

**DAFTAR PUSTAKA**

- Abd-Elgawad, M. M. M., Elshahawy, I. E., & Abd-El-Kareem, F. (2019). Efficacy of soil solarization on black root rot disease and speculation on its leverage on nematodes and weeds of strawberry in Egypt. *Bulletin of the National Research Centre* 43 (1) :175. <https://doi.org/10.1186/s42269-019-0236-1>
- Aini, N., Yamika, W. S. D., Aini, L. Q., & Firdaus, M. J. (2020). The Effect of Plant Spacing and Planting Model on Multiple Cropping of Red Chili (*Capsicum annuum* L.) and Shallot (*Allium ascalonicum* L.) under Saline Soil Conditions. *Indian Journal Of Agricultural Research*, 54(3): 349-354. <https://doi.org/10.18805/IJARe.A-484>
- Andaló, V., Moino Jr, A., Maximiniano, C., Campos, V. P., & Mendonça, L. A. (2011). Influence of temperature and duration of storage on the lipid reserves of entomopathogenic nematodes. *Revista Colombiana de Entomología*, 37(2) : 203–209. <https://doi.org/10.25100/socolen.v37i2.9075>
- Aryal, S., Nielsen, U. N., Sumaya, N. H., Wilson, C., & Riegler, M. (2022). Effect of temperature on survival of Australian entomopathogenic nematodes and their virulence against the Queensland fruit fly, *Bactrocera tryoni*. *BioControl*, 67(6) : 617–628. <https://doi.org/10.1007/s10526-022-10166-2>
- Badan Pusat Statistik. 2021. Produksi Tanaman Sayuran 2021. Retrieved from Badan Pusat Statistik: <https://www.bps.go.id/indicator/55/61/1/produksi-tanaman-sayuran.html>
- Bakonyi, G., Nagy, P., Kovács-Láng, E., Kovács, E., Barabás, S., Répási, V., & Seres, A. (2007). Soil nematode community structure as affected by temperature and moisture in a temperate semiarid shrubland. *Applied Soil Ecology*, 37 (1–2) : 31–40. <https://doi.org/10.1016/j.apsoil.2007.03.008>
- Bakr, R. A., Mahdy, M. E., & Mousa, M. E. (2013). Efficacy of soil solarization and post-planting mulch on control of root-knot nematodes. *Pakistan Journal of Nematology*. 31(1) :71-76.
- Biederman, L. A., & Boutton, T. W. (2009). Biodiversity and trophic structure of soil nematode communities are altered following woody plant invasion of grassland. *Soil Biology and Biochemistry*. 41(9): 1943–1950.



<https://doi.org/10.1016/j.soilbio.2009.06.019>

Bulluck, L. R., Barker, K. R., & Ristaino, J. B. (2002). Influences of organic and synthetic soil fertility amendments on nematode trophic groups and community dynamics under tomatoes. *Applied Soil Ecology*, 21(3): 233–250.  
[https://doi.org/10.1016/S0929-1393\(02\)00089-6](https://doi.org/10.1016/S0929-1393(02)00089-6)

Candido, V., D'Addabbo, T., Basile, M., Castronovo, D., & Miccolis, V. (2008). Greenhouse soil solarization: Effect on weeds, nematodes and yield of tomato and melon. *Agronomy for Sustainable Development*, 28(2): 221–230.  
<https://doi.org/10.1051/agro:2007053>

Candido, V., D'Addabbo, T., Miccolis, V., & Castronovo, D. (2011). Weed control and yield response of soil solarization with different plastic films in lettuce. *Scientia Horticulturae*, 130(3) : 491–497. <https://doi.org/10.1016/j.scienta.2011.08.002>

Chadfield, V. G. A., Hartley, S. E., & Redeker, K. R. (2022). Associational resistance through intercropping reduces yield losses to soil-borne pests and diseases. *New Phytologist*, 235(6), 2393–2405. <https://doi.org/10.1111/nph.18302>

Chałańska, A., Łabanowski, G., & Sas, D. (2016). Root-lesion nematodes (*Pratylenchus* spp.) in ornamental plant nurseries – influence of soil texture, acidity, salinity and organic matter content. *Communications in Biometry and Crop Science*, 11(2) : 98-104.

Egypt, & M. M. A, Y. (2020). Effect of some temperature changes on the population density of some plant parasitic nematode species. *Pakistan Journal of Nematology*, 38(1) :107–109. <https://doi.org/10.18681/pjn.v38.i01.p107-109>

Ferris, H., Bongers, T., & De Goede, R. G. M. (2001). A framework for soil food web diagnostics: Extension of the nematode faunal analysis concept. *Applied Soil Ecology*, 18(1) : 3–29. [https://doi.org/10.1016/S0929-1393\(01\)00152-4](https://doi.org/10.1016/S0929-1393(01)00152-4)

Firmansyah, A., & Bhermana, A. (2019). The Growth, Production, and Quality of Shallot at Inland Quartz Sands (Quarzipsammens) in the off Season. *Ilmu Pertanian (Agricultural Science)*, 4(3): 110.  
<https://doi.org/10.22146/tpas.39676>

Glazer, I., & Salame, L. (2000). Osmotic Survival of the Entomopathogenic Nematode



Steiner *nema carpocapsae*. Biological Control, 18(3) :251–257.  
<https://doi.org/10.1006/bcon.2000.0814>

Hasing, J. (2002). Agroeconomic effect of soil solarization on fall-planted lettuce. *Scientia Horticulturae*, 101(2) : 223-233.  
[https://doi.org/10.31390/gradschool\\_theses.2362](https://doi.org/10.31390/gradschool_theses.2362)

Ibrahim, Ahmad Yusuf & Mulyadisastra, Supramana & Riyanto, Riyanto. (2023). Populasi Nematoda Tanah pada Perlakuan Limbah Tanaman Brassicaceae. *Jurnal Fitopatologi Indonesia*, 19(1) : 19-29.  
<https://doi.org/10.14692/jfi.19.1.19-29>.

Johnson, A & Dowler, C & Handoo, Zafar. (2000). Population Dynamics of Meloidogyne incognita, M. arenaria, and Other Nematodes and Crop Yields in Rotations of Cotton, Peanut, and Wheat Under Minimum Tillage. *Journal of Nematology*, 32(1) : 52-61.

Jones, J. T., Haegeman, A., Danchin, E. G. J., Gaur, H. S., Helder, J., Jones, M. G. K., Kikuchi, T., Manzanilla-López, R., Palomares-Rius, J. E., Wesemael, W. M. L., & Perry, R. N. (2013). Top 10 plant-parasitic nematodes in molecular plant pathology: Top 10 plant-parasitic nematodes. *Molecular Plant Pathology*, 14(9) : 946–961. <https://doi.org/10.1111/mpp.12057>

Keçici, A. İ., Bozbuğa, R., Öcal, A., Yüksel, E., Özer, G., Yıldız, Ş., Lahlali, R., Slaats, B., Dababat, A. A., & İmren, M. (2022). Diversity and Identification of Plant-Parasitic Nematodes in Wheat-Growing Ecosystems. *Microorganisms*, 10(8) : 1534. <https://doi.org/10.3390/microorganisms10081534>

Kiontke, K., & Fitch, D. H. A. (2013). Nematodes. *Current Biology*, 23(19) : R862–R864. <https://doi.org/10.1016/j.cub.2013.08.009>

Krebs CJ. 1989. Ecological Methodology. Second Edition. An Imprint of Addison Wesley Longman, New York.

Landesman W.J., Treonis A.M., Dighton J. Effects of a one-year rainfall manipulation on soil nematode abundances and community composition. *Pedobiologia*. 2011;54:87–91

Lisnawita, L., Sinaga, M. S., Supramana, S., & Suastika, G. (2010). PENGARUH TEMPERATUR TERHADAP PERKEMBANGAN NEMATODA SISTA



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KENTANG (GLOBODERA spp.) INDONESIA. Jurnal Hama dan Penyakit Tumbuhan Tropika, 10(1) :29–34. <https://doi.org/10.23960/j.hptt.11029-34>

Liswarni, Y., Resti, Z., & Busniah, M. (2019). Keanekaragaman dan kepadatan populasi nematoda parasit pada rizosfer tanaman wortel (*Daucus carota*) di sentra produksi Sumatera Barat. *Biodiversitas*. 5(2) : 190-193.

Lu, Q., Liu, T., Wang, N., Dou, Z., Wang, K., & Zuo, Y. (2020). A review of soil nematodes as biological indicators for the assessment of soil health. *Frontiers of Agricultural Science and Engineering*, 7(3) : 275. <https://doi.org/10.15302/J-FASE-2020327>

Luc, M., Sikora, R. A., & Bridge, J.. (2005). Plant parasitic nematodes in subtropical and tropical agriculture (2nd ed). CABI Pub.

Majdi, N., Traunspurger, W., Fueser, H., Gansfort, B., Laffaille, P., & Maire, A. (2019). Effects of a broad range of experimental temperatures on the population growth and body-size of five species of free-living nematodes. *Journal of Thermal Biology*, 80:21–36. <https://doi.org/10.1016/j.jtherbio.2018.12.010>

Mauromicale, G., Monaco, A. L., & Longo, A. M. G. (2010). Improved efficiency of soil solarization for growth and yield of greenhouse tomatoes. *Agronomy for Sustainable Development*, 30(4) :753–761. <https://doi.org/10.1051/agro/2010015>

Matute, M. M., Manning, Y. A., & Kaleem, M. I. (2013). Community structure of soil nematodes associated with *solanum tuberosum*. *Journal of Agricultural Science*, 5(1) : 44.

Munteanu R. 2017. The Effects Of Changing Temperature And Precipitation On Free-Living Soil Nematoda In Norway.[Thesis].Lund University,Sweden

Mutalaliah, Mutala., Indarti, S., & Putra, N. S. (2018). Short Communication: Abundance and diversity of plant parasitic nematodes associated with BP 308 and BP 42 clones of robusta coffee in Java, Indonesia. *Biodiversitas Journal of Biological Diversity*, 19(1) :67–70. <https://doi.org/10.13057/biodiv/d190111>

Mulyadi. 2009. Nematologi pertanian. Gadjah Mada University Press: Yogyakarta.



Nico, A. I., Jimenez-Diaz, R. M., & Castillo, P. (2003). Solarization of soil in piles for the control of *Meloidogyne incognita* in olive nurseries in southern Spain. *Plant Pathology*, 52(6) :770–778. <https://doi.org/10.1111/j.1365-3059.2003.00927>.

Nisa, R. U., Tantry, A. Y., Kousser, N., Allie, K. A., Wani, S. M., Alamri, S. A., Alyemeni, M. N., Wijaya, L., & Shah, A. A. (2021). Influence of ecological and edaphic factors on biodiversity of soil nematodes. *Saudi Journal of Biological Sciences*, 28(5) : 3049–3059. <https://doi.org/10.1016/j.sjbs.2021.02.046>

Parthasarathi, T., Firdous, S., Mariya David, E., Lesharadevi, K., & Djanaguiraman, M. (2022). Effects of High Temperature on Crops. IntechOpen. doi: 10.5772/intechopen.105945

Phani V, Matiyar R. Khan, Tushar K. Dutta. (2021) Plant-parasitic nematodes as a potential threat to protected agriculture: Current status and management options, *Crop Protection*. 144 : 105573. <https://doi.org/10.1016/j.cropro.2021.105573>

Palmateer, A.J., Lawrence, K.S., van Santen, E. and Morgan-Jones, G. (2004) Interaction of *Rotylenchulus reniformis* with seedling disease pathogens of cotton. *Journal of Nematology*. 36 : 160–166.

Pontes, L. P., Vafeiadou, A.-M., De França, F. J. L., Cavalcante, R. A., De Araújo França, D. A., Brito, C. M., Alves, R. N., De Carvalho, P. S. M., & Dos Santos, G. A. P. (2021). Toxic effects of phenanthrene intensify with an increase of temperature for the populations of a free-living nematode. *Ecological Indicators*, 120 : 106868. <https://doi.org/10.1016/j.ecolind.2020.106868>

Polomares-Rius JE, Cantalapiedra-Navarrete C, Archidona-Yuste A, Tzortzakakis EA, Birmpilis IG, Vovlas N, Subbotin SA, Castillo P. (2017). Prevalence and molecular diversity of reniform nematodes of the genus *Rotylenchulus* (Nematoda: Rotylenchulinae) in the Mediterranean Basin. *Europe Journal of Plant Pathology*. 150:439–455. DOI: <https://doi.org/10.1007/s10658-017-1292-8>.

Putri, A. H., Indarti, S., & Harjaka, T. (2021). Diversity and abundance of nematodes in soil treated with solarization treatments. *Biodiversitas Journal of Biological Diversity*, 22 (7). <https://doi.org/10.13057/biodiv/d220708>



Rahman, L., Chan, K. Y., & Heenan, D. P. (2007). Impact of tillage, stubble management and crop rotation on nematode populations in a long-term field experiment. *Soil and Tillage Research*, 95(1–2), 110–119. <https://doi.org/10.1016/j.still.2006.11.008>

Reddy, PP (2012). Solarisasi Tanah. Dalam: Kemajuan terkini dalam perlindungan tanaman. Springer, New Delhi. 159-183 [https://doi.org/10.1007/978-81-322-0723-8\\_11](https://doi.org/10.1007/978-81-322-0723-8_11)

Renčo, M., Lišková, M., Čerevková, A. (2010): Seasonal fluctuations of the nematode communities in a hop garden soil. *Helminthologia*, 47(2): 115 – 122. DOI: 10.2478/s11687-010-0018-7

Renčo, M., Gömöryová, E., & Čerevková, A. (2020). The Effect of Soil Type and Ecosystems on the Soil Nematode and Microbial Communities. *Helminthologia*, 57(2) :129–144. <https://doi.org/10.2478/helm-2020-0014>

Rosya, A., & Winarto, W.,. (2013). Keragaman Komunitas Fitonematoda pada Sayuran Lahan Monokultur dan Polikultur di Sumatera Barat. *Jurnal Fitopatologi Indonesia*, 9(3) : 71–76. <https://doi.org/10.14692/jfi.9.3.71>

Sagita, L., Siswanto, B., & Hairiah, K. (2014). STUDI KERAGAMAN DAN KERAPATAN NEMATODA PADA BERBAGAI SISTEM PENGGUNAAN LAHAN DI SUB DAS KONTO. *Jurnal Tanah dan Sumberdaya Lahan* 1(1), 51-60.

Sánchez-Moreno, Sara & Minoshima, Hideomi & Ferris, Howard & Jackson, Louise. (2006). Linking soil properties and nematode community composition: Effects of soil management on soil food webs. *Nematology*. 8(5) :703-715. 10.1163/156854106778877857.

Sen, D. (2017). Population Fluctuation of Soil Inhabiting Nematodes in Relation to soil Temperature and moisture at Guava orchard in West Bengal, India. *Records of the Zoological Survey of India*, 117(4) :376. <https://doi.org/10.26515/rzsi/v117/i4/2017/121402>

Setyadjit, M.App.Sc, N., Risfaheri, N., & Handayani, A. A. (2019). OPTIMASI PRODUKSI BAWANG MERAH UTUH (*Allium Ascalonicum* L) IN BRINE. *Jurnal Penelitian Pascapanen Pertanian*, 15(1) : 25.



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<https://doi.org/10.21082/jpasca.v15n1.2018.25-35>

Shea, E. A., Fernández-Bayo, J. D., Hodson, A. K., Parr, A. E., Lopez, E., Achmon, Y., Toniato, J., Milkereit, J., Crowley, R., Stapleton, J. J., VanderGheynst, J. S., & Simmons, C. W. (2022). Biosolarization restructures soil bacterial communities and decreases parasitic nematode populations. *Applied Soil Ecology*, 172(43) : 104343. <https://doi.org/10.1016/j.apsoil.2021.104343>

Shutt, V. M., & Affiah, D. U. (2021). Efficacy of soil solarization on the control of root-knot nematodes infecting eggplant (*Solanum melongena*) in Plateau State. *African Journal of Plant Science*.15(6):144-150.  
<https://doi.org/10.5897/AJPS2020.1992>

Simmons, C. W., Guo, H., Claypool, J. T., Marshall, M. N., Perano, K. M., Stapleton, J. J., & VanderGheynst, J. S. (2013). Managing compost stability and amendment to soil to enhance soil heating during soil solarization. *Waste Management*,33(5):1090–1096.  
<https://doi.org/10.1016/j.wasman.2013.01.015>

Song, M., Li, X., Jing, S., Lei, L., Wang, J., & Wan, S. (2016). Responses of soil nematodes to water and nitrogen additions in an old-field grassland. *Applied Soil Ecology*, 102: 53–60. <https://doi.org/10.1016/j.apsoil.2016.02.011>

Soomro, M. H., Iqbal, E., & Kazi, F. (2022). *Textbook of Plant Nematology* (First). National Nematological Research Center, University of Karachi, Karachi.  
<https://doi.org/10.33804/978.969.23704.0.0>

Stirling GR. 2014. Biolsaogical Control of Plant-Parasitic Nematodes. Australia (AU): CABI. DOI: <https://doi.org/10.1079/9781780644158.0280>.

Subbotin, S.A., Inserra, R.N., Marais, M., Mullin, P., Powers, T.O., Roberts, P.A., Berg, E.V.D., Yeaters, P.G.W. and Baldwin, J.G. (2011). Diversity and phylogenetic relationships within the spiral nematodes of *Helicotylenchus* Steiner, 1945 (Tylenchida: Hoplolaimidae) as inferred from analysis of the D2-D3 expansion segments of 28S rRNA gene sequences. *Nematology*., 13: 333-345.

Van Capelle, C., Schrader, S., & Brunotte, J. (2012). Tillage-induced changes in the functional diversity of soil biota – A review with a focus on German data. *European Journal of Soil Biology*, 50: 165–181.



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<https://doi.org/10.1016/j.ejsobi.2012.02.005>

Wang KH, & McSorley R. (2008). Exposure Time to Lethal Temperatures for Meloidogyne incognita Suppression and Its Implication for Soil Solarization. *Journal of Nematology*. 40(1):7-12.

Wang, K.-H., & Sipes, B. S. (2009). Solarization and Cover Cropping as Alternatives to Soil Fumigants for Nematode Management in Hawai'i's Pineapple Fields. College Of Tropical Agriculture And Human Resources.

Wharton, David. 2004. Nematode Survival Strategies. CABI, New Jersey, USA.  
10.1201/b12614-17.

Wulandari, A. S., & Indarti, S. (2020). Distribution and Abundance of a New Pest "Root and Bulb Parasitic Nematode" at Different Elevation Levels and Soil Abiotic Factors in Garlic Growing Centres in Central Java. *Key Engineering Materials*, 840, 124–130. <https://doi.org/10.4028/www.scientific.net/KEM.840.124>

Wurst, S., Van Beersum, S., Wagenaar, R., Bakx-Schotman, T., Drigo, B., Janzik, I., Lanoue, A., & Van Der Putten, W. H. (2009). Plant defence against nematodes is not mediated by changes in the soil microbial community. *Functional Ecology*, 23(3) : 488–495. <https://doi.org/10.1111/j.1365-2435.2009.01543>.

Yavuzaslanoglu, E., Sonmezoglu, O. A., Genc, N., Akar, Z. M., Ocal, A., Karaca, M. S., Elekcioglu, I. H., Ozsoy, V. S., & Aydogdu, M. (2019). Occurrence and abundance of nematodes on onion in Turkey and their relationship with soil physicochemical properties. *Nematology*, 21(10) :1063–1079. <https://doi.org/10.1163/15685411-00003275>

Zhang, Y., Ji, L., & Yang, L. (2021). Abundance and diversity of soil nematode community at different altitudes in cold-temperate montane forests in northeast China. *Global Ecology and Conservation*, 29: e01717. <https://doi.org/10.1016/j.gecco.2021.e01717>