

DAFTAR PUSTAKA

- [Ditjenbun] Direktorat Jenderal Perkebunan. (2019). Statistik Perkebunan Indonesia 2018-2020 Kopi. Sekretariat Direktorat Jenderal Perkebunan. Kementerian Pertanian.
- [Ditjenbun] Direktorat Jenderal Perkebunan (2014). Pedoman Teknis Budidaya Kopi.
- [USDA] United States Department of Agriculture. (2021). *Coffee: World Markets and Trade. Foreign Agricultural Service/USDA*.
- A. R. Baso RL, (2018), “Analisis Daya Saing Kopi Indonesia,” *J. Ekon. Pertan. Dan Agribisnis*, Vol. 2, No. 1, Pp. 1–9, 2018.
- A. Styagung, (2018), “Pemangkasan Tanaman Kopi,” Probolinggo Balai Penyul. Pertan. Kec. Tiris Dinas Ketahanan Pangan Dan Pertan. Kabupaten, [Online]. Available: <https://dkpp.probolinggokab.go.id/wp-content/uploads/2018/12/6.pemangkasan-kopi.pdf>.
- Aerts, R., Chapin III, F. S., & Diaz, S. (2013). *The Plant Traits That Drive Ecosystems: Evidence From Three Continents. Journal Of Vegetation Science*, 24 (3), 565–573. <https://doi.org/10.1111/jvs.12007>.
- Arcila-Pulgarín, J., Buhr, L., Bleiholder, H., Hack, H., Meier, U., & Wicke, H. (2013). *Application Of The Extended Bbch Scale For The Description Of The Growth Stages Of Coffee (Coffea spp.). Annals Of Applied Biology*, 141(1), 19-27.
- Arifin, Zainal, Wicaksono, Kurniawan Yoga, & Suryanto, Agus. (2020). *Nutrient Cycling In Swietenia Macrophylla-Shaded Coffee Systems: Impacts On Soil Fertility And Coffee Yield. Agroforestry Systems*, 94(5), 1829–1841. <https://doi.org/10.1007/s10457-020-00505-6>.
- Baliza, D. P., Cunha, R. L. Da, Castro, E. M. De, Paulo, J., Alves, R., Barbosa, D., Pires, M. F., & Gomes, R. A. (2012). *Trocas Gasosas E Características Estruturais Adaptativas De Cafeeiros Cultivados Em Diferentes Níveis De Radiação*. <http://www.sbicafe.ufv.br/handle/123456789/7921>.
- Başak, H., Küden, A., & İkinci, A. (2018). *Effects Of Different Pruning Types On Tree Growth, Yield And Fruit Quality In 'Uzun' Pistachio. Acta Horticulturae*, 1219, 131-138. <https://doi.org/10.17660/ActaHortic.2018.1219.22>.

- Beer, J., Muschler, R., Kass, D., & Somarriba, E. (2020). *Shade Management In Coffee And Cacao Plantations. Agroforestry Systems*, 94(5), 1391–1403. <https://doi.org/10.1007/S10457-020-00536-Z>.
- Bittenbender, H.C., & Smith, V.E. (2018). *Growing Coffee In Hawaii. College Of Tropical Agriculture And Human Resources, University Of Hawaii At Manoa.*
- Bote, A. D., & Jan, V. (2016). *Branch Growth Dynamics, Flowering, And Fruit Production Of Arabica Coffee Trees In Response To Biannual Bearing. Trees*, 30(4), 1275–1285. <https://doi.org/10.1007/s00468-016-1367-8>.
- Bote, A. D., Struik, P. C., & Jan, V. (2017). *Effects Of Light Intensity On Growth And Production Of Arabica Coffee Grown By The Branched System. International Journal of Biometeorology*, 61(8), 1447–1456. <https://doi.org/10.1007/s00484-017-1320-6>.
- Bustan, A., Avni, A., Lavee, S., Zipori, I., Yeselson, Y., Schaffer, A., & Riov, J. (2011). *Role Of Carbohydrate Reserves In Yield Production Of Intensively Cultivated Olive (*Olea europaea L.*) Trees. Tree Physiology*, 31(5), 519–530. <https://doi.org/10.1093/treephys/tpr036>.
- Camargo, M. B. P. (2010). *The Impact Of Climatic Variability And Climate Change On Coffee Production. International Coffee Organization (ICO).*
- Campanha, M. M., Santinato, R., & Fernandes, A. L. T. (2012). *Desempenho De Cafeeiros Arábica Submetidos A Diferentes Sistemas De Poda E Manejo De Plantas Daninhas. Coffee Science*, 7(3), 278–288.
- Campostrini, E., Yamanishi, O. K., Fahl, J. I., & Ramalho, J. C. (2016). *Coffee Tree Growth And Environmental Effects On Photosynthesis. In V. R. Preedy (Ed.), Coffee in Health and Disease Prevention* (pp. 13–23). Academic Press. <https://doi.org/10.1016/B978-0-12-409517-5.00002-9>.
- Cerda, R., Avelino, J., Harvey, C. A., Gary, C., Tixier, P., & Allinne, C. (2017). *Coffee Agroforestry Systems Capable Of Reducing Disease-Induced Yield And Economic Losses While Providing Multiple Ecosystem Services. Crop Protection*, 98, 231–241. <https://doi.org/10.1016/j.cropro.2017.04.007>.
- Chemura, A., Kutywayo, D., & Chidoko, P. (2014). *Canopy Microclimate Modification And Its Effects On Coffee Leaf Rust Incidence. Journal of Agricultural Science*, 6(11), 1–9. <https://doi.org/10.5539/jas.v6n11p1>.
- Cilas, C., Bouharmont, P., Boccaro, M., Eskes, A. B., & Baradat, P. (2011). *Characterization Of Branching In Two Coffee Cultivars (*Coffea arabica**

- L.): *Implications For Mechanized Harvesting. Trees*, 25(5), 835–841. <https://doi.org/10.1007/s00468-011-0559-5>.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, And Mixed Methods Approaches*. Sage Publications.
- Damatta, F. M. (2004). *Ecophysiological Constraints On Coffee Production*. *Brazilian Journal Of Plant Physiology*, 16(1), 1-6.
- Damatta, F. M., Avila, R. T., Cardoso, A. A., Martins, S. C. V., & Ramalho, J. C. (2019). *Physiological And Agronomic Performance of The Coffee Crop In The Context of Climate Change and Global Warming: A Review*. *Scientia Horticulturae*, 256,108579. <https://doi.org/10.1016/j.scienta.2019.108579>.
- Damatta, F. M., Avila, R. T., Cardoso, A. A., Martins, S. C. V., & Ramalho, J. C. (2018). *Physiological and Agronomic Performance of the Coffee Crop in the Context of Climate Change and Global Warming: A review*. *Journal of Agricultural and Food Chemistry*, 66(21), 5264–5274. <https://doi.org/10.1021/acs.jafc.7b04537>.
- Damatta, F.M., & Ramalho, J.D.C. (2016). *Impacts Of Drought And Temperature Stress On Coffee Physiology And Production: A Review*. *Brazilian Journal Of Plant Physiology*, 18(1), 55-81.
- Davis, A. P. (2006). *An Annotated Taxonomic Conspectus Of The Genus Coffea (Rubiaceae)*. *Botanical Journal Of The Linnean Society*, 152(4), 465-512.
- Davis, A. P., Gole, T. W., Baena, S., & Moat, J. (2012). *The Impact Of Climate Change On Indigenous Arabica Coffee (Coffea Arabica): Predicting Future Trends And Identifying Priorities*. *Plos One*, 7(11), E47981.
- Decombaix, A. (2020). *The Role of Shade Trees in Coffee Agroforestry Systems: Effects on Soil Fertility and Coffee Production [Thesis Magister, Wageningen University & Research]*. Wageningen University Student Repository. <https://edepot.wur.nl/525797>.
- Departemen Pertanian RI. (2020). Pedoman Teknis Budidaya Tanaman Kopi. Jakarta: Direktorat Jenderal Perkebunan.
- Fathurrohmah A. (2014). Pengaruh Pohon Penaung Leda (*Eucalyptus Deglupta Bl.*) dan Suren (*Toona Sureni Merr.*) Terhadap Pertumbuhan dan Produksi Kopi (*Coffea Arabica L.*). Bogor : IPB Press.
- Ferdiansyah, I., K.P. Wicaksono. (2019). Respon Pertumbuhan dan Produksi Tanaman Kopi (*Coffea arabica*) Pada Tingkat Manajemen Budidaya yang

- Berbeda Dalam Sistem Agroforestri. *Jurnal Produksi Tanaman*. 7(11):2053-2060.
- Food And Agriculture Organization (FAO). (2021). *Climate-Smart Coffee Production*. FAO.
- Gonzales, R., Arévalo, L., & Solis, R. (2022). *Shade Management And Pruning In Two Coffee Varieties Vs. Plant Growth And Leaf Rust In The Peruvian Amazon*. *Bioagro*, 35(1), 45–56. <https://doi.org/10.51372/bioagro351.6>.
- Haryanto, Bambang. (2019). "Pelatihan Budidaya Berkelaanjutan (*Good Agriculture Practices-GAP*) dan Pascapanen (*Post-Harvest*) Kopi Arabika". Jakarta: Badan Penyuluhan dan Pengembangan SDM Pertanian, Kementerian Pertanian Republik Indonesia Bekerjasama Dengan Scopi, GCP, dan ICCRI.
- Hidayat, T., Sari, R., & Prasetyo, A. (2021). "Pengaruh Pemangkasan Terhadap Pertumbuhan Dan Hasil Tanaman Kopi Arabika." *Jurnal Agronomi Indonesia*, 49(2), 123-130.
- ICCRI. (2018). Buku Panduan Klon Kopi Robusta Unggul.
- ICO. (2021). *Coffee Development Report: Robusta Market Trends*.
- International Coffee Organization (ICO). (2023). *Coffee Growing Guide*. Diakses dari <https://www.Ico.Org>.
- International Organization For Standardization. (2018). ISO 9060:2018 *Solar Energy — Specification And Classification Of Instruments For Measuring Hemispherical Solar And Direct Solar Radiation*.
- Iskandar, M.J. (2018). *Performance Of Robusta Coffee Clones In Different Pruning Systems*. *Journal Of Coffee Research*, 12(2), 45-60.
- Jezeer, R. E., Santos, M. J., Verweij, P. A., Boot, R. G. A., & Clough, Y. (2018). *Benefits for Multiple Ecosystem Services in Peruvian Coffee Agroforestry Systems Without Reducing Yield*. *Ecosystem Services*, 30, 50–61. <https://doi.org/10.1016/j.ecoser.2018.01.006>.
- Jones, H. G. (2013). *Plants And Microclimate: A Quantitative Approach To Environmental Plant Physiology* (3rd ed.). Cambridge University Press.
- Karmawati, E., Mahmud, Z., Syakir, M., Munarso, J., Ardana, I., K., Rubiyo (2010). Budidaya dan Pasca Panen Kakao. Pusat Penelitian dan Pengembangan Perkebunan. Bogor.

- Kusuma, W. (2014). Kandungan Nitrogen (N), Fosfor (P) Dan Kalium (K) Limbah Baglog Jamur Tiram (*Pleurotus ostreatus*) Dan Jamur Kuping (*Auricularia auricular*) Guna Pemanfaatannya Sebagai Pupuk. (Unpublished Undergraduate Thesis). Fakultas Peternakan Universitas Hasanuddin.
- Lacointe, A. (2013). *Carbon Allocation Among Tree Organs: A Review Of Basic Processes And Representation In Functional-structural Tree Models*. *Annals of Forest Science*, 70(7), 687-706. <https://doi.org/10.1007/s13595-012-0269-1>.
- Leroy, T., Montagnon, C., Charrier, A., & Eskes, A. B. (2014) *Reciprocal Recurrent Selection Applied To Coffea Canephora Pierre. I. Characterization And Evaluation Of Breeding Populations And Value Of Intergroup Hybrids*. *Euphytica*, 67(1), 113-125.
- Lewin, B., Giovannucci, D., & Varangis, P. (2013). *Coffee Markets: New Paradigms In Global Supply and Demand*. World Bank Agriculture and Rural Development Discussion Paper 3.
- Lin, B. B. (2010). *The Role of Agroforestry in Reducing Water Loss Through Soil Evaporation and Crop Transpiration in Coffee Agroecosystems*. *Agricultural and Forest Meteorology*, 150(4), 510-518. <https://doi.org/10.1016/j.agrformet.2009.11.010>.
- Martins, L. D., Tomaz, M. A., Lidon, F. C., DaMatta, F. M., & Ramalho, J. C. (2014). *Combined Effects Of Elevated [CO₂] And High Temperature On Growth And Photosynthesis Of Coffee Genotypes*. *Journal of Agronomy and Crop Science*, 200(4), 252–262. <https://doi.org/10.1111/jac.12067>.
- Mawardi, S., Hulupi, R., & Misnawi. (2018). Karakterisasi Morfologi Dan Agronomi Galur Harapan Kopi Robusta Di Kebun Penelitian Kaliwining [Morphological And Agronomic Characterization Of Promising Robusta Coffee Lines At Kaliwining Research Garden]. *Pelita Perkebunan*, 34(3), 149–164. <https://doi.org/10.22302/iccri.jur.pelitaperkebunan.2018.v34.i3.342>.
- Medeiros, A. N., Oliveira, L. S., Santos, M. G., & Willadino, L. (2017). *Pruning Intensity And Season Affect Growth And Physiology Of Neem (Azadirachta indica)*. *Journal of Forestry Research*, 28(3), 489-497. <https://doi.org/10.1007/s11676-016-0330-2>.
- Mengistu, B. (2023). *Shade Tree And Coffee Production Agroforestry System*. *International Journal Of Agronomy And Soil Science*, 11(1), 1–12.
- Muschler, R. G. (2001). *Shade Improves Coffee Quality In A Sub-Optimal Coffee Zone Of Costa Rica*. *Agroforestry Systems*, 51(2), 131-139.

- Ogden, L. E. (2024). *How Shade Coffee Lends Conservation A Hand. Knowable Magazine*. <https://doi.org/10.1146/knowable-011824-2>.
- Pangabean, E. (2011). Buku Pintar Kopi. Surakarta: Agro Media Pustaka.
- Partelli, F. L., Vieira, H. D., Viana, A. P., Batista-Santos, P., Rodrigues, A. P., Leitão, A. E., & Ramalho, J. C. (2014). *Low Temperature Impact On Photosynthetic Parameters Of Coffee Genotypes*. *Pesquisa Agropecuária Brasileira*, 49 (11), 877-887. <https://doi.org/10.1590/S0100-204X2014001100007>.
- Pendergrast, M. (2010). *Uncommon Grounds: The History Of Coffee And How It Transformed Our World (2nd Ed.)*. Basic Books.
- Perea-Dallos, M., Arcila-Pulgarín, J., & Jaramillo-Robledo, Á. (2016). *Growth And Production Of Coffee In Two-Stemmed And Single-Stemmed Systems In Colombia*. *Revista Facultad Nacional de Agronomía Medellín*, 69(1), 7825–7834. <https://doi.org/10.15446/rfnam.v69n1.54753>.
- Pertamina. 23 Januari (2023). Tb 192. Produk Petrokimia Pertamina Mengobati Luka Tanaman. Diakses pada 8 Mei 2024, dari https://Onesolution.Pertamina.Com/Insight/Page/Tb_192_Produk_Petrokimia_Pertamina_Mengobati_Luka_Tanaman.
- Poorter, H., Niklas, K. J., Reich, P. B., Oleksyn, J., Poot, P., & Mommer, L. (2012). *Biomass Allocation to Leaves, Stems And Roots: Meta-Analyses Of Interspecific Variation And Environmental Control*. *New Phytologist*, 193(1), 30–50. <https://doi.org/10.1111/J.1469 8137.2011.03952.X>.
- Powo (2023). *Plants Of The World Online (Kew Science)*. Coffea Canephora.
- Prastowo, B., Karmawati, E., Rubijo, Siswanto, Indrawanto C., Munarso, J., S. (2010). Budidaya dan Pasca Panen Kopi. Bogor (ID): Pusat Penelitian Perkebunan.
- Pusat Penelitian Kopi Dan Kakao Indonesia. (2019). Pedoman Budidaya Kopi Yang Baik. Jember: PPKKI.
- Randriani E., Dani, (2018), Pengenalan Varietas Unggul Kopi, Jakarta, *Indonesian Agency for Agricultural Research and Development (IAARD) Press*.
- Rodriguez, L. P. P., Santos, A. L. dos, Cavatte, P. C., Reis, E. F. dos, Dias, D. P., & DaMatta, F. M. (2016). *Growth And Photosynthetic Responses Of Coffee Seedlings To Different Light Regimes After Stumping*. *Coffee Science*, 11(3), 380-390. <https://doi.org/10.25186/cs.v11i3.1072>.

- Ronchi, C. P., Araújo, F. C. D., Almeida, W. L. D., & Silva, M. A. C. D. (2015). *Growth, Production And Vegetative Vigor Of Conilon Coffee Plants Under Different Irrigation Depths And Planting Densities. Revista Brasileira De Engenharia Agrícola E Ambiental*, 19(10), 946–952. <https://doi.org/10.1590/1807-1929/agriambi.v19n10p946-952>.
- Ronchi, C. P., DaMatta, F. M., & Batista, K. D. (2015). *Growth and Photosynthetic Responses of Juvenile Coffee Plants To Progressive Drought And Rewatering. Photosynthetica*, 53 (2), 251-260. <https://doi.org/10.1007/s11099-015-0096-3>.
- Santoso, B., NurmalaSari, I., & Supriyadi. (2020). Efektivitas Teknik *Grafting* Pada Tanaman Kopi Arabika Untuk Meningkatkan Vigor Dan Pertumbuhan. *Jurnal Agronomi Indonesia*, 48(1), 33-40.
- Santoso, Heri, Purwanto, Benito Heru, & Indradewa, Didik. (2021). *Soil Moisture Conservation And Organic Matter Accumulation Under Mahogany-Based Coffee Agroforestry. Journal Of Environmental Management*, 299, Article 113587. <https://doi.org/10.1016/j.jenvman.2021.113587>.
- Sarmiento-Soler, A., Vaast, P., Hoffmann, M. P., Jassogne, L., van Asten, P., Graefe, S., & Rötter, R. P. (2019). *Effect Of Cropping System, Shade Cover And Altitudinal Gradient On Coffee Yield Components at Mt. Elgon, Uganda. Agriculture,Ecosystems&Environment*, 285,106645. <https://doi.org/10.1016/j.agee.2019.106645>.
- Satrio Harjono, S.P, (2019), “Tanaman Penaung Komoditas Kopi”, Kementerian Pertanian, Direktorat Jenderal Perkebunan [Online]. Available: <https://ditjenbun.pertanian.go.id/tanaman-penaung-komoditas-kopi-2/>.
- Sergio, T., Francesco, S., Alessandro, M., & Bartolomeo, S. (2015). *Effect Of Pruning On Tree Growth, Yield, And Wood Properties Of Sweet Cherry (*Prunus Avium L.*) In Southern Italy. Horticultural Science (Prague)*, 42(2), 77-85. <https://doi.org/10.17221/149/2014-HORTSCI>.
- Siles, P., Harmand, J. M., & Vaast, P. (2010). *Effects of Inga Densiflora on the Microclimate of Coffee (*Coffea arabica L.*) And Overall Biomass Under Optimal Growing Conditions in Costa Rica. Agroforestry Systems*, 78(1), 269-286.
- Silva, P. E. M., Ronchi, C. P., Almeida, W. L. de, Oliveira, L. B. de, & Batista, K. D. (2021). *The Functional Divergence Of Biomass Partitioning, Carbon Gain And Water Use In Coffea Canephora In Response To The Water Supply: Implications For Breeding Aimed At Producing Of Drought-Tolerant Genotypes. Environmental and Experimental Botany*, 181, 104291. <https://doi.org/10.1016/j.envexpbot.2020.104291>.

- Smith, W. K., Vogelmann, T. C., DeLucia, E. H., Bell, D. T., & Shepherd, K. A. (2017). Leaf Form And Photosynthesis. *Bioscience*, 67(6), 544–552. <https://doi.org/10.1093/biosci/bix040>.
- Soetriono, A. S. (2010) Daya Saing dan Penguatan Revitalisasi Perkebunan J. Sos. Ekon. Pertan. 4 60–76.
- Staver, C., Guharay, F., Monterroso, D., & Muschler, R. G. (2020). *Designing Pest-Suppressive Multistrata Perennial Crop Systems: Shade-grown Coffee in Central America. Agroforestry Systems*, 94(5), 1417–1434. <https://doi.org/10.1007/s10457-018-0323-6>.
- Subantoro, R., M.A. Aziz. (2019). Teknik Pemangkasan Tanaman Kopi (*Coffea sp*) Jurnal MEDIAGRO.15(1):52-65. <https://doi.org/10.31942/md.v15i01.3070>
- Sukasman, S. (2016). Pemangkasan Tanaman Kopi. Warta Pusat Penelitian Kopi Dan Kakao, 13(1), 38-45.
- Supriono, A. (2021). "Sustainability Challenges of Robusta Clones in Indonesia." *Journal Of Tropical Agriculture*.
- Taiz, L., & Zeiger, E. (2015). *Plant Physiology And Development* (6th Ed.). Sinauer Associates.
- Tim Dinas Perkebunan. (2019). Tanaman pelindung kopi robusta. Dinas Perkebunan dan Pangan Kabupaten Badung. <https://diperpa.badungkab.go.id/Artikel/18326-tanaman-pelindung-kopi-robusta>.
- Tim Karya Tani Mandiri. 2010. Pedoman Budidaya Tanaman Kopi. Bandung (ID): Nuansa Aula.
- Valencia, G., & Arcila, J. (2018). *Efecto De La Densidad De Siembra Y Del Manejo De Arvenses En La Producción De Café. Cenicafé*, 56(1), 50-63.
- Valladares, F., Laanisto, L., Niinemets, Ü., & Zavala, M. A. (2016). *Ecological Importance Of Intraspecific Variation In Light Responses. Journal Of Ecology*, 104(5), 1243–1255. <https://doi.org/10.1111/1365-2745.12600>.
- Wahyudi, T., Misnawi, J., Sulistyowati, & Hulupi, R. (2020)."Performance of BP 234 Robusta Clone in Lowland Areas." Pelita Perkebunan, 36(2), 89–97.
- Wahyudi, T., Pujiyanto & Misnawi. (2018). Pengaruh Pemangkasan Batang Utama Terhadap Pertumbuhan Dan Produksi Tanaman Kopi Robusta. Jurnal Penelitian Pertanian Tanaman Industri, 24(2), 45-52.

- Wintgens, J. N. (Ed.). (2009). *Coffee: Growing, Processing, Sustainable Production* (2nd Ed.). Wiley-Vch.
- Wintgens, J.N. (2012). *Coffee: Growing, Processing, Sustainable Production*. Wiley-Vch, Weinheim, Germany.
- Zhang, J., Nieminen, K., Serra, J. A. A., & Helariutta, Y. (2015). *The Formation Of Wood And Its Control. Current Opinion in Plant Biology*, 23, 56-63. <https://doi.org/10.1016/j.pbi.2014.10.008>.
- Zhang, Y., Kaiser, E., Zhang, Y., Yang, Q., & Li, T. (2018). *Shade Avoidance In The Context Of Climate Change. Plant, Cell & Environment*, 41(12), 2905–2916. <https://doi.org/10.1111/pce.13432>.