DAFTAR PUSTAKA

Ahemad, M., & Khan, M. S. 2012. Effect of fungicides on plant growth promoting activities of phosphate solubilizing *Pseudomonas putid*a isolated from mustard (*Brassica compestris*) rhizosphere. *Chemosphere*. 86 (9): 945–950p. https://doi.org/10.1016/j.chemosphere.2011.11.013.

Ahmad, F., I. Ahmad, & M.S. Khan. 2008. Screening of Free-Living Rhizospheric Bacteria for Their Multiple Plant Growth Promoting Activities. *Microbiological Research*. 163 (2): 173 – 181p. https://doi.org/10.1016/j.micres.2006.04.001.

Alina, S. O., F. Constantinscu, and C. C. Petruta. 2015. Biodiversity of *Bacillus subtilis* group and beneficial traits of *Bacillus* species useful in plant protection. *Romanian Biotechnologcal letters*. Vol. 20, No. 5: 10737-10750p.

Alori, E. T., B.R. Glick, and O.O. Babalola. 2017. Microbial phosphorus solubilization and its potential for use in sustainable agriculture. Frontiers In Microbiology, 8, 971. https://doi.org/10.3389/fmicb.2017.00971

Anand, K., Kumari, B., & Mallick, M. A. 2016. Phosphate solubilizing microbes: An effective and alternative approach as biofertilizers. International Journal of Pharmacy and Pharmaceutical Sciences, 8(2), 37–40.

Anesini, C., G.E. Ferraro, and R. Filip. 2008. Total Polyphenol Content and Antioxidant Capacity of Commercially Available Tea (*Camellia sinensis*) in Argentina. J. Agric. Food Chem (56): 9225–9229. https://doi.org/10.1021/jf8022782

Anirban Basu, Priyanka Prasad, Subha Narayan Das, Sadaf Kalam, R. Z. Sayyed, M. S. Reddy and Hesham El Enshasy. 2021. Plant Growth Promoting Rhizobacteria (PGPR) as Green Bioinoculants: Recent Developments, Constraints, and Prospects. *Sustainability*. 13: 1140p. https://doi.org/10.3390/su13031140

Asaf, S., Khan, M. A., Khan, A. L., Waqas, M., Shahzad, R., Kim, A. Y., Kang, S. M., and Lee, I. J. 2017. Bacterial endophytes from arid land plants regulate endogenous hormone content and promote growth in crop plants: An example of *Sphingomonas* sp. and *Serratia marcescens*. *Journal of Plant Interactions*. Vol. 12. No. 1: 31–38p. https://doi.org/10.1080/17429145.2016.1274060

Ayu, L., Didiek I., Erlina A. 2010. Pertumbuhan hasil dan kualitas pucuk teh (*Camellia sinensis* (L) Kuntze) di berbagai tinggi tempat.

Aziez, S. M., Eweda, W. E., Girgis, M. G. Z., and Ghany, B. F. A. 2014. Improving teh productivity and quality of black cumin (*Nigella sativa*) by using *Azotobacter* sp. as N 2 biofertilizer. *Annals of Agricultural Science*. 59(1): 95-108p. http://dx.doi.org/10.1016/j.aoas.2014.06.014

Azurianti, Restu Wulansari, Faris Nur Fauzi Athallah dan Sugeng Prijono. 2022. Kajian Hubungan Hara Tanah Terhadap Produktivitas Tanaman Teh Produktif Di Perkebunan Teh Pagar Alam, Sumatera Selatan. *Jurnal Tanah dan Sumberdaya Lahan*. Vol 9. No 1: 153-161hal. ISSN:2549-9793.

Backer, Rachel, J. Stefan Rokem, Gayathri Ilangumaran, John Lamont, Dana Praslickova, Emily Ricci, Sowmyalakshmi Subramanian and Donald L. Smith. 2018. Plant growth-promoting rhizobacteria: context, mechanisms of action, and roadmap to commercialization of biostimulants for sustainable agriculture. *Frotiers in Plant Science.* 1473(9): 1-17p. https://doi.org/10.3389/fpls.2018.01473

Bahrami, A., Iraj E., M. R. Atashi., dan H. R. Bork. 2010. Land-use change and soil degradation: A case study, North of Iran. Agriculture and Biology Journal of North America Vol 1 (4): 600-605. http://scihub.org/ABJNA/PDF/2010/4/1-4-600-605.pdf

BargazA, Lyamlouli K, Chtouki M, Zeroual Y, Dhiba D. 2018. Soil microbial resources for improving fertlizers efficiency in an integrated plant nutrient managemen system. Frontiers in Microbiology9:1-25

Behera BC, Singdevsachan SK, Mishra RR, Dutta Sk, Thatoi HN. 2014. Diversity, mechamisms and biotechnology of phosphate solubilizing microorganism in mangrove: A review. Biocatalysis and Agricultural Biotechnology3(2):97-110. https://doi.org/10.1016/j.bcab.2013.09.008

Bhardwaj, D., Ansari, M. W., Sahoo, R. K., & Tuteja, N. 2014. Biofertilizers function as key player in sustainable agriculture by improving soil fertility, plant tolerance and crop productivity. *Microbial Cell Factories*. 13(1), 1–10p. https://doi.org/10.1186/1475- 2859-13-66

Bhattacharyya P. N and D. K. Jha. 2012. Plant growth-promoting rhizobacteria (PGPR): emergence in agriculture. World J Microbiol Biotechnol, 28(4), 1327–1350. https://doi.org/10.1007/s11274-011-0979-9

Bhosale H.J. Kadam T.A., dan Bobade A.R. 2013.Identification and Production of *Azotobacter* sp. vinelandii and Its Antifungal Activity Against *Fusarium oxysporum*. *Journal of Environmental Biology*. Vol. 34 (2):177-182p.

Bloom, A.J. Teh increasing importance of distinguishing among plant nitrogen sources. Curr. Opin. Plant Biol. 2015, 25, 10–16. doi:10.1016/j.pbi.2015.03.002.https://www.sciencedirect.com/science/article/pii/S1369526615000424

Brent L. Black, Leslie H. Fuchigami And Gary D. Coleman. 2002. Partitioning of nitrate assimilation among leaves, stems and roots of poplar. Tree Physiology 22, 717–724. https://doi.org/10.1093/treephys/22.10.717

Buntoro, B. H., Rogomulyo, R., & Trisnowati, S. (2014). Pengaruh takaran pupuk kandang dan intensitas cahaya terhadap pertumbuhan dan hasil temu putih (*Curcuma zedoaria* L.). Vegetalika, 3(4), 29-39. https://doi.org/10.22146/veg.5759

Burak Yagmur & Adem Gunes. 2021. Evaluation of teh Effects of Plant Growth Promoting Rhizobacteria (PGPR) on Yield and Quality Parameters of Tomato Plants in Organic Agriculture by Principal Component Analysis (PCA). *Gesunde Pflanzen*. Vol. 73: 219–228p. https://doi.org/10.1007/s10343-021-00543-9n

Chaliha, C. 2020. Blister Blight Disease of Tea: An Enigma. Diagnostics of Plant Diseases: chapter 4. p:69-87. https://books.google.co.id/books?id=t4w4EAAAQBAJ&pg=PA85&dq=https://doi.org/10.5772/intechopen.+95362&hl=id&newbks=1&newbks_redir=1&sa=X&ved=2ahUKEwjttXw84OAAxU_1zgGHVhjCy4Q6AF6BAgIEAI

Chanyarat Paungfoo-Lonhienne, Thierry G. A. Lonhienne, Doris Rentsch, Nicole Robinson, Michael Christie, Richard I. Webb, Harshi K. Gamage, Bernard J. Carroll, Peer M. Schenk, and Susanne Schmidt. Plants can use protein as a nitrogen source without assistance from other organisms. Proceeding of the national academy of science. 4524–4529. https://doi.org/10.1073/pnas.0712078105

Christy M. D. W., K. Yurlisa dan K. P. Wicaksono. 2020. Pengaruh konsentrasi plant growth promoting rhizobacteria (PGPR) dan pupuk kandang ayam pada pertumbuhan dan hasil tanaman okra merah (*Abelmoschus esculentus* L. Moench) di musim hujan. *Jurnal Produksi Tanaman*. Vol. 8 (1): 49-57hal. ISSN: 2527-8452.

Confortin, T.C., Spannemberg, S.S., Todero, I., Luft, L., Brun, T., Alves, E.A., Kuhn, R.C.,& Mazutti, M.A. 2019. Microbial enzymes as control agents of diseases and pests in organic agriculture, in: new and future developments in microbial biotechnologyand bioengineering. In V.K. Gupta & A. Pandey (Eds.), New and future developments in microbial biotechnologyand bioengineering: microbial secondarymetabolites biochemistry and applications(321–332pp.). Amsterdam: Elsevier. https://doi.org/10.1016/B978-0-444-63504-4.00021-9

Cummings S. P.. 2009. Teh application of plant growth promoting rhizobacteria (PGPR) in low input and organic cultivation of graminaceous crops; potential and problems. Environmental Biotechnology(2):43-50. https://yadda.icm.edu.pl/baztech/element/bwmeta1.element.baztech-article-BAR0-0062-0078

Das, S.C., Das, S., & Hazarika, M. (2012). Breeding of teh tea plant (Camellia sinensis) in India. Global Tea Breeding (pp. 69–124). doi:10.1007/978-3-642-31878-8_3. https://link.springer.com/chapter/10.1007/978-3-642-31878-8_3

Denise K. Zinniel, Pat Lambrecht, N. Beth Harris, Zhengyu Feng, Daniel Kuczmarski, Phyllis Higley, Carol A. Ishimaru, Alahari Arunakumari, Raúl G. Barletta, and Anne K. Vidaver. 2002. Isolation and Characterization of Endophytic Colonizing Bacteria from Agronomic Crops and Prairie Plants. Applied And Environmental Microbiology. Vol. 68, No. 5. https://doi.org/10.1128/AEM.68.5.2198-2208.2002

Djaenuddin, Nurasiah dan A. Muis. 2015. Karakteristik Bakteri Antagonisme Bacillus Subtilis dan Potensinya Sebagai Agens Pengendali Hayati. Prosiding Seminar Nasional Serelia. *Balai Penelitian Tanaman Serealia*; 468-494hal.

Effendi, D.S., M. Syakir, M. Yusron. dan Wiratno. 2010. Budi Daya dan Pascapanen Teh. Pusat Penelitian dan Pengembangan Perkebunan. Bogor. 1-56 hal.

Ende, S., Salawati, S., Kadekoh, I., Fathurrahman, F., Darman, S., & Lukman, L. 2022. Aktivitas Nitrat Reduktase (ANR) Tanaman Jagung pada Pola

Tumpangsari yang Diberi Serasah Jagung-Kedelai serta Biochar di Lahan Suboptimal Sidondo Sulawesi Tengah. Jurnal Ilmu Pertanian Indonesia, 27(4), 528-535. https://doi.org/10.18343/jipi.27.4.544

Etesami, H., Alikhani, H. A., & Hosseini, H. M. 2015. Indole-3-acetic acid (IAA) production trait, a useful screening to select endophytic and rhizosphere competent bacteria for rice growth promoting agents. *Methodsx*. Vol. 2: 72–78p. http://dx.doi.org/10.1016/j.mex.2015.02.008

Fagard, M.; Launay, A.; Clement, G.; Courtial, J.; Dellagi, A.; Farjad, M.; Krapp, A.; Soulié, M.C.; Masclaux-Daubresse, C. 2014. Nitrogen metabolism meets phytopathology. Journal of Experimental Botany. Vol. 65, No. 19, pp. 5643–5656. https://doi.org/10.1093/jxb/eru323

Fauziyah, N., Hadisutrisno, B., & Priyatmojo, A. (2018). Waktu Pemencaran dan Pengaruh Jenis Air terhadap Perkecambahan Basidiospora Exobasidium vexans, Penyebab Penyakit Cacar Daun Teh. Jurnal Perlindungan Tanaman Indonesia, 22(1), 66. https://doi.org/10.22146/jpti.23047

Fitriana J, Pukan KK, Herlina L. 2011. Aktivitas Enzim Nitrat Reduktase Kedelai Kultivar Burangrang akibat Variasi Kadar Air Tanah pada Awal Pengisian Polong. Biosaintifika: Journal of Biology & Biology Education. 1(1): 141-147. https://doi.org/10.15294/biosaintifika.v1i1.36

Galili, G.; Avin-Wittenberg, T.; Angelovici, R.; Fernie, A.R. 2014. Teh role of photosynthesis and amino acid metabolism in teh energy status during seed development. Front. Plant Sci. vol. 5:447. https://doi.org/10.3389/fpls.2014.00447

Garbin, M.L. and L.C. Dillenburg. 2008. Effect of different nitrogen sources on growth, chlorophyll concentration, nntrate reductase activity and carbon and nitrogen distribution on Araucaria angustifolia. Braz. J. Plant Physiol. 20 (4): 295-303. https://doi.org/10.1590/S1677-04202008000400005

Goodwin,L. 2018. Teh Tea Plant: Camellia sinensis. Teh spruce Eats. https://www.thespruceeats.com/camellia-sinensis-definition-765668.

Gurikar C, Naik MK, Sreenivasa MY. 2016. Azotobacter sp. : PGPR Activities with Special Reference to Effect of Pesticides and Biodegradation. *Microbial Inoculants in Sustainable Agricultural Productivity*.Vol. 1: 229-244p. doi: 10.1007/978-81-322-2647-5_13.

Hafez EM, Osman HS, El-razek UAA, Elbagory M. 2021. Foliar-Applied Potassium Silicate Coupled with Plant Growth-Promoting Rhizobacteria Improves Growth, Physiology, Nutrient Uptake and Productivity of Faba Bean (Vicia faba L.) Irrigated with Saline Water in Salt-Affected Soil . 10(5):894. https://doi.org/10.3390/plants10050894

Hanudin, Budiarto, K. and Marwoto, B. 2017. Aplication of PGPR and Antagonist Fungi based Biofungicide for White Rust Disease Control and Its Economic Analysis in Chrysanthemum Production. Agrivita 39(3):266–278. https://agrivita.ub.ac.id/index.php/agrivita/article/view/1326/871

Haq, MS, Y Rachmiati, dan Karyudi. 2014. Pengaruh pupuk daun terhadap hasil dan komponen hasil pucuk tanaman teh (Camellia sinensis (L.) O. Kuntze var. Assamica (Mast) Kitamura). Jurnal Penelitian Teh dan Kina. 17(2):47-56.

Hashem Al-Saraireh, Wael A, Al-Zereini and Khalad A Tarawneh. 2015. Antimicrobial Activity of Secondary Metabolites from a Soil Bacillus sp. 7B Isolated from South Al-Karak, Jordan.2015. Jordan Jornal of Biological Science. Page 127-132.

Hashem, A., Tabassum. B.,&Abd_Allah, E.F.2019. Bacillus subtilis: a plant-growth promoting rhizobacterium that also impacts biotic stress. Saudi Journalof Biological Sciences, 26(6),1291–1297. https://doi.org/10.1016/j.sjbs.2019.05.004

Häusler, R.E.; Ludewig, F.; Krueger, S. 2014. Amino acids – A life between metabolism and signaling. *Plant Science*. 25–237. https://doi.org/10.1016/j.plantsci.2014.09.011

He W, Wang GX, Yang WB, Chen QM, Lu YC. 2009. Growth response of Potamogeton crispus to water depth gradient. Chinese Journal of Ecology 28: 1224–1228.

Hoffman, B. M., D. Lukoyanov, Z. Y. Yang, D. R. Dean & L. C. Seefeldt. 2014. Mechanism of nitrogen fixation by nitrogenase: teh next stage. Chem. Rev. 114: 4041-4062. https://doi.org/10.1021/cr400641x

Husni, A., D. R. Putra dan I. Y. B. Lelana. 2014. Aktivitas antioksidan Padina Sp. Pada berbagai suhu dan lama pengeringan.Jurnal Perikanan 9 (2):165-173. https://pdfs.semanticscholar.org/340a/1a948d69360b5e4cbb7d921040ec829243e2.pdf

Ibrahim MH, Jaafar HZE, Harun MH. 2017. Leaf Gas Exchange and Stomata Properties of Oil Palm Seedlings (Elaeis guineensis Jacq.) Progenies Exposed to Elevated Carbon Dioxide. Annual Research and Review in Biology 19(4):1 – 13. https://doi.org/10.9734/ARRB/2017/36488

Irina Smirnova, Amankeldi Sadanov, Gul Baimakhanova, Elmira Faizulina and Larisa Tatarkina. 2022. Metabolic interaction at teh level of extracellular amino acids between plant growth-promoting rhizobacteria and plants of alfalfa (*Medicago sativa* L.). *Rhizosphere*. Vol. 21. 1-7p. https://doi.org/10.1016/j.rhisph.2022.100477

Izzreen, N., Q and Mohd, F., A., B. 2013. Phytochemicals and Antioxidant Properties of Different Parts of Camellia Sinensis Leaves From Sabah Tea Plantation In Sabah, Malaysia. International Food Research Journal. 20(1): 307-312. http://ifrj.upm.edu.my/20%20(01)%202013/41%20IFRJ%2020%20(01)%202013%20Fadzelly%20(127).pdf

Jabeen, N. & Ahmad, R. 2011. Foliar application of potassium nitrate affects teh growth and nitrate reductase activity in sunflower and safflower leaves under salinity. Not Bot Horti Agrobo, 39(2): 172-178. https://doi.org/10.15835/nbha3926064

Javandira, C., L. Q. Aini, dan A. L. Abadi. 2013. Pengendalian Penyakit Busuk Lunak Umbi Kentang (*Erwinia Carotovora*) dengan Memanfaatkan Agens Hayati *Bacillus subtilis* dan *Pseudomonas fluorescens*. Jurnal HPT, 1(1) : 90-97hal.

Javier Martínez-Dalmau, Julio Berbel and Rafaela Ordóñez-Fernández. 2021. Nitrogen Fertilization. A Review of teh Risks Associated with teh Inefficiency of Its Use and Policy Responses. Sustainability, 13(5625) , 1–15. https://doi.org/doi.org/10.3390/

Jnawali, A. D., Ojha, R.B. dan Marahatta, S. 2015. Role of *Azotobacter* sp. in soil fertility and sustainability–a review. *Advances in Plants & Agriculture Research*. Vol. 2(6): 250-253p. https://doi.org/10.15406/apar.2015.02.00069

Kaviyarasan. G., Shricharan. S., and Kathiravan. R.2020. Studies on isolation, biochemical characterization and nitrogen fixing ability of Azotobacter sp. isolated from agricultural soils. International Journal of Scientific Engineering and Applied Science (IJSEAS) – Volume-6, Issue-11.

Kementan. 2020. Buku Outlook Komoditas Perkebunan Teh. Pusat Data dan Sistem Informasi Pertanian Sekretariat Jenderal Kementerian Pertanian. 90 hal. ISSN: 1907- 1507.

Khan, Mohammad Saghir; Zaidi, Almas; Ahemad, Munees; Oves, Mohammad; Wani, Pervaze Ahmad. 2010. Plant growth promotion by phosphate solubilizing fungi – current perspective. Archives of Agronomy and Soil Science, 56(1), 73–98. http://dx.doi.org/10.1080/03650340902806469

Kurniaty, R., Bustomi, S., & Widyati, E. 2013. Penggunaan Rhizobium dan mikoriza dalam pertumbuhan bibit kaliandra (*Calliandra callothyrsus*) umur 5 bulan. *Jurnal Perbenihan Tanaman H*utan. Vol. 1(2), 71–81hal.

Kusuma, W. 2008. Analisis Pucuk Tanaman Teh (*Camellia sine*nsis (l.) o. kuntze) di Perkebunan Rumpun Sari Kemuning, PT. Sumber Abadi Tirta Sentosa, Karanganyar, Jawa Tengah. Skripsi. IPB. Bogor.

Kusumaningrum, R., A. Supriadi dan S. Hanggita R.J. 2013. Karakteristik dan mutu teh bunga lotus (*Nelumbu nucifera*). Fidhtech 2 (1): 9-21. https://doi.org/10.36706/fishtech.v2i1.1099

L.K. Tennakoona, R.M.C.P. Rajapakshab dan L.S.K. Hettiarachchia. 2019. Tea yield maintained in PGPR inoculated field plants despite significant reduction in fertilizer application. *Rhizosphere*. Vol. 10. https://doi.org/10.1016/j.rhisph.2019.100146.

Lahive F, Hadley P, Daymond AJ. 2018. The Impact of elevated CO2 and Water Deficit Stress on Growth and Photosynthesis of Juvenile Cacao (Theobroma cacao L.). Photosynthetica 56 (10): 1 – 11. doi: 10.1007/s11099-017-0743-y

Lakitan B. 2011. Dasar-dasar Fisiologi Tumbuhan. PT. Raja Grafindo Persada. Jakarta.

Latifa. I. C. and Anggarwulan E. 2009. Nitrogen content, nitrate reductase activity, and biomass of kimpul (Xanthosoma sagittifolium) on shade and nitrogen fertilizer variation. Nusantara Bioscience 1: 65-71. https://doi.org/10.13057/nusbiosci/n010203

Lawlor, D.W., G. Lemaire, and F. Gastal. 2001. Nitrogen, plant growth and crop yield. Plant Nitrogen. pp 343–367. https://link.springer.com/chapter/10.1007/978-3-662-04064-5_13.

Listya Dewi Rifaia, Seni H. J. Tongkukut, Slamet Suyitno Raharjo. 2014. Analisis Intensitas Radiasi Matahari di Manado dan Maros. JURNAL MIPA UNSRAT ONLINE 3 (1) 49-52. https://ejournal.unsrat.ac.id/v3/index.php/jmuo/article/view/3907/3421

Liu, J., S.M. Sherif. 2019. Hormonal orchestration of bud dormancy cycle in deciduous woody perennials. Front. *Plant Science*. 10:1-21. https://doi.org/10.3389/fpls.2019.01136

Lori, P., R.B.da Silva., A.E. Ajayi., F.A de Melo Silva., A.N Badur. 2014. What Drives Decline Productivity in Ageing Tea Plantation-Soil Physical Properties or Soil Nutrient Status. Agricultural Science Vol 2, Issue 1 22-36.DOI:10.12735/as.v2i1p22. https://repositorio.unicamp.br/Busca/Download?codigoArquivo=524587

Ma, Y., Prasad, M. N. V., Rajkumar, M., & Freitas, H. 2011. Plant growth promoting rhizobacteria and endophytes accelerate phytoremediation of metalliferous soils. *Biotechnology Advances*. Vol. 29(2): 248–258. https://doi.org/10.1016/j.biotechadv.2010.12.001

Mali G.V. dan Bodhankar M.G. 2009. Antifungal and Phytohormone Production Potential of *Azotobacter sp. chroococcum* Isolates from Groundnut (*Arachis hypogea* L.) Rhizospere. *Research Journal of Chemistry and Environment*. Volo. 15 (2):1-7p.

María Soledad Anzuay, Liliana Mercedes Ludueña, Jorge Guillermo Angelini, Adriana Fabra and Tania Taurian. 2014. Beneficial effects of native phosphate solubilizing bacteria on peanut (*Arachis hypogaea* L) growth and phosphorus acquisition. Symbiosis. doi:10.1007/s13199-015-0337-z.

McDowell NG, White S, Pockman WT. 2008. Transpiration and stomatal conductance across a steep climate gradient in the southern Rocky Mountains. Ecohydrology. 1: 193-204. https://doi.org/10.1002/eco.2

Mechthild Tegeder and Celine Masclaux-Daubresse. 2017. Source and sink mechanisms of nitrogen transport and use. New Phytolgist. Vol: 217. p35–53. https://doi.org/10.1111/nph.14876

Mengel K, Kirkby EA, Kosegarten H, Appel T. 2001. Principles of Plant Nutrition. 5th (Ed) Kluwer Academic Publishers Dordrecht, Teh Nederlands. doi:10.1007/978-94-010-1009-2.

Mitrowihardjo S. 2012. Kandungan Katekin dan Hasil Pucuk Beberapa Klon Teh (*Camelia sinensis* (L.) O. Kuntze) Unggulan pada Ketinggian yang Berbeda di Kebun Pagilaran. Universitas Gadjah Mada. Disertasi Doktor.

Mook, W.T., Chakrabarti, M.H., Aroua, M.K., Khan, G.M.A., Ali, B.S., Islam, M.S., Hassan, Abu. M.A., 2018. Removal Of Total Ammonia Nitrogen (TAN), Nitrate And Total Organic Carbon (TOC) From Aquaculture Wastewater

Using Electrochemical Technology: A Review. Desalination 285, 1-13. https://doi.org/10.1016/j.desal.2011.09.029

Mungara, E., Indradewa, D., & Rogomulyo, R. (2013). Analisis Pertumbuhan dan Hasil Padi Sawah (*Oryza sativa* L.) pada Sistem Pertanian Konvensional, Transisi Organik, dan Organik. Vegetalika, 2(3), 1–12.

Mur, L. A., Hauck, B., Winters, A., Heald, J., Lloyd, A. J., Chakraborty, U., & Chakraborty, B. N. 2015. Teh development of tea blister caused by Exobasidium vexans in tea (*Camellia sinensis*) correlates with teh reduced accumulation of some antimicrobial metabolites and teh defence signals salicylic and jasmonic acids. Plant Pathology, 64(6),

Muthia Syafika Haq dan Karyudi. 2013. Upaya Peningkatan Produksi Teh (*Camelia sinensis* (L.) O.Kuntze) Melalui Penerapan Kultur Teknis. Warta PPTK, 2013, 24(1): 71-84 hal.

Nelson, L.M. 2004. Plant growth promoting rhizobacteria (PGPR): Prospects for new inoculants. *Crop Manag.* 3: 1–7p. https://doi.org/10.1094/CM-2004-0301-05-RV

Nepolean,P. Jayanthi, R., Vidhya Pallavi, R., Balamurugan, A., Kuberan, T., Beulah, T., and R . Premkumar. 2012. Role of biofertilizers in increasing tea productivity. *Asian Pacific Journal of Tropical Biomedicine*. Vol.2(3): 1443-1445p. https://doi.org/10.1016/S2221-1691(12)60434-1.

Nihal turkmen, Ferda sarı, Y. Sedat Velioglu. 2009. Factors Affecting Polyphenol Content and Composition of Fresh and Processed Tea Leaves. Review Paper Akademik Gida. 7(6): 29-40. https://dergipark.org.tr/en/download/article-file/1189454

Nirmala Phuyal ,Pramod Kumar Jha, Pankaj Prasad Raturi, and Sangeeta Rajbhandary. 2020. Total Phenolic, Flavonoid Contents, and Antioxidant Activities of Fruit, Seed, and Bark Extracts of *Zanthoxylum ar*matum DC. *Teh Scientific World Journal. 1-7p.* https://doi.org/10.1155/2020/8780704.

Noura Ziadi, Marianne Brassard, Gilles Bélanger, Athyna N. Cambouris, Nicolas Tremblay, Michel C. Nolin, Annie Claessens, and Léon-Étienne Parent. 2008. Critical Nitrogen Curve and Nitrogen Nutrition Index for Corn in Eastern Canada. Agronomu jounal. Volume 100(2). Page 271-276. doi:10.2134/agronj2007.0059.

Oktrisna D., Puspita F., dan Zuhry E., 2017. Uji Bakteri *Bacillus* sp. Endofit Diformulasi dengan Beberapa Limbah terhadap Tanaman Padi Sawah (*Oryza sativa* L.). *JOM FAPERTA*. Vol. 4. No. 1. 1-12hal.

Patti, P. S., Kaya, E., dan Silahooy, C. (2013). Analisis status nitrogen tanah dalam kaitannya dengan serapan. *Agrologia*. Vol. 2(1): 78–79hal.

Pranoto, E. 2010. Pengaruh aplikasi kombinasi berbagai dosis pupuk anorganik dan pupuk hayati terhadap kesehatan tanaman teh produktif. Jurnal Penelitian Teh dan Kina 13 (3): 61-68.

Pratelli, R. and Pilot, G. Regulation of amino acid metabolic enzymes and transporters in plants. 2014. J ournal of Experimental Botany. Vol: 65, 5535–5556. https://doi.org/10.1093/jxb/eru320

Prijono S, Laksamana MPS. 2016. Studi Laju Transpirasi Peltophorum dassyrachis dan Gliricidia sepium pada Sistem Budi Daya Tanaman Pagar Serta Pengaruhnya Terhadap Konduktivitas Hidrolik Tidak Jenuh. J-PAL 7(1): 15-24.

Puja Santana, F., Ghulamahdi, M., & Lubis, I. (2020). Respons Pertumbuhan, Fisiologi, dan Produksi Kedelai terhadap Pemberian Pupuk Nitrogen dengan Dosis dan Waktu yang Berbeda. Jurnal Ilmu Pertanian Indonesia, 26(1), 24–31. https://doi.org/10.18343/jipi.26.1.24

Ramadhan, B. R., & Ariffin, A. 2019. Kajian Thermal Unit Pada Empat Varietas Tanaman Selada (Lactuca Sativa L.) Yang Dibudidayakan Dengan Sistem Hidroponik Nutrient Film Technique dan Substrat. Journal of Agricultural Science. Vol : 4(2), 141-149. https://jpt.ub.ac.id/index.php/jpt/article/view/180/182

Rameau, C., Bertheloot, J., Leduc, N., Andrieu, B., Foucher, F., & Sakr, S. 2015. Multiple pathways regulate shoot branching. Front Plant Sci., 5, 1–15. https://doi.org/10.3389/fpls.2014.00741

Rentsch, D.; Schmidt, S.; Tegeder, M. 2007. Transporters for uptake and allocation of organic nitrogen compounds in plants. FEBS Letters. 581. p: 2281–2289. https://doi.org/10.1016/j.febslet.2007.04.013

Röll A, Niu F, Meijide A, Hardanto A, Hendrayanto, Knohl A, . Hölscher D. 2015. Transpiration in an oil palm landscape: Efects of palm age. Biogeosciences 12: 5619–5633. https://doi.org/10.5194/bg-12-5619-2015

Rusmana, N, dan A. Salim. 2006. Pengaruh kombinaasi pupuk daun puder dan takaran pupuk N, P, K yang berbeda terhadap hasil pucuk tanaman teh (Camellia sinensis (L.) O. Kuntze) seedling, TRI 20125 dan GMB 4. Jurnal Penelitian Teh dan Kina. 9(1-2): 28- 40.

Ryu CM, Farag MA, Hu CH, Reddy MS, Kloepper JW, Pare PW. 2004. Bacterial volatiles induce systemic resistance in Arabidopsis. Plant Physiol. 134:1017-1026. https://doi.org/10.1104/pp.103.026583

Saha, M., Sarkar, S., Sarkar, B., Sharma, B. K., Bhattacharjee, S., & Tribedi, P. (2016). Microbial siderophores and their potential applications: a review. *Environmental Science and Pollution Research*. Vol. 23(5), 3984–3999p. https://doi.org/10.1007/s11356-015- 4294-0.

Satyaprakash M, Nikitha T, Reddi EUB, Sadhana B, and Satya VS. 2017. A review on phosphorous and phosphate solubilising bacteria and their role in plant Nutrition. Int. J. Curr. Microbiol. App. Sci. 6:2133-2144. https://doi.org/10.20546/ijcmas.2017.604.251

Seeger, M. & Ries, J. B. 2008. Soil degradation and soil surface process intensities on abandoned fields in Mediterranean mountain environments. Land degradation & development. 19: 488- 501. https://doi.org/10.1002/ldr.854

Sen, S., Rai, M., Das, D., Chandra, S., & Acharya, K. (2020). Blister blight a threatened problem in tea industry: A review. Journal of King Saud University–Science:32(8):p3265–3272. https://doi.org/10.1016/j.jksus.2020.09.008

Setyamidjaja, D. 2000. Budidaya dan Pengolahan Pasca Panen Teh. Kanisius. Yogyakarta. 52 hal.

Shafeek, M.R., Helmy, Y.I. and Omar, N.M. 2015. Use of some bio-stimulants for improving teh growth, yield and bulb quality of onion plants (*Allium cepa* L.) under sandy soil conditions. *Middle East Journal of Applied Sciences*. Vol. 5: 68–75p. ISSN 2077-4613.

Sharma, Seema B; Sayyed, Riyaz Z; Trivedi, Mrugesh H; Gobi, Thivakaran A (2013). Phosphate solubilizing microbes: sustainable approach for managing phosphorus deficiency in agricultural soils. SpringerPlus, 2:587.doi:10.1186/2193-1801-2-587. http://www.springerplus.com/content/2/1/587.

Shruti, K., Arun, K., & Yuvneet, R. 2013. Potential plant growthpromoting activity of rhizobacteria *Pseudomona*s sp in *Oryza sativa*. *Journal Of Natural Product and Plant Resources*. Vol. 3(4): 38–50p.

Singh, N. K, Chaudhary, F. K. And Patel, D. B. 2013. Effectiveness of Azotobacter sp. bio-inoculant for wheat grown under dryland condition. *Journal of Environmental Biology*. Vol. 34: 927-93p. ISSN: 0254-8704.

Sodiq AH, Setiawati MR, Santosa DA, Widayat D. 2019. Teh potency of bio-organic fertilizer containing local microorganism of Cibodas village, Lembang-West Java. IOP Conf Ser Earth Environ Sci Pap. 383:012001. https://dx.doi.org/10.1088/1755-1315/383/1/012001.

Soesanto, L. 2008. Pengantar pengendalian hayati penyakit tanaman. PT Raja Grafindo Persada. Jakarta: 574hal.

Soleh MA, Manggala R, Maxiselly Y, Ariyanti M, Anjarsari IRD. 2017. Respons konduktansi stomata beberapa genotipe tebu sebagai parameter toleransi terhadap stress : Abiotik. Jurnal Kultivasi 16(3):490 – 493. http://jurnal.unpad.ac.id/kultivasi/article/view/14455/7170

Soltangheisi A, Haygarth PM, Pavinato PS, Paula A, Cherubin MR, Teles APB, Bordonal R, Carvalho JLN, Withers PJA, Martinelli LA. 2021. Long term sugarcane straw removal affects soil phosphorus dynamics. Soil and Tillage Res. Vol: 208:p1–8. https://doi.org/10.1016/j.still.2020.104898

Sorensen, J., Jensen, L. E., & Nybroe, O. (2001). Soil and rhizosphere as habitats for *Pseudomonas* inoculants: New knowledge on distribution, activity and physiological state derived from micro-scale and single-cell studies. *Plant and Soil*. Vol. 232(1–2), 97–108. https://doi.org/10.1023/A:1010338103982

Sriyadi, T. Abas, Y. Rachmiati dan A.A. Salim. 2009. Laporan Evaluasi Produksi Teh Januari-Maret 2009 PT Perkebunan Nusantara XII (Persero). Bandung: Pusat Penelitian Teh dan Kina.

Stewart, D.W., C. Costa, L.M. Dwyer, D.L. Smith, R.I. Hamilton, & B.L. Ma. 2003. Canopy structure, light interception, and photosynthesis in maize. Agronomy Journal. Vol: 95:p 1465-1474. https://doi.org/10.2134/agronj2003.1465

Suherman, Rahim, I., & Akib, M. A. 2012. Aplikasi Mikoriza Vesikular Arbuskular Terhadap Pertumbuhan dan Produksi Tanaman Kedelai (*Glycine max* L. Merrill). Jurnal Galung Tropika. Vol: 1. p1-6. https://doi.org/10.31850/jgt.v1i1.29

Suresh P, Vellasamy S, Almaary KS, Dawoud TM, Elbadawi YB. 2021. Fluorescent pseudomonads (FPs) as a potential biocontrol and plant growth promoting agent associated with tomato rhizosphere. J King Saud Univ - Sci. 33(4):101423. https://doi.org/10.1016/j.jksus.2021.101423.

Susilawati., Wardah dan Irmasari. 2016. Pengaruh Berbagai Intensitas Cahaya Terhadap Pertumbuhan Semai Cempaka (Michelia champacaL.) Di Persemaian.Jurnal Forest Sains, vol.14, No.1. ISSN :1693-5179. http://jurnal.untad.ac.id/jurnal/index.php/ForestScience/article/view/13698/10439

Synthia dewi dan Purwono. 2019. Mutu Petik Teh (Camellia sinensis (L.) O. Kuntze) di Kebun Bedakah, Wonosobo, Jawa Tengah. Buletin Agrohorti IPB 7(1) : 337-342 (2019). https://doi.org/10.29244/agrob.v7i3.30261

Tahir, M., Mirza, M.S., Hameed, S., Dimitrov., M.R, & Smidt, H. 2015. Cultivation-based and molecular assesment of bacterial diversity in teh rhizosheath of wheat under different crop rotations. Plos One. Vol 10(6): 28. https://doi.org/10.1371/journal.pone.0130030

Taia A. Abd El-Mageed, Shimaa A. Abd El-Mageed, Mohamed T. El-Saadony , Sayed Abdelaziz dan Nasr M. Abdou. 2022. Plant Growth-Promoting Rhizobacteria Improve Growth, Morph-Physiological Responses, Water Productivity, and Yield of Rice Plants Under Full and Defcit Drip Irrigation. *Rice*. Vol. 15. 1-15p. https://doi.org/10.1186/s12284-022-00564-6

Taiz, L and Zeiger, E. 2015. Plant Physiology 6 th Ed. Massachusetts: Sinauer Associates. https://www.cabdirect.org/cabdirect/abstract/20173165866

Tank, N., Rajendran, N., Patel, B., & Saraf, M. 2012. Evaluation and biochemical characterization of a distinctive pyoverdin from a *Pseudomonas* isolated from chickpea rhizosphere. *Brazilian Journal of Microbiology*. Vol. 43(2): 639–648p. https://doi.org/10.1590/S1517- 83822012000200028

Tariq Mahmood, Naveed Akhtar and Barkat Ali Khan. 2010. Teh morphology, characteristics, and medicinal properties of *Camellia sinensis* tea. *Journal of Medicinal Plants Research*. Vol. 4(19): 2028-2033p. DOI: 10.5897/JMPR10.010

Thakuria D., Talukdar NC., Goswami C., Hazarika S., Boro RC., Khan MR..2004. Characterization and screening of bacteria from teh rhizosphere of rice grown in acidic soils of Assam. Curr. Sci. 86: 978-985. http://www.jstor.org/stable/24109284

Tjasjono, B., 2004. Klimatologi. ITB, Bandung.

Tripti, Kumar, V., & Anshumali. 2012. Phosphate solubilizing activity of some bacterial strains isolated from chemical pesticide exposed agriculture soil. *International Journal of Engineering Research and Development*. Vol. 3(9): 1–6hal. e-ISSN: 2278-067X.

Ullah, A., Heng, S., Munis, M. F. H., Fahad, S., and Yang, X. 2015. Phytoremediation of heavy metals assisted by plant growth promoting (PGP) bacteria: A review. *Environmental and Experimental Botany*. Vol. 117. 28–40p. https://doi.org/10.1016/j.envexpbot.2015.05.001

Urban J, Ingwers MW, McGuire MA, Teskey RO. 2017. Increase in leaf temperature opens stomata and decouples net photosynthesis from stomatal conductance in Pinus taeda and Populus deltoides x nigra. Journal of Experimental Botany 68(7): 1757 – 1767. https://doi.org/10.1093/jxb/erx052

Vallad, GE and Goodman, RM . 2004.Systemic acquired resistance and induced systemic resistance in conventional Agriculture, Crop Science Society of America., vol. 44, no. 6, pp. 1920-34. https://doi.org/10.2135/cropsci2004.1920

Vassileva maria, Elena Flor-Peregrin, Aligo Malusa and Nikolay Vassilev. 2020. Towards Better Understanding of teh Interactions and Efficient Application of Plant Beneficial Prebiotics, Probiotics, Postbiotics and Synbiotics. *Frontiers in plant science*. Vol.11.no, 1068. 1-5p. https://doi.org/10.3389/fpls.2020.01068

Vishwakarma, K., Kumar, V., Tripathi, D.K. and Sharma, S. 2018. Characterization of rhizobacterial isolates from Brassica juncea for multitrait plant growth promotion and their viability studies on carriers. Environmental Sustainability 1:253–265. https://doi.org/10.1007/s42398-018-0026-y

Wall GW, Garcia RL, Wechsung F, Kimball BA. 2011. Elevated Atmospheric CO2 and Drought Effects on Leaf Gas Exchange Properties of Barley. Agriculture, Ecosystems and Environment 144: 390 – 404. https://doi.org/10.1016/j.agee.2011.07.006

Walters, DR, Ratsep, J and Havis, ND. 2013.Controlling crop diseases using induced resistance: Challenges for teh future. *Journal of Experimental Botany Advance Access*. pp. 1-18. https://doi.org/10.1093/jxb/ert026

Wang, H., Xu, R. K., Wang, N., & Li, X.H. 2010. Soil Acidification of Alfisols as Influenced by Tea Cultivation in Eastern China. Pedosphere, 20 (6), 799–806. https://doi.org/10.1016/S1002-0160(10)60070-7

Wang, Qinghu., Jinmei, J., Nayintai, D., Narenchaoketu, H., Jingjing, H., Baiyinmuqier, B. 2016. Anti-inflammatory Effects, Nuclear Magnetic Resonance Identification and High-performance Liquid Chromatography Isolation of Teh Total Flavonoids From *Artemisia frigida*. Journal Of Food and Drug Analysis. 24: 385-391. https://doi.org/10.1016/j.jfda.2015.11.004

Watanabe, M.; Balazadeh, S.; Tohge, T.; Erban, A.; Giavalisco, P.; Kopka, J.; Mueller-Roeber, B.; Fernie, A.R.; Hoefgen, R. Comprehensive dissection of spatio-temporal metabolic shifts in primary, secondary and lipid metabolism during developmental senescence in Arabidopsis thaliana. Plant Physiol. 2013, 162, 1290–1310. https://doi.org/10.1104/pp.113.217380

Yasmin, F., Othman, R., Sijam, K., and Saad, M. S. 2009. Characterization of beneficial properties of plant growth-promoting rhizobacteria isolated from sweet potato rhizosphere. *African Journal of Microbiology Research*. Vol. 3(11): 815–821p. ISSN 1996-0808.

Yazdani Mohammad, Mohammad Ali Bahmanyar, Hemmatollah Pirdashti, and Mohammad Ali Esmaili. 2009. Effect of Phosphate Solubilization Microorganisms (PSM) and Plant Growth Promoting Rhizobacteria (PGPR) on Yield and Yield Components of Corn (*Zea m*ays L.) . Proceedings of World Academy of Science, Engineerring and Technology. Vol.3(7). P : 90-92.https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=e9eef1bb81c678944eeb21fc072220731175b8d8

Zeier, J. 2013. New insights into teh regulation of plant immunity by amino acid metabolic pathways. Plant Cell Environ. Vol:36. p2085–2103. https://doi.org/10.1111/pce.12122

Zhou, C., Zhu, J., Qian, N., Guo, J., & Yan, C. (2021). Bacillus subtilissl18r induces tomato resistance against Botrytis cinerea, involving activation of long non-coding rna, mstrg18363, to decoy mir1918. Front. Plant Sci.,11, 634819. https://doi.org/10.3389/fpls.2020.634819