

DAFTAR PUSTAKA

- Akinrinde, E.A. 2004. **Soils: nature, fertility conservation and management**. AMS Publishing, Inc. Austria.
- Alfaia, S.S., G.A. Ribeiro, A.D. Nobre, R.C. Luizao & F.J. Luizao. 2004. Evaluation of soil fertility in smallholder agroforestry system and pastures in western Amazonia. *Agriculture, Ecosystems and Environment*. 102: 409-414.
- Ardillah, J.S., A.S. Leksono & L. Hakim. 2014. Diversitas arthropoda tanah di area restorasi Ranu Pani Kabupaten Lumajang. *Jurnal Biotropika*. 2 (4):208-213.
- Atangana, A.,D. Khasa, S.Chang & A.Degrande. 2014. **Tropical agroforestry**. Springer. New York.
- Badejo, M.A., T. I. Nathaniel & G. Tian. 1998. Abundance of springtails (Collembola) under four agroforestry tree species with contrasting litter quality. *Biol Fertil Soils*. 27:15-20.
- Barnard, P.C. 2011. **The royal entomological society book of british insects**. Wiley-Blackwell. Chichester.
- Barrios, E., R.J. Delve, M. Bekunda, J. Mowo, J. Agunda, J. Ramisch, M.T. Trejo & R.J. Thomas. 2006. Indicators of soil quality: a south-south development of a methodological guide for linking local and technical knowledge. *Geoderma*. 135:248-259.
- Barrios, E. 2007. Soil biota, ecosystem services and land productivity. *Ecological Economics*. 64:269-285.
- Bedano, J.C., M.P. Cantú & M.E. Doucet. 2006. Soil springtails (Hexapoda: Collembola), symphylans and pauropods (Arthropoda: Myriapoda) under different management systems in agroecosystems of the subhumid Pampa (Argentina). *European Journal of Soil Biology*. 42:107-119.
- Begum, F., R.M. Bajracharya, S. Sharma & B.K. Sitaula. 2011. Assessment of soil quality using microarthropod communities under different land system: a case study in the Mid-Hills of Central Nepal. *Journal of Life Sciences*. 5:66-73.
- Belcher, K.W., M.M. Boehm & M.E. Fulton. 2004. Agroecosystem sustainability: a system simulation model approach. *Agricultural Systems*. 79:225-241.
- Bell, W.J., L.M. Roth & C.A. Nalepa. 2007. **Cockroaches: ecology, behavior, and natural history**. The Johns Hopkins University Press. Baltimore.
- Bennett, A. 2010. The role of soil community biodiversity in insect biodiversity. *Insect Conservation and Diversity*. 3:157-171.
- Bhagwat, S.A., K.J. Willis, H.J.B. Birks & R.J. Whittaker. 2008. Agroforestry: a refuge for tropical biodiversity? *Trends in Ecology and Evolution*. 23 (5):261-267.
- Bilde, T., J.A. Axelsen & S. Toft. 2000. The value of Collembola from agricultural soils as food for a generalist predator. *Journal of Applied Ecology*. 37:672-683.
- Bolton, B. 1994. **Identification guide to the ant genera of the world**. The President and Fellows of Harvard College.
- Borrer, D.J., C.A. Triplehorn & N.F. Johnson. 1989. **Pengenalan pelajaran serangga**. Edisi Keenam. Terjemahan Soetiyono Partosoedjono. 1996. Gadjah Mada University Press. Yogyakarta.
- Boulton, A.M. & K.D. Amberman. 2006. How ant nests increase soil biota richness and abundance: a field experiment. *Biodiversity and Conservation*. 15:55-68.
- Brady, S.G., J. Gadau & P.S. Ward. 2000. Systematics of the ant genus *Camponotus* (Hymenoptera: Formicidae): a preliminary analysis using data from the mitochondrial gene Cytochrome Oxidase I. dalam A.D. Austin & M. Dowton

- (Ed.). **Hymenoptera: evolution, biodiversity and biological control**. CSIRO Publishing. Collingwood. hal. 131-139.
- Buckman, M. H. & Brady. 1982. **Ilmu tanah**. Bharata Karya. Jakarta.
- Callejas-Chavero, A., G. Castano-Meneses, M. Razo-Gonzalez, D. Perez-Velazquez, J.G. Palacios-Vargas & A. Flores-Martinez. 2015. Soil Microarthropods and Their Relationship to Higher Trophic Levels in the Pedregal de San Angel Ecological Reserve, Mexico. *J. Insect Sci.* 5(1):1-9.
- Capinera, J.L. 2008. **Encyclopedia of entomology**. Second Edition. Springer. Gainesville.
- Cassagne, N., C. Gers & T. Gauquelin. 2003. Relationships between Collembola, soil chemistry and humus types in forest stands (France). *Biol Fertil Soils.* 37:355-361.
- Charbonnier, F., G. le Maire, E. Dreyer, F. Casanoves, M. Christina, J. Dauzat, J.U.H. Eitel, P. Vaast, L.A. Vierling & O. Rouspard. 2013. Competition for light in heterogeneous canopies: Application of MAESTRA to a coffee (*Coffea arabica* L.) agroforestry system. *Agricultural and Forest Meteorology.* 181:152-169.
- Chen, J., Z. Ma, H. Yan & F. Zhang. 2007. Roles of springtails in soil ecosystem. *Biodiversity Science.* 15 (2):154-161.
- Chen, Y., Q. Li, Y. Chen, Z. Lu & X. Zhou. 2011. Ant diversity and bio-indicators in land management of lac insect agroecosystem in Southwestern China. *Biodivers Conserv.* 20:3017-3038.
- Conway, G.R. 1986. **Agroecosystem analysis for research and development**. Winrock International. Bangkok.
- Culliney. T.W. 2013. Role of arthropods in maintaining soil fertility. *Agriculture.* 3:629-659.
- Da Rocha, J.R. M., J.R. Almeida, G.A. Lins & A. Durval. 2010. Insect as indicators of environmental changing and pollution: a review of appropriate species and their monitoring. *Holos Environment.* 10(2):250-262.
- De Bruyn, L.A.L. 1999. Ants as bioindicators of soil function in rural environments. *Agriculture, Ecosystems and Environment.* 74:425-441.
- De Foresta, H., G. Michon & A. Kusworo. 2000. **Complex agroforests**. Lecture Note 1. International Centre for Research in Agroforestry. Bogor.
- Delabie, J.H.C., R. Cérégino, S. Groc, A. Dejean, M. Gibernau, B. Corbara & A. Dejean. 2009. Ants as biological indicators of Wayana Amerindian land use in French Guiana. *C. R. Biologies.* 332:673-684.
- De Souza, H.N., R.G.M. de Goede, L. Brussaard, I.M. Cardoso, E.M.G. Duarte, B.A. Raphael, R.B.A. Fernandes, L.C. Gomes & M.M. Pulleman. 2012. Protective shade, tree diversity and soil properties in coffee agroforestry systems in the Atlantic Rainforest biome. *Agriculture, Ecosystems and Environment.* 146:179-196.
- Desmond, A.O. & U.O. Alex. 2013. A comparative assessment of soil arthropod abundance and diversity in practical farmlands of University of Ibadan, Nigeria. *The International Journal of Environmental Resources Research.* 1 (1):17-29.
- Djurđjević, L., G. Gajić, O. Kostić, S. Jarić, M. Pavlović, M. Mitrović & P. Pavlović. 2012. Seasonal dynamics of allelopathically significant phenolic compounds in globally successful invader *Conyza canadensis* L. plants and associated sandy soil. *Flora.* 207:812- 820.
- Dondale, C.D. 1990. Litter araneae. dalam D.L. Dindal (Ed.). **Soil biology guide**. John Wiley & Sons, Inc. New York. hal. 477-502.

- Doran, J.W. & M. Safley. 1998. Defining and assessing soil health and sustainable productivity. dalam C. Pankhurst, B.M. Doube & V.V.S.R. Gupta (Ed.). **Biological indicators of soil health**. CAB International. Oxon. hal. 1-28.
- Doran, J.W. & M.R. Zeiss. 2000. Soil health and sustainability: managing the biotic component of soil quality. *Applied Soil Ecology*. 15:3-11.
- Eisenbeis, G. & W. Wichard. 1987. **Atlas on the biology of soil arthropods**. Springer-Verlag. Berlin.
- Fikri, G.E., P. Incaloberty, T. Arifianto, W. Anggarwanto & B. Yanuwadi. 2016. Diversitas arthropoda tanah sebagai bioindikator lahan perkebunan dan hutan sekunder di Wana Wisata Rawa Bayu, Desa Bayu, Banyuwangi. *Jurnal Biotropika*. 4 (2):32-37.
- Franzle, O. 2003. Bioindicators and environmental stress assessment. dalam B. A. Markert, A. M. Breure & H. G. Zechmeister (Ed.). **Bioindicators and biomonitors**. Elsevier Science Ltd. Amsterdam. hal. 41-84.
- Folgarait, P.J. 1998. Ant biodiversity and its relationship to ecosystem functioning: a review. *Biodiversity and Conservation*. 7:1221-1244.
- Gerlach, J., M. Samways & J. Pryke. 2013. Terrestrial invertebrates as bioindicators: an overview of available taxonomic groups. *J Insect Conserv*. 17:831-850.
- Gibb, T. & C. Oseto. 2006. **Arthropod collection and identification: field and laboratory techniques**. Academic Press is an imprint of Elsevier. London.
- Gollan, J.R., L.L. de Bruyn, N. Reid, D. Smith & L. Wilkie. 2011. Can ants be used as ecological indicators of restoration progress in dynamic environments? A case study in a revegetated riparian zone. *Ecological Indicators*. 11:1517-1525.
- Gullan, P.J. & P.S. Cranston. 2010. **The insects: an outline of entomology**. fourth edition. John Wiley & Sons Ltd. West Sussex.
- Gupta, V.V.S.R. & G.W. Yeates. 1998. Soil microfauna as bioindicators of soil health. dalam C. Pankhurst, B.M. Doube & V.V.S.R. Gupta (Ed.). **Biological indicators of soil health**. CAB International. Oxon. hal. 201-234.
- Handayanto, E. & K. Hairiyah. 2007. **Biologi Tanah Landasan Pengelolaan Lahan Sehat**. Pustaka Adipura. Yogyakarta.
- Haneda, N.F. & W. Asti. 2014. Keanekaragaman fauna tanah dan perannya terhadap laju dekomposisi serasah karet (*Hevea brasiliensis*) di Kebun Percobaan Cibodas – Ciampea Bogor. *Jurnal Silvikultur Tropika*. 05 (1):54-60.
- Haneda, N.F. & N. Yuniar. 2015. Komunitas semut (Hymenoptera: Formicidae) pada empat tipe ekosistem yang berbeda di Desa Bungku Provinsi Jambi. *Jurnal Silvikultur Tropika*. 06 (3):203-209.
- Hazelton, P. & B. Murphy. 2007. **Interpreting soil test results: what do all the numbers mean?** CSIRO Publishing. Collingwood.
- Hoffman, R.L. 1990. Diplopoda. dalam D.L. Dindal (Ed.). **Soil biology guide**. John Wiley & Sons, Inc. New York. hal. 835-860.
- Hopkin, S.P. 2002. **Biology of the springtail (Insecta: Collembola)**. Oxford University Press. New York.
- Jha, S. & J.H. Vandermeer. 2010. Impacts of coffee agroforestry management on tropical bee communities. *Biological Conservation*. 143:1423-1431.
- Jian, P., W. Yanglin, W. Jiansheng & Z. Yuqing. 2007. Evaluation for regional ecosystem health: methodology and research progress. *Acta Ecologica Sinica*. 27 (11):4877-4885.
- Jose, S. 2009. Agroforestry for ecosystem services and environmental benefits: an overview. *Agroforest Syst*. 76:1-10.

- Jose, S., R. Williams & D. Zamora. 2006. Belowground ecological interactions in mixed-species forest plantations. *Forest Ecology and Management*. 233:231-239.
- Kaine, G. W. & P. R. Tozer. 2005. Stability, resilience and sustainability in pasture-based grazing systems. *Agricultural Systems* 83:27-48.
- Kaneda, S. & N. Kaneko. 2002. Influence of soil quality on the growth of *Folsomia candida* (Willem) (Collembola). *Pedobiologia*. 46:428-439.
- Karlen, D.L., C.A. Ditzlerb & S.S. Andrews. 2003. Soil quality: why and how?. *Geoderma*. 114:145-156.
- Khasanah, N. 2011. Struktur komunitas arthropoda pada ekosistem cabai tanpa perlakuan insektisida. *Media Litbang Sulteng* IV (1):57-62.
- Kohli, R.K., H.P. Singh, D.R. Batish & S. Jose. 2008. Ecological interactions in agroforestry: an overview. dalam D.R. Batish, R.K. Kohli, S. Jose & H.P. Singh (Ed.). **Ecological basis of agroforestry**. CRC Press. Boca Raton. hal. 3-14.
- Kramadibrata, I. 1995. **Ekologi hewan**. Institut Teknologi Bandung. Bandung.
- Leveque, C. & J-C. Mounolou. 2004. **Biodiversity**. John Wiley & Sons Ltd. West Sussex.
- Loyola, R.D., S. Brito & R.L. Ferreira. 2006. Ecosystem disturbances and diversity increase: implication for invertebrate conservation. *Biodiversity and Conservation*. 15:25-14.
- Madej, J., G. Barczyk & M. Gdawiec. 2011. Evaluation of soil biological quality index (QBS-ar): its sensitivity and usefulness in post-mining consequence-preliminary research. *Pol. J. Environ. Stud.* 20 (5):1367-1372.
- Maftu'ah, E., E. Arisoelaningsih & E. Handayanto. 2002. Studi potensi diversitas makrofauna tanah sebagai bioindikator kualitas tanah pada beberapa penggunaan lahan. *Biosain*. 2(2): 34-47.
- Magurran, A.E. 1988. **Ecological diversity and its measurement**. Princeton University Press. Princeton.
- Maleque, M.A., H.T. Ishii, & K. Maeto. 2006. The use of arthropods as indicators of ecosystem integrity in forest management. *Journal of Forestry*. 104:113-117.
- Markert, B.A., A.M. Breure & H.G. Zechmeister. 2003. Definitions, strategies and principles for bioindication/biomonitoring of the environment dalam B.A. Markert, A.M. Breure & H.G. Zechmeister (Ed.). **Bioindicators & biomonitoring: principles, concepts and applications**. Elsevier Science Ltd. Oxford. hal. 3-40.
- McGavin, G.C. 2009. **Insects: spider and other terrestrial arthropods**. Covent Garden Book. New York.
- Michon, G. & H. deForesta. 1999. Agro-forests: incorporating a forest vision in agroforestry. dalam L.E. Buck, J.P. Lassoie & E.C.M. Fernandes (Ed.). **Agroforestry in sustainable agricultural systems**. CRC Press. Boca Raton. hal. 372-397.
- Montagnini, F. 2008. Soil sustainability in agroforestry systems: experiences on impacts of trees on soil fertility from a humid tropical site. dalam D.R. Batish, R.K. Kohli, S. Jose & H.P. Singh (Ed.). **Ecological basis of agroforestry**. CRC Press. Boca Raton. hal. 239-254.
- Moore, J. 2006. **An introduction to the invertebrates**. Cambridge University Press. New York.
- Mundel, P. 1990. Chilopoda. dalam D.L. Dindal (Ed.). **Soil biology guide**. John Wiley & Sons, Inc. New York. hal. 819-834.
- Nair, P.K.R. 1993. **An introduction to agroforestry**. Kluwer Academic Publishers. Netherlands.

- Nakamura, A., C.P. Catterall, A.P.N. House, R.L. Kitching & C.J. Burwell. 2007. The use of ants and other soil and litter arthropods as bio-indicators of the impacts of rainforest clearing and subsequent land use. *J Insect Conserv.* 11:177-186.
- Ninan, K.N. & M. Inoue. 2013. Valuing forest ecosystem services: what we know and what we don't. *Ecological Economics.* 93:137-149.
- Nortcliff, S. 2002. Standardisation of soil quality attributes. *Agriculture, Ecosystems and Environment.* 88:161-168.
- Nuria, R., M. Jérôme, C. Léonide, R. Christine, H. Gérard, I. Etienne & L. Patrick. 2011. IBQS: A synthetic index of soil quality based on soil macro-invertebrate communities. *Soil Biology & Biochemistry.* 43:2032-2045.
- Odum, E.P. 1971. **Dasar-dasar ekologi.** Edisi ketiga. Terjemahan T. Samingan dan Srigandono. 1998. Gadjah Mada University Press. Yogyakarta.
- Olfert, O., G.D. Johnson, S.A. Brandt & A.G. Thomas. 2002. Use of arthropod diversity and abundance to evaluate cropping systems. *Agronomy Journal.* 94:210-216.
- Pankhurst, C.E. 1998. Biodiversity of soil organisms as an indicator of soil health. dalam C. Pankhurst, B.M. Doube & V.V.S.R. Gupta (Ed.). **Biological indicators of soil health.** CAB International. Oxon. hal. 297-324.
- Paoletti, M.G. 1999. Using bioindicators based on biodiversity to assess landscape sustainability. *Agriculture, Ecosystems and Environment.* 74:1-18.
- Parisi, V., C. Menta, C. Gardi, C. Jacomini & E. Mozzanica. 2005. Microarthropod communities as a tool to assess soil quality and biodiversity: a new approach in Italy. *Agriculture, Ecosystems and Environment.* 105:323-333.
- Paudel, B.R., R.P. Udawatta & S.H. Anderson. 2011. Agroforestry and grass buffer effects on soil quality parameters for grazed pasture and row-crop systems. *Applied Soil Ecology.* 48:125-132.
- Paul, D., A. Nongmaithem & L.K. Jha. 2011. Collembolan density and diversity in a forest and an agroecosystem. *Open Journal of Soil Science.* 1:54-60.
- Pauli, N., E. Barrios, A.J. Conacher & T. Oberthür. 2012. Farmer knowledge of the relationships among soil macrofauna, soil quality and tree species in a smallholder agroforestry system of western Honduras. *Geoderma.* 189-190:186-198.
- Peraturan Menteri Kehutanan Republik Indonesia Nomor : P.8/Menhut-II/2013 tentang **pedoman umum pengembangan perhutanan masyarakat pedesaan berbasis konservasi.**
- Peraturan Pemerintah Republik Indonesia nomor 34 tahun 2002 tentang **tata hutan dan penyusunan rencana pengelolaan hutan, pemanfaatan hutan dan penggunaan kawasan hutan.**
- Peraturan Pemerintah Republik Indonesia nomor 28 tahun 2011 tentang **pengelolaan kawasan suaka alam dan kawasan pelestarian alam.**
- Philpott, S.M., I. Perfecto & J. Vandermeer. 2006. Effects of management intensity and season on arboreal ant diversity and abundance in coffee agroecosystems. *Biodiversity and Conservation.* 15:125-141.
- Pielou, E.C. 1975. **Ecological diversity.** John Wiley & Sons, Inc. New York.
- Pinho, R.C., R.P. Miller & S.S. Alfaia. 2012. Agroforestry and the Improvement of Soil Fertility: A View from Amazonia. *Applied and Environmental Soil Science.* 2012:1-11.
- Pretty, J. 2008. Agricultural sustainability: concepts, principles and evidence. *Phil. Trans. R. Soc. B.* 363:447-465.
- Pribadi, T., R. Raffiudin & I.S. Harahap. 2011. Termites community as environmental bioindicators in highlands: a case study in eastern slopes of Mount Slamet, Central Java. *Biodiversitas.* 12(3):235-240.

- Price, P.W. 1997. **Insect ecology**. Third Edition. John Wiley & Sons, Inc. New York.
- Rao, M.R., M.P. Singh & R. Day. 2000. Insect pest problems in tropical agroforestry systems: Contributory factors and strategies for management. *Agroforestry Systems*. 50:243-277.
- Reynolds, P.E., J.A. Simpson, N.V. Thevathasan & A.M. Gordon. 2007. Effects of tree competition on corn and soybean photosynthesis, growth, and yield in a temperate tree-based agroforestry intercropping system in southern Ontario, Canada. *Ecological Engineering*. 29:362-371.
- Rice, R.A. 2008. Agricultural intensification within agroforestry: The case of coffee and wood products. *Agriculture, Ecosystems and Environment* 128:212-218.
- Ritung, S., Wahyunto, F. Agus & H. Hidayat. 2007. **Panduan evaluasi kesesuaian lahan dengan contoh peta arahan penggunaan lahan kabupaten Aceh Barat**. Balai Penelitian Tanah dan World Agroforestry Centre (ICRAF). Bogor.
- Rizali, A. 2002. Keanekaragaman serangga pada lahan persawahan-tepian hutan: indikator untuk kesehatan lingkungan. *Jurnal Hayati*. 9 (2):41-48.
- Rousseau, L., S.J. Fonteb, O. Téllez, R. van der Hoek, & P. Lavelle. 2013. Soil macrofauna as indicators of soil quality and land use impacts in smallholder agroecosystems of western Nicaragua. *Ecological Indicators*. 27:71-82.
- Sanjaya, Y. & A.L.H. Dibiyantoro. 2012. Keragaman serangga pada tanaman cabai (*Capsicum annum*) yang diberi pestisida sintetis versus biopestisida racun laba-laba (*Nephila sp.*). *J. HPT Tropika*. 12 (2):192-199.
- Santorufu, L., C.A.M. Van Gestel, A. Rocco & G. Maisto. 2012. Soil invertebrates as bioindicators of urban soil quality. *Environmental Pollution*. 161:57-63.
- Schloter, M., O. Dilly & J.C. Munch. 2003. Indicators for evaluating soil quality. *Agriculture, Ecosystems and Environment*. 98:255-262.
- Slootweg, R. 2010. Interpretation of biodiversity dalam R. Slootweg, A. Rajvanshi, V.B. Mathur & A. Kolhoff (Ed.). **Biodiversity in environmental assessment**. Cambridge University Press. New York. hal. 14-58.
- Smith, R.L. 1992. **Element of ecology**. Third edition. Harper Collins Publishers, Inc. New York.
- Soegianto, A. 1994. **Ekologi kuantitatif metode analisis populasi dan komunitas**. Usaha Nasional. Surabaya.
- Sota, T., S. Nakano, N. Hasan. A. Hasyim. Syafril & K. Nakamura. 2001. Fluctuation in the abundance of terrestrial arthropods at an arable field in West Sumatran highland. *TROPICS*. 10 (3):463-472.
- Sousa, J.P., M.M. da Gama, C. Pinto, A. Keating, F. Calhoa, M. Lemos, C. Castro, T. Luz, P. Leitao & S. Dias. 2004. Effects of land-use on Collembola diversity patterns in a Mediterranean landscape. *Pedobiologia*. 48: 609-622.
- Southwood, T.R.E. & P.A. Henderson. 2000. **Ecological methods**. Third edition. Blackwell Science Ltd. Oxford.
- Staver, C. 1999. Managing ground cover heterogeneity in coffee (*coffea arabica* l.) under managed tree shade: from replicated plots to farmer practice. dalam L.E. Buck, J.P. Lassoie & E.C.M. Fernandes (Ed.). **Agroforestry in sustainable agricultural systems**. CRC Press. Boca Raton.
- Suhardjono, Y.R., L. Deharveng & A. Bedos. 2012. **Collembola (ekorpegas)**. Penerbit Vegamedia. Bogor.
- Suheriyanto, D. 2008. **Ekologi serangga**. UIN Malang Press. Malang.
- Sulaiman, Suparto & Eviati. 2005. **Petunjuk teknis analisis kimia tanah, tanaman, air, dan pupuk**. Badan Penelitian dan Pengembangan Pertanian. Departemen Pertanian. Bogor.

- Supriadi, H. 2017. Persiapan dan kesesuaian lahan tanaman kopi. <http://balittri.litbang.pertanian.go.id/index.php/berita/info-teknologi/474-persiapan-dan-kesesuai-lahan-tanaman-kopi>. Diakses 10 April 2017.
- Syaufina, L., N.F. Haneda & A. Buliyansih. 2007. Keanekaragaman arthropoda tanah di Hutan Pendidikan Gunung Walat. *Media Konservasi*. 12(2): 57-66.
- Umrani, R. & C.K. Jain. 2010. **Agroforestry: systems and practices**. Oxford Book Company. Jaipur.
- Undang-Undang Republik Indonesia nomor 41 tahun 1999 tentang **kehutanan**.
- Untung, K. 2006. **Pengantar pengelolaan hama terpadu**. Edisi Kedua. Gadjah Mada University Press. Yogyakarta.
- VanDyk, J. 2016. BugGuide. Department of Entomology. Iowa State University. <http://bugguide.net>. Diakses 1 April 2016.
- Van Straalen, N.M. 1998. Community structure of soil arthropods as bioindicator of soil health. dalam C. Pankhurst, B.M. Doube & V.V.S.R. Gupta (Ed.). **Biological indicators of soil health**. CAB International. Oxon. hal. 235-264.
- Wheeler, G.C. & J. Wheeler. 1990. Insecta: hymenoptera formicidae. dalam D.L. Dindal (Ed.). **Soil biology guide**. John Wiley & Sons, Inc. New York. hal. 477-502.
- Wirsenius, S., Azar, C. & G. Berndes. 2010. How much land is needed for global food production under scenarios of dietary changes and livestock productivity increases in 2030? *Agricultural Systems*. 103:621-638.
- Yan, S., A.N. Singh, S. Fu, C. Liao, S. Wang, Y. Li, Y. Cui & L. Hu. 2012. A soil fauna index for assessing soil quality. *Soil Biology & Biochemistry*. 47:158-165.
- Yulipriyanto, H. 2010. **Biologi tanah dan strategi pengelolaannya**. Graha Ilmu. Yogyakarta.
- Zeppelini, D., B.C. Bellini, A.J. Creao-Duarte & M.I.M. Hernandez. 2009. Collembola as bioindicators of restoration in mined sand dunes of Northeastern Brazil. *Biodivers Conserv*. 18:1161-1170.
- Zhu, W., H. Qiu, X. Chang & X. Cheng. 2006. The concept of agricultural productivity on ecosystem scale and its measurement. *Agricultural Sciences in China*. 5 (9):707-712.
- Zhu, W., S. Wang & C.D. Caldwell. 2012. Pathways of Assessing Agroecosystem Health and Agroecosystem Management. *Acta Ecologica Sinica*. 32:9-17.