

## DAFTAR PUSTAKA

- Adiwiganda, R., A. D. Koedadiri, dan Z. P. (1993). Karakterisasi Tanah Spodosol pada Formasi Geologi Minas (Qpmi). *Buletin PPKS, Vol. 1 (2)*, 163–173.
- Ariyanti, M., Yahya, S., Murtalaksono, K., Suwanto, S., & Siregar, H. H. (2016a). Pengaruh tanaman penutup tanah *Nephrolepis biserrata* dan teras gulud terhadap aliran permukaan dan pertumbuhan kelapa sawit (*Elaeis guineensis* Jacq.). *Kultivasi*, 15(2), 121–127. <https://doi.org/10.24198/kultivasi.v15i2.11889>
- Ariyanti, M., Yahya, S., Murtalaksono, K., Suwanto, & Siregar, H. H. (2015). Study of the Growth of *Nephrolepis biserrata* Kuntze and Its Utilization as Cover Crop Under Mature Oil Palm Plantation. *IJSBAR*, 4531, 325–333.
- Ariyanti, M., Yahya, S., Murtalaksono, K., Suwanto, & Siregar, H. H. (2016b). Water Balance in Oil Palm Plantation with Ridge Terrace and *Nephrolepis biserrata* as Cover Crop. *Journal of Tropical Crop Science*, 3(2), 35–41. <https://tinyurl.com/yyv2mtl7>
- Azeem, B., Kushaari, K., Man, Z. B., Basit, A., & Thanh, T. H. (2014). Review on materials & methods to produce controlled release coated urea fertilizer. *Journal of Controlled Release*, 181(1), 11–21. <https://doi.org/10.1016/j.jconrel.2014.02.020>
- Bakar, R. A., Darus, S. Z., Kulaseharan, S., & Jamaluddin, N. (2011). Effects of ten year application of empty fruit bunches in an oil palm plantation on soil chemical properties. *Nutrient Cycling in Agroecosystems*, 89(3), 341–349. <https://doi.org/10.1007/s10705-010-9398-9>
- Caliman, J. P., Martha, B., & Saletes, S. (2001). Dynamics of Nutrient Release from Empty Fruit Bunches in Field Conditions and Soil Characteristics Changes. *Proceedings of the 2001 PIPOC International Palm Oil Congress. MPOB, Bangi*, 550–556.
- Carr, M. K. V. (2011a). THE water relations and irrigation requirements of oil palm (*Elaeis guineensis*): A review. *Experimental Agriculture*, 47(4), 629–652. <https://doi.org/10.1017/S0014479711000494>
- Carr, M. K. V. (2011b). The Water Relations And Irrigation Requirements Of Oil Palm ( *Elaeis Guineensis* ): A Review. *Experimental Agriculture*, 47(4), 629–652. <https://doi.org/10.1017/S0014479711000494>
- Carron, M. P., Auriac, Q., Snoeck, D., Villenave, C., Blanchart, E., Ribeyre, F., Marichal, R., Darminto, M., & Caliman, J. P. (2015). Spatial heterogeneity of soil quality around mature oil palms receiving mineral fertilization. *European Journal of Soil Biology*, 66, 24–31. <https://doi.org/10.1016/j.ejsobi.2014.11.005>

- Chaves, M. M., Flexas, J., & Pinheiro, C. (2018). *Photosynthesis under drought and salt stress : regulation mechanisms from whole plant to cell*. June, 551–560. <https://doi.org/10.1093/aob/mcn125>
- Chaves, M. M., Pereira, J. S., Maroco, J., Rodrigues, M. L., Ricardo, C. P. P., Osório, M. L., Carvalho, I., Faria, T., & Pinheiro, C. (2002). How plants cope with water stress in the field. Photosynthesis and growth. *Annals of Botany*, 89(SPEC. ISS.), 907–916. <https://doi.org/10.1093/aob/mcf105>
- Chiew, L. K., & Rahman Zaharah, A. (2002). The Effects of Oil Palm Empty Fruit Bunches on Oil Palm Nutrition and Yield, and Soil Chemical Properties. *Journal of Oil Palm Research*, 14(2), 1–9.
- Combres, J.-C., Pallas., B., Rouan., L., Mialet-Serra, I., Caliman, J.-P., Braconnier, S., And, J.-C. S., & Dingkuhn, M. (2013). Simulation of Inflorescence Dynamics in Oil Palm and Estimation of Environment-Sensitive Phenological Phases : a Model Based Analysis. *Functional Plant Biology*, 40(NOVEMBER 2012), 263–279. <https://doi.org/10.1071/FP12133>
- Corley, R. (1976). Inflorescence Abortion and Sex Differentiation. In *Oil Palm Research. Dev Crop Sci, No 1* (pp. 37–54). : Elsevier.
- Corley, R. H. V., & Tinker, P. B. (2015). *The Oil Palm 5th Edition*. Wiley Blackwell. UK. <https://doi.org/10.1002/9781118953297>
- Corley, R. H. V., & Tinker, P. B. (2016). The Oil Palm: Fifth Edition. In *The Oil Palm: Fifth Edition* (Fifth Edit). Blackwell Science Ltd. <https://doi.org/10.1002/9781118953297>
- Cros, D., Flori, A., Nodichao, L., Omoré, A., & Nouy, B. (2013). Differential Response to Water Balance and Bunch Load Generates Diversity of Bunch Production Profiles Among Oil Palm Crosses (*Elaeis guineensis* Jacq.). *Tropical Plant Biology*, 6(1), 26–36. <https://doi.org/10.1007/s12042-013-9116-2>
- da Silva, E. C., Nogueira, R. J. M. C., da Silva, M. A., & Albuquerque, M. (2011). Drought Stress and Plant Nutrition. *Plant Stress*, 5(1), 32–41. <https://doi.org/10.1039/b806685j> [doi]
- Darmawijaya, M. I. (2013). *Klasifikasi Tanah*. Gadjah Mada University Press.
- Ditjenbun. (2016). Statistik Kelapa Sawit Indonesia. In *Badan Pusat Statistik Indonesia*. Badan Pusat Statistik Indonesia.
- Ditjenbun. (2017). *Indonesian Oil Palm Statistics*. Badan Pusat Statistik Indonesia.
- Farooq, M., Wahid, A., Kobayashi, N., & S.M.A. Fujita, D. B. (2009). Plant drought stress : effects , mechanisms and management To cite this version : Review

- article. *Agronomy for Sustainable Development*, 29(1), 185–212. <https://doi.org/10.1051/agro:2008021>. Fundamental, P. (2016). *Etiologi Penyakit Patah Pelepah ( Sengkleh )*
- Goh, K. J., Wong, C. K., & Ng, P. H. C. (2016). Oil Palm. In *Encyclopedia of Applied Plant Sciences* (Vol. 3, pp. 382–390). <https://doi.org/10.1016/B978-0-12-394807-6.00176-3>
- Gomes, F. P., & Prado, C. H. B. A. (2007). Ecophysiology of coconut palm under water stress. In *Brazilian Journal of Plant Physiology* (Vol. 19, Issue 4, pp. 377–391). <https://doi.org/10.1590/S1677-04202007000400008>
- Handa, I. T., Aerts, R., Berendse, F., Berg, M. P., Bruder, A., Butenschoten, O., Chauvet, E., Gessner, M. O., Jabiol, J., Makkonen, M., McKie, B. G., Malmqvist, B., Peeters, E. T. H. M., Scheu, S., Schmid, B., Van Ruijven, J., Vos, V. C. A., & Hättenschwiler, S. (2014). Consequences of Biodiversity Loss for Litter Decomposition Across Biomes. *Nature*, 509(7499), 218–221. <https://doi.org/10.1038/nature13247>
- Henson, I. E., & Chang, K. C. (2000). Oil palm productivity and its component processes. *Advances in Oil Palm Research*, 1, 97–145.
- Henson, I. E., Yahya, Z., Md Noor, M. R., Harun, M. H., & Mohammed, A. T. (2007). Predicting Soil Water Status , Evapotranspiration , Growth and Yield of Young Oil Palm in a Seasonally Dry Region of Malaysia. *Journal of Oil Palm Research*, 19(October 2015), 398–415.
- Henson, IAN E, & Dolmat, M. T. (2004). *Seasonal Variation In Yield And Developmental Processes In An Oil Palm Density Trial On A Peat Soil: 2. Bunch Weight Components*. 16(2), 106–120.
- Ho, S. Y., Wasli, M. E. Bin, & Perumal, M. (2019). Evaluation of Physicochemical Properties of Sandy-Textured Soils under Smallholder Agricultural Land Use Practices in Sarawak, East Malaysia. *Applied and Environmental Soil Science*, 2019. <https://doi.org/10.1155/2019/7685451>
- Kasno, a, & Subardja, D. (2010). Soil Fertility and Nutrient Management on Spodosol for Oil Palm. *Agrivita*, 32(98), 287–294.
- Khatun, R., Reza, M. I. H., Moniruzzaman, M., & Yaakob, Z. (2017). Sustainable oil palm industry: The possibilities. *Renewable and Sustainable Energy Reviews*, 76 (December 2016), 608–619. <https://doi.org/10.1016/j.rser.2017.03.077>
- Kheong, L. V., Rahman, Z. A., Musa, M. H., & Hussein, A. (2010). Empty fruit bunch application and oil palm root proliferation. *Journal of Oil Palm Research*, 22(APRIL), 750–757.

- Koedadiri, A.D., R. Adiwiganda, dan Z. P. (1995). Keragaan Tanaman Kelapa Sawit (*Elaeis guineensis* Jacq) pada Tanah Typic Paleudults, Psamentic Paleudults, dan Haplorthods. *Prosiding Seminar Nasional HITI., Kongres HITI VII*.
- Krull, E. S., Skjemstad, J. O., & Baldock, J. a. (2009). Functions of Soil Organic Matter and the Effect on Soil Properties. *GRDC Final Report CSO00029*, 128.
- Legros, S., Mialet-Serra, I., Caliman, J. ., Siregar, F. A., Cle'ment-Vidal, A., & Dingkuhn, M. (2009). Phenology and Growth Adjustments of Oil Palm (*Elaeis guineensis*) to Photoperiod and Climate Variability. *Annals of Botany*, 104, 1171–1182. <https://doi.org/10.1093/aob/mcp214>
- Legros, S., Mialet-Serra, I., Clement-Vidal, A., Caliman, J. P., Siregar, F. A., Fabre, D., & Dingkuhn, M. (2009). Role of transitory carbon reserves during adjustment to climate variability and sourcesink imbalances in oil palm (*Elaeis guineensis*). *Tree Physiology*, 29(10), 1199–1211. <https://doi.org/10.1093/treephys/tpp057>
- Lipiec, J., Doussan, C., Nosalewicz, A., & Kondracka, K. (2013). *Effect of drought and heat stresses o n plant growth and yield : a review \*\**. 463–477. <https://doi.org/10.2478/intag-2013-0017>
- Magdoff, F., & Weil, R. (2004a). *Soil Organic Matter Management Strategies*. 45–66. <https://doi.org/10.1201/9780203496374.ch2>
- Magdoff, F., & Weil, R. (2004b). *Soil Organic Matter Management Strategies*. May. <https://doi.org/10.1201/9780203496374.ch2>
- Mattos, L. M., & Moretti, C. L. (2016). Oxidative Stress in Plants Under Drought Conditions and the Role of Different Enzymes. *Enzyme Engineering*, 5(1), 1–6. <https://doi.org/10.4172/2329-6674.1000136>
- Muhdan. (2015). *Warta Pusat Penelitian Kelapa Sawit, Vol 20, No. 20 Juni 2015*. 20(20), 1–11.
- Muhdan Syarovy;, Ginting;, E. N., Dimas, W., & Heri, S. (2015). OPTIMALISASI PERTUMBUHAN TANAMAN KELAPA SAWIT DI TANAH SPodosol. *Pertanian Tropik*, 2(2), 340–347.
- Murtalaksono, K., & Darmosarkoro, H. H. S. W. (2007). ( *WATER BALANCE MODEL IN OIL PALM PLANTATION* ) atau pada musim kemarau yang pada. 15(1).
- Murtalaksono, K., Siregar, H. H., & Darmosarkoro, W. (2007). Model Neraca Air di Perkebunan Kelapa Sawit. *Jurnal Penelitian Kelapa Sawit*, 15(1), 21–35.
- Ng, P. H. C., Gan, H. H., & Goh, K. J. (2011). Soil nutrient changes in Ultisols



- under oil palm in Johor, Malaysia. *Journal of Oil Palm and the Environment*, 2(10), 93–104. <https://doi.org/10.5366/jope.2011.10>
- Nielsen, U. N., Ayres, E., Wall, D. H., & Bardgett, R. D. (2011). Soil Biodiversity and Carbon Cycling: A Review and Synthesis of Studies Examining Diversity-Function Relationships. *European Journal of Soil Science*, 62(1), 105–116. <https://doi.org/10.1111/j.1365-2389.2010.01314.x>
- Othman, H., Mohammed, A. T., Harun, M. H., Darus, F. M., & Mos, M. (2010). Best management practices for oil palm planting on peat: optimum groundwater table. *MPOB Information Series*. <http://palmoilis.mpob.gov.my/publications/TOT/TT-472.pdf>
- Pahan, I. (2015). *Panduan Teknis Budidaya Kelapa Sawit*. Swadaya.
- Paramanathan, S. (2011). Managing Sandy Soils of the Tropics for Oil Palm Cultivation. *Agronomic Principles and Practices of Oil Palm Cultivation*, M, 1–17.
- Pashkevich, M. D., Aryawan, A. A. K., Luke, S. H., Dup  rr  , N., Waters, H. S., Caliman, J. P., Naim, M., & Turner, E. C. (2021). Assessing the effects of oil palm replanting on arthropod biodiversity. *Journal of Applied Ecology*, 58(1), 27–43. <https://doi.org/10.1111/1365-2664.13749>
- Passioura, J. (2006). Increasing crop productivity when water is scarce  from breeding to field management. *Agricultural Water Management*, 80(1–3), 176–196. <https://doi.org/10.1016/j.agwat.2005.07.012>
- Paterson, R. R. M., Kumar, L., Taylor, S., & Lima, N. (2015). Future climate effects on suitability for growth of oil palms in Malaysia and Indonesia. *Scientific Reports*, 5, 1–11. <https://doi.org/10.1038/srep14457>
- Paterson, R. R. M., & Lima, N. (2018a). Climate change affecting oil palm agronomy, and oil palm cultivation increasing climate change, require amelioration. *Ecology and Evolution*, 8(1), 452–461. <https://doi.org/10.1002/ece3.3610>
- Paterson, R. R. M., & Lima, N. (2018b). Climate change Affecting Oil Palm Agronomy, and Oil Palm Cultivation Increasing Climate Change, Require Amelioration. *Ecology and Evolution*, 8(1), 452–461. <https://doi.org/10.1002/ece3.3610>
- Pirker, J., Mosnier, A., Kraxner, F., Havlik, P., & Obersteiner, M. (2016). What are the limits to oil palm expansion? *Global Environmental Change*, 40, 73–81. <https://doi.org/10.1016/j.gloenvcha.2016.06.007>
- Rachman Sutanto. (2005). *Dasar-Dasar Ilmu Tanah, Konsep dan Kenyataan*. Kanisius.

- Ramirez-ortega, B. X.-C. F. A., Ruiz-Medrano, & Roberto, L. F.-E. (2010). Drought Tolerance in Crop Plants. *American Journal of Plant Physiology*.
- Rhebergen, T., Zingore, S., Giller, K. E., Frimpong, C. A., Acheampong, K., Ohipeni, F. T., Panyin, E. K., Zutah, V., & Fairhurst, T. (2020). Closing yield gaps in oil palm production systems in Ghana through Best Management Practices. *European Journal of Agronomy*, 115(April 2019), 126011. <https://doi.org/10.1016/j.eja.2020.126011>
- Rivera-Mendes, Y. D., Cuenca, J. C., & Romero, H. M. (2016). Physiological responses of oil palm (*Elaeis guineensis* Jacq.) seedlings under different water soil conditions. *Agronomía Colombiana*, 34(2), 163. <https://doi.org/10.15446/agron.colomb.v34n2.55568>
- Santoso, H. S., E. S. Sutarta, W. D. (2013). Pengelolaan Tanah dan Penggunaan Pupuk NPK Palmo pada Tanah Spodosols di PT Bumitama Gunajaya Agro. *Pusat Penelitian Kelapa Sawit. Medan*.
- Saptiningsih, E.-. (2019). Peningkatan Produktivitas Tanah Pasir untuk Pertumbuhan Tanaman Kedelai dengan Inokulasi Mikorhiza dan Rhizobium. *Bioma : Berkala Ilmiah Biologi*, 9(2), 58. <https://doi.org/10.14710/bioma.9.2.58-61>
- Seki, M., Umezawa, T., Urano, K., & Shinozaki, K. (2007). Regulatory metabolic networks in drought stress responses. *Current Opinion in Plant Biology*, 10(3), 296–302. <https://doi.org/10.1016/j.pbi.2007.04.014>
- Simeh, M. A. (2005). Oil Palm Planting in Marginal Soils: Selected Cases. *Oil Palm Bulletin*, 50(May), 24–30. <http://palmoilis.mpob.gov.my/publications/OPB/opb50-arif.pdf>
- Singh, R. P., Ibrahim, M. H., Esa, N., & Iliyana, M. S. (2010). Composting of waste from palm oil mill: A sustainable waste management practice. *Reviews in Environmental Science and Biotechnology*, 9(4), 331–344. <https://doi.org/10.1007/s11157-010-9199-2>
- Sinulingga, M., & Darmanti, S. (2007). Kemampuan Mengikat Air oleh Tanah Pasir yang Diperlakukan dengan Tepung Rumput Laut *Gracilaria verrucosa*. *Jurnal Anatomi Fisiologi*, 15(2), 32–38.
- Suharta, N., & Yatno, E. (2009). Karakteristik Spodosols, Kendala dan Potensi Penggunaannya. *Jurnal Sumberdaya Lahan*, 3(1), 1–14.
- Syarovy, M., Ginting, E. N., Wiratmoko, D., & Santoso, H. (2015). *Oil Palm Growth Optimallization in the Spodosols*. November 2016.
- Taiz, L., & Zeiger, E. (n.d.). *Lincoln Taiz.to user*

- Tao, H. H., Donough, C., Gerendas, J., Hoffmann, M. P., Cahyo, A., Sugianto, H., Wandri, R., Rahim, G. A., Fisher, M., Rötter, R. P., Dittert, K., Pardon, L., & Oberthür, T. (2018). Fertilizer management effects on oil palm yield and nutrient use efficiency on sandy soils with limited water supply in Central Kalimantan. *Nutrient Cycling in Agroecosystems*, 112(3), 317–333. <https://doi.org/10.1007/s10705-018-9948-0>
- Turner, P. D. (1974). *Oil palm cultivation and management / P.D. Turner and R.A. Gillbanks*. 235–245.
- Verheye, W. (2010). Growth and Production of Oil Palm. *Soils, Plant Growth and Crop Production - Vol. II*, 10. <https://doi.org/10.1017/CBO9781107415324.004>
- Weng, C. K. (2001). Soils Management for Sustainable Oil Palm Cultivation. *Advances in Oil Palm Research*, 1, 371–410.
- Wiratmoko, N. H. Darlan, Winarna, dan A. R. P. 2015. (2015). Wiratmoko, N. H. Darlan, Winarna, dan A. R. Purba. *Teknologi Pengelolaan Lahan Sub Optimal Untuk Optimalisasi Produksi Kelapa Sawit. Diampaiakan Pada Seminar Optimalisasi Pemanfaatan Lahan Marginal Untuk Usaha Perkebunan. Surabaya*.
- Woittiez, L. S., Wijk, M. T. Van, Slingerland, M., Noordwijk, M. Van, & Giller, K. E. (2017). Yield gaps in oil palm: A quantitative review of contributing factors. *European Journal of Agronomy*, 83, 57–77. <https://doi.org/10.1016/j.eja.2016.11.002>
- Wulandari, N., Muchtadi, T. R., Budijanto, S., & Sugiyono. (2011). Sifat Fisik Minyak Kasar dan Korelasinya dengan Atribut Mutu. *Jurnal Teknologi Dan Industri Pangan*, XXII(2), 177–183.
- Yamada, N., Cha-Um, S., Kageyama, H., Promden, W., Tanaka, Y., Kirdmanee, C., & Takabe, T. (2011). Isolation and characterization of proline/betaine transporter gene from oil palm. *Tree Physiology*, 31(4), 462–468. <https://doi.org/10.1093/treephys/tpr017>

