

## DAFTAR PUSTAKA

- Amliana, D. R., Prasetyo, Y. dan Sukmono, A. 2016. *Analisis Perbandinan Nilai NDVI Landsat 7 dan Landsat 8 pada Kelas Tutupan Lahan (Studi Kasus : Kota Semarang, Jawa Tengah)*. Jurnal Geodesi UNDIP Volume 5 : 1, 2016. Hal. 264-274.
- Amundson, R. 2001. *The carbon budget in soil*. Earth Planet. Sci. Hal. 29:535- 562.
- Arnold, R.W. 1988. *The worldwide distribution of Andisols and the need for an Andisol order in Soil Taxonomy*. Hal. 5-12.
- Ashazy, A.A. dan Cahyono, A.B. 2013. *Analisis Indeks Vegetasi Menggunakan Citra Satelit FORMOSAT-2 Di Daerah Perkotaan (Studi Kasus: Surabaya Timur)*. Jurnal Teknik POMITS Vol. X.Hal 3.
- As-syakur, A.R dan Sandi, A. 2009. *Analisis Indeks Vegetasi Menggunakan Citra ALOS/AVNIR-2 dan Sistem Informasi Geografi (SIG) untuk Evaluasi Tata Ruang Kota Denpasar*. Jurnal Bumi Lestari. Hal. 1-11.
- Badan Pertahanan Nasional Republik Indonesia. 2009. *Rencana Strategis (RENSTRA) BPN RI Tahun 2010-2014*. Jakarta: Kementerian Agraria dan Tata Ruang/ Badan Pertanahan Nasional
- Baldock J.A. and Sanderman, J. 2011. *Soil Organic Matter*, chap. II-1. In: Hunag PM, Li Y, Sumner ME (Hrsg) Handbook of soil science. CRC, Boca Raton. Hal. 245-262
- Baldock, J.A. 2012. *Building soil carbon for productivity and carbon accounting*. (GRDC Update Paper). Canberra: Australian Goverment. Hal. 1-6
- Baret, F., Guyot, G., dan Major, D.J., 1989. *TSAVI: a vegetation index which minimizes soil brightness effects on LAI and APAR estimation*. In: IGARSS'89, Proceedings of the IEEE International Geoscience and Remote Sensing Symposium and 12th Canadian Symposium on Remote Sensing, IEEE, Vancouver, Canada, 10–14 July 1989. Vol. 3. Hal. 1355–1358.
- Barus, Y.A. 2007. *Kajian Pedokimia pada Tanah Andisols berdasarkan Mineral Liat di Desa Tungkoh Kecamatan Karo*. Skripsi Fakultas Pertanian USU. Medan. Hal. 46-49.
- Batiano, A., Kihara, J., Vanlauwe, B., Waswa, B., dan Kimetu, J. 2006. *Soil organic carbon dynamic, functions and management in west african agro-ecosystems*. Agricultural Systems. Hal. 13-25.
- Bengtsson, L. dan Enell, M. 1986. Chemical analysis. In B.E Berglund(ed) : *Handbook of holocene palaeoceanology and palaeohydrology*, Wiley, Chichester, 423-425
- Blair, G. J., Lefroy, R. D., dan Lisle, L. 1995. *Soil carbon fractions based on their degree of oxidation, and the development of a carbon management index*

- for agricultural systems.* Australian journal of agricultural research. Hal. 1459-1466.
- Blakemore, L.C., Scarle, P.L., dan Daly, B.K. 1987. *Soil Bureau Laboratory Methods for Chemical Analysis of Soil.* New Zealand. New Zealand Soil Bureau. Soil rep. Hal. 10
- Brinker, J.F., Scherer, G.W., 1990. *Sol-Gel Science.* New York. Soil Journal. Hal. 998.
- Buurman, P., Peterse, F., Almendros-Martin, G., 2007. *Soil organic matter chemistry in allophanic soils: a pyrolysis-GC/MS study of a Costa Rican Andosol catena.* Eur. J. Soil Sci. 58, 1330–1347.
- Colins, H.P., Rasmussen, P.E., Douglas, Jr. C. 1992. *Crop rotation and residues management effect, on soil organic carbon and microbial dynamics.* Soil Sci. Soc. Am. J. Hal. 56:783-788.
- Coleman, D.C. dan Crossley Jr D.A. 1995. *Fundamental of Soil Ecology.* Academic Press. San Diego. New York. Hal. 39-41
- Dahlgren, R.A., Saigusa, M., Ugolini, F.C., 2004. *The nature, properties and management of volcanic soils.* Adv. Agron. 82, 113–182.
- Dalal, R.C. dan Chan, K.Y. 2001. *Soil organic matter in rainfed cropping systems of the Australian cereal belt.* Australian Journal of Soil Research Hal. 39, 435-64.
- Davidson, E.A dan Jassens I. 2006. *Temperature sensitivity of soil carbon decomposition and feedbacks to climate change.* Nature 04514 Vol 440. Hal. 165-173.
- Dean, W. E. Jr. 1974. *Determinations of carbonate and organic matter in calcereous sediments and sedimentary rocks by loss on ignition: comparison with other method.* Journal of Sedimentary Petrology, Hal. 44, 242-284.
- Donovan, P. 2012. *Measuring soil carbon change: A flexible, practical and local method.* Soil carbon coalition.org. Hal. 81-86
- Erfandi, D., U. Kurnia, dan Juarsah I. 2004. *Pemanfaatan Bahan Organik dalam Perbaikan Sifat Fisik dan Kimia Tanah Ultisols. Dalam Prosiding Semnas. Pendayagunaan Tanah Masam, Buku II, Puslitbang Tanah dan Agroklimat.* Bogor. Hal. 77-85.
- Eswaran, H., Van Den Berg E., dan Reich P. 1993. *Organic C in soils of the world.* Soil sci. Soc. Am. J. Hal. 57:192-194.
- Evans LJ. 1989. *Chemistry of metal retention by soils.* Environ Sci Technol 1989;23:1046 –1056.
- Farrell, J., & Rose, A. 1967. *Temperature effects on microorganisms.* Annual Reviews in Microbiology. Hal. 101-120.
- Fiantis, D. 2002. *Tanah Vulkanis Sumatera Barat.* Dies Faperta 2002. Universitas Andalas. Hal 9-10.

- Fiantis, D. 2006. *Laju Pelapukan Kimia Debu Vulkanis Gunung Talang dan Pengaruhnya Terhadap Proses Pembentukan Mineral Liat Non-kristalin*. Artikel Penelitian. Direktorat Jendral Pendidikan Tinggi. SURAT PERJANJIAN NO: 005/SP3/PP/DP2M/II/2006. Departemen Pendidikan Nasional. Fakultas Pertanian, Universitas Andalas.
- Hairiah, K., Widianto, Utami, S.R., Suprayogo, D., Sunaryo, Sitompul, S.M Lusiana, B., Mulia, R., van Nordwijk, M., dan Cadisch, G.. 2000. *Pengelolaan Tanah Masam Secara Biologi: Refleksi Pengalaman dari Lampung Utara*. ICRAF SE Asia. Hal. 182.
- Hakim, N., Nyakpa, M.Y., Lubis, A.M., Nugroho, S.G., Saul, Diha, M.A., Hong, G.B. dan Bailey, H.H. 1984. *Bahan Praktikum Dasar-dasar Ilmu Tanah*. Lampung. BKS-PTN/USAID (University of Kentucky). WUAE Project. Hal. 576.
- Hardiyanti S., Purwadhi. 2001. *Interpretasi Citra Digital*. Jakarta. Grasindo. Hal. 59-66.
- Hardjowigeno, S., H. Subagyo., dan M. L. Rayes. 2004. *Morfologi dan Klasifikasi Tanah Sawah*. In: Agus, F., A. Adimiharja., S. Hardjowigeno., A.M. Fagi., and W. Hartatik., editor. *Tanah Sawah dan Teknologi Pengelolaannya*. Bogor. Pusat Penelitian Tanah dan Agroklimat. Hal. 363.
- Harterink, A.E. 2008. *Soils are back on the global agenda* Soil Use and Management Hal. 327-330.
- Helal HM. 1990. *Varietal differences in root phosphatase activity as related to the utilization of organic phosphates*. Plant and Soil. 123: 161-163
- Hikmat, A. 2005. *Biomass estimation, carbon storage and energy content of three virgin jung reserves in Peninsular Malaysia*. Media Konservasi. 10(2): Hal. 1- 8.
- Hoyle, F.C., Baldock, J.A., dan Murphy, D.V. 2011. *Soil organic carbon Role in rainfed farming systems*. New York, ed. P Tow, I Cooper, I Partridge and C Birch, Springer. Hal. 339–363.
- Huygens, D., Boeckx, P., Van Cleemput, O., Oyarzún, C., Godoy, R., 2005. *Aggregate and soil organic carbon dynamics in South Chilean Andisols*. Biogeosciences 2, 159–174.
- Kaiser K, Guggenberger G. 2000. *The role of DOM sorption to mineral surfaces in the preservation of organic matter in soils*. Org Geochem 31. Hal. 711 –725.
- Kaiser K, Haumaier L, Zech W. 2000. *The sorption of organic matter in soils as affected by the nature of soil carbon*. Soil Sci. Hal. 305 –313.
- Kalbitz K, Solinger S, Park JH, Michalzik B, Matzner E. 2000. *Controls on the dynamics of dissolved organic matter in soils: a review*. Soil Sci. Hal. 277 –304.

- Kleber, M. 2010. *What is recalcitrant soil organic matter?*. Environmental Chemistry. Hal. 320-332.
- Krull, E., Baldock, J., dan Skjemstad, J. 2001. *Soil texture effects on decomposition and soil carbon storage*. In Kirshbaum, M.U.F. & Mueller, R. (eds.), Net Ecosystem Exchange: CRC Workshop Proceedings. Canberra: CRC for Greenhouse Accounting. Hal. 103-110.
- Kumar, Pavan. Prem Chandra Panday, Swati Katiyar dan Meenu rani. 2015. *Estimation of accumulated soil organic carbon stock in tropical forest using geospatial strategy*. The Egyptian Journal of remote sensing and space sciences. Hal. 1-15.
- Kyuma, K. 2004. *Paddy Soil Science*. Japan. Kyoto University Press, and Australia Trans Pacific Press.
- Liddicoat, C., Schapell, A., Davenport, D., & Dwyer, E. 2010. *Soil carbon and climate change. For the Sustainable system Group, Agriculture, Food and Wine, Primary Industries and Resources SA*. (PIRSA Discussian Paper). Hal. 79
- Lillesand, T. M dan Ralph, W. K. 1997. *Remote Sensing and Image Interpretation*. John Willey and Sons, New York. Hal. 2.
- Lillesand, T. M., & Kiefer, R. W. 1979: Remote sensing and image interpretation. New York: John Wiley. Hal. 13-21
- Lorenz, K., R. Lal. 2005. *The depth distribution of soil organic carbon in relation to land use and management and the potential of carbon sequestration in subsoil horizons*. Elsevier. Advance in Agronomy Vol. Hal. 35-66.
- Maxin CR, Kogel-Knabner I. 1995. *Partitioning of polycyclic aromatic hydrocarbons (PAH) to water-soluble organic matter*. Eur J Soil Sci. Hal. 193 –204.
- Mayer, L.M., Schick, L.L., Hardy, K.R., Wagai, R., McCarthy, J., 2004. *Organic matter in small mesopores in sediments and soils*. Geochimica et Cosmochimica Acta 68. Hal. 19.
- Miller, M.H. dan R.L. Donahue. 1990. Soils. An Introduction to Soils and Plant Growth. Prentice Hall Englewood Cliffs. New Jersey. Hal. 768.
- Musa, L. Mukhlis dan A. Rauf. 2006. *Dasar Ilmu Tanah*. Departemen Ilmu Tanah Fakultas Pertanian Universitas Sumatera Utara, Medan. Hal. 73-77
- Nelson, D. W. ,dan L. E. Sommers . 1982. *Total carbon, organic carbon, and organic matter*. American Society of Agronomy, Madison, Wisconsin, USA. Hal. 539-579.
- Nelson, W.L. 1982. *Soil Fertility and fertilizer, an introduction to nutrients management*. Pearson Education, inc. USA. Hal. 81-86.

- Oppenheimer, C. 2002. *Limited global change due to the largest known Quaternary eruption, Toba*. Quarternary Science Reviews 21(14-15): Hal. 1593-1609.
- Pankhurst, CE., and J.M.Lynce.1993. *The role of soil biota in suistanable agriculture*. P. 3-9. In C.E. Pankhurst, B.M. Doebe, V.V.S.R Gupta, dan P.R. Grace. *Soil biota: Management in sustainable farming system*. CSIRO Press, Melbourne, Australia. Hal. 875-877.
- Pizarro, C., Escudey, M., Fabris, J.D., 2003. *Influence of organic matter on the iron oxide mineralogy of volcanic soils*. *Hyperfine Interact*. Hal.148–149, 53–59.
- Price, M. 1986. The analysis of vegetation change by remote sensing. *Progress in Physical Geography*, 10(4), Hal. 473-49.
- Rahmad, 2002. Inventarisasi Sumber Daya Lahan Kabupaten Pelalawan dengan Menggunakan Data Citrrahmada Satelit. Volume v. Hal. 14.
- Ramrath, S.E., S. Siegert., J.O Rieley., H.D.V. Boehm., A. Jaya. And S.H. Limin. 1999. The amount of carbon released from peat and forest fires. *Narure*. Hal 42,61-65.
- Rovira, A.D. dan Greace L.E. 1957. *The effect of aggregate disruption on the activity of microorganisms in the soil*. Australia. Australian journal of agricultural research. Hal. 46-59.
- Ruddiman, W. 2007. *Losses of soil carbon Plows, Plagues, and Petroleum: How Humans Took Control of Climate*. Princeton, NJ: Princeton University Press. Hal. 202.
- Sanchez, P.A. 1992. *Sifat dan Pengelolaan Tanah Tropika*. (Johana T. Jayadinata, Penterjemah). Bandung: Penerbit ITB. Hal. 167-171.
- Seprianto. 2016. *Fraksionasi karbon tanah vulkanis di kecamatan 2 x 11 enam lingkung Kabupaten Padang Pariaman*, Skripsi, Fakultas Pertanian, Universitas andalas. Hal. 40-59.
- Shoji, F.H. Beinrorth, dan Eswaran H. (Eds.). Proceedings of the Ninth International Soil Classification Workshop. Japan 20 July to 1 August 1987. Publ. by Japanese Commitee for the 9th International Soil Classification Workshop, for the Soil Management Support Services, Washington D.C. USA. Hal. 93-99.
- Shoji, S. dan Takahashi, T. 2003. Environmental and agricultural significance of volcanic ash soils. *Global Environment Resource*, 6: Hal. 113–135.
- Shoji, S., Dahlgren, R., dan Nanzyo, M., 1993. *Genesis of volcanic ash soils*. In: Shoji, S., Nanzyo, M., Dahlgren, R. (Eds.), *Volcanic Ash Soils: Genesis, Properties and Utilization*. Soil Science. Elsevier, Amsterdam, Hal. 37–71.

- Shoji, S., Nanzyo, M. dan Dahlgren, R. A. 1993. *Volcanic ash soils: Genesis, properties, and utilization*. Amsterdam the Netherlands: Elsevier.
- Siringoringo, H.H. 2014. *Peranan penting pengelolaan penyerapan karbon dalam tanah*. Pusat penelitian dan pengembangan konservasi dan rehabilitasi Bogor. Hal. 75-192.
- Soepardi, G. 1983. *Sifat dan ciri-ciri Tanah*. Jurusan Tanah. Fakultas Pertanian. Institut Pertanian Bogor. Hal. 23-37
- Soepraptohardjo, M. and Suhardjo H. 1978. *Rice soils in Indonesia*. Los Banos, Philippines. In IRRI, Soils and Rice. Hal. 99-114
- Steiner, C. 2007. *Soil Charcoal amendment maintain soil fertility and establish carbon sink-research and prospect*. Soil Ecology Res Dev. Hal. 1-6
- Stevenson FJ. 1994. *Humus chemistry.Genesis, composition, reactions*, 2nd ed. New York: John Wiley. Hal. 496.
- Sudarsono, Nur Wahidah, Bambang Sudarsono, dan Arwan Putra Wijaya. 2016. *Analisis Fase Tumbuh Padi Menggunakan Algoritma NDVI, EVI, SAVI, dan LSWI Pada Citra Landsat 8*. Semarang. Jurnal Geodesi UNDIP Volume 5 : 1, 2016. Hal. 125-134.
- Sudaryo dan Sutjipto. 2009. *Identifikasi dan Penentuan Logam pada Tanah Vulkanik di Daerah Cangkringan Kabupaten Sleman dengan Metode Analisis Aktivasi Neutron Cepat*. Yogyakarta. Sekolah Tinggi Teknologi Nuklir. Hal. 13-19
- Suparto, Hikmatullah, Wahyunto, dan A. Hidayat. 1989. *Sifat dan klasifikasi tanah berkembang dari volkan andesitik-dasitik daerah Gunung Seulawah Agam, Kabupaten Aceh Besar*. Dalam Kurnia, U. (Eds.). Risalah Hasil Penelitian Tanah, Pusat Penelitian Tanah, Badan Penelitian dan Pengembangan Pertanian. Hal. 80-87.
- Sutanto, 2013. *Metode Penelitian Penginderaan Jauh*. Universitas Gadjah Mada Yogyakarta. Hal. 30-33.
- Sutanto. 1994. *Penginderaan Jauh Jilid II Edisi 2*. Yogyakarta. Gajah Mada University Press. Hal. 289-294.
- Tan, K. H. 1998. *Andosols*. Program Studi Ilmu Tanah Program Pasca Sarjana Universitas Sumatera Utara. Medan. Hal. 56.
- Torn, M.S., Trumbore, S.E., Chadwick, O.A., Vitousek, P.M., Hendricks, D.M., 1997. *Mineral control of soil organic carbon storage and turnover*. Nature 389. Hal. 170–173.
- Uehara, G., and G. Gillman. 1981. *The mineralogy, chemistry, and physics of tropical soils with variable charge clays*. Westview Tropical Agriculture Series No. 4. Westview Press, Inc. Colorado. Hal. 170.
- Ugolini, F. C. and Dahlgren, R. A. 2003. Soil development in volcanic ash. *Global Environment Research*, 6. Hal. 69–81.

- Van Breemen, N., and P. Buurman. 1998. *Soil Formation*. Kluwer Academic Publishers. Dordrecht, The Netherlands. Hal. 377-381.
- Van Reeuwijk, L.P. 1993. *Procedures for soil Analysis*. Technical paper, International Soil Reference and Information Centre. Wageningen, the Netherlands. 4th ed. Hal. 100.
- Veres, S. D. 2002. A *Comparative Study Between Loss on Ignition and Total Carbon Analysis on Minerogenic Sediments*. University of Babes-Boyai. Hal. 171-182
- Vidyarthi, G.S. and R.V. Misra. 1982. The role and importance of organic materials and biological nitrogen fixation in rational improvement of agricultural production. FAO Soils Bulletine. Hal. 45.
- Wahyunto, Murdiyanti,S.R. dan Ritung, S. 2004. Aplikasi Teknologi Pengindraan Jauh dan Uji Validitasnya Untuk Deteksi Penyebaran Lahan Sawah dan Penggunaan/Penutupan Lahan. Soil Research Institute, CSARD of IAARD. Hal. 253-256.
- Wahyunto, Widagdo dan Bambang Heryanto. 2006. *Pendugaan Produktivitas Tanaman Padi Sawah melalui Analisis Citra Satelit*. Bogor. Jurnal Informatika Pertanian Vol 15. Hal 117-115.
- Walcott, J., Bruce, S., and Sims, J. (2009). *Soil carbon for carbon sequestration and trading: a review of issues for agriculture and forestry*. Canberra: Bureau of Rural Sciences, Department of Agriculture, Fisheries & Forestry.Hal. 12-17
- Widagdo. 2001. *Validasi Model Estimasi Hasil Padi Sawah Melalui Analisis Citra Satelit*. Laporan Akhir, Bagian Proyek Penelitian Sumberdaya Lahan dan Agroklimat. Puslitbang Tanah dan Agroklimat. Bogor. Hal. 26-31
- Woignier, T., Primera, J., Duffours, D., Dieudonné, P., Raada, A. 2008. *Preservation of the allophanic soils structure by supercritical drying*. Microporous Mesoporous Mater. Hal. 109, 370–375.
- Yoshida, S. 1981. *Fundamentals of Rice Crop Science*. Loas Banos. International Rice Research Institute. Hal. 269.