

## DAFTAR PUSTAKA

- Abdoli, M. A., Golzary, A., Hosseini, A., & Sadeghi, P. (2018). *Wood Pellet Characteristics (Definition, Determination and Internal Relation)* (pp. 111–138).
- Aliah, H., Winarti, I., Iman, R. N., Setiawan, A., Safarina, R., & Sawitri, A. (2023). Influence of Sieve Size on Calorific Value and Proximate Properties of Bio-Briquette Composites. *Journal of Ecological Engineering*, 24(7), 25–34.
- American Society for Testing and Materials. 2002. *ASTM D 5468-02: Standard Test Method for Gross Calorific and Ash Value of Waste Materials*. American Society for Testing and Materials: USA.
- American Society for Testing and Materials. 2021. *ASTM D 1762-84: Analysis of Wood Charcoal*. American Society for Testing and Materials: USA.
- American Society for Testing and Materials. 2021. *ASTM D 3172-13: Standard practice for proximate analysis of coal and coke*. USA: American Society for Testing and Materials: USA.
- American Society for Testing and Materials. 2017. *ASTM D 2395-17: Standard Test Methods for Density and Specific Gravity (Relative Density) of Wood and Wood-Based Materials*. American Society for Testing and Materials: USA.
- American Society for Testing and Materials. 2017. *ASTM D 4179-11: Standard Test Method for Single Pellet Crush Strength of Formed Catalysts Shapes*. American Society for Testing and Materials: USA.
- Arslan, H., & Baykal, G. (2006). Utilization of Fly Ash as Engineering Pellet Aggregates. *Environmental Geology*, 50(5), 761–770.
- Ashizawa, M., Otake, M., Yamamoto, H., & Akisawa, A. (2022). CO<sub>2</sub> Emissions and Economy of Co-Firing Carbonized Wood Pellets at Coal-Fired Power Plants: The Case of Overseas Production of Pellets and Use in Japan. *Energies*, 15(5).
- Bartocci, P., Skreiberg, Ø., Wang, L., Song, H., Yang, H.-P., Zampilli, M., Bidini, G., & Fantozzi, F. (2019). Mechanical Aspects and Applications of Pellets Prepared from Biomass Resources. In *Production of Materials from Sustainable Biomass Resource* (pp. 325–358).
- Borel, L. D. M. S., de Lira, T. S., Ataíde, C. H., & de Souza Barrozo, M. A. (2021). Thermochemical Conversion of Coconut Waste: Material Characterization and Identification of Pyrolysis Products. *Journal of Thermal Analysis and Calorimetry*, 143(1), 637–646.
- BPS Kabupaten Sleman. (2019). Kabupaten Sleman dalam Angka 2019. *Badan Pusat Statistik*. BPS Kabupaten Sleman.
- Cahyono, D., Coto, Z., & Febrianto, F. (2008). Thermophysical Aspects of Wood Utilization as Substitution Fuel at Cement Factory. *Jurnal Ilmu Dan Teknologi Hasil Hutan*, 1(1), 45–53.
- Capablo, J., Jensen, P. A., Pedersen, K. H., Hjuler, K., Nikolaisen, L., Backman, R., & Frandsen, F. (2009). Ash Properties of Alternative Biomass. *Energy and Fuels*, 23(4), 1965–1976.
- Damayanti, R., Lusiana, N., & Prasetyo, J. (2017). Studi Pengaruh Ukuran Partikel dan Penambahan Perekat Tapioka terhadap Karakteristik Biopellet dari Kulit

- Coklat (*Theobroma Cacao L.*) Sebagai Bahan Bakar Alternatif Terbaru. *Jurnal Teknotan*, 11(1), 51–60.
- Demirbaş, A. (2003). Relationships Between Heating Value and Lignin, Fixed Carbon, and Volatile Material Contents of Shells from Biomass Products. *Energy Sources*, 25(7), 629–635.
- Din EN 15270. 2007. *Pellet Burners for Small Heating Boilers. Definitions, Requirements, Testing, Marking*. Berlin, Germany: Deutsches Institut für Normung
- Direktorat Jenderal Perkebunan. (2020). *Statistik Perkebunan Unggulan Nasional 2019-2021*. Sekretariat Jenderal Perkebunan.
- Dong, K., Dong, X., & Jiang, Q. (2020). How Renewable Energy Consumption Lower Global CO<sub>2</sub> Emissions? Evidence from Countries with Different Income Levels. *World Economy*, 43(6), 1665–1698.
- Dong, K., Hochman, G., Zhang, Y., Sun, R., Li, H., & Liao, H. (2018). CO<sub>2</sub> Emissions, Economic and Population Growth, and Renewable Energy: Empirical Evidence Across Regions. *Energy Economics*, 75, 180–192.
- Ekawati, H. (2019). Briket Bioarang dari Pelepah Salak (*Salacca zalacca*) sebagai Bahan Bakar Alternatif. *Jurnal Adi Karsa*, 16(17), 53–64.
- European Pellet Council. 2013. *Handbook for the Certification of Wood Pellets for Heating Purposes Version 2.0.*: European Pellet Council: Brussels, Belgium.
- European Pellet Council. 2015. *ENplus Handbook. Part 3 - Pellet Quality Requirements*. European Pellet Council: Brussels, Belgium
- Hakim, L., Widyorini, R., Nugroho, W. D., & Prayitno, T. A. (2019). Anatomical, Chemical, and Mechanical Properties of Fibrovascular Bundles of *Salacca* (Snake Fruit) Frond. *BioResources*, 14(4), 7943–7957.
- Hakim, T. (2022). *Buku Monograf Agribisnis Salak Pondoh*. Dewangga Publishing.
- Hansen, M. T., Jain, A. R., Hayes, S., & Bateman, P. (2009). *English Handbook for Wood Pellet Combustion English Handbook for Wood Pellet Combustion*.
- Harun, N. Y., & Afzal, M. T. (2016). Effect of Particle Size on Mechanical Properties of Pellets Made from Biomass Blends. *Procedia Engineering*, 148, 93–99.
- Hasna, A. H., Sutapa, J. P. G., & Irawati, D. (2019). Pengaruh Ukuran Serbuk dan Penambahan Tempurung Kelapa terhadap Kualitas Pelet Kayu Sengon. *Jurnal Ilmu Kehutanan*, 13, 170–180.
- Hendra, D. (2012). Rekayasa Pembuatan Mesin Pelet Kayu dan Pengujian Hasilnya. *Jurnal Penelitian Hasil Hutan*, 30(2), 144–154.
- Hidayatullah, A. H., Sutapa, J. P. G., & Listyanto, T. (2022). Pengaruh Ukuran Partikel Bahan Baku terhadap Kualitas Pelet Ranting Kaliandra (*Calliandra calothyrsus*) dari Limbah Pakan Ternak Kambing. *Jurnal Ilmu Dan Teknologi Kayu Tropis*, 20(1), 31–39.
- James, A. K., Thring, R. W., Helle, S., & Ghuman, H. S. (2012). Ash Management Review-Applications of Biomass Bottom Ash. *Energies*, 5(10), 3856–3873.
- Japan Ministry of Agriculture. 2021. *JAS Standards for Wood Pellets for Non-Industrial Use*.
- Kaliyan, N., & Morey, R. V. (2009). Factors Affecting Strength and Durability of Densified Biomass Products. *Biomass and Bioenergy*, 33(3), 337–359.

- Korea Forest Service. 2018. *Wood Pellet Statistics*. Available online: [https://www.forest.go.kr/kfswweb/cop/bbs/selectBoardArticle.do?nttId=3132691&bbsId=BBSMSTR\\_1069&pageUnit=10&pageIndex=19&searchtitle=title&searchcont=&searchkey=&searchwriter=&searchWrd=&ctgryLrcls=&ctgryMdcls=&ctgrySmcls=&ntcStartDt=&ntcEndDt=&mn=NKFS\\_06\\_09\\_01&orgId=](https://www.forest.go.kr/kfswweb/cop/bbs/selectBoardArticle.do?nttId=3132691&bbsId=BBSMSTR_1069&pageUnit=10&pageIndex=19&searchtitle=title&searchcont=&searchkey=&searchwriter=&searchWrd=&ctgryLrcls=&ctgryMdcls=&ctgrySmcls=&ntcStartDt=&ntcEndDt=&mn=NKFS_06_09_01&orgId=) (diakses 28 Februari 2024).
- Kumar, T. V., Chandrasekaran, M., & Santhanam, V. (2017). Characteristics Analysis of Coconut Shell Husk Reinforced Polymer Composites. *Journal of Engineering and Applied Sciences*, 12(8).
- Lestari, R. Y., Prabawa, I. D. G. P., & Cahyana, B. T. (2019). Pengaruh Kadar Air terhadap Kualitas Pelet Kayu dari Serbuk Gergajian Kayu Jabon dan Ketapang. *Jurnal Penelitian Hasil Hutan*, 37(1), 1–12.
- Lisowski, A., Dąbrowska-Salwin, M., Ostrowska-Ligęza, E., Nawrocka, A., Stasiak, M., Świętochowski, A., Klonowski, J., Sypuła, M., & Lisowska, B. (2017). Effects of the Biomass Moisture Content and Pelleting Temperature on the Pressure-Induced Agglomeration Process. *Biomass and Bioenergy*, 107, 376–383.
- Liu, Z., Mi, B., Jiang, Z., Fei, B., Cai, Z., & Liu, X. (2016). Improved Bulk Density of Bamboo Pellets as Biomass for Energy Production. *Renewable Energy*, 86, 1–7.
- Luo, H., Lu, Z., Jensen, P. A., Glarborg, P., Lin, W., Dam-Johansen, K., & Wu, H. (2020). Experimental and Modelling Study on the Influence of Wood Type, Density, Water Content, and Temperature on Wood Devolatilization. *Fuel*, 260, 1–12.
- Lu, Z., Chen, X., Yao, S., Qin, H., Zhang, L., Yao, X., Yu, Z., & Lu, J. (2019). Feasibility Study of Gross Calorific Value, Carbon Content, Volatile Matter Content and Ash Content of Solid Biomass Fuel Using Laser-Induced Breakdown Spectroscopy. *Fuel*, 258, 1–8.
- Mardiatmoko, G., & Ariyanti, M. (2018). *Produksi Tanaman Kelapa (Cocos nucifera L.)*. Badan Penerbit Fakultas Pertanian Universitas Pattimura.
- Moriarty, P., & Honnery, D. (2020). Feasibility of a 100% Global Renewable Energy System. *Energies*, 13(21).
- Muharom, S., Sudarmin, & Wijayati, N. (2018). Indonesian Journal of Chemical Science Sintesis Natrium Lignosulfonat Berbasis Lignin Pelepah Salak Pondoh (*Salacca zalacca* (Gaertner) Voss). *Indonesian Journal of Chemical Science*, 7(3), 270–276.
- Popa, V. I. (2018). *Biomass for Fuels and Biomaterials* (pp. 1–37). Elsevier.
- Prasetyadi, G. V., & Sutapa, J. P. G. (2023). Utilizing Merbau Wood and Coconut Shell Wastes as Biofuel in the Form of Pellets. *Journal of Ecological Engineering*, 24(1), 172–178.
- Rimantho, D., Hidayah, N. Y., Pratomo, V. A., Saputra, A., Akbar, I., & Sundari, A. S. (2023). The Strategy for Developing Wood Pellets as Sustainable Renewable Energy in Indonesia. *Heliyon*, 9(3).

- Rupasinghe, R. L., Perera, P., Bandara, R., Amarasekera, H., & Vlosky, R. (2024). Insights into Properties of Biomass Energy Pellets Made from Mixtures of Woody and Non-Woody Biomass: A Meta-Analysis. *Energies*, 17(1).
- Sadono, R., B. Murdawa, D. Soeprijadi, dan Nawari. 2011. *Biometrika Hutan Volume I Metode Statistika*. Interlude: Yogyakarta.
- Sarker, T. R., Nanda, S., Meda, V., & Dalai, A. K. (2023). Densification of Waste Biomass for Manufacturing Solid Biofuel Pellets: A Review. *Environmental Chemistry Letters*, 21(1), 231–264.
- Sedjo, R. A., & Tian, X. (2012). An Investigation of the Carbon Neutrality of Wood Bioenergy. *Journal of Environmental Protection*, 03(09), 989–1000.
- Sidabutar, V. T. P. (2018). Kajian Peningkatan Potensi Ekspor Pelet Kayu Indonesia sebagai Sumber Energi Biomassa yang Terbarukan. *Jurnal Ilmu Kehutanan*, 12, 99–116.
- Singh, M., Singh, R., & Gill, G. (2015). Estimating the Correlation Between the Calorific Value and Elemental Components of Biomass Using Regression Analysis. *International Journal of Industrial Electronics and Electrical Engineering*, 3(9), 18–23.
- Soraya, D. K., & Widyorini, R. (2015). Karakteristik Papan Partikel dari Pelepah Salak Pondoh (*Salacca sp*) dengan Penambahan Asam Sitrat. *Prosiding Seminar Nasional XVIII MAPEKI*, 542–548.
- Standar Nasional Indonesia. 2014. *Pelet Kayu*. Badan Standardisasi Nasional SNI 8021: 2014: Jakarta.
- Suskendriyati, H., Wijayati, A., Hidayah, N., & Cahyuningdari, D. (2000). Studi Morfologi dan Hubungan Kekerabatan Varietas Salak Pondoh (*Salacca zalacca* (Gaert.) Voss.) di Dataran Tinggi Sleman. *Biodiversitas*, 1(2), 59–64.
- Tokan, J. A., & Kyauta. (2017). A Review of Pellet Production from Biomass Residue and Characterization for Application as Domestic Fuel. *International Journal of Scientific & Engineering Research*, 8(4).
- Tomar, R., Kishore, K., Singh Parihar, H., & Gupta, N. (2021). A Comprehensive Study of Waste Coconut Shell Aggregate as Raw Material in Concrete. *Materials Today: Proceedings*, 44, 437–443.
- Ulbig, P., & Hoburg, D. (2002). Determination of The Calorific Value of Natural Gas by Different Methods. *Thermochimica Acta*, 382, 27–35.
- Ungureanu, N., Vladut, V., Voicu, G., Dinca, M. N., & Zabava, B. S. (2018). Influence of Biomass Moisture Content on Pellet Properties - Review. *Engineering for Rural Development*, 17, 1876–1883.
- Wahab, R., Sukhairi Mat Rasat, M., Hazim Mohamad Amini, M., Mazlan Mohamed, T., Sharizal Sirrajudin, M., Mohamed, M., Iqbal Ahmad, M., Moktar, J., Azhar Ibrahim, M., Kelantan, M., & Campus, J. (2016). Enhancing the Energy Properties of Fuel Pellets from oil palm fronds of agricultural residues by mixing with glycerin. *Article in ARPN Journal of Engineering and Applied Sciences*, 11(9).
- Wattana, W., Phetklung, S., Jakaew, W., Chumuthai, S., Sriam, P., & Chanurair, N. (2017). Characterization of Mixed Biomass Pellet Made from Oil Palm and Para-rubber Tree Residues. *Energy Procedia*, 138, 1128–1133.

- Yiwananda, Y., & Nugrahani, H. S. D. (2021). Realisasi Kebijakan Energi Terbarukan Uni Eropa (UE) Oleh Denmark dalam Menghadapi Ancaman Pemanasan Global. *Journal of International Studies*, 6(1), 121–146.
- Yolcan, O. O. (2023). World energy outlook and state of renewable energy: 10-Year evaluation. *Innovation and Green Development*, 2(4).
- Yudha, V., Rochardjo, H. S. B., Jamasri, J., Widyorini, R., Yudhanto, F., & Darmanto, S. (2018). Isolation of Cellulose from Salacca Midrib Fibers by Chemical Treatments. *IOP Conference Series: Materials Science and Engineering*, 434, 1–5.
- Zajac, G., Szyszlak-Bargłowicz, J., Gołębiowski, W., & Szczepanik, M. (2018). Chemical Characteristics of Biomass Ashes. *Energies*, 11(11).
- Zhang, J., Zhang, K., Huang, J., Feng, Y., Yellezuome, D., Zhao, R., Chen, T., & Wu, J. (2024). Synergistic Effect and Volatile Emission Characteristics During Co-Combustion of Biomass and Low-Rank Coal. *Energy*, 289.