

DAFTAR PUSTAKA

- Adiningsih, J. dan M. Sudjadi. 1993. Peranan system bertanam lorong (Alley cropping) dalam meningkatkan kesuburan tanah pada lahan kering masam. Risalah seminar, Hasil Penelitian Tanah dan Agroklimat. Pusat Penelitian Tanah dan Agroklimat, Bogor.
- Agegnehu, G., P.N. Nelson, & M.I. Bird. 2016. Crop yield, plant nutrientuptake and soil physicochemical properties under organic soil amendments and nitrogen fertilization on Nitisols. *Soil Tillage Res.* 160, 1-13.
- Agrafioti, E., G. Bouras, D. Kalderis, & E. Diamadopoulos. 2013. Biochar production by sewage sludge pyrolysis. *Journal of Analytical and Applied Pyrolysis.* 101, 72-78
- Balittan. 2012. Petunjuk Teknis: Analisis Kimia Tanah, Tanaman, Air, dan Pupuk. Bogor.
- Berek, A.K., N. Hue, & A. Ahmad. 2011. Benefical use of biochar to correct oil acidity. Hanai' Ai. *The Food Provider.* 2011.
- Brodowski, S., W. Amelung, L. Haumaier, C. Abetz, W. Zwch. 2005. Morphologiucal and chemical properties of black carbon in physical soil fractions as revealed by scanning electron microscopy and energy-dispersive X-ray spectroscopy. *Geoderma.* 128, 116-129.
- Chan, K.Y., L. Van-Zwieten, I Mezaros, A. Downie, & S. Joseph. 2007. Agronomic values of greenwaste biochar as a soil amandements. *Australian Journal of Soil Research.* 45, 437-444.
- Clough, T. J., & L.M. Condron. 2010. Biochar & the nitrogen cycle: introduction. *Journal of Environmental Quality.* 39, 1218 – 1223.
- Duku, M.H., S. Gu, & E.B. Hagan. 2011. Biochar production potential ini Ghana-a review. *Renew. Sust Energ. Rev.,* 15: 3539-3551.
- Dutta, M.H.,V.G.S. Raghavan, V. Orsat, & M. Ngadi. 2015. Surface characterisation and classification of microwave pyrolysed maple wood biochar. *Biosystems Engineering.* 131, 49 – 64.
- Damanik, M.M.B., B.E. Hasibuan, Fauzi, Sarifuddin, H. Hanum. 2010. Kesuburan Tanah dan Pemupukan. USU Press, Medan.
- Damanik, M.M.B., B.E. Hasibuan, Fauzi, Sarifuddin, H. Hanum. 2011. Kesuburan Tanah dan Pemupukan. USU Press, Medan.
- Deckers, J., O Spaargaren & F. Nachtergaele. 2001. Vertisols: Genesis properties and soilscape management for sustainable development. p. 3-20. In Syers, J. K, F. W. T. Penning De Vries, and P. Nyamudeza (Eds): *The Sustainable Management of Vertisols.* IBSRAM Proceeding No. 20.

Djuarnani, N., Kristiani, dan B.S Setiawan. 2005. Cara Cepat Membuat Kompos. Jakarta. Agromedia Pustaka

Dobermann A, Fairhurst T. 2000. Rice: Nutrient Disorders and Nutrient Management. Manila: International Rice Research Institute dan Potash & Phosphate Institute (PPI), Potash & Phosphate Institute of Canada (PPIC).

Downie, A., A. Crosky, & P. Munroe. 2009. Physical properties of biochar. In: J. Lehmann, & J. Stephen, editors, Biochar for environmental management. Earthscan, London.

Downie, A., L. Van-Zwieten, & A. L. Cowie. 2012. Biochar as a Geoenvironmental Climate Solution: Hazard Identification and Risk Management. Article in critical reviews in environmental science and technology.

Fahmi, I. Z. 2013. Media Tanam Hidroponik Dari Arang Sekam. Balai Besar Perbenihan dan Proteksi Tanaman Perkebunan. Surabaya.

FAO. 1987. Principles of composting. *In* Soil Management: Compost Production and use in Tropical and Sub-tropical Environments. FAO Soils Bulletin 56.

Firmanto, B. 2011. Sukses bertanaman terong secara organik. Angkasa, Bandung.

Gao, N., J. Li, . Qi, A. Li Y. Duan & Z. Wang. 2014. Thermal analysis and products distribution of dried sewage sludge pyrolysis. *Journal of Analytical and Applied Pyrolysis*. 105, 43-48.

Gaur, A.C. 1980. A Manual of Rural Composting. Project Field Document No. 15 Food and Agriculture Organization of The United Nations.

Gonzales, M.E., A. Gonzales, C.A. Toro, M. Cea, N. Sepulveda, M.C. Diez, & R. Navia. 2012. Biochar as a renewable matrix for the development of encapsulated and immobilized novel added-value bioproduct. *Journal of Biobased Materials and Bioenergy*. Vol. 6, 1-12.

Gracia C, Hernandez T, Costa F, Ceccanti B. 1994. Biochemical parameters in soils regenerated by the addition of organic wastes. *Wastes Management and Res*. 12: 457-466

Granatstein, D., C. Kruger, H. Collins, S. Galinato, M. Garcia-Perez, & J. Yoder. 2009. Use of Biochar from the Pyrolysis of Waste Organic Material as a Soil Amendment. Final Project Report. Center for Sustaining Agriculture and Natural Resources, Washington State University, Wenatchee, WA.

Hadrjowigeno, S. 2010. Ilmu Tanah. Akademika Pressindo. Jakarta.

Hillel, D. 1982. Introduction to Soil Rhyysics. Academic Press., Inc. San Diego, California.



Hilman, Y & Noordiyati. 1988, Pengujian pemupukan P dan K berimbang pada tanaman bawang putih di tanah sawah, *Bul. Penel. Hort.* 16 (1) : 48-54.

Huth, CJ & Pellmyer, D 1977, Nutrient requirements of solanaceous vegetable crops, *Indian J. of Agric Sciences.* 58 :668-72

Indriani, Y. H., 2001. *Membuat Kompos Secara Kilat.* Jakarta .Penebar Swadaya,

Inyang, M., B. Gao, P. Pullammanappallil, W. Ding, & A.R. Zimmerman. 2010. Biochar from anaerobically digested sugarcane bagasse. *Bioresour. Techno.* 101, 8868-8872.

Kasno, A. 2009. Respon tanaman jagung terhadap pemupukan kandang fosfor pada Typic Dystrudepts. *J. Tanah Tropika*

Ladd, J.N. 1985. Soil enzymes. P. 175-221. *In* D. Vaughan and R.E. Malcolm (*Eds.*). *Soils Organik Matter and Bioloical Activity.* The Hague, the Netherlands, Nijhoff & Junk Publ.

Laird, D.A., P.D. Fleming, D.D. Davi, B. Wang, R. Horton, & D.L. Karlen. 2010. Biochar impact on nutrient leaching from a Midwestern agricultural soil. *Geoderma.* 158 436-442.

Lal, R. 2008. Black & buried carbons' impacts on soil quality and ecosystem services. *Soil Tillage Res.*

Latuponu, H. 2013. Pemanfaatan biochar limbah sagu untuk meningkatkan ketersediaanN, P, K. Stok karbon tanah dan hasil tanaman jagung di Ultisol. Disertasi. Universitas Gadjah Mada. Yogyakarta.

Lehmann, J., J. P. Da Silva Jr, C. Steiner, T. Nehls, W. Zech, & B. Glaser. 2003. Nutrient availability and leaching in an archaeological anthrosol and a ferralsol of the central amazon basin: fertilizer. Manure and charcoal amendments. *Plant and Soil* 249, 343-357.

Lehmann, J. 2007. Bioenergy in the black carbon. *Frontiers Ecology and The Environment.* 5, 381-387.

Lehmann, J., & S. Joseph. 2009. *Biochar for environmental management: Science and Technology.* Earthscan-UK.

Lingga, P & Marsono. 2001. *Petunjuk Penggunaan Pupuk.* Penebar Swadaya. Jakarta.

Lu, H., W. Zhang, S. Wang, L. Zhuang, Y. Yang, & R Qiu. 2013. Characterization of sewage sludge-derived biochars from different feedstocks and pyrolysis temperatures. *Journal of Analytical and Applied Pyrolysis.* 102, 137-143.

Magen, H. 2008. Balanced crop nutrition: Fertilizing for crop and food quality. *Turk J. Agric.* 32 : 183-93.

Mukhlis. 2007. *Analisis Tanah Dan Tanaman.* USU press, Medan.

- Murbandonno, L. 2000. Membuat Kompos. Edisi Revisi. Jakarta. Penebar Swadaya.
- Musnamar, E. I., 2007. Pembuatan Aplikasi Pupuk Organik Padat. Penebar Swadaya, Jakarta.
- Nurtika, N & Sumarni, N. 1992. Pengaruh sumber, dosis dan waktu aplikasi pupuk kalium terhadap pertumbuhan dan hasil tomat. *Bul. Penel. Hort.* 22 (1) : 96-101.
- Novak, J.M., I. Lima, B.Xing, J.W. Gaskin, & C. Steiner. 2009. Characterization of designer biochar produced at different temperatures on fertility of a southeastern coastal plain soil. *Soil Science*. 174, 105-112.
- Notohadiprawiro, T. 1998. Tanah dan Lingkungan. Direktorat Jenderal Pendidikan Tinggi Departemen Pendidikan dan Kebudayaan. Jakarta.
- Peng, L., L. Ye, C.H. Wang, H. Zhou, & B.un. 2011. Temperature and duration dependent rice straw-derived biochar: characteristics and its effects on soil properties of an Ultisol in southern China. *Soil & Tillage Research*. 112, 159-166.
- Poerwowidodo, 1992. Telaah Kesuburan Tanah. Angkasa, Bandung.
- Prihmantoro, H. 2003. Memupuk Tanaman Sayur. Penebar Swadaya. Jakarta
- Parman, S. 2009. Pengaruh Pemberian Pupuk Organik Cair Terhadap Pertumbuhan dan Produksi Kentang (*Solanum tuberosum L.*). *Buletin Anatomi dan Fisiologi*, 15 (2): 21 – 31.
- Priyanto, D., A. Priyanti, & I. Inonu. 2004. Potensi dan Peluang Pola Integrasi Ternak Kambing dan Perkebunan Kakao Rakyat. Pemda Lampung
- Raihan, H.S. 2000. Pemupukan NPK dan ameliorasi lahan pasang surut sulfat masam berdasarkan nilai uji tanah untuk tanaman jagung. *J. Ilmu Pertanian* 9 (1): 20-28.
- Resman, S. A. Siradz, dan B. H. Sunarminto. 2006. Kajian beberapa sifat kimia dan fisika inceptisol pada toposekuen lereng selatang Gunung Merapi Kabupaten Sleman. *Jurnal Ilmu Tanah dan Lingkungan* 6: 101- 108.
- Saringoringo, H. H. & C. A. Siregar. 2011. Pengaruh aplikasi arang terhadap pertumbuhan awal *Michelia Montana* Blume dan perubahan sifat kesuburan tanah pada tipe tanah latosol. *Jurnal Penelitian Hutan dan Konservasi Alam* 8 (1) : 65 – 85.
- Setyorini D, Suriadikarta DA, Nurjaya. 2007. Rekomendasi pemupukan padi di lahan sawah bukaan baru. Di dalam *Lahan Sawah Bukaan Baru*. Bogor: Balai Besar Penelitian dan Pengembangan Sumberdaya Lahan Pertanian (BBSDLP).
- Samadi, B. 2001. Budidaya Terung Hibrida. Penerbit Kansius. Yogyakarta.
- Simatupang. 2014. Sayuran Jepang. Penebar Swadaya. Jakarta.



UNIVERSITAS
GADJAH MADA
Srinivasan,

PENGARUH ARANG BERBASIS KOTORAN AYAM TERHADAP SIFAT KIMIA TANAH DAN PERTUMBUHAN TERONG DI INCEPTISOL BERBAH, SLEMAN

RADITA GALIH P, Dr. Agr. Cahyo Wulandari, S.P., M.P.; Nasih Widya Yuwono, S.P., M.P.

Universitas Gadjah Mada, 2019 | Diunduh dari <http://etd.repository.ugm.ac.id/>

Srinivasan, S. P., Sarmah, R. Smernik, O. Das, M. Farid, & W. Gao. 2015. A feasibility study of agricultural and sewage biomass a biochar. Bioenergy and biocomposite feedstock: Production. Characterization and potential applications. Science of The Total Environment. 512-513: 495-505.

Subroto. 2009. Kesuburan dan Pemupukan Tanah Pertanian. Bandung: Pustaka Buana.

Subagyo, H., N. Suharta & A.B. Siswanto. 2000. The Agricultural soils in Indonesia. In the Indonesian Land Resources, and it's Management. Soil Research and Agroclimate Center, Bogor. 21-65. Indonesia

Suhening, W. 2012. Pengaruh Mulsa Organik Terhadap Pertumbuhan dan Hasil Tiga Varietas Kacang Hijau (*Vigna radiata* L. Wilczek) di Lahan Pasir Pantai Bugel, Kulon Progo. Jurnal Fakultas Pertanian Universitas Gadjah Mada. Yogyakarta.

Sumiati, E. 1983. Pengaruh zat pengatur tumbuh dan pupuk daun, biokimia terhadap hasil tanaman tomat (*Lycopersicon esculentum* Mill L.). Bul. Penel. Hort. 10 (3) : 21-7. 25.

Sumiati, E. 1989. Pengaruh mulsa jerami, naungan dan zat pengatur tumbuh terhadap hasil buah tomat kultivar berlian. Bul. Penel. Hort. 18 (2) : 18-31.

Suryani, Y., Astuti, Oktavia, B & Umniyati, S.2010. Isolasi dan Karakterisasi Bakteri Asam Laktat dari Limbah Kotoran Ayam sebagai Agensi Probiotik dan Enzim Kolesterol Reduktase. Prosiding Seminar Nasional Biologi 3 Juli 2010.

Soemeinaboedhy, N. & R. S. Tejowulan. 2007. Pemanfaatan Beberapa Macam Arang Sebagai Sumber Unsur Hara P dan K Serta Sebagai Pembena Tanah. Jurusan Ilmu Tanah Fakultas Pertanian Universitas Mataram. Agroteksos. 17(2): 114-122.

Soeryoko, H. 2011. Kiat Pintar Memproduksi Kompos Dengan Pengurai Buatan Sendiri. Lily Publisher. Yogyakarta. 112 hal.

Susetya, D. 2010. Panduan Lengkap Membuat Pupuk Organik untuk Tanaman Pertanian dan Perkebunan. Pustaka Baru Press. Yogyakarta.

Soetasad, A. 2000. Budidaya terong lokal dan terong jepang. Penebar Swadaya, Jakarta.

Steiner, C., B. Glaser, W.G. Teixeira, J. Lehmann, W.E.H. Blum, Zech. 2008. Nitrogen retention and plant uptake on a highly weathered central Amazonian ferra Isol amended with compost and charcoal. Journal of Plant Nutrition and Soil Science. 171, 893-899.

Syekhfani. 2000. Arti penting bahan organik bagi kesuburan tanah. Kongres I dan Semiloka Nasional. MAPORINA. Batu, Malang. Hal. 18.

Taberima, S. 2004. Peranan Mikroorganisme Dalam Mengurangi Efek Toksik Pada Tanah Terkontaminasi Logam Berat. Program Pascasarjana. Institut Pertanian Bogor, Bogor.

- Taiganides, R. E. 1977. *Animal Waste*. Applied Science Publisher Ltd: London.
- Tang, X. Y., L. Bernard, A. Brauman, T. Daufresne, P. Deleporte, D. Declaux, G.Souche, S.A. Placella, & P. Hinsinger. 2014. Increase in microbial biomass and phosphorus availability in the rhizosphere of intercropped cereal and legumes under field conditions. *Soil Biology & Biochemistry*. 75, 86-93.
- Thies, J.E., & M. Rillig. 2009. Characteristics of biochar: Biological properties. In: J. Lehmann, and . Joseph, editors, *Biochar environmental management*. Earthscan, London. 85-105.
- Wang, Z., A. Gottlein, & G. Bartonek. 2001. Effects of growing roots of Norway spruce (*Picea abies L. Karst*) and European beech (*Fagus ylvatica L.*) on rhizosphere soil solution chemistry. *Journal of Plant Nutrition and Soil Science*. 164 (1), 35-41.
- Winarso, S. 2011. *Kesuburan Tanah Dasar Kesehatan dan Kualitas Tanah*. Gava Media. Yogyakarta.
- Wuryaningsih, S. 1996. Pertumbuhan Beberapa Setek Melati pada Tiga Macam Media, *Jurnal Penelitian Pertanian*, 5(3), 50-57.
- Yati Supriati dan Ersi Herliana. *Bertanam 15 Sayuran Organik dalam Pot*. Penebar Swadaya. Jakarta.
- Yuan, J.H., R.K. Xu, & H.Zhang. 2011. The forms of alkalis in the biochar produced from crop residues at different temperatures. *Bioresource Technology*. 102, 328-3497.
- Zhang, P., Voroney, & G.W. Price. 2015. Effects of temperature and processing conditions on biochar chemical properties and their influence on soil C and N transformations. *Soil Biology & Biochemistry*. 83
- Zhao, R., N. Coles, & J. Wu, 2015. Carbon mineralization following additions of fresh and aged biochar to an infertile soil. *Catena*. 125, 183-189.
- Zheng, H., Z.Y. Wang, X. Deng, J. Zhao, & Y. Luo. 2013. Characteristics and nutrient values of biochars produced from giant reed at different temperatures. *Bioresource Technology*. Vo. 130, 463 – 471.
- Zielinska, A., P. Oleszczuk, B. Chamas, J. Skubiszewska-Zieba, & S. Pasieczna-Patkowska. 2015. Effect of sewage sludge properties on the biochar characteristic. *Journal of Analytical and Applied Pyrolysis*. 112, 201-213.