

## DAFTAR PUSTAKA

- Abdurrachman, A., Dariah, A., Mulyeni, A. 2007. *Strategi Dan Teknologi Pengelolaan Lahan Kering Mendukung Pengadaan Pangan Nasional*. Jurnal Litbang Pertanian, 27(2), 2008. Badan Litbang.
- Al-jibri, M., Miskad, S., dan Erwin. 1995. *Evaluasi Kesuburan Tanah dan Pemupukan di Areal Kebun Konversi PG Kuala Madu PT Perkebunan IX Medan*. Risalah Hasil Penelitian sumberdaya Lahan/tanah Areal Konversi P.G Kuala Madu P. T. Perkebunan IX Medan . Medan.
- Aulia. Y. 2018. *Pemanfaatan Biochar Ampas Tebu (Amelioran) untuk Memperbaiki Sifat Kimia Inceptisol pada Lahan Tebu Lawang, Kab. Agam*. Universitas Andalas. Padang.
- Balai Penelitian dan Pembangunan Pertanian. 2014. *Panduan Pendampingan dan Pengawasan P2T3 (Percepatan Penerapan Teknologi Tebu Terpadu)*. Jakarta.
- Balai Penelitian Tanah. 2010. *Gagasan Swasembada Gula di Indonesia*. Kepala Balai Penelitian Tanah. Kementrian Pertanian. Bogor.
- Chan, K. Y., Van Zwieten, I., Meszaros, I., Downie, A. and Joseph, S. 2007. *Agronomic Values of Greenwaste Biochar as a Soil Amandement*. Australian Journal of Soil Research. 45:437-444.
- Crawford, N. M., 1995. *Nitrate: Nutrient and Signal for Plant Growth*. The Plant Cell., 7:859-868.
- David, E. Kissel. 1988. *Management of Urea Fertilizers*. Kansas University.
- Dempster, D. N., Gleeson, D. B., Solaiman, Z. M., Jones, D. L. and Murphy, D. V. 2012. *Decreased Soil Microbial Biomass and Nitrogen Mineralisation with Eucalyptus Biochar Addition to a Coarse Textured Soil*. Plant and Soil, 354, 311-324.
- Departemen Pertanian. 2009. *Petunjuk Teknis Verifikasi Dokumen Pengembangan Usaha Agribisnis Pedesaan (PUAP)*: Departemen Pertanian. Jakarta.
- Estianty, L., M., Dewi, F., dan Irma Y. 2004. *Zeolit Alam Cikanca Tasikmalaya: Media Penyimpan Ion Ammonium dari pupuk Ammonium Sulfat*. (oline). Diunduh pada 13 Mei 2017.

- Fan, J., Hao, M. dan Malhi, S.S., 2010. Accumulation of Nitrate-N in The Soil Profile and Its Implications for The Environment Under Dryland Agriculture in Northern China. *Can. J. Soil Sci.*, 90(3):429–440.
- Fraser, B. 2010. *High-tech Charcoal Fights Climate Change*. Environ. Sci. Technol. 2010, 548.
- Gani, A. 2009. *Biochar penyelamat lingkungan*. Balai Besar Penelitian Tanaman Padi. Warta Penelitian dan Pengembangan Pertanian. 31:15-16.
- Gani, A. 2010. *Multiguna Arang-Hayati Biochar*. Sinar Tani. Balai Besar Penelitian Tanaman Padi. Edisi 13-19 : 1-4.
- Gardner, P, NA. Campbell dan JB. Reece. 1991. *Fisiologi Tanaman Budidaya*. UI Press. Jakarta.
- Glaser, B. J Lehmann and W Zech. 2002. *Ameliorating Physical And Chemical Properties Of Highly Weathered Soil In The Tropics With Charcoal A Review*. *Biol And Fertility Of Soils*. 35 : 219-230.
- Glaser, B. 2001. *The Terra Preta Phenomenon: A Model for Sustainable Agriculture In the Humic Tropic*. *Die Naturwissenschaften* 88: 37-41.
- Hakim, N., M.Y Nyakpa, A.M. Lubis, S.G. Nugroho, M.R. Saul, M.A. Dina, G.B. Hong, dan H.H. Bailey, 1986. *Dasar-dasar Ilmu Tanah*. Universitas Lampung. Bandar Lampung.
- Hanafiah, K. A. 2005. *Dasar-Dasar Ilmu Tanah*. Divisi Buku Perguruan Tinggi. PT. Raja Grafindo Persada. Jakarta.
- Hanafiah, K. A. 2010. *Dasar-dasar Ilmu Tanah*. Rajawali Pers. Jakarta..
- Hardjowigeno, S., 1993. *Klasifikasi Tanah dan Pedogenesis*. Akdemika Presindo : Jakarta.
- Harsanti, E., S., dan Ardiwinata, A., N. 2011. *Arang Aktif Meningkatkan Kualitas Lingkungan*. Edisi 6-12 Maret 2011 No.3400 Tahun XLI, Sinar Tani. Jakarta.
- Hasibuan, B. E. 2008. *Diktat Kuliah Pupuk dan Pemupukan*. Fakultas Pertanian Universitas Sumatera Utara. Medan.
- Hollister, C. C., Bisogni, J. J. and Lehmann, J. 2012. *Ammonium, Nitrate, and Phosphate Sorption to and Solute Leaching from Biochars Prepared from Corn Stover (Zea maysL.) and Oak Wood (Quercusspp.)*. *Journal of Environmental Quality*, 1, 137-144.

- Husin. 2007. *Analisis Serat Bagase*. (<http://www.free.vism.org/>, diakses tanggal 6 Juli 2009).
- Idris, A. H., Staples, E. D., and O'Brien, D. J. 1994. *Entidal carbon dioxide during extremely low cardiac output*. *Ann. Emerg. Med.*, 23; 568-572.
- Islami. T., B. Guritno., N. Basuki dan A. Suryanto. 2011a. *Biochar for sustaining productivity of cassava based cropping systems in the degraded lands of East Java, Indonesia*. *J. Tropical Agriculture*
- James, G. 2004. *Sugarcane*. Blackwell Publishing Company. Oxford.UK. 216 halaman.
- Kameyama, K., Miyamoto, T., Shiono, T., Shinogi, Y. 2012. *Influence Of Sugarca Bagasse-Derived Biochar Application On Nitrat Leaching In Calcarik Dark Red Soil*. *J. Environ. Qual.* 41. 1131-1137.
- Kamman, C., Linsel, S., Gobling, J., H-W, K. 2011. *Influence Of Biochar On Drought Tolerance Of Chenopodium Quinoa Willd And On Soil-Plant Relation*. *Plant soil* 2011. 345. 195-210.
- Kookana, R., A. Sarmah., Z. Van., L. Krull, and E.B. Singh. 2011. *Biochar Application to Soil: Agronomic and Environmental Benefits and Unintended Consequences*. *Adv. Agron.* 112, 103.
- Kusuma, Dewi, Retno. 2019. *Pemanfaatan Biochar Sekam Padi Dan Pupuk Kandang Sapi Untuk Meningkatkan Sifat Kimia Ultisol Dan Pertumbuhan Bibit Tanaman Kelapa Sawit*. Universitas Andalas. Padang.
- Lehman, J., Da Silva, J. P., Steiner, C., Nehls, T., Zech, W., Glaser, B. 2003. *Nutrient Availability And Leaching In An Archaeological Anhthrosol And A Ferralsol Of The Central Amazon Basin. Fertilizer, Manure And Charcoal Amandements*. *Plant Soil.* 249. 343-357.
- Lehman, J. 2007. *Bio-energy in the Black. Departement of Crop and Soil Sciences. Collage of Agriculture and Life Sciences*. Cornell University. Ithaca. NY 14853. The Ecological Society of America. *Front Ecol Environ* 2007 : 5(7) : 381-387.
- Liang, B. J Lehmann., D. Kiyangi, J. Grossman, B. O'Neill, J. O. Skjemstad, J. Thies, F. J. Luizao, Peterson, J. and Neves, E. G. 2006. *Black CarbonIncreases Cation Exchange Capacity in Soil*. *Soil Science. Soc. Am.*, 70, 1719-1730.

- Lopez, B.R.J., Fonta, J.M., Lopez, B.F.J., dan Lopez, B.L. 2010. *Carbonsequestration by tillage, rotation, and nitrogen fertilization in a Mediterranean Vertisol*. *Agron J* (102): 310-318.
- Maulana, A. 2016. *Aktivasi Bubuk Batubara Muda Subbituminus dengan urean KCl, NaOH, dan NaCl untuk memperbaiki Sifat Kimia Ultisol dan Meningkatkan Produksi Tanaman Jagung*. [Skripsi] Fakultas Pertanian. Universitas Andalas. Padang. 82 hal.
- Masulili, A., Utomo, W. H., and Syechfani. 2010. *Rice husk biochar for rice based cropping system in acid soil I. The characteristics of rice husk biochar and its influence on the properties of acid sulfate soils and rice growth in west kalimantan, indonesia*. *Journal of Agricultural Science* 2(1): 39 – 47.
- Mawardiana., Sufardi dan E. Husen. 2013. *Pengaruh Residu Biochar Dan Pupukan NPK Terhadap Sifat Kimia Tanah Dan Pertumbuhan Serta Hasil Tanaman Padi Musim Tanam Ketiga*. *Jurnal Konservasi SumberdayaLahan*. Universitas Syiah Kuala. Banda Aceh. Hal 16-23.
- Miller, J. D. And Gilbert, R. A. 2006. *Sugarcane Botany: A Brief View*. *Agronomy Departement, Florida Cooperative Extension Service, Institut of Food and Agricultural Sciences*. University of Florida. 6 hlm.
- Munir, M. 1995. *Tanah-Tanah Utama Indonesia*. Pustaka Jaya. Jakarta. 345 Hal.
- Nancy , M. 2008. *Nitrogen: The Essential Element*. <http://pmep.cce.cornell.edu>. Diakses pada tanggal 20 November 2008, pukul 16.18 WIB.
- Naspendra, Z. 2013. *Pengaruh Pemanfaatan Bagase, Molase, dan Pupuk Kandang terhadap beberapa Sifat Fisika dan Kimia Tanah serta Pertumbuhan Tanaman Tebu*. Padang: Universitas Andalas.
- Novak, J.M., W.J. Busscher, D.L. Laird, M. Ahmedna, D.W. Watts, and M.A.S. Niandou. 2009a. *Impact of biochar amendment on fertility of a southeastern coastal plain*. *Soil Science* 174:105-111.
- Rahyuni. 2018. *Potensi Penggunaan Biochar Yang Diperkaya Amonium Dalam Mensubstitusi Penggunaan Pupuk Urea*. Padang: Universitas Andalas
- Resman, S. A. Syiradz dan Sunarminto, B. H. 2006. *Kajian Beberapa Sifat Kimia dan Fisika Inceptisol pada Toposekuen Lereng Selatan Gunung Merapi Kabupaten Sleman*. *Jurnal Ilmu Tanah dan Lingkungan* Vol. 6 No. II: 101-108.

- Renner, R. 2007. *Rethinking Biochar*. Environ. Sci. Technol., 41, 5932-5933.
- Sanchez, P.A. 1992. *Sifat dan Pengelolaan Tanah Tropika*. Terjemah. Bandung. ITB.
- Rondon, M.A., J. Lehmann., J. Ramez, and M. Hurtado. 2007. *Biological Nitrogen Fixation by Common Beans (Phaseolus vulgaris L.) Increases with Biochar Additions*. Biology and Fertility of Soils, 43, 699-708.
- Sanchez, P.A. 1992. *Sifat dan Pengelolaan Tanah Tropika*. Jayadinata, J.T., penerjemah. Bandung: ITB.
- Setyamidjaja, D. 2006. *Budidaya Kelapa Sawit*. Yogyakarta (ID): Kanisius. 74 hal.
- Steiner, C., W.G. Teixeira, J. Lehmann, T. Nehls, J.L.V. de Macêdo, W.E.H. Blum, W. Zech. 2007. *Long term effects of manure, charcoal and mineral fertilization on crop production and fertility on a highly weathered Central Amazonian upland soil*. Plant soil 291: 275-290
- Subagyo, H., Nata, S. Dan Agus, B. S. 2000. *Tanah-tanah pertanian di Indonesia*. Bogor: Pusat Penelitian Tanah dan Agroklimat. 78-80 hal.
- Sudiatso, S. 1999. *Bertanam Tebu*. Departemen Agronomi. Fakultas Pertanian. Institut Pertanian Bogor. Bogor.
- Supriyadi, A. 1992. *Rendemen Tebu : Liku-Liku Permasalahannya*. Kanisius. Jakarta.
- Sutirja, R. 2007. *Standar Mutu Pupukan Organik Dan Pembenh Tana Modul Pelatihan Pembuatan Kompos*. Departemen Tenaga Kerja dan Transmigrasi RI. Balai Besar Pengembangan dan Perluasan Kerja. Lembang.
- Tan, K. H. 1991. *Principle of Soil Chemistry ( Dasar-Dasar Kimia Tanah*. Alih Bahasa: Ir. Didiek Hadjar Goenadi, Msc. Phd). Gadjah Mada University Press. Yogyakarta. 275 hal.
- Tisdele, S.L. and Nelson J.D. 1985. *Soil fertility and fertilizers*. Mc Macmilan Co. New York. 249-291 hal.
- Verheijen, F, et al.2010. *Biochar Application to Soils*. Italy : JRC: Institute for Environment and Sustainability
- Widowati, Asnah, dan Utomo, W. H. 2014. *The Use of Biochar to reduce Nitrogen and Pottasium leaching From soil Cultivated With Maize*. Journal of Degraded and Mining Lands Management 2 (2),211-218.

- Wijayanti, 2008. *Rapid in vitro micro propagation of sugarcane (Saccharum officinarum L. Cv Nayana) through callus culture*. Nature Science 7(4):110.
- Yamato, M., Okimori, Y., Wibowo, L.F., Anshiori, S. and Ogawa, M. 2006. *Effects of application of charred bark of Acacia mangium on the yield of maize, cowpea and peanut, and soil chemical properties in South Sumatera, Indonesia*. Soil Science and Plant Nutrition 52: 489-495.
- Yao, Y., Gao, B., Zhang, M., Inyang, M. and Zimmermann, A.R. 2012. *Effect of Biochar Amendment on Sorption and Leaching of Nitrate, Ammonium, and Phosphate in a Sandy Soil*. Chemosphere, 89, 1467-1471.

