

DAFTAR PUSTAKA

- Anda, M., Dahlgren, R. A., & Shoji, S. (2015). Volcanic ash soils: Genesis, properties and utilization. *Developments in Soil Science*, 36, 1–474.
- Balittanah. (2009). *Petunjuk Teknis Edisi 2: Analisis Kimia Tanah, Air dan Pupuk*. Bogor: Badan Penelitian dan Pengembangan Pertanian, Departemen Pertanian.
- Basile-Doelsch, I., Amundson, R., Stone, W. E. E., Borschneck, D., Bottero, J. Y., Moustier, S., & Masin, F. (2005). Mineralogical control of organic carbon dynamics in a volcanic ash soil on La Réunion. *European Journal of Soil Science*, 56(5), 689–703.
- Beck, H. E., Wood, E. F., Pan, M., Fisher, C. K., Miralles, D. G., van Dijk, A. I. J. M., & McVicar, T. R. (2019). MSWEP V2 global 3-hourly 0.1° precipitation: Methodology and quantitative assessment. *Bulletin of the American Meteorological Society*, 100(3), 473–500.
- BMKG. (2024). Laporan Pemantauan Cuaca dan Dampak Abu Vulkanis Erupsi Gunung Marapi. Badan Meteorologi, Klimatologi, dan Geofisika, Jakarta.
- Blakemore, L.C., Scarle, P.L., & Daly, B.K. (1987). Soil Bureau Laboratory Methods for Chemical Analysis of Soil. New Zealand Soil mBureau. *Soil rep.* 10 A. DSIRO. New Zealand.
- Buurman, P. (1990). Chemical, Physical, dan Mineralogical Characteristics for The Soil Data Base. Technical Report No.7, Version 2.1. *Land Resource Evaluation and Planning Project, Soil Data Base Management*. Center for Soil and Agroclimate Research, Bogor.
- Carrillo-Rosúa, J., Esteban-Arispe, I., & Morales-Ruano, S. (2021). Anion composition of apatite in the Au-Cu epithermal deposit of Palai-Islica (Almería, SE Spain) as an indicator of hydrothermal alteration. *Minerals*, 11(12), 1358. <https://doi.org/10.3390/min11121358>
- Dahlgren, R., Shoji, S., & Nanzyo, M. (1993). Mineralogical characteristics of volcanic ash soils. In Shoji S, Nanzyo M, and Dahlgren R (Eds.). *Volcanic Ash Soils. Genesis, Properties and Utilizations. Development in Soil Science 21*. Elsevier, Amsterdam. 101-143.
- Dahlgren, R.A., Saigusa, M., Ugolini, F.C. (2004). The nature, properties and management of volcanic soils. *Adv. Argon*, 82, 113-182.
- Dharumarajan, S., Mandal, C., Sarkar, D., Reddy, K.S., dan Nanda, A.K. (2021). *Digital Mapping of Soil Properties Using Kriging Methods: A Case Study. Geoderma Regional*, 25: 103-117.

- Fauzi, I., & Hariyadi, E. S. (2018). Analisis Geostatistik dalam Menentukan Keseragaman Nilai Kepadatan Tanah Dasar. *Jurnal Teknik Sipil*, 25(3), 195. <https://doi.org/10.5614/jts.2018.25.3.4>
- Fiantis, D., Van Ranst, E., Shamshuddin, J. (2006). Impact of acid deposition on cation leaching from Mt. Talang airfall ash. In: *New Waves in Physical Lands Resources*. Ghent University; Free University Brussels; VLIR UCOS, 258-268.
- Fiantis, D., Shamshuddin, J., Fauziah, C. I., & van Ranst, E. (2010). Effect of volcanic ash from Mount Talang eruption on chemical properties of soils. *Geoderma*, 155(3–4), 359–366.
- Fiantis, D. (2017). *Morfologi dan Klasifikasi Tanah*. Padang: LPTIK Universitas Andalas.
- Fiantis, D., Gusnidar., Ginting, F.I., Nelson, M. & Minasny, B. (2019). Volcanic Ash, Insecurity for the People but Securing Fertile Soil for the Future. *Sustainability*, 11(11): 3072.
- Harahap, I. (2007). *Kajian Sifat Kimia Tanah Vulkanis Pasca Erupsi Gunung Talang 12 April 2005 di Aie Batumbuk Kecamatan Gunung Talang Kabupaten Solok*. Universitas Andalas. Padang.
- Harsh, J., Chorover, J., & Nizeyimana, E. (2002). Allophane and Imogolite. *Soil Mineralogy with Environmental*. <https://doi.org/10.2136/sssabookser7.c9>
- Hou, A. Y. (2014). The Global Precipitation Measurement mission. *Bulletin of the American Meteorological Society*, 95(5), 701–722.
- Huffman, George J., Bolvin, David T., Turk, Jennifer, Stocker, Edward F., & Nelkin, Eric J. (2019). GPM IMERG late, early, and final precipitation estimates at monthly and daily time scales. *Journal of Hydrometeorology*, 20(4), 835–860.
- Huffman, George J., Bolvin, David T., Braithwaite, Carlos J. R., & Nelkin, Eric J. (2020). Integrated Multi-satellite Retrievals for the Global Precipitation Measurement (GPM) mission (IMERG). *Advances in Global Change Research*, 67, 343–353.
- Jackson, T. J., Huffman, G. J., Stocker, E. F., & Petersen, W. A. (2017). The Global Precipitation Measurement (GPM) mission. *Bulletin of the American Meteorological Society*, 98(8), 1679–1695.
- Kementerian Energi dan Sumber Daya Mineral (KESDM). (2024). *Laporan Pemantauan Gunung Api Aktif di Indonesia*. Pusat Vulkanologi dan Mitigasi Bencana Geologi (PVMBG), Jakarta.
- Kome, G., Enang, R. K., Yerima, B., & Gilles Raoul, L. (2018). Models relating soil pH measurements in H₂O, KCl and CaCl₂ for volcanic ash soils of

Cameroon. *Geoderma Regional*, 14, e00185.

Kusmiyarti, T. B., Suryani, I., & Adnyana, I. W. S. (2020). Sifat Andisol di daerah Tawangmangu dan Bedugul. *Jurnal Pertanian Tropik*, 7(2), 155–165

Lillesand, T.M., & Kiefer, R.W. (1994). *Remote Sensing and Image Interpretation*. Third Edition. Wiley, New York.

Miftahuddin, Y., Umaroh, S., & Karim, F. R. (2020). Perbandingan Metode Perhitungan Jarak Euclidean, Haversine, Dan Manhattan Dalam Penentuan Posisi Karyawan (Studi Kasus : Institut Teknologi Nasional Bandung). *Bandung: Jurnal Tekno Insentif*, 69-77.

Mohr, E.C.J., F.A. Van Baren, & J. Van Schuylenborgh. (1972). Tropical soils. A comprehensive study of their genesis, third edition. *Mouton-Ichtiar Baru-Van Hoeve*, The Hague, Paris, Jakarta.

Munadi, S. (2005). *Pengantar Geostatistik*. Jakarta: Universitas Indonesia.

Munir, M., (1996). *Tanah – tanah utama Indonesia*. Pustaka Jaya, Jakarta.

Nanzyo, M., Shoji, S., & Dahlgren, R. A. (1993). Physical characteristics of volcanic ash soils. In S. Shoji, M. Nanzyo, & R. A. Dahlgren (Eds.), *Volcanic Ash Soils: Genesis, Properties and Utilization* (pp. 189–207). Elsevier.

Nanzyo, M., Shoji, S., & Dahlgren, R. A. (2002). *Unique properties of volcanic ash soils*. *Global Environmental Research*, 6(2), 99-112.

Nasution, H., Yusfaneti, & Emanauli. (2023). Pengkajian sifat fisika Andisol pada penggantian hutan dengan tanaman kopi dan kayu manis. *Attractive Journal*.

Parfitt, R. L., & Childs, C. W. (1988). Estimation of forms of Fe and Al: A review, and analysis of contrasting soils by dissolution and Mossbauer methods. *Australian Journal of Soil Research*, 26(1), 121–144.

Parfitt, R.L., & Kimble, J.M. (1989). Characteristics and Properties of Andosols. *Geoderma*, 45: 65-78.

Parfitt, R. L. (1989). *Phosphate reactions with natural allophane, ferrihydrite and goethite*. *Journal of Soil Science*, 40(2), 359–369.

Parfitt, R. L. (1990). Allophane in New Zealand — a review. *Australian Journal of Soil Research*, 28(3), 343–360.

Purwadhi, & Sanjoto, A. (2008). *Penginderaan Jauh untuk Sumber Daya Lahan*. Penerbit Universitas Gadjah Mada, Yogyakarta.

Prasetyo, B.H., J.S. Adiningsih, K. Subagyono, & R.D.M. Simanungkalit. (2004).

Mineralogi, kimia, fisika, dan biologi lahan sawah. Hlm 29-82. Dalam F. Agus (Eds.) *Tanah Sawah dan Teknologi Pengelolaannya*. Pusat Penelitian Tanah dan Agroklimat, Bogor.

Rijanta, R., Hizbaron, M., & Baiquni. (2014). *Modal Sosial dalam Manajemen Bencana*. Yogyakarta: Gadjah Mada University Press.

Rozalia, Gera, Hasbi Yasin, & Dwi Ispriyanti. (2016). Penerapan Metode Ordinary Kriging pada Pendugaan Kadar di Udar. *Jurnal Gaussian*, Vol. 5, No. 1, hal. 113-121.

Sartohadi, & Junun, (2012). *Pengantar Geografi Tanah*. Yogyakarta: Penerbit Pustaka Pelajar.

Schmidt, F. H., & Ferguson, J. H. A. (1951). *Rainfall types based on wet and dry period ratios for Indonesia with Western New Guinea*. Verhandelingen No. 42. Kementerian Perhubungan dan Tenaga, Jawatan Meteorologi dan Geofisika.

Shekar, S., Lu, C. T., & Zhang, P. (2003). A Unified Approach to Detecting Spatial Outliers. *GeoInformatica*, 139-166.

Shoji, S., S. Kobayashi, I. Yamada, & J. Masui. (1975). Chemical and mineralogical studies on volcanic ashes: I. Chemical composition of volcanic ashes and their classification. *Soil Science Plant Nutrient*. 21(4):311-318.

Shoji, S., M. Nanzyo, & R.A. Dahlgren. (1993). Volcanic ash soils: Genesis, properties and utilization. *Development in Soil Science Vol. 21*, Elsevier. 288 pp.

Six, J., Elliott, E. T., & Paustian, K. (2000). *Soil macroaggregate turnover and microaggregate formation: A mechanism for C sequestration under no-tillage agriculture*. *Soil Biology and Biochemistry*, 32(14), 2099–2103

Skofronick-Jackson, Gail, Petersen, Walter A., Berg, Warren, et al. (2017). The Global Precipitation Measurement (GPM) Mission for Science and Society. *Bulletin of the American Meteorological Society*, 98(8), 1679–1695.

Soil Survey Staff. (2014). *Keys to Soil Taxonomy* (12th ed.). USDA-NRCS.

Sulaeman, Y. (2011). *Pemanfaatan Teknologi Pemetaan Digital untuk Pengelolaan Tanah dan Lahan*. *Jurnal Agroklimatologi*, 9(1): 15-26.

Sumner, M. E., & Noble, A. D. (2003). Soil acidification: the world story. In Z. Rengel (Ed.), *Handbook of Soil Acidity* (pp. 1–28). CRC Press.

Suwargana, N. (2013). *Penginderaan Jauh dan Pengolahan Citra Digital untuk Kajian Lingkungan*. Bandung: ITB Press.

Takahashi, T., & Dahlgren, R. A. (2016). Nature, properties and management of

Andosols. *Geoderma Regional*, 7(3), 255-263.

- Takahashi, T. (2020). *Andisols: Properties, management, and agricultural potential*. Tokyo: Springer.
- Tan, Jimmy T., Petersen, Walter A., & Tokay, Ali (2016). Evaluation of GPM IMERG Early Run Using Ground Radar Observations. *Journal of Hydrometeorology*, 17(3), 733–747.
- Tang, G., Clark, M. P., Papalexiou, S. M., Ma, Z., & Hong, Y. (2020). Have satellite precipitation products improved over last two decades? A comprehensive comparison of GPM IMERG with ground-based observations over complex terrain. *Atmospheric Research*, 240
- Tsai, C. C., Chen, Z. S., & Hseu, Z. Y. (2010). Pedogenesis of volcanic ash soils along a temperate to tropical climatic gradient in Taiwan. *Geoderma*, 156(3–4), 254–265.
- Ulfa, N., Yulnafatmawita, Y., & Rasyidin, A. (2024). Kajian Sifat Fisika Tanah pada Beberapa Umur Tanaman Kelapa Sawit (*Elaeis guineensis* Jacq.) Rakyat di Nagari Ladang Panjang Kabupaten Pasaman, Sumatera Barat. *Agrikultura*, 35(2), 365–376.
- Van Breemen, N., & P. Buurman. (1998). *Soil Formation*. Kluwer Academic Publishers. Netherlands, 377-381.
- Wada, K. (1989). *Minerals in Soil Environment* (2nd ed.). Soil Science Society of America, pp. 1051–1087
- Wahyuni, S., Subiksa, I. G. M., & Nugroho, K. (2012). Perubahan sifat kimia tanah akibat oksidasi sulfur pada tanah sulfat masam. *Jurnal Tanah dan Iklim*, 36(2), 89–98.
- Webster, R., & Burgess, T. M. (1980). Optimal Interpolation and Isarithmic Mapping of Soil Properties Iii Changing Drift and Universal Kriging. *Journal of Soil Science*, 31(3), 505–524.
- Yatno, E., & Suharta, N. (2011). Andisols derived from acid pyroclastic liparitic tuff in North Sumatra, Indonesia. *Indonesian Journal of Agriculture*, 4(1), 8–16.
- Yousman, M. (2004). *Sistem Informasi Geografis: Prinsip dan Aplikasinya*. Jakarta: PT Gramedia Pustaka Utama.
- Yulnafatmawita. (2013). *Buku Pegangan Mahasiswa untuk Praktikum Fisika Tanah*. Jurusan Tanah Fakultas Pertanian Universitas Andalas, Padang. 39 hal.