

DAFTAR PUSTAKA

- Adesodun, J.K., J.S.C. Mbagwua, and N. Oti. 2001. Structural stability and carbohydrate contents of an ultisol under different management systems. *Soil and Tillage Research*. 60 : 135 - 142.
- Arvidsson, J., A. Trautner, J.J.H. van den Akker and Per Schjønning. 2001. Subsoil compaction caused by heavy sugarbeet harvesters in southern Sweden II. Soil displacement during wheeling and model computations of compaction. *Soil and Tillage Research*. 60 : 79 - 89.
- Armstrong, W. 1979. Aeration in higher plants. Dalam : *Advances in Botanical Research*, Volume 7. Editor : H.W. Woolhouse. Academic Press. New York.
- Audebert, A. and K.L. Sahrawat. 2000. Mechanisms for iron toxicity tolerance in lowland rice. *Journal of Plant Nutrition*. 23 (11 - 12) : 1877 - 1885.
- Barak, Philip, Babou O. Jobe, Armand R. Krueger, Lloyd A. Peterson and David A. Laird. 1997. Effects of long-term soil acidification due to nitrogen fertilizer inputs in Wisconsin. *Plant and Soil*. 197 : 61 - 69.
- Barak, Philip. 2000. Long-Term Effects of Nitrogen Fertilizers on Soil Acidity. *Proceedings Papers of 2000 Wisconsin Crop Management Conference*.
- Bàrberi, P. 2006. Tillage: how bad is it in organic agriculture?. Dalam : *Organic Agriculture - A Global Perspective*. Editors : P. Kristiansen, A. Taji and J. Reganold. CSIRO Publishing. Australia.
- Barlett, R.J. and D.C. Riego. 1972. Effect of Chelation on the toxicity of Aluminum. *Plant and Soil*. 37 : 419 - 423
- Bayer, C., L. Martin-Neto, João Mielniczuk and C.A. Ceretta. 2000. Effect of no-till cropping systems on soil organic matter in a sandy clay loam Acrisol from Southern Brazil monitored by electron spin resonance and nuclear magnetic resonance. *Soil and Tillage Research*. 53 : 95 - 104.
- Becker, M. and F. Asch. 2005. Iron toxicity in rice - conditions and management concepts. *Journal of Plant Nutrition and Soil Science*. 168 : 558 - 573
- Benito, A., Sombrero, A. and Escribano, C. 1999. Influencia del laboreo de conservación sobre la propiedades del suelo (The effect of conservation tillage on soil properties). *Agricultura. Revista Agropecuaria*. 804 : 538 - 541.
- Bertolino, Ana V.F.A., Nelson F. Fernandes, João P.L. Miranda, Andréa P. Souza, Marcel R.S. Lopes and Francesco Palmieri. 2010. Effects of plough pan development on surface hydrology and on soil physical properties in Southeastern Brazilian plateau. *Journal of Hydrology*. 393 : 94 - 104.
- Bitelli, M. and M. Flury. 2009. Errors in Water Retention Curves Determined with Pressure Plates. *Soil Science Society of America Journal*. 73 (5) : 1453 - 1460.

- Bohn, H.L., B.L. McNeal, and G. O'Connor. 2001. Soil Chemistry. Third Edition. John Wiley and Sons Inc. New York.
- Brown, R.B. 1990. Soil Texture. University of Florida, Institute of Food and Agricultural Sciences. Gainesville. Florida.
- Brown, G., A.C.D. Newman, J.H. Rayner, and A.H. Weir. 1978. The Structure and Chemistry of Soil Clay Mineral. Dalam : The Chemistry of Soil Constituents. Editor : D.J. Greenland and M.H.B. Hayes. John Wiley and Sons. London.
- Conklin, A.R. 2005. Introduction to Soil Chemistry : Analysis and Instrumentation. John Wiley and Sons Inc. New Jersey.
- Coyne, M. 1999. Soil Microbiology : An exploratory approach. Delmar Publisher. New York.
- Chandler, R.F. 1979. Rice in the Tropics. International Agricultural Development Service. Westview Press. Colorado.
- Deepthy, R., and S. Balakrishnan. 2005. Climatic control on clay mineral formation : Evidence from weathering profiles developed on either side of the Western Ghats. Journal of Earth System Science. 114 (5) : 545–556
- Ghimire, A. 2002. A Review on Organic Farming for Sustainable Agriculture. Department of Agriculture Extension and Rural Sociology Institute of Agriculture and Animal Science. Rampur, Chitwan, Nepal.
- Grisso, R., Alley, M., Holshouser, D., and Thomason, W. 2009. Precision Farming Tools: Soil Electrical Conductivity. Virginia Cooperative Extension. Publication No. 442 - 508.
- Grybos, M., M. Davranche, G. Gruau, P. Petitjean, and M. Pédrot. 2009. Increasing pH drives organic matter solubilization from wetland soils under reducing conditions. Geoderma. 154 : 13 - 19.
- Guzha, A.C. 2004. Effects of tillage on soil microrelief, surface depression storage and soil water storage. Soil and Tillage Research. 76 : 105 - 114.
- Haile, M., Karl H. and Brigitta S. 2006. Sustainable Land Management – A New Approach to Soil and Water Conservation in Ethiopia. Mekelle University, Ethiopia: Land Resources Management and Environmental Protection Department, Mekelle University; Bern, Switzerland: Centre for Development and Environment (CDE), University of Bern, and Swiss National Centre of Competence in Research (NCCR) North-South.
- Hamza, M.A. and W.K. Anderson. 2005. Soil compaction in cropping systems - A review of the nature, causes and possible solutions. Soil and Tillage Research. 82 : 121 - 145.
- Hanafiah, Kemas Ali. 2005. Dasar-Dasar Ilmu Tanah. PT Raja Grafindo Perkasa. Jakarta.

- Hardjowigeno, S. dan M.L. Rayes. 2005. Tanah Sawah : Karakteristik, Kondisi, dan Permasalahan Tanah Sawah di Indonesia. Bayumedia. Malang.
- Hayes, M.H.B. 1984. Structure of Humic Substances. Dalam : Organic Matter and Rice. International Rice Research Institute. Los Banos. Filipina.
- He, Z., M. Zhang and M.J. Wilson. 2004. Distribution and Classification of Red Soils in China. Dalam : The Red Soils of China : Their Nature, Management and Utilization. Editor : M.J. Wilson, Zhenli He, and Xiaoe Yang. Kluwer Academic Publisher. Dordrecht.
- Hesse, P.R. 1984. Potentials of Organic Materials for Soil Improvement. Dalam : Organic Matter and Rice. International Rice Research Institute. Los Banos. Filipina.
- Husson, O. 2013. Redox potential (Eh) and pH as drivers of soil/plant/microorganism systems: a transdisciplinary overview pointing to integrative opportunities for agronomy. Plant Soil. 362 : 389 - 417.
- Jaillard, B., C. Plassard, and P. Hinsinger. 2003. Measurements of H⁺ Fluxes and Concentrations in the Rhizosphere. Dalam : Handbook of Soil Acidity. Editor : Zdenko Rengel. Marcell Decker Inc. New York.
- Juo, A.S.R., F.R. Moormann, and H.O. Maduakor. 1974. Forms and pedogenetic distribution of extractable iron and aluminum in selected soils of nigeria. Geoderma, 11(3) : 167—179.
- Kasperczyk, N. and K. Knickel. 2006. Environmental impacts of organic farming. Dalam : Organic Agriculture - A Global Perspective. Editor : P. Kristiansen, A. Taji and J. Reganold. CSIRO Publishing. Australia.
- Keller, T., M. Lamandé, S. Peth, M. Berli, J.-Y. Delenne, W. Baumgarten, W. Rabbel, F. Radjaï, J. Rajchenbach, A.P.S. Selvadurai, and D. Or. 2013. An interdisciplinary approach towards improved understanding of soil deformation during compaction. Soil and Tillage Research. 128 : 61 - 80.
- Kölbl, A. P. Schad, R. Jahn, W. Amelung, A. Bannert, Z.H. Cao, S. Fiedler, K. Kalbitz, E. Lehdorff, C. Müller-Niggemann, M. Schlöter, L. Schwark, V. Vogelsang, L. Wissing, and I. Kögel-Knabner. 2014. Accelerated soil formation due to paddy management on marshlands (Zhejiang Province, China). Geoderma 228 - 229 : 67 - 89.
- Kyuma, K. 2004. Paddy Soil Science. Kyoto University Press and Trans Pasific Press. Melbourne.
- Kyuma, K. and K. Kawaguchi. 1966. Major Soils of Southeast Asia and the Classification of Soils Under Rice Cultivation (Paddy Soils). Southeast Asian Studies. 4 : 290 - 312.
- Lal, R. 1979^a. The Role of Physical Properties in Maintaining Productivity of Soils in the Tropics. Dalam : Soil Physical Properties and Crop Production in the Tropics. Editor : R. Lal and D.J. Greenland. John Wiley and Sons.

- Lal, R. 1979^b. Physical Characteristics of Soils of the Tropics : Determination and Management. Dalam : Soil Physical Properties and Crop Production in the Tropics. Editor : R. Lal and D.J. Greenland. John Wiley and Sons.
- Lal, R. and Manoj K. Shukla. 2004. Principles of Soil Physics. Marcel Dekker Inc. New York.
- Lason, W.E. and C.E. Clapp. 1984. Effect of Organic Matter on Soil Physical Properties. Dalam : Organic Matter and Rice. International Rice Research Institute. Los Banos. Filipina.
- Li, M., Y. Lin-Zhang, X. Li-Zhong, S. Ming-Xing, Y. Shi-Xue and L. Yun-Dong. 2011. Long-Term Effects of Inorganic and Organic Amendments on Organic Carbon in a Paddy Soil of the Taihu Lake Region, China. *Pedosphere*. 21 (2) : 186 - 196.
- Li, Z., Ming L., Xiaochen W., Fengxiang H. and Taolin Z. 2010. Effects of long-term chemical fertilization and organic amendments on dynamics of soil organic C and total N in paddy soil derived from barren land in subtropical China. *Soil and Tillage Research*. 106 : 268 - 274.
- Lindsay, W.L. 1979. Chemical Equilibrium in Soils, John Wiley and Sons. New York.
- Liu, Chen-Wuing, Shih-Wei Cheng, Wen-Sheng Yu, and Shih-Kai Chen. 2003. Water infiltration rate in cracked paddy soil. *Geoderma*. 117 : 169–181.
- Maie, N. A. Watanabe, K. Hayamizu and M. Kimura. 2002. Comparison of chemical characteristics of Type A humic acids extracted from subsoils of paddy fields and surface and soils. *Geoderma*. 106 : 1 - 19.
- Marschner, H. 1995. Mineral nutrition of higher plants. Functions of mineral nutrients: Micronutrients. Second Edition. Academic Press. London.
- Meunier, A. 2005. Clays. Springer-Verlag Berlin Heidelberg.
- Moormann, F.R. and N. van Breemen. 1978. Rice : Soil, Water, Land. International Rice Research Institute, Los Baños, Philippines.
- Munkholm, L.J., P. Schjønning, and K. Rüegg. 2005. Mitigation of subsoil recompaction by light traffic and on-land ploughing : I. Soil response. *Soil and Tillage Research*. 80 : 149 - 158.
- Neubauer, S.C., D. Emerson, and J.P. Megonigal. 2008. Microbial oxidation and reduction of iron in the root zone and influences on metal mobility. Dalam : Biophysico-Chemical Processes of Heavy Metals and Metalloids in Soil Environments (Editor : A. Violante. PM Huang. and GM Gadd). John Wiley and Sons. New Jersey.
- Nguyen, T.H. and H. Shindo. 2011. Quantitative and qualitative changes of humus in whole soils and their particle size fractions as influenced by different levels of compost application. *Agricultural Sciences*. 2 (1) : 1 - 8.

- Nimmo, J.R. 2004. Porosity and Pore Size Distribution. Dalam : Encyclopedia of Soils in the Environment. Volume 3. Editor : D. Hillel, C. Rosenzweig, D. Powlson, K. Scow, M. Singer and D. Sparks. London, Elsevier.
- Oberthur, T., P.F. White, R.T. Reyes, A. Dobermann, P. Sovuthy, and J.F. Rickman. 1997. Major Soils of the Rice-Growing Areas. Dalam : The Soils Used for Rice Production in Cambodia : A Manual for their Identification and Management. Cambodia-IRRI-Australia Project. International Rice Research Institute. Los Baños, Philippines.
- Onishi, T., K. Nakamura, H. Horino, T. Adachi, and T. Mitsuno. 2012. Evaluation of the denitrification rate of terraced paddy fields. Journal of Hydrology. 436 - 437 : 111 - 119.
- Oyedele, D.J., Per Schjønning, Erik Sibbesen, and Kasia Debosz. 1999. Aggregation and organic matter fractions of three Nigerian soils as affected by soil disturbance and incorporation of plant material. Soil and Tillage Research. 50 : 105 - 114.
- Peng, X., Z.B. Zhang, L.L. Wang, and L. Gan. 2012. Does soil compaction change soil shrinkage behaviour?. Soil and Tillage Research. 125 : 89 - 95.
- Pietola, L., R. Horn, and M. Yli-Hall. 2005. Effects of trampling by cattle on the hydraulic and mechanical properties of soil. Soil and Tillage Research. 82 : 99 - 108.
- Podder, M., M. Akter, A.S.M. Saifullah and S. Roy. 2012. Impacts of Plough Pan on Physical and Chemical Properties of Soil. Journal of Environmental Science and Natural Resources. 5 (1) : 289 - 294.
- Ponnamperuma, F.N. 1972. The Chemistry of Submerged Soils. Advances in Agronomy. 24 : 29 - 96.
- Ponnamperuma, F. N. 1981. Properties of Tropical Rice Soils. Lecture series delivered to graduate students at the Tropical Agriculture College, H. Cardenas, Tabasco, Mexico, July 23-25, 1981.
- Ponnamperuma, F.N. 1985. Chemical Kinetics of Wetland Rice Soils Relative to Soil Fertility. Dalam : Wetland Soils - Characterization, classification and utilization (Proceedings). International Rice Research Institute. Los Baños, Philippines.
- Ponnamperuma, F.N. 1994. Evaluation and Improvement of Lands for Wetland Rice Production. Dalam : Rice and Problem Soil in South and Southeast Asia. Editor : D. Senadhira. IRRI Discussion Paper Series 4. International Rice Research Institute. Los Baños, Philippines.
- Prakongkep, N., A. Suddhiprakarn, I. Kheoruenromne and R.J. Gilkes. 2007. Micromorphological Properties of Thai Paddy Soils. Kasetsart Journal (Natural Science). 41 : 42 - 48.

- Pramanik, P. and P.J. Kim. 2014. Fractionation and characterization of humic acids from organic amended rice paddy soils. *Science of the Total Environment*. 466 - 467 : 952 - 956.
- Prassana, R., L. Nain, A.K. Pandey, and S. Nayak. 2010. Exploring the Ecological Significance of Microbial Diversity and Networking in the Rice Ecosystem. Dalam : *Soil Biology and Agriculture in the Tropics*. Editor : Patrice Dion. Springer. Berlin.
- Punmia, B.C., Ashok K.J., and Arun K.J. 2005. *Soil Mechanics and Foundations*. 16th Edition. Laxmi Publications.
- Quirk, J.P. 1979. The Nature of Aggregate Stability and Implications for Management. Dalam : *Soil Physical Properties and Crop Production in the Tropics*. Editor : R. Lal and D.J. Greenland. John Wiley and Sons.
- Reddy, K.R. and R.D. DeLaune. 2008. *Biogeochemistry of Wetlands : Science and Applications*. CRC Press. Boca Raton, Florida.
- Ritchie, G.S.P. 1989. The Chemical Behaviour of Aluminium, Hydrogen and Manganese in Acid Soils. Dalam : *Soil Acidity and Plant Growth*. Editor : A.D. Robson. Academic Press. Australia.
- Rukshana, F., C.R. Butterly, J.M. Xu, J.A. Baldock, and C. Tang. 2013. Soil organic carbon contributes to alkalinity priming induced by added organic substrates. *Soil Biology and Biochemistry*. 65 : 217 - 226.
- Sahrawat, K.L. 2004. Organic matter accumulation in submerged soils. *Advances in Agronomy* 81, 169 - 201.
- Samndi, A.M. 2012. Vegetation effect on pedogenetic forms of iron and aluminium and mineralogical properties of basaltic soils in the southern guinea savanna of Nigeria. *Bayero Journal of Pure and Applied Sciences*. 5 (1) : 139 – 148.
- Sander, T., Horst H. Gerke, and H. Rogasik. 2008. Assessment of Chinese paddy-soil structure using X-ray computed tomography. *Geoderma*. 145 : 303 - 314.
- Shukla, M.K. and R. Lal. 2006. Air Permeability of Soils. Dalam : *Encyclopedia of Soil Science* 2nd Edition. Editor : Rattan Lal. Taylor and Francis.
- Silaban, Marihot S.P. 2001. Studi Mineral Lempung Hidrotermal dan Aplikasinya Untuk Operasi Pemboran Panasbumi. (Studi Kasus : Prospek Panasbumi Ulubelu, Lampung). *Proceeding of the 5th Inaga Annual Scientific Conference and Exhibitions*. Yogyakarta, 7 - 10 Maret 2001.
- Soeprattohardjo, M. and H. Suhardjo. 1978. Rice Soils of Indonesia. Dalam : *Soils and Rice*. International Rice Research Institute. Los Baños, Philippines.
- Soil Survey Staff USDA. 2014. *Keys to Soil Taxonomy* 12th Edition. United States Department of Agriculture. Washington.

- Sparks, D.L. 2003. Environmental Soil Chemistry. Second Edition. Academic Press. San Diego, California.
- Sposito, G. 1994. Chemical Equilibria and Kinetics in Soils. Oxford University Press. New York.
- Strudley, M.W., Timothy R. Green, and James C. Ascough II. 2008. Tillage effects on soil hydraulic properties in space and time: State of the science. Soil and Tillage Research. 99 : 4 - 48.
- Tan, K.H. 2000. Environmental Soil Science. Second Edition, Revised and Expanded. Marcel Dekker, Inc. New York.
- Toriyama, K., Heong K.L. and Hardy B. 2005. Rice is life: scientific perspectives for the 21st century. Proceedings of the World Rice Research Conference held in Tokyo and Tsukuba, Japan, 4-7 November 2004. Los Baños (Philippines): International Rice Research Institute, and Tsukuba (Japan): Japan International Research Center for Agricultural Sciences.
- Trouse, A.C. 1979. Soil Physical Characteristics and Root Growth. Dalam : Soil Physical Properties and Crop Production in the Tropics. Editor : R. Lal and D.J. Greenland. John Wiley and Sons.
- Velasco, M.I., P. A. Campitelli, S.B. Ceppi and J. Havel. 2004. Analysis of humic acid from compost of urban wastes and soil by fluorescence spectroscopy. Agriscientia. 21 (1) : 31 - 38.
- Velde, B. and P. Barré. 2010. Soil, Plant and Clay Minerals. Mineral and Biologic Interactions. Springer-Verlag Berlin Heidelberg.
- Watanabe, I. 1984. Anaerobic Decomposition of Organic Matter in Flooded Rice Soils. Dalam : Organic Matter and Rice (Proceedings). International Rice Research Institute. Los Baños, Philippines.
- Weiss, J.V., D. Emerson, and J.P. Megonigal. 2005. Rhizosphere Iron (III) Deposition and Reduction in a *Juncus effusus* L.-Dominated Wetland. Soil Science Society of America. 69 : 1861 - 1870
- Wissing, L., Angelika K., Werner H., Peter S., Zhi-Hong C., and Ingrid K. 2013. Management-induced organic carbon accumulation in paddy soils: The role of organo-mineral associations. Soil and Tillage Research. 126 : 60 - 71.
- Xu, D. and A. Mermoud. 2001. Topsoil properties as affected by tillage practices in North China. Soil and Tillage Research. 60 : 11 - 19.
- Yoshida, S. 1981. Fundamentals of Rice Crop Science. International Rice Research Institute. Los Baños, Philippines.
- Yulianti, A., Dwi Sarah dan Eko Soebowo. 2012. Pengaruh Lempung Ekspansif Terhadap Potensi Amblesan Tanah di Daerah Semarang. Riset Geologi dan Pertambangan. 22 (2) : 93-103.

- Zanelli, Remo, Markus Egli, Aldo Mirabella, Daniele Giaccai, Mustapha Abdelmoula. 2007. Vegetation effects on pedogenetic forms of Fe, Al and Si and on clay minerals in soils in southern Switzerland and northern Italy. *Geoderma* 141 (1-2) : 119–129
- Zech, W., N. Senesi, G. Guggenberger, K. Kaiser, J. Lehmann, T.M. Miano, A. Miltner, and G. Schroth. 1997. Factors controlling humification and mineralization of soil organic matter in the tropics. *Geoderma*. 79 : 117 - 161.
- Zhang, M., and Z. He. 2004. Long-term changes in organic carbon and nutrients of an Ultisol under rice cropping in southeast China. *Geoderma*. 118 : 167 - 179.
- Zhang, M., M.J. Wilson and Z. He. 2004. Mineralogy of Red Soils in Southern China in Relation to their Development and Charge Characteristics. Dalam : *The Red Soils of China : Their Nature, Management and Utilization*. Editor : M.J. Wilson, Zhenli He, and Xiaoe Yang. Kluwer Academic Publisher. Dordrecht.
- Zhang, Gan-Lin and Zi-Tong Gong. 2003. Pedogenic evolution of paddy soils in different soil landscapes. *Geoderma*. 115 : 15 - 29.
- Zoltán, S. 2008. Spatial and Temporal Pattern of Soil pH and Eh and Their Impact on Solute Iron Content in a Wetland (Transdanubia, Hungary). *AGD Landscape and Environment*. 2 (1) : 34 - 45.