

## DAFTAR PUSTAKA

- Abbott, L.K. and Robson, A.D. 1977. The distribution and abundance of vesicular-arbuscular endophytes in some Western Australian soils. *Aus. J. Bot.* 25: 515-522.
- Abdissa, Y, Tekalign, T & Pant, LM. 2011. Growth, bulb yield, and quality of onion (*Allium cepa* L.) as influenced by nitrogen and phosphorus fertilization on vertisol. I., growth attributes, biomass production and bulb yield. *Afr. J. Agric. Res*, vol. 6, no. 14, pp. 3252-8.
- Abdurachman, A., A.Dariah., & A.Mulyani. 2008. Strategi dan teknologi pengelolaan lahan kering mendukung pengadaan pangan nasional. *Jurnal Litbang Pertanian*. 27(2):43-49
- Ail, Z.M., Zhang, J.Y., Liu, H.F., Xue, S., & G.B. Li. 2018. Influence of slope aspect on the microbial properties of rhizospheric and non-rhizospheric soils on the Loess Plateau, China. *Solid Earth*. 9:1157-1168.
- Aguzaen, H. 2009. Respon Pertumbuhan Bibit Stek Lada (*Piper Nisum* L.) Terhadap Pemberian Air Kelapa dan Berbagai Jenis CMA. *Jurnal Agronobis*. 1(1):36-47
- Alfiah, L.N., D. Zul, dan Nelvia. 2010. Pengaruh Isolasi Campuran Isolat Bakteri Pelarut Fosfat Indigenous Riau terhadap Pertumbuhan dan Produksi Tanaman Kedelai (*Glycine max* L. merr) *Jurnal Agroekoteknologi* 7 (1): 7-14.
- Alguacil, MDM., Torres, MP., Montesinos-Navarro, A., dan A. Roldan. 2016. Soil Characteristics Driving Arbuscular Mycorrhizal Fungal Communities in Semiarid Mediterranean Soils. *Applied and Environmental Microbiology*. Volume 82 Number 11. Page 3348-3356.
- Aliudin, Yuliarni, AN & Tampubolon, M 1992, 'Frekuensi pemberian pupuk N pada dua kultivar tanaman bawang putih, *Bul. Panel. Hort.*, vol. 21, no. 4, hlm. 15-22.
- Astiko, W., Wangiyana, W., and Susilowati L.E. 2019. Indigenous Mycorrhizal Seed-coating Inoculation on Plant Growth and Yield, and NP-uptake and Availability on Maize sorghum Cropping Sequence in Lombok's Drylands. *Pertanika J. Trop. Agric. Sc.* 42 (3): 1131-1146.

- Bai, J., G. Zhang, Q. Zhao, Q. Lu, J. Jia, B. Cui, and X. Liu. 2016. "Depth-distribution patterns and Control of Soil Organic Carbon in Coastal Salt Marshes with Different Plant Covers." *Scientific Reports* 6: 34835.
- Bao, X., Wang, Y. and Olsson, P.A., 2019. Arbuscular mycorrhiza under water—Carbon–phosphorus exchange between rice and arbuscular mycorrhizal fungi under different flooding regimes. *Soil Biology and Biochemistry*, 129, pp.169-177.
- Benbi, D.K., Brar, K., Toor, A.S. and Singh, P. 2015. Total and Labile pools of Soil Organic Carbon in Cultivated and Undisturbed Soils in Northern India. *Geoderma* 237-238 : 149-158
- Boeraeve, M., Honnay, O. & H. Jacquemyn. 2019. Forest edge effects on the mycorrhizal communities of the dual-mycorrhizal tree species *Alnus glutinosa* (L.) Gaertn. *Science of the Total Environment*. 666: 703-712.
- Brundrett, M.C. & L. Tedersoo. 2018. Evolutionary history of mycorrhizal symbioses and global host plant diversity. *New Phytologist*. 220(4):1108-1115.
- Bukovská, P., Bonkowski, M., Konvalinková, T., Beskid, O., Hujšlová, M., Püschel, D., Řezáčová, V., Semiramis, M., Núñez, G., Gryndler, M., & J. Jansa. 2018. Utilization of organic nitrogen by arbuscular mycorrhizal fungi—is there a specific role for protists and ammonia oxidizers?. *Springer. Mycorrhiza* 28:465
- Buol, S.W., Hole, F.D., & R.J. McCracken. 1980. *Soil Genesis and Classification*. Second Edition. IOWA State University Press.
- Burrows, R.L., Pfleger, F.L., 2002. Host responses to AMF from plots differing in plant diversity. *Plant and Soil* 240, 169-179
- Cahyani, V.R. 2009. Pengaruh Beberapa Metode Sterilisasi Tanah Terhadap Status Hara, Populasi Mikrobiota, Potensi Infeksi Mikoriza dan Pertumbuhan Tanaman. *Sains Tanah Jurnal Ilmiah Ilmu Tanah dan Agroklimatologi* 6(1) 2009 48.

- Cahyani, N.K.M.D., Nurhatika, S., & M. Anton. 2014. Eksplorasi Mikoriza Vesikular Arbuskular (MVA) Indigenous pada Tanah Aluvial di Kabupaten Pamekasan Madura. *Jurnal Sains dan Seni Pomit*. Vol. 3, No.1, 22-25.
- Carballar-Hernandez, S., Hernandez-Cuevas, L.V., Montano, N.M., Ferrera-Cerrato, R., Alarcon, A. 2018. Species Composition of Native Arbuscular mycorrhizal Fungal Consortia Influences Growth and Nutrition of poblano Pepper Plants (*Capsicum annuum* L.). *Applied Soil Ecology*. 130:50-58.
- Carreira, J.A., Vinẽgla, B., dan Lajtha, K..2006. Secondary  $\text{CaCO}_3$  and precipitation of P Cacompounds control the retention of soil P in arid ecosystems. *Journal of Arid Environments* 64. 460–473
- Carrenho R., Trufem SFB., Bononi VLR., ES. Silva. 2007. The effect of different soil properties on arbuscular mycorrhizal colonization of peanuts, sorghum and maize. *Acta Botanica Brasilica*. 21(3): 723-730.
- Correa, A., Gurevitch, J., Martins-Loução, M.A. and Cruz, C., 2012. C allocation to the fungus is not a cost to the plant in ectomycorrhizae. *Oikos*, 121(3), pp.449-463.
- Chen, Y.Y., Hu, C.Y., and Xiao, J.X. 2014. Effects of arbuscular mycorrhizal inoculation on the growth, zinc distribution and photosynthesis of two citrus cultivars grown in low-zinc soil. *Trees-Structure and Function* 28, 1427–1436
- Darlita, R.R., B.Joy., dan R. Sudirja. 2017. Analisis Beberapa Sifat Kimia anah terhadap Peningkatan Produksi Kelapa Sawit pada Tanah Pasir di Perkebunan Kelapa Sawit pada Tanah Pasir di Perkebunan Kelapa Sawit Selangkun. *Jurnal Agrikultura*. 28 (1): 15-20.
- Darmawijaya, I.M. 1997. *Klasifikasi Tanah*. Gadjah Mada University Press, Yogyakarta.
- Effendi, S.1980. *Bercocok Tanaman Jagung*. Yasaguna. Jakarta. 96 h.
- Desah, A. & J. Widada. 2014. Ketergantungan Beberapa Kultivar Jagung terhadap Beneficial Soil Fungi. Tesis Universitas Gadjah Mada.
- Doyle JJ, Doyle JL (1990). Isolation of Plant DNA from Fresh Tissue. *Focus*. 12: 13-15.

- El-Atrach, F., Vierheilig, H. and Ocampo, J.A. 1989. Influence of non-host plants on vesicular-arbuscular mycorrhizal infection of host plants and on spore germination. *Soil Bioi. Biochem.* 21: 161-163.
- Faidzin, F.A.Q. 2015. Pengaruh Limbah Biogas Pasar Buah terhadap Pertumbuhan dan Serapan N, P, dan K jagung manis pada Alfisol Gunung Kidul. Fakultas Pertanian UGM. Yogyakarta. Skripsi
- Fang, X.-M., F.-S. Chen, S.-Z. Wan, Q.-P. Yang, and J.-M. Shi. 2015. "Top soil and Deep Soil Organic Carbon Concentration and Stability Vary with Aggregate Size and Vegetation Type in Subtropical China." *PloS One* 10 (9): e0139380.
- Firmansyah, I dan Sumarni, N. 2013. Pengaruh Dosis Pupuk N dan Varietas Terhadap pH Tanah, N-Total Tanah, Serapan N, dan Hasil Umbi Bawang Merah (*Allium ascalonicum* L.) pada Tanah Entisols-Brebes Jawa Tengah (Effect of N Fertilizer Dosages and Varieties On Soil pH, Soil Total-N, N Uptake, and Yield of Shallots (*Allium ascalonicum* L.) Varieties On Entisols-Brebes Central Java). *J. Hort.* 23(4):358-364,.
- Fisher, M.M., & E.W. Triplet. 1999. Automated Approach for Ribosomal Intergenic Spacer Analysis of Microbial Diversity and Its Application to Freshwater Bacterial Communities. *Applied and Environmental Microbiology.* 65(10): 4630-4636
- Garbeva L., Dickie I. A., Reich P.B. 2004. Ectomycorrhizal fungal communities at forest edges. *J. Ecol* 93:244-255.
- Genre, A., Chabaud, M., Timmers, T. Bonfante, P., & Barker D.G. 2005. Arbuscular mycorrhizal fungi elicit a novel intracellular apparatus in *Medicago truncatula* root epidermal cells before infection. *Plant Cell.* 17:3489-3499.
- George, E., Marschner, H., and Jakobsen, I. (1995). Role of arbuscular mycorrhizal fungi in uptake of phosphorus and nitrogen from soil. *Critical Reviews in Biotechnology*, 15(3-4), 257-270.

- Giovannetti M. 2000. Spore Germination and Pre-Symbiotic Mycelial Growth. In: Kapulnik Y., Douds D.D. (eds) *Arbuscular Mycorrhizas: Physiology and Function*. Springer, Dordrecht. 47-68.
- Giovannetti, M., Sbrana, C., Avio, L., Citernesi, A.S. & Logi, C., 1993. Differential hyphal morphogenesis in arbuscular mycorrhizal fungi during pre-infection stages. *New Phytologist*, 125(3):587-593.
- Grant, C., Bittman, S., Montreal, M., Plenchette, C., and Morel, C. 2005. Soil and Fertilizer phosphorus: Effects on plant P supply and mycorrhizal development. *Canadian Journal of Plant Science*, 85(1), 3-14.
- Guppy, C.N., N.W. Menziis and T. Harding. 2004. Limitations of Bioassays in Macronutrient Deficiency Determination. 2004. SuperSoil: 3<sup>rd</sup> Australian New Zealand Soils Conference. University of Sydney, Australia, 5-9 December 2004.
- Hanudin, E., Nurdin, M., and J.W. Purnomo. 2012. *Karakteristik Konkresi Mangan dan Mollisol Hutan Bunder Ghunung Kidul*. In: SEMINAR NASIONAL AGROFORESTRYIII, 29 Mei 2012, Hotel University Club UGM Yogyakarta.
- Hasid, R., Arma, M.J., and A. Nurmas. 2018. Existence Arbuscula Mycorrhiza and Its Application Effect to Several Variety of Corn Plant (*Zea mays* L.) in Marginal Dry Land. *Pakistan Journal of Biological Science*. 21 (4): 199-204.
- Hayman, S. 1970. Endogene Spore Numbers in Soil and Vesicular-Arbuscular Mycorrhiza in Wheat as Influenced By Season and Soil Treatment. *Transactions of the British Mycological Society*. Vol 54 , issue 1 . pages 53-63.
- Hepper, C. M. 1984. Regulation of spore germination of the vesicular-arbuscular mycorrhizal fungus *Acaulospora laevis* by soil pH. *Trans. Br. mycol. Soc.* 83: 154-156.
- Hu, W., Wei, S., Chen, H. 2020. Effect of Sterilization on Arbuscular Mycorrhizal Fungal Activity and Soil Nutrient Status. *J Soil Sci Plant Nutr* 20, 684–689..

Insofa.2019.Isolasi dan Identifikasi Jamur Mikoriza Arbuskular (JMA) pada Rhizosfer Tanaman Karet (*Havea brasiliensis Muell. Arg.*). Skripsi. Universitas Gadjah Mada.

International Training Center (ITC)-Gent. 1994. Pedological Excursions Areas Around Yogyakarta and Central Java Indonesia-Publication Series No 6. Yogyakarta; Departement of Soil Science Faculty of Agriculture Gadjah Mada University.

Isrun. 2006. Pengaruh Dosis Pupuk Kandang Terhadap Beberapa Sifat Kimia Tanah, Serapan P dan Hail Jagung Manis (*Zea mays var Saccharata sturt*) pada Inceptisols Jatinangor. J. Agrisains 7 (1): 9-17.

Jasper, D.A., Robson, A.D., Abbott, L.K. 1979. Phosphorus and the formation of vesicular-arbuscular mycorrhizas. Soil Biology and Biochemistry. Volume 11, Issue 5, Pages 501-505.

Jones, D.L., Magthab, E.A., Gleeson, D.B., Hill, P.W., Sánchez-Rodríguez, A.R., Roberts, P., Ge, T. & D.V. Murphy.2018. Microbial competition for nitrogen and carbon is as intense in the subsoil as in the topsoil. Soil Biology and Biochemistry, 117:72-82.

Kent, A., D., D. J. Smith, B. J. Benson, and E. W. Triplett. 2003. Web-based Phylogenetic Assignment Tool For Analysis of Terminal Restriction Fragment Length Polymorphism Profiles of Microbial Communities. Appl. Environ. Microbiol. 69:6768-6776.

Khan, S., Qureshi, M.I., Kamaludddin, Alam, T., and M.Z. Abidin. 2007. Protocol for Isolation of Genomic DNA from Dry and Fresh Roots of Medicinal Plants Suitable for RAPD and Restriction Digestion. African Journal of Biotechnology Vol. 6(3). 175-178.

Kitts, C.L. 2001. Terminal Restriction Fragment Patterns: A Tool for Comparing Microbial Communities and Assessing Community Dynamics. Curr Issues Intest Microbiol. 2:17-25.

- Lang, M., Christie, P., Zhang, J., & X. Li. 2018. Long-term phosphorus application to a maize monoculture influences the Soil Microbial Community and Its Feedback Effect on Maize Seedling biomass. *Applied Soil Ecology*.128:12-22
- Lawrence, WJC. 1956. Soil Sterilization. George Allen & Unwin Ltd. London.
- Ligawati, L.2016. Analisis Produksi dan Konsumsi Jagung Domestik dalam Rangka Pencapaian Swasembada Jagung Nasional Tahun 2017. Skripsi IPB
- Marschner, H.2011. *Marschner's mineral nutrition of higher plants*. Academic press.
- Mawarni, E., Suryatmana, P., Kerana, I.W., Puspanikan, D.L., Setiawati, M.R., Manurung, R.2013. Peran Mikoriza Arbuskular dalam penyerapan nutrient, pertanian, dan kadar minyak jarak (*Jatropha Curcas L.*). *Bionatura-Jurnal Ilmu-ilmu Hayati dan Fisik*. Bandung.
- Metay, A., J. A. A. Mareira, M. Bernoux, T. Boyer, J. M. Douzet, B. Feigl, C. Feller, F. Maraux, R. Oliver, and E. Scopel. 2007. " Storage and Form of Organic Carbon in No-tillage under Cover Crop System on Clayey Oxisol in Dry Land Rice Production (Cerrados, Brazil)." *Soil and Research* 94: 122-132.
- Munir, Dr.Ir Moch.1996.Tanah-Tanah Utama Indonesia.Malang;Pustaka Jaya.
- Nasreen, S, Haque, MM, Hosain, MA & Farid, ATM 2007. Nutrient uptake and yield of onion as influenced by nitrogen and sulphur fertilization. Bangladesh. *J. Agril. Res.*, vol. 32, no. 3, pp. 413-20.
- Nicolson, T. H. and Schenck, N.C. 1979. Endogonaceous mycorrhizal endophytes in Florida. *Mycologia*. 71: 178-198.
- Nursyamsi, D., dan Suprihati. 2005. Sifat-sifat Kimia dan Mineralogi Tanah serta Kaitannya dengan Kebutuhan Pupuk untuk Padi (*Oryza sativa*), Jagung (*Zea mays*), dan Kedelai (*Glycine max*). *Bul. Agron.* (33) (3) 40 – 47.
- F, Laczko E., Bogenrieder A., Stahr K, Bosch R., van der Heijden M., Sieverding E. 2010. Soil type and land use intensity determine the composition of arbuscular mycorrhizal fungal communities. *Soil Biol Biochem*. 42:724-738.

- Ortas, I. (2012). Mycorrhiza in citrus: growth and nutrition. In *Advances in Citrus Nutrition*, A.K. Srivastava, ed. (The Netherlands: Springer-Verlag).  
[https://doi.org/10.1007/978-94-007-4171-3\\_23](https://doi.org/10.1007/978-94-007-4171-3_23).
- Ortas, I., Akpinar, C., and Demirbas, A. 2016. Sour Orange (*Citrus aurantium* L.) growth is strongly mycorrhizal dependent in terms of phosphorus (P) nutrition rather than zinc (Zn). *Commun. in Soil Sci. and Plant Anal.* 47, 2514-2527.
- Ortas, I., Demirbas, A., and C. Akpinar. 2018. Under sterilized and non-sterilized soil conditions, mycorrhizal dependency in citrus plants depends on phosphorus fertilization rather than zinc application. *European Journal of Horticultural Science*. 83(2), 81-87.
- Osborn A.M., Moore, E.R.B. & K.N., Timmis .2000. An Evaluation of Terminal-Study of Microbial Community Structure and Dynamics. *Eznaviron Microbiol.*2:39-50.
- Ortas, I., Ortakci, D., and Kaya, Z. (2002). Various mycorrhizal fungi propagated on different hosts have different effect on citrus growth and nutrient uptake. *Commun. in Soil Sci. and Plant Anal.* 33, 259–272.
- Powes T.O., Todd T.C., Burnell A.M., Murray P.C.B., Fleming C.C., Szalanki A.L., Adams B.A., & T.S. Hariris. 1997. The Internal Transcribed Spacer Region as A Taxonomic Marker for Nematodes. *J Nematol.* 29: 441-450.
- Praharasti, A.S., Kusumaningtyas, A., Helbert, S.U. & P.B. LIPI.2012. Effecta of Bio-Fertilizer and Vesicular-Arbuscular Mycorrhiza (VAM) Application on Growth and Productivity Of Sweet-Corn Crop (*Zea mays Saccharata*). *Balancing Efforts on Environment Usage in Economy and Ecology*.153.
- Rachim, D.A. 2007. *Dasar-Dasar Genesis Tanah*. Departemen Ilmu Tanah dan Sumberdaya Lahan Fakultas Pertanian, Institut Pertanian Bogor.
- Reddy, D.D., A.S. Rao, K.S. Reddy, and P.N. Takkar. 1999. Yield Sustainability and Phosphorus acquisition and utilization as influences by varying supply and soil types. *J. Plant Nutririo.* 20 : 155-180.



- Sanjaya, B., Fathul, F dan R. Sutrisna. 2013. Potensi Ca, P, Mg, dan Zn pada berbagai bagian Tanaman Kiambang (*Salvinia molesta*) di Bendungan Batu Tegi Kabupaten Tanggamus. *Jurnal Ilmiah Peternakan Terpadu*. 1(2): 1-6.
- Samanhudi, A. Yunus, dan B.P.C. Tani. 2018. Budidaya Organik Kunyit pada Kluster Biofarmaka Kabupaten Karanganyar. *Journal of Sustainable Agriculture* 33(1):. 34-41.
- Sato, T., Hachiya, S., Inamura, N., Ezawa, T., Cheng, W., & K. Tawaraya. 2019. Secretion of Acid Phosphatase from Extraradical Hyphae of The Arbuscular Mycorrhizal Fungus *Rhizophagus clarus* is Regulated in Response to phosphate Availability. *Mycorrhiza*. 29(6): 599-605.
- Slankis V. 1974. Soil Factors Influencing Formation of Mycorrhizae. *Annu. Rev. Phytopathol.* 12: 437-457.
- Seoud, A.E & Meeged, A.A.2019. Contribution of Roots and Mycorrhizal Hyphae on Phosphorus Efficiency of Maize (*Zea mays*, L.) Genotypes Grown on Calcareous Soil-A Mechanistic Modeling Approach. *Communications in Soil Science and Plant Analysis*.50(17).
- Smith, S.E and Read, D., J. 2010. Mycorrhizal symbiosis. New York, NY; Academic Press.
- Srivastava, A.K., Singh, S., and Marathe, R.A. (2002). Organic citrus: soil fertility and plant nutrition. *J. Sustain. Agric.* 19, 5–29.
- Suryanti, S., Indradewa, D., Sudira, P., & J. Widada.2015.Hubungan Antara Sifat Perakaran, Sifat Fisiologis dan Tanggapan Terhadap Mikoriza pada Kultivar Kedelai dengan Tingkat Ketahanan terhadap Cekaman Kekeringan. Disertasi. Agronomi, Fak Pertanian, Universitas Gadjah Mada
- Yuslisa, FA.2018. Pengaruh Vermikompos yang Diperkaya Batuan Fosfat terhadap Sifat Kimia Tanah, Pertumbuhan dan Serapan P Jagung Di Alfisol Pathuk, Gunung Kidul. Fakultas Pertanian. Universitas Gadjah Mada. Skripsi

- Wahyudin, A., Fitriatin, B.N., Wicaksono, F.Y., dan A. Rahardiyan. 2017. Respon Tanaman Jagung (*Zea mays* L.) akibat Pemberian Pupuk Fosfat dan Waktu Aplikasi Pupuk Hayati Mikroba Pelarut Fosfat pada Ultisols Jatinangor. Jurnal Kultivasi Vol. 16 (1): 246-254.
- Walker, C. 1995. AM or VAM: what's in a word? A. Varma, B. Hock (Eds.), Mycorrhiza: Structure, Function, Molecular Biology and Biotechnology, Springer Verlag, Berlin, Deutschland. 25-26
- Wang, C., White, P.J. & Li, C. 2017. Colonization and Community Structure of Arbuscular mycorrhizal Fungi in Maize Roots at Different Depths in the Soil Profile Respond differently to Phosphorus Inputs on a Long-term Experimental Site. Mycorrhiza. 27(4):369-381.
- Wijanarko, A., Sudaryono, dan Sutarno. 2007. Karakteristik Sifat Kimia dan Fisika Alfisol di Jawa Timur dan Jawa Tengah. Iptek Tanaman Pangan. 2(2):214-226.
- Wijanarko, AA., Rahmianna, A., & Sudaryono. 2012. Status Kesuburan Lahan Kering Alfisol dan Usaha Peningkatan Produktivitas Kacang Tanah. Prosiding Seminar Hasil Penelitian Tanaman Aneka Kacang dan Umbi
- Wijanarko, A., and B. H. Purwanto. 2017. " Effect of Land Use and Organic Matter on Nitrogen and Carbon Labile fractions in a Typic Hapludult." Journal of Degraded and Mining Lands Management 4 (3): 837-843.
- Winarso, S. 2005. Kesuburan Tanah, Dasar Kesehatan dan Kualitas Tanah. Yogyakarta; Penerbit Gava Media.
- Yoneyama, T. 1991. Uptake assimilation, and trans location of nitrogen by crops. JARQ, vol. 25, no. 2, pp. 75-82.