DAFTAR PUSTAKA

Adeyemo, G. O., S. A. Abioye, and F. A. Aderemi. 2012. The effect of varied dietary crude protein levels with balanced amino acids on performance and egg quality characteristics of *layer*s at first laying phase. Food and Nutrition Sciences 3: 526-529.

Afriansyah, A., M. Amin, A. D. Sasanti, S. H. Dwinanti, and Tanbiyaskur. 2025. Effects of dietary coffee husk fermentation on the growth of catfish (*Pangasianodon hypophthalmus*). Journal of Aquaculture Science 10(1): 40-47.

Ahn, J. S., G. H.l Son, M. J. Kim, C. S. Choi, C. W. Lee, J. K. Park, E. G. Kwon, J. S. Shin, and B. K. Park. 2019. Effect of total digestible nutrients level of concentrates on growth performance, carcass characteristics, and meat composition of Korean Hanwoo steers. Food Science of Animal Resources 39(3): 388.

Aisy, N. D., A. R. D. Wardani, D. H. V. Paradhipta, A. Agus, and C. T. Noviandi. 2024. Chemical composition and fermentation characteristics of different proportions of fermented poultry manure and sheep feces as unconventional feed. Jurnal Ilmu-Ilmu Peternakan 34(1): 51-59.

Alagawany, M., M. E. Abd El-Hack, M. Arif, and E. A. Ashour. 2016. Individual and combined effects of crude protein, methionine, and probiotic levels on laying hen productive performance and nitrogen pollution in the manure. Environmental Science and Pollution Research 23: 22906-22913.

AOAC. 2005. Official Methods of Analysis of AOAC International. 18th ed. Assoc. Off. Anal. Chem., Washington DC.

Azis, A. F. 2023. Pengaruh level molases terhadap kualitas fisik dan kimia pelet berbasis ekskreta ayam segar dengan penambahan *wheat bran* sebagai *absorbent*. Skripsi Sarjana Peternakan. Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta.

Badan Standarisasi Nasional. 2006. Pakan Buatan Untuk Ikan Lele (*Clarias gariepinus*). SNI 01-4087-2006. Jakarta.

Benders, R. T., J. A. Dijksman, T. M. M. Bastiaansen, R. Fix, J. Van Der Gucht, and M. Thomas. 2025. Palatable pellets – A fundamental framework to produce sustainable pellets via extrusion. arXiv preprint arXiv:2504.04838.

Bo, X., Y. Hongxiang, and Y. Deyong. 2019. One-dimensional isothermal drying model for parenchyma cell tissue of potato tuber.

Transactions of the Chinese Society of Agricultural Engineering 35(16): 309–319.

Bryden, W. L., X. Li, I. Ruhnke, D. Zhang, and S. Shini. 2021. Nutrition, feeding and laying hen welfare. Animal Production Science 61(10): 893-914.

Budiharjo, A., A. M. P. Nuhriawangsa, L. R. Kartikasari, dan B. S. Hertanto. 2022. Aplikasi teknologi *floating catfish* pelet sebagai solusi pemanfaatan larva *black soldier fly* di Mitra Usaha Mazgot BSF Boyolali. PRIMA: Journal of Community Empowering and Services 6(1): 14-24.

Chartier, J. 2022. Mitigating ammonia: Your options in poultry litter treatment. Available at https://Backyardpoultry.Iamcountryside.Com/Coops/Poultry-Litter-Treatment/. Accession Date: 3 Mar 2024.

Chowdhury, S. D., Z. Sultana, M. Ahammed, B. L. Chowdhury, S. C. Das, and B. C. Roy. 2005. The nutritional value of khesari (*Lathyrus sativus*) for growing and laying pullets. The Journal of Poultry Science 42(4): 308-320.

Cunha, T. J., and R. L. Shirley. 2012. Nitrogen and energy nutrition of ruminants. Academic Press. Cambridge.

Das, H., M. Hattula, O. Myllymäki, and Y. Mälkki. 1993. Effects of formulation and processing variables on dry fish feed pellets containing fish waste. Journal of the Science of Food and Agriculture 61: 181-187.

Daud, M., M.A. Yaman, C. A. Fitri, dan A. Ratnawati. 2020. Penggunaan pakan nonkonvensional *sprouted fodder for chicken* (SF2C) terfermentasi pada ayam petelur. Pages 767-775 in Prosiding Seminar Teknologi Agribisnis Peternakan (STAP) Fakultas Peternakan. Universitas Jenderal Soedirman.

Desbruslais, A., A. Wealleans, D. Gonzalez-Sanchez, and M. D. Benedetto. 2021. Dietary fibre in laying hens: A review of effects on performance, gut health and feather pecking. World's Poultry Science Journal 77(4): 797-823.

Direktorat Jenderal Peternakan dan Kesehatan Hewan Kementerian Pertanian. 2024. Statistik Peternakan dan Kesehatan Hewan 2024. Direktorat Jenderal Peternakan dan Kesehatan Hewan Kementerian Pertanian, Jakarta.

Ebnesajjad, S. 2013. Polyvinyl fluoride. William Andrew. Norwich.

Fahrenholz, A. C. 2012. Evaluating factors affecting pellet durability and energy consumption in a pilot feed mill and comparing methods for

evaluating pellet durability. Disertasi Doctor of Philosophy. Department of Grain Science and Industry, Kansas State University.

Fatmawaty, A. A., A. N. Putra, A. Munandar, N. Hermita, M. Mustahal, D. Hermawan, L. A. Agung, A. Rahman, and M. B. Syamsunarno. 2021. The use of rubber seed oil as an alternative plant lipid source for stripped catfish (*Pangasianodon hypophthalmus*) diet. Journal of Aquaculture and Fish Health 10(2): 165-175.

Geng, S., S. Huang, Q. Ma, F. Li, Y. Gao, L. Zhao, and J. Zhang. 2021. Alterations and correlations of the gut microbiome, performance, egg quality, and serum biochemical indexes in laying hens with low-protein amino acid-deficient diets. ACS Omega 6(20): 13094-13104.

Ghaly, A. E. and K. N. MacDonald. 2012. Drying of poultry excreta for use as animal feed. American Journal of Agricultural and Biological Sciences 7(3): 239-254.

Haetami, K., J. Junianto, I. Iskandar, R. Rostika, and A. Abun. 2017. Durability and water stability of pellet fish supplementation results pairing coconut oils and hazelnut oil. International Journal of Environment, Agriculture, and Biotechnology 2(3): 238800.

Harjanti, W. S., Y. H. Darundiati, dan N. A. Y. Dewanti. 2016. Analisis risiko kesehatan lingkungan pajanan gas amonia (NH_3) pada pemulung di TPA Jatibarang, Semarang. Jurnal Kesehatan Masyarakat 4(3): 921-930.

Henuk, Y. L. and J.G. Dingle. 2003. Poultry excreta: Source of fertilizer, fueland feed. World's Poultry Science Journal 59(3): 350-360.

Huda, T. I. A., A. Agus, C. T. Noviandi, S. Andarwati, dan A. Astuti. 2024. Analysis of the nutritional quality of local feed ingredients commonly used in the concentrate formula for beef cattle feedlots in Indonesia. Buletin Peternakan. 48(1): 117-127.

Islam, S., A. K. M. Kabir, and M. R. I. Khan. 2024. Fermentation of poultry ekskreta for improving its quality and safety as ruminant feed. International Journal of Recycling Organic Waste in Agriculture 13(1): 1-23.

Jaelani, A., S. Dharmawati dan W. Wacahyono. 2016. Pengaruh tumpukan dan lama masa simpan pakan pellet terhadap kualitas fisik. ZMIP 41(2): 261-268.

Kang, H. K., S. B. Park, J. J. Jeon, H. S. Kim, K. T. Park, S. H. Kim, E. C. Hong, and C. H. Kim. 2018. Effect of increasing levels of apparent metabolizable energy on laying hens in barn system. Asian-Australasian Journal of Animal Sciences 31(11): 1766.

Khater, E.-S. G., A. H. Bahnasawy, and S. A. Ali. 2014. Physical and mechanical properties of fish feed pellets. Food Processing and Technology 5(10): 378.

Kim, J. R., J. S. Woo, Y. C. Baek, S. S. Jang, and K. K. Park. 2023. Prediction of total digestible nutrient and crude protein requirements according to daily weight gain, and behavioral measurements of Hanwoo heifers. Animal Bioscience 36(4): 601.

Koni, T. N. I. and T. A. Y. Foenay. 2022. Pellet quality with the addition of kepok banana peel silage in grower crossbred native chickens diet. Jurnal Sain Peternakan Indonesia 17(1): 14-21

Lisnahan, C. V., M. E. Elu, A. A.Dethan, and A. Nubatonis. 2024. Reproductive organ profile of *pullet* phase kampung chicken after L-isoleucine supplementation in feed. Journal of Tropical Animal Science and Technology 6(1): 22-31.

Miladinovic, D., M. Sørensen, and B. Svihus. 2013. Strength and durability of feed pellets influenced by different particle size distribution, pellet volume and dehydration techniques. Ann. Trans. Nordic. Rheol. Soc. 21: 107–115.

Momoh, A. T., M. Y. Abubakar, and J. K. Ipinjolu. 2016. Effect of ingredients substitution on binding, water stability and floatation of farm-made fish feed. International Journal of Fisheries and Aquatic Studies 4(3): 92-97.

Montenegro, L. F., A. M. Descalzo, S. A. Cunzolo, and C. D. Pérez. 2020. Modification of the content of n-3 highly unsaturated fatty acid, chemical composition, and lipid nutritional indices in the meat of grass carp (*Ctenopharyngodon idella*) fed alfalfa (*Medicago sativa*) pellets. Journal of Animal Science 98(4): skaa084.

Muduli, S., A. Champati, H. K. Popalghat, P. Patel, and K. R. Sneha. 2019. Poultry waste management: An approach for sustainable development. International Journal of Advanced Scientific Research 1(4): 08-14.

Mulia, D. S. dan H. Maryanto. 2014. Uji fisik dan kimiawi pakan ikan yang menggunakan bahan perekat alami. Prosiding Seminar Hasil Penelitian LPPM UMP 2014. Hal. 25–33.

Muntafiah, I. 2020. Analisis pakan pada budidaya ikan lele (*Clarias* sp.) di Mranggen. Jurnal Riset Sains dan Teknologi 4(1): 35-39.

Muramatsu, K., A. Massuquetto, F. Dahlke, and A. Maiorka. 2015. Factors that affect pelet quality: A review. Journal of Agricultural Science and Technology 9(2): 717-722.

Murni. R, S. Akmal, dan B.L. Ginting. 2008. Buku Ajar Teknologi Pemanfaatan Limbah Untuk Pakan. Laboratorium Makanan Ternak. Fakultas Peternakan. Universitas Jambi. Jambi.

Nadeem M. A, A., A. A. Azim, and A.G. Khan. 2016. Effect of feeding broiler litter on growth and nutrient utilisation by Barbari goats. Asian Journal of Animal Science 6(1):73-77.

Nie, E., D. Gao, and G. Zheng. 2020. Effects of lactic acid on modulating the ammonia emissions in co-composts of poultry litter with slaughter sludge. Bioresource Technology 315: 123812.

Park, J., Y.-J. Heo, D.-H. Kim, Y. B. Kim, B.-Y. Kwon, J.-Y. Song, and K.-W. Lee. 2024. Nutritional and physiological responses to dietary phosphorus levels and phytase in *pullet*s and laying hens. Poultry Science 103(8): 103886.

Park, J., Y.-J. Heo, D.-H. Kim, Y. B. Kim, B.-Y. Kwon, J.-Y. Song and K.-W. Lee. 2024. Nutritional and physiological responses to dietary phosphorus levels and phytase in *pullet*s and laying hens. Poultry Science 103(8): 103886.

Pinandoyo, P., M. B. Syakirin, dan T. Y. Mardiana. 2021. Pemanfaatan ikan rucah dan fermentasi kotoran ayam dalam pakan lele terhadap pertumbuhan dan kelulushidupan lele Sangkuriang (*Clarias* sp.). Pena Akuatika: Jurnal Ilmiah Perikanan dan Kelautan 20(1): 116.

Poernomo, M. H., M. Razif, dan A. Mansur. 2020. Pengolahan air limbah dometsik dengan metode kombinasi filtrasi dan fitoremediasi (Studi kasus di Kelurahan Margorejo Surabaya). Prosiding Seminar Nasional Sains dan Teknologi Terapan 1(1): 177-184.

Pöllinger-Zierler, B., I. Sedlmayer, C. Reinisch, H. Hofbauer, C. Schmidl, L. Kolb, E. Wopienka, E. Leitner, and B. Siegmund. 2019. Interrelation of volatile organic compounds and sensory properties of alternative and torrefied wood pellets. Energy and Fuels 33(6): 5270–5281.

Pottgüter, R. 2019. Practical aspects of feeding, crude fibre applications and problems with digestion in poultry feed? Available at https://lohmann-breeders.com/practical-aspects-of-feeding-crude-fibre-applications-and-problems-with-digestion-in-poultry-feed/. Accession date 22nd Jan 2025.

Prastiwi, A. N., A. R. D. Wardani, C. T. Noviandi, A. Astuti. and D. H. V. Paradhipta. 2024. The effect of binders on the quality of fermented poultry manure pellets as unconventional feed. Jurnal Ilmu Produksi dan Teknologi Hasil Peternakan 12(2): 68-74.

Rasby, Rick. 2020. Understanding Feed Analysis. https://beef.unl.edu/learning/feedanalysis.shtml. Accession date 31 June 2025.

Rosyadi, M. A., D. K. Purnamasari, E. Erwan, S. Sumiati, K. G. Wiryawan, S. Syamsuhaidi, dan V. Maslami. 2024. Komposisi nutrisi maggot yang dibudidaya pada media berbasis limbah telur infertil dan ampas tahu. Jurnal Sains Teknologi dan Lingkungan. 10(1): 118-128.

Saalah, S., R. Shapawi, N. Othman and A. Bono. 2010. Effect of formula variation in the properties of fish feed pellet. Journal of Applied Sciences 10: 2537-2543.

Saki, A. A., P. Zamani, M. Rahmati, and H. Mahmoudi. 2012. The effect of cage density on laying hen performance, egg quality, and excreta minerals. Journal of Applied Poultry Research 21(3): 467-475.

Salam, N. I, A. Malik, dan R. Dewi. 2017. Formulasi pakan kotoran ayam dengan persentase yang berbeda terhadap pertumbuhan ikan bandeng Chanos Chanos di BBAP Takalar Provinsi Sulawesi Selatan. Octopus: Jurnal Ilmu Perikanan 6(1): 563-568.

Santi, S., A. T. B. Astuti, dan J.Pasamboang. 2020. Nilai Nutrisi Maggot Black Solder Fly (Hermetia Illucens) dengan Berbagai Media. Jurnal Ilmu Pertanian 5(2): 91-93.

Sgarbossa, A., C. Costa, P. Menesatti, F. Antonucci, F. Pallottino, M. Zanetti, S. Grigolato. and R. Cavalli. 2014. Colorimetric patterns of wood pellets and their relations with quality and energy parameters fuel 137: 70-76.

Sitaula, Y. 2012. Effect of starch source, screw configuration and steam injection on physical quality and color development of extruded fish feed. Thesis. Norwegian University of Life Sciences.

Smith, L.W. 2024. Dehydrated poultry excreta as a crude protein supplement for ruminants. Available at https://www.fao.org/4/x6512e/X6512E13.htm. Accession date 31 June 2025.

SNI 01-4087-2006. Pakan buatan untuk ikan lele dumbo (*Clarias gariepinus*) pada budidaya intensif.

Suryani, S. A. M. P., A. A. S. P. R. Andriani, I. G. A. D. S. Rejeki, and G. A. S. Pratama. 2023. Training and implementation of catfish feed technology in the sedana sari fish farmers group in Selat Village, Abiansemal, Badung, Bali. Asian Journal of Community Services 2(8): 663-670.

Sutardi, T. 1980. Landasan Ilmu Nutrisi Jilid 1. Diktat Kuliah. Fakultas Peternakan IPB. Bogor.

Tabib, Z., F. T. Jones, and P. B. Hamilton. 1984. Effect of pelleting of poultry feed on the activity of molds and mold inhibitors. Poultry Science 63(1): 70-75.

Tejeda, O. and W. K. Kim. 2021. Role of dietary fiber in poultry nutrition. MDPI Animals 11(2): 461.

Tumuluru, J. S. 2018. Effect of pellet die diameter on density and durability of pellets made from high moisture woody and herbaceous biomass. Carbon Resources Conversion 1(1): 44–54.

Usman, S. O., K. U. Ogbe, J. U. Oguche, T. B. Momoh, and S. Omale. 2019. Utilization of poultry waste as feed and supplementary feed for fish growth. Journal of Applied Sciences and Environmental Management 23(4): 627-631.

Vlaicu, P. A., A. E. Untea, and A. G. Oancea. 2024. Sustainable poultry feeding strategies for achieving zero hunger and enhancing food quality. Agriculture 14(10): 1811.

Wang, J., H. Yue, S. Wu, H. Zhang, and G. Qi. 2017. Nutritional modulation of health, egg quality and environmental pollution of the layers. Animal Nutrition 3 (2): 91-96.

Wellborn, T. L. 1990. Channel Catfish Life History and Biology. Texas Agricultural Extension Service. Austin.

Widyastuti, S. and D. M. Rosyid. 2020. Organic catfish feed from cow manure. Journal of Applied industrial Engineering 3(2): 29-34.

Winarto, W., N. Irwani, dan S. Kaffi. 2014. Optimasi pembuatan pelet rumput gajah (*Pennisetum purpurium*) sebagai peluang ekspor untuk pakan ternak ruminansia. Jurnal Ilmiah Teknik Pertanian-Tektan 6(2): 128-142.

Wirne, M., S. Dako, dan F. Datau. 2022. Penggunaan feses hewan yang berbeda terhadap kualitas pupuk organik cair. Jambura Journal of Animal Science 4(2): 140-145.

Wohlfarth, G. W. and G. L. Schroeder. 1979. Use of excreta in fish farming - A review. Agricultural Wastes 1(4): 279-299.

Won, S., N. Ahmed, B. G. You, S. Shim, S. S. Kim, and C. Ra. 2018. Nutrient production from korean poultry and loading estimations for cropland. Journal of Animal Science and Technology 60(1): 1-9.

Zettl, S., D. Cree, M. Soleimani, and L. Tabil. 2019. Mechanical properties of aquaculture feed pellets using plant-based proteins. Cogent Food & Agriculture 5(1): 1656917.