

DAFTAR PUSTAKA

- Acmaad, A., 2006, Identifikasi Kerusakan Lahan dan Pendapat Masyarakat terhadap Rencana Lahan Pertanian Pasca Tsunami (Studi Kasus Kecamatan Lho'nga Kabupaten Aceh Besar), *Tesis*, Sekolah Pascasarjana Institut Pertanian Bogor, Bogor.
- Adiningsih, J. dan Sudjaji, M., 1993, Peranan sistem bertanam lorong (*Alleycropping* dalam meningkatkan kesuburan tanah pada lahan kering masam), *Risalah Seminar, Hasil Penelitian Tanah dan Agroklima*, Pusat Penelitian dan pengembangan Tanah dan Agroklimat, Bogor.
- Andjartyassih, K., 2015, Studi Adsorpsi – Desorpsi Kalium pada Humus Sintetis dalam Kondisi Lingkungan Asam, *Skripsi*, Fakultas MIPA Universitas Gadjah Mada, Yogyakarta.
- Antonietti, M., 2006, *Magic Coal from the Steam Cooker*, Departement of Colloid Chemistry, Max Plank Institute of Colloids and Interface, Postdam. Pers. Comm., 12-22.
- Anwar, E.K. dan Suganda, H., 2002, *Pupuk Limbah Industri : Pupuk Organik dan Pupuk Hayati*, Badan Penelitian dan Pengembangan Pertanian, Departemen Pertanian.
- Aprilina, M., 2016, Pembuatan Humus Sintetik dari Limbah Monosodium Glutamat sebagai Penangkap dan penyimpan Nitrogen, *Skripsi*, Fakultas MIPA Universitas Gadjah Mada, Yogyakarta.
- Arifin, S., Sumoyo, dan Bachtar, A., 1998, Pengujian Substitusi Amonium Sulfat oleh Sipramin terhadap Produksi Tebu Tanaman Pangan Pertama di Lahan Sawah Bertekstur Halus Pasuruan. *Prosiding Seminar Pengujian Sipramin terhadap Produksi, Hasil Pengolahan Tebu, dan Sifat-sifat Tanah*. Malang, 25-26 November 1997.
- Bai, P., dan Siepmann, J.I., 2013, Adsorption of Glucose into Zeolite Beta from Aqueous Solution, *AIChE J.*, 59, 3523-3529.
- Calderon, F.J., McCarty, G.W., dan Reeves III, J.B., 2005, Pyrolysis-MS and FT-IR Analysis of Fresh and Decomposed Dairy Manure, *J. Anal. Appl. Pyrolysis*, 76, 14-23.

- Cassman, K.G., Dobermann, A.R., dan Walters, D.T., 2002, Pyrolysis-MS and FT-IR of Fresh and Decomposed Dairy Mature., *J. Anal. Appl. Pyrolysis*, 76, 14-23.
- Charlina, C., 2015, Karakterisasi Fraksi Humin, Asam Humat, dan Asam Fulvat pada CRH (*Carbonized Rice Husk*) dan Humus Sintetis, *Skripsi*, Jurusan Kimia FMIPA, Universitas Gadjah Mada, Yogyakarta.
- Chia, C.H., Sigh, B.P., Joseph, S., Graber, E.R., dan Munroe, P., 2014, Characterization of an Enriched Biochar, *J. Anal. Appl. Pyrolysis.*, 108, 26-34.
- Chlupáčová, M., Hrouda, F., Nižňanský, D., Procházka, V., Petáková Z., dan Laufek F., 2012, Frequency-dependent Susceptibility and other Magnetic Properties of Celtic and Mediaeval Graphitic Pottery from Bohemia: an Introductory Study, *Studia Geophysica et Geodaetica.*, 56(3), 803-825.
- Djukri, 2009, Cekaman Salinitas terhadap Pertumbuhan Tanaman, *Dalam Prosiding Seminar Nasional Penelitian, Pendidikan dan Penerapan MIPA*, Fakultas MIPA, Universitas Negeri Yogyakarta, 16 Mei 2009.
- Fessenden, R.J., dan Fessenden, J.S., 1982, *Organic Chemistry 3rd Ed. Jilid 2*, Erlangga, Jakarta.
- Funke, A., dan Ziegler, F., 2010, Hydrothermal Carbonization of Biomass: A Summary and Discussion of Chemical mechanisms for Process Engineering, *Biofuels. Bioprod. Biorefin.*, 4(2), 160-177.
- Glaser, B., Haumaier, Guggenberger, H.G., dan Zech, W., 2001, The Terra Preta Phenomenon - a Model for Sustainable Agriculture in the Humid Tropics, *Naturwissenschaften*, 88, 37-41.
- Hayes, M.H.B., dan Graham, C.L., 2000, *Procedures for the Isolation and Fractionation of Humic Substances*. dalam Ghabbour, E. A., Davies, G., *Humic Substances: Versatile Components of Plants, Soil and Water*, RSC, Cambridge.
- Hayes, M.H.B., Swift, R.S., Byrne, C.M., Song, G., dan Andre, J., 2010, Humin: The Simplest of the Humic Substances?, *Proceeding 15th Meeting of the International Humic Substances Society*, Tenerife Canary Islands, 27 Juni-2 Juli 2010, 64-68.

- Hayes, T.M., Hayes, M.H.B., Skjemstad, J.O., dan Swift, R.S., 2008, Studies of Compositional Relationships Between Organic Matter in a Grassland soil and lys Agricultural Residues, *Biogeosciences*, 11, 6613-6621.
- Jindo, K., Mizumoto, H., Sawada, Y., Sanchez-Monodero, M. A., dan Sonoki, T., 2014, Physical and Chemical Characterization of Biochar Derived from Different Agricultural Residues, *Biogeosciences*, 11, 6613-6621.
- Joseph, S., Lehmann, J., Amonette, J., Camps, M., Munroe, P., Muller, P., Yun, Y., dan Chia, C., 2011, The Nanostructure of Fresh and Aged Biochar and its Potential Significance for Changes in Soil Properties and Plant Nutrient Uptake, *Towards Human and Enviromental Symbiosis using Biochar Asia Pasific Biochar Conference*, Kyoto.
- Kennedy, L.J., Vijaya, J.J., dan Sekaran, G., 2005, Electrical Conductivity Study of Porous Carbon Composite Derived from Rice Husk, *Mater. Chem. Phys.*, 91, 471-476.
- Ketis, N.K., Wahyuningrum, D., Achmad, S., dan Bundjali, B., 2010, Efektivitas Asam Glutamat sebagai Inhibitor Korosi pada Baja Karbon dalam Larutan NaCl 1 %, *Jurnal Matematika dan Sains*, 15(1).
- Kowalski, S., Lukasiewicz, M., Chodak-Duda, A., dan Ziec, G., 2013, 5-Hydroxymethyl-2-Furfural (HMF)- Heat Induced Formation, Occurrence in Food and Biotransformation-a Review, *Pol. J. Food Nutr. Sci.*, 63-4, 207-225
- Kuncaka, A., 2013, *Slow Release Organic Paramagnetic (SROP) Fertilizer sebagai Model Humus Sintetis untuk Mengantarkan Terwujudnya Industri Pertanian Raksasa Nasional yang Berkelanjutan*, Pidato Dies Natalis Universitas Gadjah Mada ke-58, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Gadjah Mada, Yogyakarta, 19 Desember 2013.
- Kuncaka, A., 2014, *Metode Memproduksi Pupuk Organik Paramagnetik Pelepasan Lambat*, paten Negara, P00201401530.
- Land, M., dan Liu, M., 2008, Preparation and Properties of Chitosan-Coated NPL Compound Fertilizer with Controlled Release and Water Retention, *Carbohydr. Polym.*, 72, 240-247.

- Liljestråle, A., 2007, Hydrothermal Carbonization of Biowaste – a Step towards Efficient Carbon Sequestration and Sustainable Energy Production, *Thesis*, Uppsala Universitet, Uppsala.
- Leiwakabessy, F.M., Wahjudin, U.M., dan Suwarno, 2003, *Kesuburan Tanah*, Institut Pertanian Bogor, Bogor.
- Malghani, S., Gleixner, G., dan Trumbore, S.E., 2013, Chars Produce by Slow Pyrolysis and Hydrothermal Carbonization Vary in Carbon Sequestration Potential and Greenhouse Gases Emissions, *Soil Biol. Biochem.*, 62, 137-146.
- Mann, C.C., 2005, *New Revelations of the Americas before Columbus*, Vintage and Anchor Hooks, New York.
- Mengel, K., dan Kirkby, E.A., 1979, *Principle of Plant Nutrition 2nd*, International Potash Institute, Warblaufen-Bern, Switzerland.
- Mulyadi, M. dan Lestari, H., 1993, Komposisi Kimia Pupuk Cair dari Limbah MSG di Lampung, Berita No.10, Pusat Penelitian Perkebunan Gula Indonesia, Pasuruan.
- Paul, E.A. dan Clark, F.E., 1996, *Soil Microbiology and Biochemistry*, 2nd Edition, Academic Press, USA.
- Peña-Méndez, E.M., Havel, J., dan Patocka, J., 2004, Humic Substances – Compounds of Still Unknown Structure : Application in Agriculture, Industry, Environment, and Biomedicine, *J. Appl. Biomed.*, 3, 13-24.
- Piccolo, A., 2002, The Supramolecular Structure of Humic Substances: a Novel Understanding of Humus Chemistry and Implications in Soil Science, *Adv. Agro*, 75, 57-134.
- Rahman, A.Z.M.S., Cao, X., Wei, L., Wang, B., dan Wu, H., 2013, Luminescence Properties of Samarium-doped SiO₂-Na₂SO₄ Composite, *Mater. Lett.*, 99(2013), 142-145.
- Russel, E.W., 1973, *Soil Condition and Plant Growth*, 10th edition, Longman-ELBS, London.
- Saikia, B.J., Parthasarathy, G., dan Sarmah, N.C., 2008, Fourier Transform Infrared Spectroscopic Estimation of Crystallinity in SiO₂ Based Rocks, *Bull. Matter. Sci.*, 31(5), 775-779.

- Sanchez, P.A., 1976, *Properties and Management of Soils in the Tropics*, John Wiley & Sons, New York.
- Sevilla, M., dan Fuestes, A.B., 2009, The Production of Carbon Materials by Hydrothermal Carbonization of Cellulose, *Carbon*, 47, 2281-2289.
- Singh, S., Rekha, P.D., Arun, A.B., dan Young, C.C., 2009, Impacts of Monosodium Glutamate Industrial Wastewater on Plant Growth and Soil Characteristics, *Ecol. Eng.*, 35(2009), 1559-1563.
- Smejkalova, D., dan Piccolo, A., 2008, Host-Guest Interactions between 2,4-Dichlorophenol and Humic Substances as Evaluated by ^1H NMR Relaxation and Diffusion Ordered Spectroscopy, *Environ. Sci. Technol.*, 42, 699-706.
- Soepardi, H.G., 2001, Strategi usaha tani agribisnis sumber daya lahan, hlm. 35-52 dalam *Prosiding Nasional Pengelolaan Sumber Daya Lahan dan Pupuk Buku I*, Pusat Penelitian dan Pengembangan Tanah dan Agroklimat, Bogor.
- Sofyan, A., Setyorini, D., dan Adiningsih, J.S., 1997, Dampak Penggunaan Pupuk Cair Sipramin terhadap Sifat Kimia Tanah, Hlm 23-5, dalam *Prosiding Seminar Dampak Penggunaan Pupuk Cair Sipramin terhadap Sifat Kimia, Fisika dan Mikroorganisme Tanah*. Malang, 10 April 1997.
- Solomon, T.W.G., dan Fryhle, C.B., 2011, *Organic Chemistry 10th ed.*, John Wiley & Sons Inc., New York.
- Sombroek, W.G., Ruivo, M.L., Fearnside, B.G., dan Lehman, J., 2003, Amazonian Dark Earths as Carbon Stores and Sinks. Academic Publisher: 125-139.
- Song, G.X., Novotny, E.H., Simpson, A J., Clapp, C.E. dan Hayes, M.H.B., 2008, Sequential Exhaustive Extraction of a Mollisol Soil, and Characterizations of Humic Components, including Humin, by Solid and Solution State NMR, *Eur. J. Soil Sci.*, 59, 505-516.
- Stevenson, F.J., 1994, *Humus Chemistry Genesis, Composition, Reactions*, 2nd ed, Willey, New York.
- Stuart, B., 2004, *Infrared Spectroscopy: Fundamentals and Applications*, John Wiley and Sons, New York.

- Titirici, M.M., Antonietti, M., dan Baccile, N., 2008, Hydrothermal Carbon from Biomassa: A Comparison of the Local Structure from Poly- to Monosaccharides and Pentoses/Hexoses, *Green Chem*, 10, 1204-1212.
- Triastuti, E., 2006, Laporan Sanitasi Industri Proses Produksi Monosodium Glutamat PT. Palur Raya Karanganyar, Fakultas Pertanian, Universitas Sebelas Maret, Surakarta.
- Van Brunt. J.M., dan Sultenfuss, J.H., 1998, Better crops with plat food, dalam *Potassium: Functions of Potassium* 82(3)4-5.
- Wahyunintyas, A., 2015, Studi Adsorpsi-Desorpsi Glukosa pada Humin Sintetik, *Skripsi*, Fakultas MIPA Universitas Gadjah Mada, Yogyakarta.
- Yang, Q., Yang, M., Zhang, S., dan Lv, W., 2005, Treatment of Wastewater from Monosodium Glutamate Manufacturing Plant Using Successive Yeast and Activated Sludge Systems, *Process* dan Kacman, H., 2012, Distinguishing Opaline Silica Polymorphs from α -Cristobalite in Gedikler Bentonite, *Appl. Clay Sci.*, 62-63, 80-86.
- Zhang, W., dan Lau, A., 2007, Reducing ammonia emission from poultry manure composing via struvite formation, *J. Chem. Technol. Biotechnol.*, 82, 598-602.
- Zhu, K., Fu, H., Zhan, J., Lv, X., Tang, J., dan Xu, X., 2012 Studies on Removal of $\text{NH}_4\text{-N}$ from Aqueous Solution by Using the Activated Carbons Derived from Rice Husk, *Biomass Bioenergy*, 43, 18-25.
- Ziechmann, W., Hubner, M., Jonassen, K.E.N., Batsberg, W., Nielsen, T., Hahner, S., Hansen, P.E., dan Gudmudson, A.L., 2000, *Humic Substances and Humification*, Royal Society of Chemistry, Cornwall.