https://www.scirp.org/\(S\(lz5mqp453edsnp55rrgjt55\)\)/reference/ReferencesPapers.aspx?ReferenceID=1818817](https://www.scirp.org/(S(lz5mqp453edsnp55rrgjt55))/reference/ReferencesPapers.aspx?ReferenceID=1818817)
- Fester, T., & Sawers, R. 2011. Progress and challenges in agricultural applications of arbuscular mycorrhizal Fungi. *Critical Reviews in Plant Sciences*, 30(5), 459–470. <https://doi.org/10.1080/07352689.2011.605741>
- Fischer, R. A., & Maurer, R. 1978. Drought resistance in spring wheat cultivars. I. Grain yield responses. *Australian Journal of Agricultural Research*, 29(5), 897–912. <https://doi.org/10.1071/AR9780897>
- Frey-Klett, P., Garbaye, J., & Tarkka, M. 2007. The mycorrhiza helper bacteria revisited. *New Phytologist*, 176(1), 22–36. <https://doi.org/10.1111/j.1469-8137.2007.02191.x>
- Fu, X., Feng, Y. Q., Zhang, X. W., Zhang, Y. Y., Bi, H. G., & Ai, X. Z. 2021. Salicylic acid is involved in rootstock–scion communication in improving the chilling tolerance of grafted cucumber. *Frontiers in Plant Science*, 12(June). <https://doi.org/10.3389/fpls.2021.693344>
- Garcia-Garrido, J. M., García- Garrido, J. M., & Ocampo, J. A. 2002. Regulation of the plant defence response in arbuscular mycorrhizal symbiosis. *Journal of Experimental Botany*, 53(373), 1377–1386. <https://doi.org/10.1093/jexbot/53.373.1377>
- Garmendia, I., Aguirreolea, J., & Goicoechea, N. 2006. Defence-related enzymes in pepper roots during interactions with arbuscular mycorrhizal fungi and/or *Verticillium dahliae*. *BioControl*, 51(3), 293–310. <https://doi.org/10.1007/s10526-005-4238-6>
- Garmendia, I., Goicoechea, N., & Aguirreolea, J. 2004. Effectiveness of three *Glomus* species in protecting pepper (*Capsicum annuum* L.) against verticillium wilt. *Biological Control*, 31(3), 296–305. <https://doi.org/10.1016/j.biocontrol.2004.04.015>
- Gaur, A., Adholeya, A., Mukerji, K. G., Gaur, A., Adholeya, A., & Mukerji, K. G. 1998. A comparison of AM fungi inoculants using *Capsicum* and *Polianthes* in marginal soil amended with organic matter. In *Mycorrhiza* (Vol. 7). Springer-Verlag.
- Gavuzzi, P., Rizza, F., Palumbo, M., Campanile, R. G., Ricciardi, G. L., & Borghi, B. 1997. Evaluation of field and laboratory predictors of drought and heat tolerance in winter cereals. *Canadian Journal of Plant Science*, 77(4), 523–531. <https://doi.org/10.4141/P96-130>
- Gayoso, C., Pomar, F., Novo-Uzal, E., Merino, F., & Martínez de Iláduya, Ó. 2010. The Ve-mediated resistance response of the tomato to *Verticillium dahliae* involves H₂O₂, peroxidase and lignins and drives PAL gene expression. *BMC Plant Biology*, 10. <https://doi.org/10.1186/1471-2229-10-232>

- Ghozali, I. 2008. Structural Equation Modeling; Alternative Method with Partial Least Square (PLS). In *Badan Penerbit Universitas Diponegoro* (2nd ed.). Badan Penerbit Universitas Diponegoro, Semarang, Indonesia.
https://www.researchgate.net/publication/289674653_Structural_Equation_Modeling_Metode_Alternatif_dengan_Partial_Least_Squares_PLS
- Gianinazzi, S., Gollotte, A., Binet, M.-N. N., Van Tuinen, D., Redecker, D., & Wipf, D. 2010. Agroecology: The key role of arbuscular mycorrhizas in ecosystem services. *Mycorrhiza*, 20(8), 519–530. <https://doi.org/10.1007/s00572-010-0333-3>
- Gniffke, P. A., Shieh, S. C., Lin, S. W., Sheu, Z. M., Chen, J. R., Ho, F. I., Tsai, W. S., Chou, Y. Y., Wang, J. F., Cho, M. C., Roland, S., Kenyon, L., Ebert, A. W., Srinivasan, R., & Kumar, S. 2013. Pepper Research and Breeding at AVRDC—The World Vegetable Center. *Proceedings of XV EUCARPIA Meeting on Genetics and Breeding of Capsicum and Eggplant*, 305–311.
- Goicoechea, N., Garmendia, I., Sánchez-Díaz, M., & Aguirreolea, J. 2010. Arbuscular mycorrhizal fungi (AMF) as bioprotector agents against wilt induced by *Verticillium spp.* in pepper: a review. *Spanish Journal of Agricultural Research*, 8(S1), 25. <https://doi.org/10.5424/sjar/201008s1-5300>
- Gosling, P., Hodge, A., Goodlass, G., & Bending, G. D. 2006. Arbuscular mycorrhizal fungi and organic farming. *Agriculture, Ecosystems and Environment*, 113(1–4), 17–35. <https://doi.org/10.1016/j.agee.2005.09.009>
- Graham, J. H., & Abbott, L. K. 2000. Wheat responses to aggressive and non-aggressive arbuscular mycorrhizal fungi. *Plant and Soil*, 220(1–2), 207–218. <https://doi.org/10.1023/a:1004709209009>
- Grimault, T., Anais, G., & Prior, P. 1994. Distribution of *Pseudomonas solanacearum* in the stem tissues of tomato plants with different levels of resistance to bacterial wilt. *Plant Pathology*, 43(4), 663–668. <https://doi.org/10.1111/J.1365-3059.1994.TB01604.X>
- Grimault, T., & Prior, P. 1993. Bacterial wilt resistance in tomato associated with tolerance of vascular tissues to *Pseudomonas solanacearum*. *Plant Pathology*, 42(4), 589–594. <https://doi.org/10.1111/j.1365-3059.1993.tb01539.x>
- Grimault, V., Gélie, B., Lemattre, M., Prior, P., & Schmit, J. 1994. Comparative histology of resistant and susceptible tomato cultivars infected by *Pseudomonas solanacearum*. *Physiological and Molecular Plant Pathology*, 44(2), 105–123. [https://doi.org/10.1016/S0885-5765\(05\)80105-5](https://doi.org/10.1016/S0885-5765(05)80105-5)
- Halim, V. A., Altmann, S., Ellinger, D., Eschen-Lippold, L., Miersch, O., Scheel, D., & Rosahl, S. 2009. PAMP-induced defense responses in potato require both salicylic acid and jasmonic acid. *The Plant Journal: For Cell and Molecular Biology*, 57(2), 230–242. <https://doi.org/10.1111/J.1365-313X.2008.03688.X>
- Hallett, P. D., Feeney, D. S., Bengough, A. G., Rillig, M. C., Scrimgeour, C. M., & Young, I. M. 2009. Disentangling the impact of AM fungi versus roots on soil structure and water transport. *Plant and Soil*, 314(1–2), 183–196. <https://doi.org/10.1007/s11104-008-9717-y>
- Hardoim, P. R., Van Overbeek, L. S., Berg, G., Pirttilä, A. M., Compant, S., Campisano, A., Döring, M., Sessitsch, A., Mach, E., & Michele All'adige, S. 2015. The hidden world within plants: ecological and evolutionary considerations for defining functioning of microbial endophytes. *Microbiol Mol Biol Rev*, 79(3), 293–320. <https://doi.org/10.1128/MMBR.00050-14>

- Harrier, L. A., & Watson, C. A. 2004. The potential role of arbuscular mycorrhizal (AM) fungi in the bioprotection of plants against soil-borne pathogens in organic and/or other sustainable farming systems. *Pest Management Science*, 60(2), 149–157. <https://doi.org/10.1002/PS.820>
- Hause, B., Mrosk, C., Isayenkov, S., & Strack, D. 2007. Jasmonates in arbuscular mycorrhizal interactions. *Phytochemistry*, 68(1), 101–110. <https://doi.org/10.1016/j.phytochem.2006.09.025>
- He, L. Y., Sequeira, L., & Kelman, A. 1983. Characteristics of strains of *P. solanacearum* form China. *Plant Disease*, 67, 1357–1361.
- He, Y., Fukushige, H., Hildebrand, D. F., & Gan, S. 2002. Evidence supporting a role of jasmonic acid in Arabidopsis leaf senescence. *Plant Physiology*, 128(3), 876–884. <https://doi.org/10.1104/pp.010843>
- Heckman, J. R., & Angle, J. S. 1987. Variation between Soybean Cultivars in Vesicular- Arbuscular Mycorrhiza Fungi Colonization 1. *Agronomy Journal*, 79(3), 428–430. <https://doi.org/10.2134/agronj1987.00021962007900030004x>
- Herder, G. Den, Van Isterdael, G., Beeckman, T., & De Smet, I. 2010. The roots of a new green revolution. *Trends in Plant Science*, 15(11), 600–607. <https://doi.org/10.1016/j.tplants.2010.08.009>
- Hetrick, B. A. D., Wilson, G. W. T., & Cox, T. S. 1992. Mycorrhizal dependence of modern wheat cultivars and ancestors: a synthesis. *Canadian Journal of Botany*, 71(3), 512–518. <https://doi.org/10.1139/b93-056>
- Hikichi, Y., Yoshimochi, T., Tsujimoto, S., Shinohara, R., Nakaho, K., Kanda, A., Kiba, A., & Ohnishi, K. 2007. Global regulation of pathogenicity mechanism of *Ralstonia solanacearum*. *Plant Biotechnology*, 24(1), 149–154. <https://doi.org/10.5511/plantbiotechnology.24.149>
- Hoeksema, J. D., Chaudhary, V. B., Gehring, C. A., Johnson, N. C., Karst, J., Koide, R. T., Pringle, A., Zabinski, C., Bever, J. D., Moore, J. C., Wilson, G. W. T., Klironomos, J. N., & Umbanhowar, J. 2010. A meta-analysis of context-dependency in plant response to inoculation with mycorrhizal fungi. *Ecology Letters*, 13(3), 394–407. <https://doi.org/10.1111/j.1461-0248.2009.01430.x>
- Hohmann, P., & Messmer, M. M. 2017. Breeding for mycorrhizal symbiosis: focus on disease resistance. *Euphytica*, 213(5), 1–11. <https://doi.org/10.1007/s10681-017-1900-x>
- Hossain, A. B. S., Sears, R. G., Cox, T. S., & Paulsen, G. M. 1990. Desiccation Tolerance and Its Relationship to Assimilate Partitioning in Winter Wheat. *Crop Science*, 30(3), 622–627. <https://doi.org/10.2135/cropsci1990.0011183x003000030030x>
- Huang, J., Wei, Z., Tan, S., Mei, X., Yin, S., Shen, Q., & Xu, Y. 2013. The rhizosphere soil of diseased tomato plants as a source for novel microorganisms to control bacterial wilt. *Applied Soil Ecology*, 72, 79–84. <https://doi.org/10.1016/J.APSOIL.2013.05.017>
- Huet, G. 2014. Breeding for resistances to *Ralstonia solanacearum*. *Frontiers in Plant Science*, 5(DEC), 715. <https://doi.org/10.3389/FPLS.2014.00715/BIBTEX>
- ICARDA. 2013. *'FIGS'-the Focused Identification of Germplasm Strategy*. www.icarda.org
- Iqbal, U., Mukhtar, T., & Iqbal, S. M. 2014. In vitro and in vivo evaluation of antifungal activities of some antagonistic plants against charcoal rot causing

fungus *Macrophomina phaseolina*. *Pakistan Journal of Agricultural Sciences*, 51(3), 689–694.

- Ishihara, T., Mitsuhara, I., Takahashi, H., & Nakaho, K. 2012. Transcriptome Analysis of Quantitative Resistance-Specific Response upon *Ralstonia solanacearum* Infection in Tomato. *PLoS ONE*, 7(10), 46763. <https://doi.org/10.1371/journal.pone.0046763>
- Jacott, C. N., Murray, J. D., & Ridout, C. J. 2017. Trade-offs in arbuscular mycorrhizal symbiosis: Disease resistance, growth responses and perspectives for crop breeding. *Agronomy*, 7(4), 1–18. <https://doi.org/10.3390/agronomy7040075>
- Janos, D. P. 2007. Plant responsiveness to mycorrhizas differs from dependence upon mycorrhizas. *Mycorrhiza*, 17, 75–91. <https://doi.org/10.1007/s00572-006-0094-1>
- Jiang, G., Wei, Z., Xu, J., Chen, H., Zhang, Y., She, X., Macho, A. P., Ding, W., & Liao, B. 2017. Bacterial wilt in China: History, current status, and future perspectives. *Frontiers in Plant Science*, 8(Sep.), 1–10. <https://doi.org/10.3389/fpls.2017.01549>
- Johnson, N. C., Graham, J. H., & Smith, F. A. 1997. Functioning of mycorrhizal associations along the mutualism-parasitism continuum. *The New Phytologist*, 135(4), 575–586. <https://doi.org/10.1046/j.1469-8137.1997.00729.x>
- Jones, M. D., & Smith, S. E. 2004. Exploring functional definitions of mycorrhizas: Are mycorrhizas always mutualisms? *Canadian Journal of Botany*, 82(8), 1089–1109. <https://doi.org/10.1139/B04-110>
- Jung, S. C., Martinez-Medina, A., Lopez-Raez, J. A., & Pozo, M. J. 2012. Mycorrhiza-Induced Resistance and Priming of Plant Defenses. *Journal of Chemical Ecology*, 38(6), 651–664. <https://doi.org/10.1007/s10886-012-0134-6>
- Kandhasamy, N., Ravichandran, K. R., & Thangavelu, M. 2020. Interactive Influence of Soil and Plant Genotypes on Mycorrhizal Dependency in Finger Millet. *Journal of Soil Science and Plant Nutrition*, 20(3), 1287–1297. <https://doi.org/10.1007/s42729-020-00212-2>
- Kang, Y. J., Ahn, Y. K., Kim, K. T., & Jun, T. H. 2016. Resequencing of *Capsicum annuum* parental lines (YCM334 and Taeon) for the genetic analysis of bacterial wilt resistance. *BMC Plant Biology*, 16(1). <http://bmcpplantbiol.biomedcentral.com/articles/10.1186/s12870-016-0931-0>
- Kapulnik, Y., & Kushnir, U. 1991. Growth dependency of wild, primitive and modern cultivated wheat lines on vesicular-arbuscular mycorrhiza fungi. *Euphytica*, 56, 27–36.
- Kashyap, A., Jiménez-Jiménez, Á. L., Zhang, W., Capellades, M., Srinivasan, S., Laromaine, A., Serra, O., Figueras, M., Rencoret, J., Gutiérrez, A., Valls, M., & Coll, N. S. 2022. Induced ligno-suberin vascular coating and tyramine-derived hydroxycinnamic acid amides restrict *Ralstonia solanacearum* colonization in resistant tomato. *New Phytologist*, 234(4), 1411–1429. <https://doi.org/10.1111/nph.17982>
- Kaur, S., & Suseela, V. 2020. Unraveling arbuscular mycorrhiza-induced changes in plant primary and secondary metabolome. *Metabolites*, 10(8), 1–30. <https://doi.org/10.3390/METABO10080335>
- Kayani, M. Z., Mukhtar, T., & Hussain, M. A. 2017. Effects of southern root knot

nematode population densities and plant age on growth and yield parameters of cucumber. *Crop Protection*, 92, 207–212.
<https://doi.org/10.1016/j.cropro.2016.09.007>

- Kelman, A. 1954. The Relationship Of Pathogenecity in *Pseudomonas solanacearum* To Colony Appearance On A Tetrazolium Chloride Medium. *Phytopathology*, 44, 693–695.
- Kim, B. S., French, E., Caldwell, D., Harrington, E. J., & Iyer-Pascuzzi, A. S. 2016. Bacterial wilt disease: Host resistance and pathogen virulence mechanisms. *Physiological and Molecular Plant Pathology*, 95, 37–43.
<https://doi.org/10.1016/j.pmpp.2016.02.007>
- Kolde, R. 2019. Pretty Heatmaps. *R Package Version*, January(926), 1–8.
<https://rdr.io/cran/pheatmap/>
- Koo, A. J. K., & Howe, G. A. 2009. The wound hormone jasmonate. *Phytochemistry*, 70(13–14), 1571–1580. <https://doi.org/10.1016/J.PHYTOCHEM.2009.07.018>
- Krall, J., Uthoff, V., & Harley, J. 1975. A step-up procedure for selecting variables associated with survival. *Biometrics*, 31, 49–57.
- Kurabachew, H., & Ayana, G. 2016. Bacterial Wilt Caused by *Ralstonia solanacearum* in Ethiopia: Status and Management Approach. *International Journal of Phytopathology*, 05, 107–119.
- Labeau, A., Daunay, M.-C. C., Frary, A., Palloix, A., Wang, F., Dintinger, J., Chiroleu, F., Wicker, E., Prior, P., Lebeau, A., Daunay, M.-C. C., Frary, A., Palloix, A., Wang, J.-F., Dintinger, J., Chiroleu, F., Wicker, E., Prior, P., Labeau, A., ... Prior, P. 2011. Bacterial Wilt Resistance in Tomato, Pepper, and Eggplant: Genetic Resources Respond to Diverse Strains in the *Ralstonia solanacearum* Species Complex. *Phytopathology*, 101(1), 154–165.
<https://doi.org/10.1094/PHTO-02-10-0048>
- Lafortune, D., Béramis, M., Daubèze, A. M., Boissot, N., & Palloix, A. 2005. Partial resistance of pepper to bacterial wilt is oligogenic and stable under tropical conditions. *Plant Disease*, 89(5), 501–506. <https://doi.org/10.1094/PD-89-0501>
- Latz, M. A. C., Jensen, B., Collinge, D. B., & Jørgensen, H. J. L. 2018. Endophytic fungi as biocontrol agents: elucidating mechanisms in disease suppression. *Plant Ecology and Diversity*, 11(5–6), 555–565.
<https://doi.org/10.1080/17550874.2018.1534146>
- Li, H., Smith, F. A., Dickson, S., Holloway, R. E., & Smith, S. E. 2008. Plant growth depressions in arbuscular mycorrhizal symbioses: Not just caused by carbon drain? *New Phytologist*, 178(4), 852–862. <https://doi.org/10.1111/j.1469-8137.2008.02410.x>
- Li, Y., Wei, Y. C., Li, Z. Q., Wang, S. H., & Chang, L. 2014. Relationship between progeny growth performance and molecular marker-based genetic distances in *Eucommia ulmoides* parental genotypes. *Genetics and Molecular Research*, 13(3), 4736–4746. <https://doi.org/10.4238/2014.JULY.2.3>
- Lillemo, M., Joshi, A. K., Prasad, R., Chand, R., & Singh, R. P. 2013. QTL for spot blotch resistance in bread wheat line Saar co-locate to the biotrophic disease resistance loci Lr34 and Lr46. *Theoretical and Applied Genetics*, 126(3), 711–719. <https://doi.org/10.1007/s00122-012-2012-6>
- Linderman, R. G., & Davis, E. A. 2004. Varied response of marigold (*Tagetes* spp.) genotypes to inoculation with different arbuscular mycorrhizal fungi. *Scientia*

Horticulturae, 99, 67–78. [https://doi.org/10.1016/S0304-4238\(03\)00081-5](https://doi.org/10.1016/S0304-4238(03)00081-5)

- Lioussanne, L., Jolicoeur, M., & St-Arnaud, M. 2008. Mycorrhizal colonization with *Glomus intraradices* and development stage of transformed tomato roots significantly modify the chemotactic response of zoospores of the pathogen *Phytophthora nicotianae*. *Soil Biology and Biochemistry*, 40(9), 2217–2224. <https://doi.org/10.1016/J.SOILBIO.2008.04.013>
- Liu, H., Carvalhais, L. C., Crawford, M., Singh, E., Dennis, P. G., Pieterse, C. M. J., & Schenk, P. M. 2017. Inner plant values: Diversity, colonization and benefits from endophytic bacteria. *Frontiers in Microbiology*, 8(DEC), 2552. <https://doi.org/10.3389/fmicb.2017.02552>
- Liu, H., Wu, M., Liu, J., Qu, Y., Gao, Y., & Ren, A. 2020. Tripartite Interactions Between Endophytic Fungi, Arbuscular Mycorrhizal Fungi, and *Leymus chinensis*. *Microbial Ecology*, 79(1), 98–109. <https://doi.org/10.1007/s00248-019-01394-8>
- Livak, K. J., & Schmittgen, T. D. 2001. Analysis of relative gene expression data using real-time quantitative PCR and the 2- $\Delta\Delta CT$ method. *Methods*, 25(4), 402–408. <https://doi.org/10.1006/meth.2001.1262>
- Llorens, E., García-Agustín, P., & Lapeña, L. 2017. Advances in induced resistance by natural compounds: Towards new options for woody crop protection. In *Scientia Agricola* (Vol. 74, Issue 1, pp. 90–100). <https://doi.org/10.1590/1678-992x-2016-0012>
- Llorens, E., Scalschi, L., Sharon, O., Vicedo, B., Sharon, A., & García-Agustín, P. 2022. Jasmonic acid pathway is required in the resistance induced by *Acremonium sclerotigenum* in tomato against *Pseudomonas syringae*. *Plant Science*, 318, 1–11. <https://doi.org/10.1016/j.plantsci.2022.111210>
- Lopes, C. A., & Boiteux, L. S. 2004. Biovar-specific and broad-spectrum sources of resistance to bacterial wilt (*Ralstonia solanacearum*) in *Capsicum*. *CA Lopes and LS Boiteux Crop Breeding and Applied Biotechnology*, 4, 350–355.
- López-Ráez, J. A., Flors, V., García, J. M., & Pozo, M. J. 2010. AM symbiosis alters phenolic acid content in tomato roots. *Plant Signaling and Behavior*, 5(9), 1138–1140. <https://doi.org/10.4161/psb.5.9.12659>
- López-Ráez, J. A., Pozo, M. J., & García-Garrido, J. M. 2011. Strigolactones: A cry for help in the rhizosphere. *Botany*, 89(8), 513–522. <https://doi.org/10.1139/b11-046>
- López, P., Gorzalczany, S., Acevedo, C., Alonso, R., & Ferraro, G. 2012. Chemical study and anti-inflammatory activity of *Capsicum chacoense* and *C. baccatum*. *Revista Brasileira de Farmacognosia*, 22(2), 455–458. <https://doi.org/10.1590/S0102-695X2011005000187>
- Lovelock, D. A., Šola, I., Marschollek, S., Donald, C. E., Rusak, G., van Pée, K. H., Ludwig-Müller, J., & Cahill, D. M. 2016. Analysis of salicylic acid-dependent pathways in *Arabidopsis thaliana* following infection with *Plasmodiophora brassicae* and the influence of salicylic acid on disease. *Molecular Plant Pathology*, 17(8), 1237–1251. <https://doi.org/10.1111/mpp.12361>
- Lowe-Power, T. M., Jacobs, J. M., Ailloud, F., Fochs, B., Prior, P., & Allen, C. 2016. Degradation of the plant defense signal salicylic acid protects *Ralstonia solanacearum* from toxicity and enhances virulence on tobacco. In *mBio* (Vol. 7, Issue 3). American Society for Microbiology. <https://doi.org/10.1128/mBio.00656-16>

- Lowe-Power, T. M., Khokhani, D., & Allen, C. 2018. How *Ralstonia solanacearum* Exploits and Thrives in the Flowing Plant Xylem Environment. *Trends in Microbiology*, 26(11), 929–942. <https://doi.org/10.1016/j.tim.2018.06.002>
- Lynch, J. P. 2007. Turner review no. 14. Roots of the second green revolution. In *Australian Journal of Botany* (Vol. 55, Issue 5, pp. 493–512). <https://doi.org/10.1071/BT06118>
- Maherali, H., & Klironomos, J. N. 2007. Influence of phylogeny on fungal community assembly and ecosystem functioning. *Science*, 316(5832), 1746–1748. <https://doi.org/10.1126/science.1143082>
- Mamphogoro, T. P., Babalola, O. O., & Aiyegoro, O. A. 2020. Sustainable management strategies for bacterial wilt of sweet peppers (*Capsicum annuum*) and other Solanaceous crops. *Journal of Applied Microbiology*, 129(3), 496–508. <https://doi.org/10.1111/JAM.14653>
- Mandal, D., & Saha, J. 2016. Comparative efficacy of arbuscular mycorrhizal inoculum on the growth of Sorghum (*Sorghum vulgare* L .) under municipal solid waste. *J. Mycopathol. Res.*, 54, 367–370.
- Mansfield, J., Genin, S., Magori, S., Citovsky, V., Sriariyanum, M., Ronald, P., Dow, M., Verdier, V., Beer, S. V., Machado, M. A., Toth, I., Salmond, G., & Foster, G. D. 2012. Top 10 plant pathogenic bacteria in molecular plant pathology. In *Mol. Plant Pathol.* (Vol. 13, Issue 6, pp. 614–629). <https://doi.org/10.1111/j.1364-3703.2012.00804.x>
- Matsunaga, H., & Monma, S. 1999. Sources of Resistance to Bacterial Wilt in *Capsicum*. *J. Japan. Soc. Hort. Sci.*, 4(68), 753–761. <http://www.mendeley.com/research/geology-volcanic-history-eruptive-style-yakedake-volcano-group-central-japan/>
- Matsunaga, H., Saito, T., & Saito, A. 2011. Evaluation of resistance to bacterial wilt and *Phytophthora* blight in *Capsicum* genetic resources collected in Myanmar. *Journal of the Japanese Society for Horticultural Science*, 80(4), 426–433. <https://doi.org/10.2503/jjshs1.80.426>
- Mcgarvey, J. A., Denny, T. P., & Schell, M. A. 1999. *Spatial-Temporal and Quantitative Analysis of Growth and EPS I Production by Ralstonia solanacearum in Resistant and Susceptible Tomato Cultivars* (Vol. 89, Issue 12).
- Mimura, Y., Kageyama, T., Minamiyama, Y., & Hirai, M. 2009. QTL analysis for resistance to *Ralstonia solanacearum* in *Capsicum* Accession “LS2341.” *Journal of the Japanese Society for Horticultural Science*, 78(3), 307–313. <https://doi.org/10.2503/jjshs1.78.307>
- Mimura, Y., Yoshikawa, M., & Hirai, M. 2009. Pepper Accession LS2341 Is Highly Resistant to *Ralstonia solanacearum* Strains from Japan. *HORTSCIENCE*, 44(7), 2038–2040. <https://doi.org/10.21273/hortsci.44.7.2038>
- Mishra, V., Ellouze, W., & Howard, R. J. 2018. Utility of Arbuscular Mycorrhizal Fungi for Improved Production and Disease Mitigation in Organic and Hydroponic Greenhouse Crops. *Journal of Horticulture*, 05(03). <https://doi.org/10.4172/2376-0354.1000237>
- Mukhtar, T., Arooj, M., Ashfaq, M., & Gulzar, A. 2017. Resistance evaluation and host status of selected green gram germplasm against *Meloidogyne incognita*. *Crop Protection*, 92, 198–202. <https://doi.org/10.1016/j.cropro.2016.10.004>

- Nakaho, K., & Allen, C. 2009. A pectinase-deficient *Ralstonia solanacearum* strain induces reduced and delayed structural defences in tomato xylem. *Journal of Phytopathology*, 157(4), 228–234. <https://doi.org/10.1111/j.1439-0434.2008.01467.x>
- Nakaho, K., Hibino, H., & Miyagawa, H. 2000. Possible mechanisms limiting movement of *Ralstonia solanacearum* in resistant tomato tissues. *Journal of Phytopathology*, 148(3), 181–190. <https://doi.org/10.1046/j.1439-0434.2000.00476.x>
- Nakaho, K., Seo, S., Ookawa, K., Inoue, Y., Ando, S., Kanayama, Y., Miyashita, S., & Takahashi, H. 2017. Involvement of a vascular hypersensitive response in quantitative resistance to *Ralstonia solanacearum* on tomato rootstock cultivar LS-89. *Plant Pathology*, 66(1), 150–158. <https://doi.org/10.1111/ppa.12547>
- Namisy, A., Chen, J. R., Prohens, J., Metwally, E., Elmahrouk, M., & Rakha, M. 2019. Screening cultivated eggplant and wild relatives for resistance to bacterial wilt (*Ralstonia solanacearum*). *Agriculture (Switzerland)*, 9(7), 1–11. <https://doi.org/10.3390/agriculture9070157>
- Navarro-Meléndez, A. L., & Heil, M. 2014. Symptomless endophytic fungi suppress endogenous levels of salicylic acid and interact with the jasmonate-dependent indirect defense traits of their host, lima bean (*Phaseolus lunatus*). *Journal of Chemical Ecology*, 40(7), 816–825. <https://doi.org/10.1007/S10886-014-0477-2>
- Newman, E. I., & Reddell, P. 1987. The distribution of mycorrhizas among families of vascular plants. *New Phytol*, 106, 745–751.
- Noceto, P. A., Bettenfeld, P., Boussageon, R., Hériché, M., Sportes, A., van Tuinen, D., Courty, P. E., & Wipf, D. 2021. Arbuscular mycorrhizal fungi, a key symbiosis in the development of quality traits in crop production, alone or combined with plant growth-promoting bacteria. *Mycorrhiza*, 31(6), 655–669. <https://doi.org/10.1007/s00572-021-01054-1>
- Oyetunji, O., Salami, A., Oyetunji OJ, Salami AO, Oyetunji, O., & Salami, A. 2011. Study on the control of Fusarium wilt in the stems of mycorrhizal and trichoderma inoculated pepper (*Capsicum annum* L.). *J. Appl. Biosci*, 45, 3071–3080. www.biosciences.elewa.org
- Ozgonen, H., & Erkilic, A. 2007. Growth enhancement and Phytophthora blight (*Phytophthora capsici* Leonian) control by arbuscular mycorrhizal fungal inoculation in pepper. *Crop Protection*, 26(11), 1682–1688. <https://doi.org/10.1016/j.cropro.2007.02.010>
- Ozgonen, H., Yardimci, N., & Cular Kilic, H. 2009. Induction of phenolic compounds and pathogenesis-related proteins by mycorrhizal fungal inoculations against *Phytophthora capsici* leonian in pepper. *Pakistan Journal of Biological Sciences*, 12(17), 1181–1187. <https://doi.org/10.3923/pjbs.2009.1181.1187>
- Parniske, M. 2008. Arbuscular mycorrhiza: The mother of plant root endosymbioses. *Nature Reviews Microbiology*, 6(10), 763–775. <https://doi.org/10.1038/nrmicro1987>
- Paszkowski, U. 2006. Mutualism and parasitism: the yin and yang of plant symbioses. *Current Opinion in Plant Biology*, 9(4), 364–370. <https://doi.org/10.1016/j.pbi.2006.05.008>
- Pawaskar, J., Kadam, J., Navathe, S., & Kadam, J. 2014. Response of chilli varieties and genotypes to bacterial wilt caused by *Ralstonia solanacearum* and its management. *Indian Journal of Science*, 11(December), 66–72.

- Peeters, N., Guidot, A., Vailleau, F., & Valls, M. 2013. *Ralstonia solanacearum*, a widespread bacterial plant pathogen in the post-genomic era. <https://doi.org/10.1111/mpp.12038>
- Pereira, J. A. P., Vieira, I. J. C., Freitas, M. S. M., Prins, C. L., Martins, M. A., & Rodrigues, R. 2016. Effects of arbuscular mycorrhizal fungi on *Capsicum* spp. *Journal of Agricultural Science*, 154(5), 828–849. <https://doi.org/10.1017/S0021859615000714>
- Phillips, J. M. J. J. M., & Hayman, D. S. D. 1970. Improved procedures for clearing roots and staining parasitic and vesicular-arbuscular mycorrhizal fungi for rapid assessment of infection. *Transactions of the British Mycological Society*, 55(1), 158–IN18. [https://doi.org/10.1016/s0007-1536\(70\)80110-3](https://doi.org/10.1016/s0007-1536(70)80110-3)
- Pieterse, C. M. J., Van Der Does, D., Zamioudis, C., Leon-Reyes, A., & Van Wees, S. C. M. 2012. Hormonal modulation of plant immunity. *Annual Review of Cell and Developmental Biology*, 28, 489–521. <https://doi.org/10.1146/ANNUREV-CELLBIO-092910-154055>
- Plant Genetic Resources Instit, I. 1995. *Descriptors for capsicum (Capsicum spp.)*.
- Plener, L., Boistard, P., Gonzá Lez, A., Boucher, C., & Phane Genin, S. 2012. *Metabolic Adaptation of Ralstonia solanacearum during Plant Infection: A Methionine Biosynthesis Case Study*. <https://doi.org/10.1371/journal.pone.0036877>
- Plener, L., Manfredi, P., Valls, M., & Genin, S. 2010. PrhG, a transcriptional regulator responding to growth conditions, is involved in the control of the type III secretion system regulon in *Ralstonia solanacearum*. *Journal of Bacteriology*, 192(4), 1011–1019. <https://doi.org/10.1128/JB.01189-09>
- Pozo, M. J., & Azcón-Aguilar, C. 2007. Unraveling mycorrhiza-induced resistance. *Current Opinion in Plant Biology*, 10(4), 393–398. <https://doi.org/10.1016/j.pbi.2007.05.004>
- Pozo, M. J., Cordier, C., Dumas-Gaudot, E., Gianinazzi, S., Barea, J. M., & Azcón-Aguilar, C. 2002. Localized versus systemic effect of arbuscular mycorrhizal fungi on defence responses to *Phytophthora* infection in tomato plants. *Journal of Experimental Botany*, 53(368), 525–534. <https://doi.org/10.1093/jexbot/53.368.525>
- R Core Team. 2018. A Language and Environment for Statistical Computing. *R Foundation for Statistical Computing*, 2, <https://www.R-project.org>. [https://www.scirp.org/\(S\(351jmbntvnsjt1aadkposzje\)\)/reference/ReferencesPapers.aspx?ReferenceID=2144573](https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=2144573)
- Rahman, M. A., Abdullah, H., & Vanhaecke, M. 1999. Histopathology of susceptible and resistant *Capsicum annuum* cultivars infected with *Ralstonia solanacearum*. *Journal of Phytopathology*, 147(3), 129–140. <https://doi.org/10.1046/j.1439-0434.1999.147003129.x>
- Raivo, K. 2019. Package “pheatmap”: Pretty Heatmap. <https://cran.r-project.org/Web/Packages/Pheatmap/Index.Html>
- Reddy, S. D. M. R., Svistoonoff, S., Breuillin, F., Wegmüller, S., Bucher, M., & Reinhardt, D. 2009. Development and Function of the Arbuscular Mycorrhizal Symbiosis in Petunia. In T. Gerats & J. Strommer (Eds.), *Petunia: Evolutionary, Developmental and Physiological Genetics (Second Edition)* (Issue December, pp. 131–156). Springer, New York, NY. <https://doi.org/10.4324/9781315129518-30>

- Redecker, D., Schüßler, A., Stockinger, H., Stürmer, S. L., Morton, J. B., & Walker, C. 2013. An evidence-based consensus for the classification of arbuscular mycorrhizal fungi (Glomeromycota). *Mycorrhiza*, 23(7), 515–531. <https://doi.org/10.1007/s00572-013-0486-y>
- Regvar, M., Vogel-Mikuš, K., & Ševerkar, T. 2003. Effect of AMF inoculum from field isolates on the yield of green pepper, parsley, carrot, and tomato. *Folia Geobotanica*, 38(2), 223–234. <https://doi.org/10.1007/BF02803154>
- Royal Horticultural Society. 2016. *Royal Horticultural Society Colour Charts Edition V*. 2016. <http://rhscf.orgfree.com/>
- Safni, I., Cleenwerck, I., De Vos, P., Fegan, M., Kappler, S., & Ulrike. 2014. Polyphasic taxonomic revision of the *Ralstonia solanacearum* species complex: proposal to emend the descriptions of *Ralstonia solanacearum* and *Ralstonia syzygii* and reclassify current *R. syzygii* strains as *Ralstonia syzygii* s. *International Journal Of Systematic and Evolutionary Microbiology*, 64(9), 3087–3101.
- Sagar, V., Malkhan, S. G., Jeevalatha, A., Rahul, R. B., S., K. C., R., K. A., & Sanjeev, S. 2014. Phylotype analysis of *Ralstonia solanacearum* strains causing potato bacterial wilt in Karnataka in India. *African Journal of Microbiology Research*, 8(12), 1277–1281. <https://doi.org/10.5897/ajmr2014.6613>
- Salloum, M. S., Guzzo, M. C., Velazquez, M. S., Sagadin, M. B., & Luna, C. M. 2016. Variability in colonization of arbuscular mycorrhizal fungi and its effect on mycorrhizal dependency of improved and unimproved soybean cultivars. *Canadian Journal of Microbiology*, 62(12), 1034–1040. <https://doi.org/10.1139/cjm-2016-0383>
- Sanati, S., Razavi, B. M., & Hosseinzadeh, H. 2018. A review of the effects of *Capsicum annum* L. and its constituent, capsaicin, in metabolic syndrome. *Iranian Journal of Basic Medical Sciences*, 21(5), 439–448. <https://doi.org/10.22038/IJBMS.2018.25200.6238>
- Sanmartín, N., Pastor, V., Pastor-Fernández, J., Flors, V., Pozo, M. J., & Sánchez-Bel, P. 2021. Role and mechanisms of callose priming in mycorrhiza-induced resistance. *Journal of Experimental Botany*, 71(9), 2769–2781. <https://doi.org/10.1093/JXB/ERAA030>
- Sarwade, P. P., Chandanshive, S. S., Kanade, M. B., Ambuse, M. G., & Bhale, U. N. 2011. Growth effect of *Capsicum annum* var. *Jwala* plants inoculated with *Glomus fasciculatum* and *Trichoderma* species. *International Multidisciplinary Research Journal*, 1(12), 13–16.
- SAS Institute. 2013. *SAS System for Windows 9.4*. SAS Institute, Inc., North Carolina, USA.
- Sawers, R. J. H., Gebreselassie, M. N., Janos, D. P., & Paszkowski, U. 2010. Characterizing variation in mycorrhiza effect among diverse plant varieties. *Theoretical and Applied Genetics*, 120(5), 1029–1039. <https://doi.org/10.1007/s00122-009-1231-y>
- Scalschi, L., Vicedo, B., Camañes, G., Fernandez-Crespo, E., Lapeña, L., González-Bosch, C., & García-Agustín, P. 2013. Hexanoic acid is a resistance inducer that protects tomato plants against *Pseudomonas syringae* by priming the jasmonic acid and salicylic acid pathways. *Molecular Plant Pathology*, 14(4), 342–355. <https://doi.org/10.1111/mpp.12010>

- Schindelin, J., Arganda-Carreras, I., Frise, E., Kaynig, V., Longair, M., Pietzsch, T., Preibisch, S., Rueden, C., Saalfeld, S., Schmid, B., Tinevez, J. Y., White, D. J., Hartenstein, V., Eliceiri, K., Tomancak, P., & Cardona, A. 2012. Fiji: An open-source platform for biological-image analysis. *Nature Methods*, 9(7), 676–682. <https://doi.org/10.1038/nmeth.2019>
- Sensoy, S., Demir, S., Turkmen, O., Erdinc, C., & Savur, O. B. 2007. Responses of some different pepper (*Capsicum annuum* L.) genotypes to inoculation with two different arbuscular mycorrhizal fungi. *Scientia Horticulturae*, 113(1), 92–95. <https://doi.org/10.1016/j.scienta.2007.01.023>
- Sharma, M. P., & Council, I. 2016. *Natural mechanisms of soil suppressiveness against diseases caused by Fusarium*. April, 219–247. <https://doi.org/10.1007/978-3-319-23075-7>
- Sharma, S., Singh, Y., & Sharma, A. 2013. Genetics of Bacterial Wilt Resistance in Sweet Pepper. *Bioinfolet*, 10, 795–799. <https://www.researchgate.net/publication/299468635>
- Singh, A., Gupta, R., & Pandey, R. 2016. Rice seed priming with picomolar rutin enhances rhizospheric *Bacillus subtilis* CIM colonization and plant growth. *PLoS ONE*, 11(1). <https://doi.org/10.1371/JOURNAL.PONE.0146013>
- Singh, A. K., Hamel, C., DePauw, R. M., & Knox, R. E. 2012. Genetic variability in arbuscular mycorrhizal fungi compatibility supports the selection of durum wheat genotypes for enhancing soil ecological services and cropping systems in Canada. *Canadian Journal of Microbiology*, 58(3), 293–302. <https://doi.org/10.1139/W11-140>
- Singh, A., Kumar, R., & Singh, D. 2019. Mycorrhizal fungi as biocontrol agent for soil borne pathogens : A review. *Journal of Pharmacognosy and Phytochemistry*, 1(1), 281–284. <http://www.phytojournal.com/archives/2019/vol8issue1S/PartG/Sp-8-1-84-415.pdf>
- Singh, N., Singh, D., & Singh, N. 2017. Effect of *Glomus bagyarajii* inoculation and phosphorus amendments on fusarial wilt of chickpea. *Agricultural Research Journal*, 54(2), 236. <https://doi.org/10.5958/2395-146X.2017.00043.6>
- Singh, P., & Bhatia, D. 2017. Incomplete block designs for plant breeding experiments. *Agricultural Research Journal*, 54(4), 607. <https://doi.org/10.5958/2395-146X.2017.00119.3>
- Smith, S. E., & Read, D. J. 2008. *Mycorrhizal Symbiosis*. 3rd Edition. Academic Press, London. - References - Scientific Research Publishing. [https://www.scirp.org/\(S\(351jmbntvnst1aadkoze\)\)/reference/referencespapers.aspx?referenceid=1398632](https://www.scirp.org/(S(351jmbntvnst1aadkoze))/reference/referencespapers.aspx?referenceid=1398632)
- Smith, S. E., Smith, F. A., & Jakobsen, I. 2003. Mycorrhizal fungi can dominate phosphate supply to plants irrespective of growth responses. *Plant Physiology*, 133(1), 16–20. <https://doi.org/10.1104/pp.103.024380>
- Sreeramulu, K. R., & Bagyaraj, D. J. 1986. *Field response of chilli to VA mycorrhiza on black clayey soil*. 93, 299–302.
- Strack, D., Fester, T., Hause, B., Schliemann, W., & Walter, M. H. 2003. Arbuscular Mycorrhiza: Biological, Chemical, And Molecular Aspects. *Journal of Chemical Ecology*, 29(9), 1955–1979.
- Sun, Y., Wang, K., Caceres-Moreno, C., Jia, W., Chen, A., Zhang, H., Liu, R., &

- Macho, A. P. 2017. Genome sequencing and analysis of *Ralstonia solanacearum* phylotype I strains FJAT-91, FJAT-452 and FJAT-462 isolated from tomato, eggplant, and chili pepper in China. *Standards in Genomic Sciences*, 12(1), 1–11. <https://doi.org/10.1186/s40793-017-0241-7>
- Tahat, M. M., & Sijam, K. 2010. *Ralstonia solanacearum*: The bacterial wilt causal agent. *Asian Journal of Plant Sciences*, 9(7), 385–393. <https://doi.org/10.3923/ajps.2010.385.393>
- Tahat, M. M., Sijam, K., & Othman, R. 2012. The potential of endomycorrhizal fungi in controlling tomato bacterial wilt *Ralstonia solanacearum* under glasshouse conditions. *African Journal of Biotechnology*, 11(67), 13085–13094. <https://doi.org/10.5897/AJB11.3629>
- Tawaraya, K. 2003. Arbuscular mycorrhizal dependency of different plant species and cultivars. *Soil Science and Plant Nutrition*, 49(5), 655–668. <https://doi.org/10.1080/00380768.2003.10410323>
- Tennant, D. 1975. A Test of a Modified Line Intersect Method of Estimating Root Length. *The Journal of Ecology*, 63(3), 995. <https://doi.org/10.2307/2258617>
- Thakur, B. R. 1990. *Evaluation of Disease Resistance in Capsicum Peppers*. CSK Himachal Pradesh Krishi Vishwavidyalaya, Palampur.
- Thakur, P. P., Mathew, D., Nazeem, P. A., Abida, P. S., Indira, P., Girija, D., Shylaja, M. R., & Valsala, P. A. 2014. Identification of allele-specific AFLP markers linked with bacterial wilt [*Ralstonia solanacearum* (Smith) Yabuuchi et al.] resistance in hot peppers (*Capsicum annuum* L.). *Physiological and Molecular Plant Pathology*, 87, 19–24. <https://doi.org/10.1016/J.PMPP.2014.05.001>
- Tiwari, M., Pati, D., Mohapatra, R., Sahu, B. B., & Singh, P. 2022. The Impact of Microbes in Plant Immunity and Priming Induced Inheritance: A Sustainable Approach for Crop protection. In *Plant Stress* (Vol. 4, p. 100072). Elsevier. <https://doi.org/10.1016/j.stress.2022.100072>
- Torrecillas, E., Alguacil, M. M., & Roldán, A. 2012. Host preferences of arbuscular mycorrhizal fungi colonizing annual herbaceous plant species in semiarid mediterranean prairies. *Applied and Environmental Microbiology*, 78(17), 6180–6186. <https://doi.org/10.1128/AEM.01287-12>
- Tran, N. H., & Byungsoo, K. 2010. Inheritance of Resistance to Bacterial Wilt (*Ralstonia solanacearum*) in Pepper (*Capsicum annuum* L.). *Horticulture, Environment & Biotechnology*, 51, 431–439.
- Tripodi, P., & Kumar, S. 2019. The Capsicum Crop: An Introduction. In *Springer Nature Switzerland AG 2019*. (pp. 1–8). https://doi.org/10.1007/978-3-319-97217-6_1
- Van Loon, L. C., Rep, M., & Pieterse, C. M. J. 2006. Significance of inducible defense-related proteins in infected plants. *Annual Review of Phytopathology*, 44, 135–162. <https://doi.org/10.1146/annurev.phyto.44.070505.143425>
- Van Wees, S. C., Van der Ent, S., & Pieterse, C. M. 2008. Plant immune responses triggered by beneficial microbes. *Current Opinion in Plant Biology*, 11(4), 443–448. <https://doi.org/10.1016/j.pbi.2008.05.005>
- Varshney, R. K., Bohra, A., Yu, J., Graner, A., Zhang, Q., & Sorrells, M. E. 2021. Designing Future Crops: Genomics-Assisted Breeding Comes of Age. *Trends in Plant Science*, 26(6), 631–649. <https://doi.org/10.1016/j.tplants.2021.03.010>

- Vasse, J., Genin, S., Frey, P., Boucher, C., & Brito, B. 2000. The *hrpB* and *hrpG* regulatory genes of *Ralstonia solanacearum* are required for different stages of the tomato root infection process. *Molecular Plant-Microbe Interactions*, 13(3), 259–267. <https://doi.org/10.1094/MPMI.2000.13.3.259>
- Wallis, F. M., & Truter, S. J. 1978. Histopathology of tomato plants infected with *Pseudomonas solanacearum*, with emphasis on ultrastructure. *Physiological Plant Pathology*, 13(3), 307–317. [https://doi.org/10.1016/0048-4059\(78\)90047-4](https://doi.org/10.1016/0048-4059(78)90047-4)
- Wang, B., & Qiu, Y. L. 2006. Phylogenetic distribution and evolution of mycorrhizas in land plants. *Mycorrhiza*, 16(5), 299–363. <https://doi.org/10.1007/s00572-005-0033-6>
- Wang, J.-F., & Lin, C.-H. 2005. Bacterial Wilt management in Tomato. In *AVRDC Publication*. http://203.64.245.61/web_crops/tomato/bacterial_wilt.pdf
- Wani, Z. A., Ashraf, N., Mohiuddin, T., & Riyaz-UI-Hassan, S. 2015. Plant-endophyte symbiosis, an ecological perspective. In *Applied Microbiology and Biotechnology* (Vol. 99, Issue 7, pp. 2955–2965). <https://doi.org/10.1007/s00253-015-6487-3>
- Wehner, J., Antunes, P. M., Powell, J. R., Mazukatow, J., & Rillig, M. C. 2010. Plant pathogen protection by arbuscular mycorrhizas: A role for fungal diversity? *Pedobiologia*, 53(3), 197–201. <https://doi.org/10.1016/j.pedobi.2009.10.002>
- Whipps, J. M. 2004. Prospects and limitations for mycorrhizas in biocontrol of root pathogens. *Canadian Journal of Botany*, 82(8), 1198–1227. <https://doi.org/10.1139/B04-082>
- www.genaid.com. 2020. *Geneaid Biotech Ltd*. <https://www.genaid.com/>
- Xavier, L., & Boyetchko, S. 2003. *Arbuscular Mycorrhizal Fungi In Plant Disease Control*. August. <https://doi.org/10.1201/9780203913369.ch16>
- Yadeta, K. A., & Thomma, B. P. H. J. 2013. The xylem as a battleground for plant hosts and vascular wilt pathogens. *Frontiers in Plant Science*, 4(APR), 1–13. <https://doi.org/10.3389/fpls.2013.00097>
- Yang, S., Shi, Y., Zou, L., Huang, J., Shen, L., Wang, Y., Guan, D., & He, S. 2020. Pepper CaMLO6 negatively regulates *ralstonia solanacearum* resistance and positively regulates high temperature and high humidity responses. *Plant and Cell Physiology*, 61(7), 1223–1238. <https://doi.org/10.1093/PCP/PCAA052>
- Yuan, S., Li, M., Fang, Z., Liu, Y., Shi, W., Pan, B., Wu, K., Shi, J., Shen, B., & Shen, Q. 2016. Biological control of tobacco bacterial wilt using *Trichoderma harzianum* amended bioorganic fertilizer and the arbuscular mycorrhizal fungi *Glomus mosseae*. *Biological Control*, 92, 164–171. <https://doi.org/10.1016/J.BIOCONTROL.2015.10.013>
- Yuliar, Asi Nion, Y., & Toyota, K. 2015. Recent trends in control methods for bacterial wilt diseases caused by *Ralstonia solanacearum*. *Microbes and Environments*, 30(1), 1–11. <https://doi.org/10.1264/JSME2.ME14144>
- Zangaro, W., Nisizaki, S. M. A., Domingos, J. C. B., & Nakano, E. M. 2002. Arbuscular Mycorrhizal in Native Woody Species of Tibagi River Basin, Paraná. *Cerne*, 8(1), 77–87.
- Zeiss, D. R., Mhlango, M. I., Tugizimana, F., Steenkamp, P. A., & Dubery, I. A. 2019. Metabolomic profiling of the host response of tomato (*Solanum lycopersicum*) following infection by *Ralstonia solanacearum*. *International*

Journal of Molecular Sciences, 20(16). <https://doi.org/10.3390/ijms20163945>

Zhang, L., Zhou, J., George, T. S., Limpens, E., & Feng, G. 2021. Arbuscular mycorrhizal fungi conducting the hyphosphere bacterial orchestra. *Trends in Plant Science*, 1–10. <https://doi.org/10.1016/j.tplants.2021.10.008>