UNIVERSITAS
GADJAH MADA
Identifikasi Spesies Nematoda Luka Akar Pratylenchus spp. pada Tanaman Kopi (Coffea sp.)
Annisa Wahyu Hapsari Putri, Prof. Dr. Ir. Siwi Indarti, M.P.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Amarsena, P. G. D. S., K. M. Mohotti, D. M. De Costa, and J. F. Nyarko. 2019. Morphometric and molecular characterization of isolates of the root lesion nematode, *Pratylenchus loosi* infecting tea in Sri Lanka. Tropical Agricultural Research 31(1): 57-71.

Artati, D., dan D. S. Lubis. 2017. Optimalisasi performa DNA marker pada elektroforesis gel. Buletin Teknik Litkayasa Akuakultur 15(2): 47-50.

Asyiah, I. N., I. Mudakir, M. Hoesain, A. P. Pradana, A. Djunaidy, and R. F. Sari. 2020. Consortium of endophytic bacteria and rhizobacteria effectively suppresses the population of *Pratylenchus coffeae* and promotes the growth of Robusta coffee. Biodiversitas 21(10): 4702-4708.

Badan Pusat Statistik, 2024.

Bogale, M., A. Baniya, and P. D. Gennaro. 2020. Nematode identification techniques and recent advances. Plants 9(10): 1260.

Budiman, A., Supramana, dan Giyanto. 2019. Morphological and molecular characteristics of *Pratylenchus coffeae* from the origin of robusta coffee plantation in Malang, East Java. Jurnal Perlindungan Tanaman Indonesia 23(2): 211-218.

Budiman, A., Supramana, Giyanto, dan F. Kurniawati. 2020. Komunitas fitonematoda pada pertanaman kopi robusta dan arabika di Jawa Timur. Jurnal Fitopatologi Indonesia 16(5): 207-215.

Castillo, P., and N. Volvas. 2007. *Pratylenchus* (Nematoda: Pratylenchidae): Diagnosis, Biology, Pathogenicity and Management. Brill, Boston.

Chen X., F. Li, D. Wang, and L. Cai. 2024. Insights into the plant response to nematode invasion and modulation of host defense by plant parasitic nematode. Frontiers in Microbiology 15:1482789

Confort, P. M. S., T. G. Souto, J. F. Macedo, S. Creste, and C. B. M. Vitorello. 2025. Multilayered defense responses in sugarcane against Pratylenchus zeae revealed by comparative transcriptomics. Frotiers in Plant Science 16: 1-21.

Cortes, E. G., W. P. Padilla, and P. Castillo. 2023. Morphometric an molecular identification of root-lesion nematodes, *Pratylenchus* spp., from Costa Rica. Nematropica 53: 41-57.

De Luca, F., A, Troccoli, L. W. Duncan, S. A. Subbotin, L. Waeyenberge, D. L. Coyne, F. C. Brentu, and R. N. Inserra. 2012. *Pratylenchus speijeri* n. sp. (Nematoda: Pratylenchidae), a new root-lesion nematode pest of plantain in West Africa. Nematology 00(): 1-18.

Dinata, G. F., Haryuni, A. U. Mahanani, R. Soelistijono, M. Sada, N. Khoirotin, Mutala'liah, B. K. Lahati, N. Takdir, K. Arianti, dan S. Tuhuteru. 2023. Fitopatologi: Menuju Pertanian Berkelanjutan. Tohar Media, Makassar.

Durahman, D., Tarno, H., & Rahardjo, B. T. 2014. Eksplorasi nematoda parasit tumbuhan pada tanaman nilam (*Pogostemon cablin* Benth) di Kecamatan Kesamben Kabupaten Blitar. Jurnal HPT 2(4): 1-10.

Farah, A. 2019. Coffee Production, Quality and Chemistry. Royal Society of Chemistry, Croydon.

Gamboa-Cortés, E., W. Peraza-Padilla, and P. Castillo. 2023. Morphometric and molecular identification of root-lesion nematodes, Pratylenchus spp., from Costa Rica. Nematropica 53:41-57.

UNIVERSITAS
GADJAH MADA
Identifikasi Spesies Nematoda Luka Akar Pratylenchus spp. pada Tanaman Kopi (Coffea sp.)
Annisa Wahyu Hapsari Putri, Prof. Dr. Ir. Siwi Indarti, M.P.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Getachew, S., B. H. Meressa, M. Couvreur, M. G. Teklu, and W. Bert. 2024. First report of root-lesion nematode (Pratylenchus goodeyi) parasitizing soybean (Glycine max) in Ethiopia. Australian Plant Pathology 54(1): 37-43.

Handoo, Z. A., L. K. Carta, and A. M. Skantar. 2008. Taxonomy, morphology and phylogenetics of coffee-associated root-lesion nematodes, *Pratylenchus* spp. Springer 29-50.

Hartati, S., R. Meliansyah, dan T. Mayanti. 2024. Potensi senyawa volatil dari khamir untuk mengendalikan *Cercospora coffeicola*. Jurnal Fitopatologi Indonesia 20(1): 1-16.

Hindersah, R., and I. N. Asyiah. 2023. Abundance of beneficial soil microbes in the rhizosphere of coffee plants infected by *Pratylenchus coffeae*. Biosaintifika 15(2): 220-229.

Hindersah, R., and I. N. Asyiah. 2024. The application of arbuscular mycorrhizal fungi and mycorrhizae helper bacteria combined with compost to reduce the Pratylenchus coffeae population in an Arabica coffee plantation. Coffee Science 19: 1-19.

Hindersah, R., E. F. L. Lilipaly, I. Mudakir, I. N. Aisyah, and R. Harni. 2022. Role of mycorrhiza helper bacteria on mycorrhizal colonization and nematode Pratylenchus coffeae infection. Biotropia 29(3): 244-253.

Inomoto, M.M., and C. M. G. Oliveira. 2008. Plant-Parasitic Nematodes of Coffee. Springer, Campos dos Goytacazes.

International Coffee Organization, 2023.

Jesus, A. M. D., E. M. R. Pedrosa, J. B. R. D.S. reis, and A. C. F. Porto. 2020. Morphological and morphometric characterization of *Pratylenchus* species in sugarcane cropping areas of Penambuco State. Revista Caatinga 33(3): 599-607.

Jones, M. G. K., and F. Nyarko. 2014. Molecular biology of root lesion nematodes (Pratylenchus spp.) and their interaction with host plants. Annals of Applied Biology 164: 163-181.

Kandel, S. L. 2013. Relationship between climatic factors and distribution of Pratylenchus spp. in the dryland wheat-production areas of Eastern Washington. The American Phytopathological Society 97(11): 1448-1456.

Kimpinski, J., and C. B. Willis. 1981. Influence of soil temerature and pH on *Pratylenchus penetrans* and *P. crenatus* in Alfafa and Timothy. Journal of Nematology 13(3): 333-338.

Kolombia, Y. A., O. Ogundero, E. Olajide, N. Viaene, P. L. Kumar, D. L. Coyne, and W. Bert. 2020. Morphological and molecular characterization of Pratylenchus species from Yam (Dioscorea spp.) in West Africa. Journal of Nematology 52:1-25.

Kombo, J. 2025. Polymerase chain reaction (PCR): principle, requirements, types and application. Lifeline Health Sciences 3(1): 98-105.

Kusnadi, J., E. L. Arumingtyas, H. M. Hakiki. 2022. Aplikasi Teknik PCR untuk Autentikasi Halal. UB Press, Malang.

Lubis, K., S. Indarti, and N. S. Putra. 2021. Plant parasitic nematode abundance and diversity in potato (Solanum tuberosum) cultivation at various altitudes in Wonosobo and Banjarnegara. Jurnal Perlindungan Tanaman Indonesia 25(2): 99-105.

Machado, A. C. Z., R. Kumar, B. J. R. Fatobene. 2023. Nematode problems in coffee and their sustainable management. Nematode Diseases of crops and Their Sustainable Management: 641-651.

UNIVERSITAS
GADJAH MADA
Identifikasi Spesies Nematoda Luka Akar Pratylenchus spp. pada Tanaman Kopi (Coffea sp.)
Annisa Wahyu Hapsari Putri, Prof. Dr. Ir. Siwi Indarti, M.P.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Maharani, R., S. Indarti, A. Soffan, and S. Hartono. 2023. *Aphelenchoides varicaudatus* (Nematoda:Aphelenchoididae) and *Helicotylenchus erythrinae* (Nematoda: Hololaimidae) from garlic plantation in Magelang, Central Java, Indonesia. Helminthologia 60(1): 94-105.

Mgonja, D. M., G. E. Temu, M. F. Mziray, B. E. Kashando, A. E. Mwenisongole, M. M. Masunga, S. L. Lyantagaye, and N. D. Luambano. 2019. Morphological and molecular identification of Pratylenchus goodeyi associated with banana in Tanzania. Tanzania Journal of Science 45(2): 265-278.

Mirsam, H., Supramana, dan G. Suastika. 2015. Identifikasi nematoda parasit pada tanaman wortel di dataran tinggi Malino, Sulawesi Selatan berdasarkan pada ciri morfologi dan morfometrik. Jurnal Fitopatologi Indonesia 11(3): 85-90.

Nguyen, H. D., H. T. Nguyen, T. M. L. Le, D. D. Hoang, T. D. Nguyen, and Q. P. Trinh. 2024. Morphological and molecular characterizations of Pratylenchus coffeae infecting Ming aralia and coffee in Vietnam. Helminthologia 61(1): 76-84.

Nguyen, T.T. 2010. A Comparative Polyphasic Study of 10 Pratylenchus coffeae Populations from Vietnam. Doctoral Thesis. Katholic University of Leuven, Belgia. 141.

Nisa, R. U., A. Y. Tantray, N. Kouser, K. A. Allie, S. M. Wani, S. A. Alamri, M. N. Alyemeni, L. Wijaya, and A. A. Shah. 2021. Influence of ecological and edaphic factors on biodiversity of soil nematodes. Saudi Journal of Biological Sciences 28: 3049-3059.

Nishantha, K. M. D. W. P., M. M. Nugaliyadde, D. M. D. Costa, L. Nugaliyadde, S. W. G. A. N. Kumari, D. M. I. C. B. Dissanayake, and M. H. N. Y. Malwenna. 2025. Morphometric taxonomy of Meloidogyne spp. infesting vegetable crops in Sri Lanka via female perenial pattern analysis. International Journal of Environment Agriculture and Biotechnology 10(2): 1-6.

Oliveira, C. M. G., and J. M. O. Rosa. 2018. Nematoides parasitos do cafeeiro. Boletin Tecnico 32: 1-28.

Phap, T. Q. 2010. Identity and Diversity of Migratory Plant-Parasitic Nematodes on Coffee and Their Sustainable Mnagement Via Crop Resistence in Vietnam. Ghent University. Master Thesis.

Pradnyaniti, D. G., I. N. Wirajana, dan S. C. Yowani. 2013. Desain primer secara in silico untuk amplifikasi fragmen gen rpoB *Mycobacterium tuberculosis* dengan polymerase chain reaction (PCR). Jurnal Farmasi Udayana 2(3): 124-130.

Purba, R. P., D. Bakti, dan S. F. Sitepu. Hubungan persentase serangan dengan estimasi kehilangan hasil akibat serangan hama penggerek buah kopi *Hypothenemus hampei* ferr.(Coleoptera: Scolytidae) di Kabupaten Simalungun. Jurnal Online Agroekoteaknologi 3(2): 790-799.

Qin, L., F. Lin, Y. Lv, Z. Tai, X. Zhang, H. Li, Y. Li, and K. Wang. 2025. Identification of *Pratylenchus coffeae* as a causal agent of root rot disease in *Sorghum bicolor* in China. Microbiology. 25(41): 1-11.

Rahardjo, P. 2012. Kopi. Penebar Swadaya, Depok.

Rizwan, M. 2021. Budi Daya Kopi. Azka Pustaka, Pasaman Barat.

Saiki, R. K., D. H. Gelfand, S. Stoffel, S. J. Scharf, R. Higuchi, G. T. Horn, K. B. Mullis, and H. A. Erlich. 1987. Primer-directed enzymatic amplification of DNA with a thermostable DNA polymerase. Science 239: 487-491.

UNIVERSITAS
GADJAH MADA
Identifikasi Spesies Nematoda Luka Akar Pratylenchus spp. pada Tanaman Kopi (Coffea sp.)
Annisa Wahyu Hapsari Putri, Prof. Dr. Ir. Siwi Indarti, M.P.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Shivas, R. G., Kiss, L, Geering, A. D, and McTaggart, A. R. 2023. Management of plant pathogen collections. Departement of Agriculture, Fisheries and Forestry.

Sidstedt, M., P. Radstrom, and J. Hedman. 2020. PCR inhibition in qPCR, dPCR and MPS—mechanisms and solutions. Analytical and Bioanalytical Chemistry 412: 2009-2023.

Silva, R. A., and M. M. Inomoto. 2002. Host-range characterization of two Pratylenchus coffeae isolates from Brazil. Journal of Nematology 34(2): 135-140.

Sunarharum, W. B., K. Fibrianto, S. S. Yuwono, dan M. Nur. 2019. Sains Kopi Indonesia. UB Press, Malang.

Sunarto, T. 2023. Pengenalan nematoda pada tanaman kopi dan metode pengendaliannya di Desa Panca Mulya, Kecamatan Cimaung, Kabupaten Bandung. Jurnal Pengabdian Agrokompleks 1(1):6-9.

Suprayogi., N. Farid, P. S. Dewi, S. Nugroho, dan D. Susanti. 2021. Teknik-Teknik Dasar Bioteknologi. UNSOED Press, Purwokerto.

Surna, M. I., Q. S. Fazli, T. Chamzurni, Susanna, and G. M. Idroes. 2025. Influence of elevational; and environmental factors on parasitic nematode distribution in arabica coffee in the Gayo Highlands, Indonesia. Leuser Journal of Environmental Studies 3(2): 56-66.

Thiep, N. V., K. Soytong, N. T. K. Oanh, and P. M. Hung. 2019. Study on nematodes (Pratylenchus spp.) on Arabica coffee in the Northwestern Vietnam. International Journal of Agricultural Technology 15(4): 675-684.

Tiwari, S. P., D. Masih, R. Jatav, G. Tiwari, and R. Husain. 2024. Lesion nematode (*Pratylenchus* spp): 'emerging threats' in horticulture and agriculture, a review. Journal of Research in Agriculture and Animal Science 11(12): 17-33.

Tiyet, N. T., A. Elsen, H. H. Nhi, and D. D. waele. 2012. Morphological and morphometrical characterisation of ten *Pratylenchus coffeae* populations from Vietnam. Russian Journal of Nematology 20(1):75-93.

Wilson, M. 2011. Nematology monographs and perspectives. Forest Pathology 41(6): 520.

Wu, H.-Y., & Tsay, T.-T. 2002. Identification and biological study of *Pratylenchus* spp. isolated from crops in Taiwan. Taiwan Agricultural Research Institute 51(1): 1–12.

Zuckerman, B. M., W. F. Mai, and R. A. Rohde. 1971. Plant Parasitic Nematodes. Academic Press, London.