

DAFTAR PUSTAKA

- Al-Shammary, A. A. G., Khouzani, A. Z., Kaynak, A., Khoo, S. Y., Norton, M., & Gates, W. 2018. Soil Bulk Density Estimation Methods: A Review. *Pedosphere*, 28(4): 581–596.
- Alemu, M. M. 2015. Effect of Tree Shade on Coffee Crop Production. *Journal of Sustainable Development*, 8(9): 66.
- Angon, P. B., Anjum, N., Akter, M. M., K.C., S., Suma, R. P., & Jannat, S. 2023. An Overview of the Impact of Tillage and Cropping Systems on Soil Health in Agricultural Practices. *Advances in Agriculture*, 14.
- Ball, B. C., Guimaraes, R. M. L., Cloy, J. M., Hargreaves, P. R., Shepherd, T. G., & McKenzie, B. M. 2017. Visual soil evaluation: A summary of some applications and potential developments for agriculture. *Soil and Tillage Research*, 173: 114–124.
- Batista, I., Machado, D., Correia, M., Spinelli, M., & Cora, J. 2023. Soil macrofauna correlations with soil chemical and physical properties and crop sequences under no-tillage. *Revista Brasileira de Ciência Do Solo*, 47: 1–17.
- Bátori, Z., Lengyel, A., Maróti, M., Körmöczi, L., Tölgyesi, C., Bíró, A., Tóth, M., Kincses, Z., Cseh, V., & Erdős, L. 2014. Microclimate-vegetation relationships in natural habitat Islands: Species preservation and conservation perspectives. *Idojaras*, 118(3): 257–281.
- Blaise, C., Mazzia, C., Bischoff, A., Millon, A., Ponel, P., & Blight, O. 2022. Vegetation increases abundances of ground and canopy arthropods in Mediterranean vineyards. *Scientific Reports*, 12(1): 1–10.
- Bock, I. R., & Parsons, P. A. 1978. The subgenus *Scaptodrosophila* (Diptera: Drosophilidae). *Systematic Entomology*, 3(2): 91–102.
- Borror, & Delong's. 2005. *Study of Insects 7th Edition*. Peter Marshall.
- Cai, A., Liang, G., Yang, W., Zhu, J., Han, T., Zhang, W., & Xu, M. 2021. Patterns and driving factors of litter decomposition across Chinese terrestrial ecosystems. *Journal of Cleaner Production*, 278, 123964.
- Campera, M., Budiadi, B., Busina, T., Fathoni, B. H., Dermody, J., Nijman, V., Imron, M. A., & Nekaris, K. A. I. 2022. Abundance and richness of invertebrates in shade-grown versus sun-exposed coffee home gardens in Indonesia. *Agroforestry Systems*, 96(5–6): 829–841.
- Caswell, H. 1976. Community Structure: A Neutral Model Analysis. *Ecological Monographs*, 46(3): 327–354.
- Cessa-Reyes, V., Ruiz-Rosado, O., & Alcudia-Armida, L. 2020. The Coffee Agroforestry System in Mexico. *Agro Productividad*, 13(11): 45–51.

- Chediack, A., Liesch, P. J., Shanovich, H. N., & Aukema, B. H. 2022. Arthropod Community in Hybrid Hazelnut Plantings in the Midwestern United States. *Journal of Insect Science*, 22(4): 1–9.
- Culliney, T. W. 2013. Role of arthropods in maintaining soil fertility. *Agriculture (Switzerland)*, 3(4): 629–659.
- Damayanti, A., Triyogo, A., & Musyafa. 2023. Soil arthropod diversity in three different land management intensities of Wanagama Forest, Yogyakarta, Indonesia. *Biodiversitas*, 24(3): 1799–1808.
- Erdos, L., Torok, P., Veldman, J. W., Batori, Z., Bede-Fazekas, A., Magnes, M., Kroel-Dulay, G., & Tolgyesi, C. 2022. How climate, topography, soils, herbivores, and fire control forest–grassland coexistence in the Eurasian forest-steppe. *Biological Reviews*, 97(6): 2195–2208.
- Erktan, A., Or, D., & Scheu, S. 2020. The physical structure of soil: Determinant and consequence of trophic interactions. *Soil Biology and Biochemistry*, 148, 107876.
- Fayle, T. M., Bakker, L., Cheah, C., Ching, T. M., Davey, A., Dem, F., Earl, A., Huamei, Y., Hyland, S., Johansson, B., Ligtermoet, E., Lim, R., Lin, L. K., Luangyotha, P., Martins, B. H., Palmeirim, A. F., Paninahuan, S., Rojas, S. K., Sam, L., ... Trevelyan, R. 2011. A positive relationship between ant biodiversity (Hymenoptera: Formicidae) and rate of scavenger-mediated nutrient redistribution along a disturbance gradient in a southeast asian rain forest. *Myrmecological News*, 14: 5–12.
- Frances, & J. Murphy. 2000. *An Introduction to The Spiders of South East Asia*. United Selangor Press Sdn. Bhd.
- Franceschi, E., Reischl, A. M., Rahman, M. A., Pauleit, S., Pretzsch, H., & Rotzer, T. 2022. Crown Shapes of Urban Trees-Their Dependences on Tree Species, Tree Age and Local Environment, and Effects on Ecosystem Services. *Forests*, 13(5): 748.
- Frouz, J., & Jilková, V. 2008. The effect of ants on soil properties and processes (Hymenoptera : Formicidae). *Myrmecological News*, 11: 191–199.
- Ge, Z., Xiao, H., Pang, Y., Peng, S., Mao, L., & Ruan, H. 2023. Soil Organic Carbon and pH Dominate the Effects of Nitrogen Addition on Soil Microarthropods in a Poplar Plantation in Coastal Eastern China. *Forests*, 14(5): 1–13.
- Ghiglieno, I., Simonetto, A., Orlando, F., Donna, P., Tonni, M., Valenti, L., & Gilioli, G. 2020. Response of the arthropod community to soil characteristics and management in the franciacorta viticultural area (Lombardy, Italy). *Agronomy*, 10(5).
- Ghiglieno, I., Simonetto, A., Sperandio, G., Ventura, M., Gatti, F., Donna, P., Tonni, M., Valenti, L., & Gilioli, G. 2021. Impact of environmental conditions and management on soil arthropod communities in vineyard ecosystems. *Sustainability*, 13(21): 1–12.
- Giachene Charles, K. . G. (2003). Soil fertility and land productivity Africa region. In *English* (Issue 30).
- Giatman, M., Haq, S., & Andayono, T. 2019. Effect of Porosity on Soil Permeability in the

- Flood Area of Padang City. *Journal of Physics: Conference Series*, 1387(1).
- Gillot, C. 2014. Entomology Third Edition. In *Vascular* (Issue January 2010). Springer.
- Greco, E. B., & Wright, M. G. 2015. Ecology, biology, and management of *Xylosandrus compactus* (Coleoptera: Curculionidae: Scolytinae) with emphasis on coffee in Hawaii. *Journal of Integrated Pest Management*, 6(1), 7.
- Greiser, C., Hederová, L., Vico, G., Wild, J., Macek, M., & Kopecký, M. 2024. Higher soil moisture increases microclimate temperature buffering in temperate broadleaf forests. *Agricultural and Forest Meteorology*, 345(November 2023). <https://doi.org/10.1016/j.agrformet.2023.109828>
- Griffiths, H. M., Ashton, L. A., Walker, A. E., Hasan, F., Evans, T. A., Eggleton, P., & Parr, C. L. (2017). Ants are the major agents of resource removal from tropical rainforests. *Journal of Animal Ecology*, 87(1), 293–300.
- Guerrero, R. J., García, E., & Fernández, F. 2022. The Pheidole Westwood, 1839 ants (Formicidae: Myrmicinae) in Colombia: new records including two species with remarkable morphology. *Zootaxa*, June.
- Hacala, A., Lafage, D., Prinzing, A., Sawtschuk, J., & Pétilion, J. 2021. Drivers of taxonomic, functional and phylogenetic diversities in dominant ground-dwelling arthropods of coastal heathlands. *Oecologia*, 197(2): 511–522.
- Haryati, U. 2014. Karakteristik Fisik Tanah Kawasan Budidaya Sayuran Dataran Tinggi, Hubungannya dengan Strategi Pengelolaan Lahan. *Jurnal Sumberdaya Lahan Badan Litbang Pertanian Di Balai Penelitian Tanah*, 8(2): 125–138.
- Hazarika, H. N., & Khanikor, B. 2021. Integration of morphological and molecular taxonomic characters for identification of *Odontoponera denticulata* (Hymenoptera: Formicidae: Ponerinae) with the description of the antennal sensilla. *Zoologischer Anzeiger*, 293: 89–100.
- Hofstede, R. G. M., Groenendijk, J. P., Coppus, R., Fehse, J. C., & Sevink, J. 2002. Impact of pine plantations on soils and vegetation in the Ecuadorian high Andes. *Mountain Research and Development*, 22(2): 159–167.
- Hurduzeu, G., Pânzaru, R. L., Medelete, D. M., Ciobanu, A., & Enea, C. 2022. The Development of Sustainable Agriculture in EU Countries and the Potential Achievement of Sustainable Development Goals Specific Targets (SDG 2). *Sustainability*, 14(23): 15798.
- Illig, J., Norton, R. A., Scheu, S., & Maraun, M. 2010. Density and community structure of soil- and bark-dwelling microarthropods along an altitudinal gradient in a tropical montane rainforest. *Experimental and Applied Acarology*, 52(1): 49–62.
- Indriati, G., Khaerati, K., Sobari, I., & Pranowo, D. 2017. Attack Intensity of Twig Borer *Xylosandrus compactus* (Coleoptera: Curculionidae) on Four Robusta Coffee Clones. *Jurnal Tanaman Industri Dan Penyegar*, 4(2): 99.
- Indriati, G., Sobari, I., & Pranowo, D. B. P. T. I. dan P. J. R. P. K. 2017. Intensitas

- Penggerek Cabang *Xylosandrus compactus* (Coleoptera: Curculionidae) Pada Empat Klon Kopi Robusta. *Jurnal Tanaman Industri Dan Penyegar*, 4(2): 99–106.
- Ismaeel, A., Tai, A. P. K., Santos, E. G., Maraia, H., Aalto, I., Altman, J., Doležal, J., Lembrechts, J. J., Camargo, J. L., Aalto, J., Sam, K., Avelino do Nascimento, L. C., Kopecký, M., Svátek, M., Nunes, M. H., Matula, R., Plichta, R., Abera, T., & Maeda, E. E. 2024. Patterns of tropical forest understory temperatures. *Nature Communications*, 15(1): 1–10.
- IUCN. 2020. *Hylobates moloch*, Silvery Gibbon. *The IUCN Red List of Threatened Species*, 8235, eT.10550A17966495.
- Kissinger, K., & Pitri, R. M. N. 2017. Bioekologi agroforestry kopi: tutupan vegetasi dan pola tumbuhan penyusun agroforestry kopi (*coffea* sp.) di kecamatan pengaron kabupaten banjar kalimantan selatan. *EnviroScientiae*, 13(2): 150.
- Krebs, C. J. 1973. Ecology Ecology: The Experimental Analysis of Distribution and Abundance Charles J. Krebs. In *BioScience* (Vol. 23, Issue 4). British Library Cataloguing in Publication Data.
- Kurniawan, I. D., Kinasih, I., Akbar, R. T. M., Chaidir, L., Iqbal, S., Pamungkas, B., & Imanudin, Z. 2023. Arthropod Community Structure Indicating Soil Quality Recovery in the Organic Agroecosystem of Mount Ciremai National Park's Buffer Zone. *Caraka Tani: Journal of Sustainable Agriculture*, 38(2): 229–243.
- Lagendijk, D. D. G., Cueva-Arias, D., Van Oosten, A. R., & Berg, M. P. 2022. Impact of three co-occurring physical ecosystem engineers on soil Collembola communities. *Oecologia*, 198(4): 1085–1096.
- Le, V. H., Truong, C. T., Le, A. H., & Nguyen, B. T. 2023. A Combination of Shade Trees and Soil Characteristics May Determine Robusta Coffee (*Coffea canephora*) Yield in a Tropical Monsoon Environment. *Agronomy*, 13(1).
- Li, S., Xu, Z., Yu, Z., Fu, Y., Su, X., Zou, B., Wang, S., Huang, Z., & Wan, X. 2023. Litter decomposition and nutrient release are faster under secondary forests than under Chinese fir plantations with forest development. *Scientific Reports*, 13(1): 1–10.
- Lisnawati, A., Lahjie, A. M., Simarankir, B. D. A. S., Yusuf, S., & Ruslim, Y. 2017. Agroforestry system biodiversity of Arabica coffee cultivation in North Toraja district, South Sulawesi, Indonesia. *Biodiversitas*, 18(2): 741–751.
- Liu, K. lou, Han, T. fu, Huang, J., Asad, S., Li, D. ming, Yu, X. chu, Huang, Q. hai, Ye, H. cai, Hu, H. wen, Hu, Z. hua, & Zhang, H. min. 2020. Links between potassium of soil aggregates and pH levels in acidic soils under long-term fertilization regimes. *Soil and Tillage Research*, 197.
- López-Carr, D. 2021. A review of small farmer land use and deforestation in tropical forest frontiers: Implications for conservation and sustainable livelihoods. *Land*, 10(11): 1113.
- Lyubechanskii, I. I., Bepalov, A. N., Tiunov, A. V., Azarkina, G. N., Dudko, R. Y., Salisch, L. V., & Mordkovich, V. G. 2023. Trophic Structure of the Soil-Dwelling

- Arthropod Communities at the Border of the Forest and the Steppe in the South of Western Siberia: Isotopic Data. *Diversity*, 15(3): 445.
- Menta, C., & Remelli, S. 2020. Soil health and arthropods: From complex system to worthwhile investigation. *Insects*, 11(1).
- Migge-Kleian, S., Woltmann, L., Anas, I., Schulz, W., Steingrebe, A., & Schaefer, M. 2007. Impact of forest disturbance and land use change on soil and litter arthropod assemblages in tropical rainforest margins. *Environmental Science and Engineering*, 147–163.
- Murnen, C. J., Gonthier, D. J., & Philpott, S. M. 2013. Food webs in the litter: Effects of food and nest addition on ant communities in coffee agroecosystems and forest. *Environmental Entomology*, 42(4): 668–676.
- Nardi, D., Giannone, F., & Marini, L. 2022. Short-term response of ground-dwelling arthropods to storm-related disturbances is mediated by topography and dispersal. *Basic and Applied Ecology*, 65: 86–95.
- Negawo, W. J., & Beyene, D. N. 2017. The role of coffee based agroforestry system in tree diversity conservation in Eastern Uganda. *Journal of Landscape Ecology*, 10(2): 5–18.
- Neher, D. A., & Barbercheck, M. E. 2019. Soil microarthropods and soil health: Intersection of decomposition and pest suppression in agroecosystems. *Insects*, 10(12).
- Nkem, J. N., Lobry De Bruyn, L. A., Grant, C. D., & Hulugalle, N. R. (2000). The impact of ant bioturbation and foraging activities on surrounding soil properties. *Pedobiologia*, 44(5): 609–621.
- Nooten, S., P, S., RC, R., SL, F., & JM, C. 2019. A cross-species test of the function of cuticular traits in ants. *Myrmecological News*, 31(29): 67–77.
- Palacios-Vargas, J. G., Castaño-Meneses, G., Gómez-Anaya, J. A., Martínez-Yrizar, A., Mejía-Recamier, B. E., & Martínez-Sánchez, J. 2007. Litter and soil arthropods diversity and density in a tropical dry forest ecosystem in Western Mexico. *Biodiversity and Conservation*, 16(13): 3703–3717.
- Pant, M., Negi, G. C. S., & Kumar, P. 2017. Macrofauna contributes to organic matter decomposition and soil quality in. *Applied Soil Ecology*, 120: 20–29.
- Peña-Aguilera, P., Schmidt, N. M., Stewart, L., Parisy, B., van der Wal, R., Lindman, L., Vesterinen, E. J., Maclean, I. M. D., Kankaanpää, T., Wirta, H., & Roslin, T. 2023. Consistent imprints of elevation, soil temperature and moisture on plant and arthropod communities across two subarctic landscapes. *Insect Conservation and Diversity*, 16(5): 684–700.
- Prather, R. M., Castillioni, K., Welti, E. A. R., Kaspari, M., & Souza, L. 2020. Abiotic factors and plant biomass, not plant diversity, strongly shape grassland arthropods under drought conditions. *Ecology*, 101(6): 1–7.

- Prayogo, C., Sholehuddin, N., Putra, E. Z. H. S., & Rachmawati, R. 2018. Azotobacter population, soil nitrogen and groundnut growth in mercury-contaminated tailing inoculated with Azotobacter. *Journal of Degradate Mining Lands Management*, 5(53): 2502–2458.
- Rahayu, G. A., Buchori, D., Hindayana, D., & Rizali, A. 2017. Keanekaragaman dan peran fungsional serangga Ordo Coleoptera di area reklamasi pascatambang batubara di Berau, Kalimantan Timur. *Jurnal Entomologi Indonesia*, 14(2): 97–106.
- Rippel, T., DeCandia, A., Tomasula, J., McIntosh, C., Murphy, S., & Wimp, G. 2023. Detritivores and exogenous nitrogen influence litter microbial communities in coastal salt marshes. *Marine Ecology Progress Series*, 716: 17–29.
- Robinson, S. I., McLaughlin, Ó. B., Marteinsdóttir, B., & O’Gorman, E. J. 2018. Soil temperature effects on the structure and diversity of plant and invertebrate communities in a natural warming experiment. *Journal of Animal Ecology*, 87(3): 634–646.
- Ronque, M. U. V., Fourcassié, V., & Oliveira, P. S. 2018. Ecology and field biology of two dominant Camponotus ants (Hymenoptera: Formicidae) in the Brazilian savannah. *Journal of Natural History*, 52(3–4), 237–252.
- Samsuri, Rizkana, Zaitunah, A., & Ahmad, A. G. 2022. Shade tree pattern of highland coffee plantation and coffee production in Aceh Tengah, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 977(1).
- Samsuri, Zaitunah, A., Ahmad, A. G., & Rizkana. 2021. Analysis of agroforestry tree species composition and coffee cultivation production tropical highlands, Aceh Tengah - Indonesia. *IOP Conference Series: Earth and Environmental Science*, 886(1).
- Shahinur Islam, M., Hossain, M., Yasmin, M., Md Shahinur Islam, C., & Hossain, M. 2018. Impact of climatic factors and soil quality on the abundance and population density of Collembola in the. *Journal of Entomology and Zoology Studies*, 6(1): 1119–1125.
- Singh, V., Johar, V., Kumar, R., & Chaudhary, M. 2021. Socio-economic and Environmental Assets Sustainability by Agroforestry Systems: A Review. *International Journal of Agriculture Environment and Biotechnology*, 14(4): 521–533.
- Sofo, A., Mininni, A. N., & Ricciuti, P. 2020. Soil macrofauna: A key factor for increasing soil fertility and promoting sustainable soil use in fruit orchard agrosystems. *Agronomy*, 10(4).
- Susilo, F. X., Indriyati, I., & Hardiwinoto, S. 2009. Diversity and Abundance of Beetle (Coleoptera) Functional Groups in a Range of Land Use System in Jambi, Sumatra. *Biodiversitas Journal of Biological Diversity*, 10(4): 195–200.
- Szinwelski, N., Fialho, V. S., Yotoko, K. S. C., Seleme, L. R., & Sperber, C. F. 2012. Ethanol fuel improves arthropod capture in pitfall traps and preserves DNA. *ZooKeys*, 196: 11–22.

- Trajkovic, J., Vujic, V., Milicic, D., Gojgic-cvijovic, G., & Pavkovic-lucic, S. 2017. Fitness traits of *Drosophila melanogaster* (Diptera: Drosophilidae) after long-term laboratory rearing on different diets. *European Journal of Entomology*, 114: 222–229.
- Upton, M., & Mantle, B. 2010. Methods for collecting, preserving and studying insects and other terrestrial arthropods. In *Australian Entomology Society* (Vol. 5th). Paragon Printers Australasia, Canberra. <http://www.austentsoc.org.au/wordpress/publications/other-publications/>
- Uthappa, A. R., Shishira, D., Chavan, S. B., & Kumar, M. 2022. Soil arthropods and their role in soil health sustenance. In *Central Coastal Agricultural Research Institute, Goa* (Issue July). ICAR- Central Coastal Agricultural Research Institute, Goa.
- Villanueva-Lopez, G., Lara-Perez, L. A., Oros-Ortega, I., Ramirez-Barajas, P. J., Casanova-Lugo, F., Ramos-Reyes, R., & Aryal, D. R. 2019. Diversity of soil macroarthropods correlates to the richness of plant species in traditional agroforestry systems in the humid tropics of Mexico. *Agriculture, Ecosystems and Environment*, 286: 106658.
- Wale, M., & Yesuf, S. 2022. Abundance and diversity of soil arthropods in disturbed and undisturbed ecosystem in Western Amhara , Ethiopia. *International Journal of Tropical Insect Science*, 42: 767–781.
- Winkler, D., Mateos, E., Traser, G., Lakatos, F., & Tóth, V. 2020. New insight into the systematics of european lepidocyrtus (Collembola: Entomobryidae) using molecular and morphological data. *Insects*, 5.
- Xie, L., Slotsbo, S., & Holmstrup, M. 2023. Tolerance of high temperature and associated effects on reproduction in euedaphic Collembola. *Journal of Thermal Biology*, 113, 103439.
- Zhang, X., Xin, Y., Zhang, Z., Zhang, Z., & HaitaoWu. 2022. Effects of ant colonies on molecular characteristics of dissolved organic matter in peatland soils, Northeast China. *Applied Soil Ecology*, 171, 104298.
- Zhou, W., Zhan, P., Zeng, M., Chen, T., Zhang, X., Yang, G., & Guo, Y. 2023. Effects of ant bioturbation and foraging activities on soil mechanical properties and stability. *Global Ecology and Conservation*, 46, e02575.