UNIVERSITAS
GADJAH MADA
**Evaluasi Manajemen Produksi Kelapa Sawit (Elaeis guineensis Jacq.) Tahun Tanam 2002 Periode Sebelum
dan Sesudah Kerja Sama Operasional di Kebun Cikasungka PTPN IV Bogor**
Teodore Bernard Limbong, Eka Tarwaca Susila Putra, S.P., M.P., Ph.D.; Dr. Panjisakti Basunanda, S.P., M.P.
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

# DAFTAR PUSTAKA

Ara, I., M. S. Islam, M. A. Kashem, and K. T. Osman. 2018. A comparative study of phosphorus availability in an acidic soil and an alkaline soil amended with organic and inorganic phosphorus sources. Journal of Soil Science and Plant Nutrition. 18(2): 466–478.

Awang, A. H., I. Z. Rela, A. Abas, M. A. Johari, M. E. Marzuki, M. N. R. M. Faudzi, and A. Musa. 2021. Peat land oil palm farmers' direct and indirect benefits from good agriculture practices. Sustainability. 13(14): 1-18.

Badan Meteorologi, Klimatologi, dan Geofisika. 2023. Analisis Dinamika Atmosfer Dasarian I Juli 2023. <https://www.bmkg.go.id/iklim/dinamika-atmosfer/analisis-dinamika-atmosfer-dasarian-i-juli-2023>. Diakses 3 Juni 2026.

Badan Pusat Statistik. 2024. Statistik Kelapa Sawit Indonesia Tahun 2023 Volume 17, 2024. Badan Pusat Statistik Republik Indonesia, Jakarta.

Bojacá, C. R., D. A. Hernández-Rendón, A. A. Tupaz-Vera, and J. E. Camperos-Reyes. 2025. Strategic optimization of harvest collection points in oil palm plantations. OCL: Oilseeds & fats Crops and Lipids. 32(24): 1-9.

Bonneau, X., R. Impens, and M. Buabeng. 2018. Optimum oil palm planting density in West Africa. OCL: Oilseeds & fats Crops and Lipids. 25(2): 1-10.

Corley, R. H. V., and P. B. Tinker. 2016. The Oil Palm. Fifth Edition. John Wiley & Sons Ltd, Chichester, United Kingdom.

da Silva, K. C., M. Tabarelli, and I. C. Vieira. 2023. Oil palm plantations in an aging agricultural landscape in the eastern Amazon: Pushing Amazon forests farther from biodiversity-friendly landscapes. Biological Conservation. 283: 1- 11.

Darlita, R., B. Joy, and R. Sudirja. 2017. Analisis beberapa sifat kimia tanah terhadap peningkatan produksi kelapa sawit pada tanah pasir di perkebunan kelapa sawit Selangkun. Agrikultura. 28(1): 15–20.

Darmawan, D. I., T. Setyorini, dan N. Andayani. 2022. Respon pertumbuhan tiga varietas bibit kelapa sawit dengan pemberian pupuk bioslurry padat pada media tanam di pembibitan pre-nursery. Prosiding Seminar Nasional INSTIPER. 85–93.

de Vos, R. E., L. Nurfalah, F. A. Tenorio, Y. L. Lim, J. P. Monzon, C. R. Donough, H. Sugianto, A. A. Dwiyahreni, N. L. Winarni, N. Mulani, G. Ramadhan, M. A. Imran, A. P. Tito, P. Sulistiawan, M. Khoirul, R. Farrasati, I. Pradiko, P. Grassini, and M. Slingerland. 2023. Shortening harvest interval, reaping benefits? A study on harvest practices in oil palm smallholder farming systems in Indonesia. Agricultural Systems. 211: 1-11.

UNIVERSITAS
GADJAH MADA
**Evaluasi Manajemen Produksi Kelapa Sawit (Elaeis guineensis Jacq.) Tahun Tanam 2002 Periode Sebelum
dan Sesudah Kerja Sama Operasional di Kebun Cikasungka PTPN IV Bogor**
Teodore Bernard Limbong, Eka Tarwaca Susila Putra, S.P., M.P., Ph.D.; Dr. Panjisakti Basunanda, S.P., M.P.
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

Delgado, T., G. Ladino, and N. Arias. 2024. Evaluation of the effect of soil water conditions on the development and water requirements of adult oil palm (*Elaeis guineensis* Jacq.) in the northern region of Colombia. Agronomy. 14: 1-19.

Essono, D. M., B. B. Nkoué, E. Voundi, L. Kono, E. Verrecchia, J. Ghazoul, A. W. Malab, A. Buttler, and T. Guillaume. 2023. Nutrient availability challenges the sustainability of low-input oil palm farming systems. Farming System. 1(1): 1-8.

Etikan, I., Musa, S. A. Musa, and R. S. Alkassim. 2016. Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics. 5(1):1–4.

Farooqi, Z. U. R., A. A. Qadir, S. Riaz, Z. M. Chaudhary, W. M. U. Din, P. Ilić, and N. Pržulj. 2025. Soil acidification: Processes, effects on soil and plants, and remediation strategies. Dalam: P. Ilić dan N. Pržulj (eds.). Environmental Protection and Remediation. Academy of Sciences and Arts of the Republic of Srpska. Monograph LXIII: 171–206.

Fauzi, F. 2017. Potensi limbah perkebunan kelapa sawit sebagai sumber energi alternatif terbarukan di wilayah Kalimantan Barat. Elkha: Jurnal Teknik Elektro. 9(2): 22-29.

Gunawan, T. R., M. G. Pradana, C. A. Yusup, T. A. P. Rozziansha, H. Priwiratama, dan A. E. Prasetyo. 2024. Intensitas serangan tikus di perkebunan kelapa sawit: Studi kasus di Kabupaten Tanjung Jabung Timur, Jambi. Warta PPKS. 29(1): 61–68.

Handru, A., D. Putri, and M. F. Sidiq. 2023. Keragaman serangga pengunjung pada kelapa sawit (*Elaeis guineensis* Jacq.) di Kebun Pendidikan dan Penelitian (KP2) Stiper Edu Agro Tourism Ungaran. AGROISTA: Jurnal Agroteknologi. 7(2): 107-117.

Harahap, A., A. Ambarsari, dan S. Rahmawati. 2024. Dampak alih fungsi lahan perkebunan karet ke perkebunan kelapa sawit bagi kesejahteraan masyarakat di Desa Sihopuk Baru Kecamatan Halongonan Timur Kabupaten Padang Lawas Utara. Agroforetech. 2(2): 721–731.

Harahap, F. S., J. Purba, dan A. Rauf. 2021. Hubungan curah hujan dengan pola ketersediaan air tanah terhadap produksi kelapa sawit (*Elaeis guineensis* Jacq.) di dataran tinggi. Agrikultura. 32(1): 37-42.

Hasputri, R., Sudradjat, and Sugiyanta. 2017. The roles of organic and NPK compound fertilizers for four year old mature oil palm (*Elaeis guineensis* Jacq). International Journal of Sciences: Basic and Applied Research (IJSBAR). 36(1): 213–225.

UNIVERSITAS
GADJAH MADA
**Evaluasi Manajemen Produksi Kelapa Sawit (Elaeis guineensis Jacq.) Tahun Tanam 2002 Periode Sebelum
dan Sesudah Kerja Sama Operasional di Kebun Cikasungka PTPN IV Bogor**
Teodore Bernard Limbong, Eka Tarwaca Susila Putra, S.P., M.P., Ph.D.; Dr. Panjisakti Basunanda, S.P., M.P.
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

Idris, I., R. Mayerni, dan Warnita. 2020. Karakterisasi morfologi tanaman kelapa sawit (*Elaeis guineensis* Jacq.) di kebun binaan PPKS Kabupaten Dharmasraya. Jurnal Riset Perkebunan. 1(1): 45-53.

Iqbal, J., Z. Yao, S. T. Raza, H. Iqbal, and B. Zhu. 2025. Long-term nitrogen fertilization increases soil organic carbon and wheat yields on purple soil in China. Plants. 14(18): 1-16.

Jazuli, N. A., A. Kamu, K. P. Chong, D. Gabda, A. Hassan, I. A. Seman, and C. M. Ho. 2022. A review of factors affecting *Ganoderma* basal stem rot disease progress in oil palm. Plants. 11: 1-14.

Kassim, M. S. M., W. I. W. Ismail, A. R. Ramli, and S. K. Bejo. 2012. Oil palm fresh fruit bunches (FFB) growth determination system to support harvesting operation. Journal of Food, Agriculture & Environment. 10(2): 620-625.

Kholmanskiy, A., and N. Zaytseva. 2020. Dependence of chlorophyll content in leaves from light regime, electromagnetic fields and plant species. Journal of International Scientific Publications: Ecology and Safety. 14: 1-8.

Kome, G. K., and F O. Tabi. 2020. Towards sustainable oil palm plantation management: Effects of plantation age and soil parent material. Agricultural Sciences. 11(1): 54–70.

Kurniawan, S., M. D. Corre, A. L. Matson, H. Schulte-Bisping, S. R. Utami, O. van Straaten, and E. Veldkamp. 2018. Conversion of tropical forests to smallholder rubber and oil palm plantations impacts nutrient leaching losses and nutrient retention efficiency in highly weathered soils. Biogeosciences. 15(16): 5131-5154.

Legros, S., I. Mialet-Serra, J. P. Caliman, F. A. Siregar, A. Clément-Vidal, and M. Dingkuhn. 2009. Phenology and growth adjustments of oil palm (*Elaeis guineensis*) to photoperiod and climate variability. Annals of Botany. 104: 1171–1182.

Li, C., W. Shi, and M. Huang. 2023. Effects of crop rotation and topography on soil erosion and nutrient loss under natural rainfall conditions on the Chinese Loess Plateau. Land. 12(2): 1-16.

Li, Y., C. Liu, J. Zhang, H. Yang, L. Xu, Q. Wang, L. Sack, X. Wu, J. Hou, and N. He. 2018. Variation in leaf chlorophyll concentration from tropical to cold-temperate forests: Association with gross primary productivity. Ecological Indicators. 85: 383–389.

Liang, Y., E. F. Leifheit, A. Lehmann, dan M. C. Rillig. 2025. Soil organic carbon stabilization is influenced by microbial diversity and temperature. Scientific Reports. 15: 13990.

UNIVERSITAS
GADJAH MADA
**Evaluasi Manajemen Produksi Kelapa Sawit (Elaeis guineensis Jacq.) Tahun Tanam 2002 Periode Sebelum
dan Sesudah Kerja Sama Operasional di Kebun Cikasungka PTPN IV Bogor**
Teodore Bernard Limbong, Eka Tarwaca Susila Putra, S.P., M.P., Ph.D.; Dr. Panjisakti Basunanda, S.P., M.P.
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

Lim, H., M. J. Kobayashi, S. N. Marsoem, D. Irawati, A. Kosugi, T. Kondo, and N. Tani. 2023. Transcriptomic responses of oil palm (*Elaeis guineensis*) stem to waterlogging at plantation in relation to precipitation seasonality. Frontiers in Plant Science. 14: 1-14.

Litbang Penelitian Tanah (LPT). 1983. Kriteria Penilaian Sifat Kimia Tanah. Bogor: Balai Penelitian dan Pengembangan Pertanian Departemen Pertanian.

Liu, Q., L. S. Chiu, X. Hao, and C. Yang. 2021. Spatiotemporal trends and variations of the rainfall amount, intensity, and frequency in TRMM multi-satellite precipitation analysis (TMPA) data. Remote Sensing. 13(22): 1-21.

Lubis, N., M. A. Khoiri, dan R. Irawan. 2023. Pengaruh tinggi tapak timbun terhadap distribusi akar kelapa sawit (*Elaeis guineensis* Jacq.) umur 10 tahun pada lahan mineral. Jurnal Agrotek Lestari. 9(2): 188-198.

Mauliyani, E. S., A. Miru, dan N. Said. 2013. Kedudukan perjanjian kerja sama operasi (KSO) dalam hukum perusahaan di Indonesia. Hassanudin Law Journal. 2: 193-200.

Montoya, C., E. Daza, F. S. Mejía-Alvarado, A. F. Caicedo-Zambrano, I. Ayala-Díaz, R. Ruiz-Romero, and H. M. Romero. 2024. Photosynthetic performance of oil palm genotypes under drought stress. Plants. 13: 1-16.

Muhammad, I. I., S. N. A. Abdullah, H. M. Saud, N. A. Shaharuddin, and N. M. Isa. 2021. The dynamic responses of oil palm leaf and root metabolome to phosphorus deficiency. Metabolites. 11(4): 2-15.

Mukaka, M. M. 2012. Statistics corner: A guide to appropriate use of correlation coefficient in medical research. Malawi Medical Journal. 24(3): 69-71.

Murphy, B. W. 2015. Impact of soil organic matter on soil properties—a review with emphasis on Australian soils. Soil Research. 53(6): 605-635.

Murphy, D. J., K. Goggin, and R. R. M. Paterson. 2021. Oil palm in the 2020s and beyond: challenges and solutions. CABI Agriculture and Bioscience. 2(1): 1-22.

Mustafa, N., N. Ya'acob, Z. A. Latif, and A. L. Yusof. 2015. Quantification of oil palm tree leaf pigment (chlorophyll a) concentration based on their age. Jurnal Teknologi. 75(11): 129–134.

Mustikasari, N., S. D. Tarigan, S. Sabiham, dan B. Sahari. 2018. Aliran permukaan, erosi dan kehilangan hara kebun kelapa sawit Kabupaten Sorolangun Provinsi Jambi. Jurnal Ilmu Tanah dan Lingkungan. 20(2): 82–85.

Novita, S. S., S. Fachrurrozie, A. Dessy, and Maryadi. 2022. Various problems of farmers and factors influencing their decisions to convert rubber plant into oil palm in

UNIVERSITAS
GADJAH MADA
**Evaluasi Manajemen Produksi Kelapa Sawit (Elaeis guineensis Jacq.) Tahun Tanam 2002 Periode Sebelum
dan Sesudah Kerja Sama Operasional di Kebun Cikasungka PTPN IV Bogor**
Teodore Bernard Limbong, Eka Tarwaca Susila Putra, S.P., M.P., Ph.D.; Dr. Panjisakti Basunanda, S.P., M.P.
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

Maur Baru Village of Rupit District, Muratara Regency, Indonesia. RJOAS: Russian Journal of Agricultural and Socio-Economic Sciences. 7(127): 92-97.

Nurulita, Y., E. M. Adetutu, K. K. Kadali, D. Zul, A. A. Mansur, and A. S. Ball. 2015. The assessment of the impact of oil palm and rubber plantations on the biotic and abiotic properties of tropical peat swamp soil in Indonesia. International Journal of Agricultural Sustainability. 13(2): 150-166.

Okolo, C. C., E. C. Okolo, A. L. Nnadi, F. E. Obikwelu, S. E. Obalum, and C. A. Igwe. 2019. The oil palm (*Elaeis guineensis* Jacq): nature's ecological endowment to eastern Nigeria. Agro-Science. 18(3): 48-57.

Pardede, R. Z., dan F. Fathurrahman. 2024. Pengaruh pupuk ecofarming dan NPK Mutiara terhadap pertumbuhan bibit kelapa sawit di main nursery pada media gambut. Jurnal Dinamika Pertanian. 40(1): 13-28.

Pradiko, I., R. Farrasati, N. H. Darlan, H. Sumaryanto, and D. A. Thirafi. 2025. Estimation of water use efficiency (WUE) for efficient irrigation level of oil palm during the main nursery phase. Sains Tanah: Journal of Soil Science and Agroclimatology. 22(1): 220–230.

Saibani, N., A. A. Muhamed, M. F. Maliami, and R. Ahmad. 2015. Time and motion studies of manual harvesting methods for oil palm fruit bunches: A Malaysian case study. Jurnal Teknologi (Sciences & Engineering). 74(3): 77-83.

Santoso, K., S. M. Rochmiyati, and R. M. Hartati. 2026. Respon pertumbuhan bibit kelapa sawit di main nursery terhadap pemberian dolomit dan limbah solid pada tanah masam. Agroforetech. 4(1): 57–61.

Sayer, J., J. Ghazoul, P. Nelson, and A. K. Boedhihartono. 2012. Oil palm expansion transforms tropical landscapes and livelihoods. Global Food Security. 1(2): 114-119.

Sujoko, A. 2020. Teori dan praktik berkontrak dengan penyedia kerja sama operasi (KSO) dalam pengadaan barang/jasa pemerintah. Administrative Law and Governance Journal. 3(1): 35-53.

Swaray, S., M. D. Amiruddin, M. Y. Rafii, S. Jamian, M. F. Ismail, M. Jalloh, M. Marjuni, M. M. Mohamad, and O. Yusuff. 2020. Influence of parental dura and pisifera genetic origins on oil palm fruit set ratio and yield components in their D× P Progenies. Agronomy. 10(11): 1-30.

Syafrinal, M. A. Khoiri, G. Juliano, A. Perdana, and M. T. L. Hakim. 2025. Effect of residual frond number and NPK fertilization on yield components of oil palm (*Elaeis guineensis* Jacq.). Australian Journal of Crop Science. 19(10): 1050–1056.

UNIVERSITAS GADJAH MADA
**Evaluasi Manajemen Produksi Kelapa Sawit (Elaeis guineensis Jacq.) Tahun Tanam 2002 Periode Sebelum dan Sesudah Kerja Sama Operasional di Kebun Cikasungka PTPN IV Bogor**
Teodore Bernard Limbong, Eka Tarwaca Susila Putra, S.P., M.P., Ph.D.; Dr. Panjisakti Basunanda, S.P., M.P.
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

Syamsafitri, S., I. Gunawan, R. D. H. Rambe, M. Dalimunthe, and N. Nurhayati. 2023. Conversion of rubber land into palm oil and its effect on production in North Sumatra. Jurnal Penelitian Pendidikan IPA. 9(3): 1503-1511.

Ugot, H., E. Syahputra, dan R. Rahmidayani. 2022. Keefektifan herbisida IPA-Glifosat (480 g/l) dalam mengendalikan gulma pada budidaya kelapa sawit TBM. Perkebunan dan Lahan Tropika. 12(2): 74-85.

United States Department of Agriculture (USDA) Foreign Agricultural Service. 2025. Production, Supply and Distribution (PSD) Online Database: Oilseed, Palm Oil. <https://www.fas.usda.gov/data/production/commodity/4243000>. Diakses 4 November 2025.

Utami, S. R., S. Kurniawan, C. Agustina, and M. D. Corre. 2021. Soil macroporosity, physical properties and nutrient leaching after forest conversion to rubber and oil palm plantation in an Acrisol of Jambi, Indonesia. Journal of Degraded and Mining Lands Management. 9(1): 3155-3163.

Wang, L., Y. Li, J. Wu, Z. An, L. Suo, J. Ding, S. Li, D. Wei, and L. Jin. 2023. Effects of the rainfall intensity and slope gradient on soil erosion and nitrogen loss on the sloping fields of Miyun Reservoir. Plants. 12(3): 1-15.

Wardhani, A., dan Armaini. 2015. Teknis budidaya dan produktivitas tanaman kelapa sawit (*Elaeis guineensis* Jacq.) di lahan gambut bantuan Pemerintah Kabupaten Rokan Hilir dan Kabupaten Siak. JOM Faperta. 2(1): 1–15.

Widyastuti, D. A., dan A. Kurniawan. 2018. Pengendalian gulma pada tanaman menghasilkan kelapa sawit (*Elaeis gueneensis* Jack.) di PT Kharisma Alam Persada Kabupaten Tapin. Agrisains: Jurnal Budidaya Tanaman Perkebunan Politeknik Hasnur. 4(1): 21–26.

Woittiez, L. S., M. T. van Wijk, M. Slingerland, M. van Noordwijk, and K. E. Giller. 2017. Yield gaps in oil palm: A quantitative review of contributing factors. European Journal of Agronomy. 83: 57–77.

Yabani, Y., R. A. Kuswardani, A. Susanto, and S. Sihotang. 2024. Study on the production of superior seed bunches of oil palm (*Elaeis guineensis* Jacq.) (*Case study: Indonesian Oil Palm Research Institute-PPKS Marihat Unit*). Jurnal Pembelajaran dan Biologi Nukleus. 10(2): 693–708.

Yahya, Z., A. Husin, J. Talib, J. Othman, O. H. Ahmed, and M. B. Jalloh. 2010. Soil compaction and oil palm (*Elaeis guineensis*) yield in a clay textured soil. American Journal of Agricultural and Biological Sciences. 5(1): 15-19.

Yaman, W., H. Susanto, Sugiatno, dan H. Pujisiswanto. 2021. Efikasi herbisida Ispropilamina Glifosat 240 G L-1 terhadap pertumbuhan gulma di perkebunan kelapa sawit (*Elaeis guineensis* Jacq.) tanaman menghasilkan. Inovasi Pembangunan: Jurnal Kelitbangan. 9(2): 189-189.

UNIVERSITAS
GADJAH MADA
**Evaluasi Manajemen Produksi Kelapa Sawit (Elaeis guineensis Jacq.) Tahun Tanam 2002 Periode Sebelum
dan Sesudah Kerja Sama Operasional di Kebun Cikasungka PTPN IV Bogor**
Teodore Bernard Limbong, Eka Tarwaca Susila Putra, S.P., M.P., Ph.D.; Dr. Panjisakti Basunanda, S.P., M.P.
**Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/**

Yudistina, V., M. Santoso, dan N. Aini. 2017. Hubungan antara diameter batang dengan umur tanaman terhadap pertumbuhan dan hasil tanaman kelapa sawit. Buana sains. 17(1): 43-48.

Yulianto, A. W., S. Sarman, dan E. I. Swari. 2024. Pengaruh pemberian kompos pelepah kelapa sawir dan pupuk NPKMg terhadap pertumbuhan bibit kelapa sawit (*Elaeis guineensis* Jacq.) di pembibitan utama. Jurnal Agroecotania: Publikasi Nasional Ilmu Budidaya Pertanian. 7(1): 29-45.