

DAFTAR PUSTAKA

- Adesogan, A.T. dan Dahl, G.E. (2020) 'Sustainability of dairy production and consumption in low-income countries', *Journal of Dairy Science*, 103(11), hlm. 9791-9802.
- Andreasen, S.N., Sandøe, P. and Forkman, B., 2014. Can animal-based welfare assessment be simplified? A comparison of the Welfare Quality® protocol for dairy cattle and the simpler and less time-consuming protocol developed by the Danish Cattle Federation. *Animal Welfare*, 23(1), pp.81-94.
- Anwar, R., T. A. Wibowo, dan D. S. Untari. 2021. Manajemen pemberian pakan ternak sapi potong di Kecamatan Pasir Sakti Kabupaten Lampung Timur. *Open Science and Technology*. 1(2): 190-195.
- Aranguiz, A.A., Setiabudi, F.H. and Spoelstra, M., Trends and outlook of dairy production in Java, Indonesia.
- Badan Pusat Statistik Indonesia. (2025, Februari 28). *Produksi Susu Segar menurut Provinsi, 2024*. Diakses pada 8 Juli 2025, dari <https://www.bps.go.id/id/statistics-table/2/NDkzIzI=/produksi-susu-segar-menurut-provinsi.html>
- Balai Pengujian Mutu dan Sertifikasi Pakan (BPMSP). (2025) Data bahan pakan ternak. Direktorat Jenderal Peternakan dan Kesehatan Hewan, Kementerian Pertanian Republik Indonesia.
- Bayne, K. and Turner, P.V., 2019. *Animal welfare* standards and international collaborations. *ILAR journal*, 60(1), pp.86-94.
- Collier, R.J. and Gebremedhin, K.G., 2015. Thermal biology of domestic animals. *Annual Review of Animal Biosciences*, 3, pp.513-532.
- Carroll, A.L., Hanford, K.J., Abney-Schulte, C. and Kononoff, P.J., 2024. Estimation of the nutrient variation in feed delivery and effects on lactating dairy cattle. *JDS communications*, 5(6), pp.548-552.
- Cottle, D. dan L. Kahn. 2014. Beef Cattle Production and Trade. CSIRO Publishing. Australia.
- Desta, A.G., 2024. The effect of crude protein and energy on conception of dairy cow: a review. *Discover Animals*, 1(1), p.29.
- Edi, D.N. and Rachmasari, A.P., 2024. Efisiensi Pakan, Energi Bruto Dan Feed Conversion Ratio Sapi Friesian Holstein Indonesia Pada Periode Laktasi Yang Berbeda. *Jurnal Nutrisi Ternak Tropis*, 7(1), pp.16-23.

- Dawkins, M.S., 2017. Animal welfare and efficient farming: is conflict inevitable?. *Animal Production Science*, 57(2), pp.201-208.
- Dewi, M. P., Kusumastuti, T. A. & Umami, N. (2025) 'Water use efficiency and influencing factors in dairy farms: A case study from Yogyakarta,
- Edi, D.N. and Rachmasari, A.P., 2024. Efisiensi Pakan, Energi Bruto Dan Feed Conversion Ratio Sapi Friesian Holstein Indonesia Pada Periode Laktasi Yang Berbeda. *Jurnal Nutrisi Ternak Tropis*, 7(1), pp.16-23.
- Edmonson, A.J., Lean, I.J., Weaver, L.D., Farver, T. and Webster, G., 1989. A body condition scoring chart for Holstein dairy cows. *Journal of dairy science*, 72(1), pp.68-78.
- FAO and IDF (2011). *Guide to Good Dairy Farming Practices*. Animal Production and Health Guidelines. Rome: Food and Agriculture Organization of the United Nations.
- Faisal, M. (2023). Five freedoms sebagai dasar evaluasi kesejahteraan hewan di peternakan rakyat. *Veteriner Nusantara*, 5(3), pp.141-150.
- Firman, A., Mauludin, M.A., Salsabila, K.N. and Kusmayadi, T., The Smallholder Dairy Farmer Strategies to Address Feed Scarcity in Pangalengan, Indonesia. *Jurnal Peternakan*, 22(1), pp.1-9.
- Fraser, D., 2008. Understanding animal welfare. *Acta Veterinaria Scandinavica*, 50(Suppl 1), p.S1.
- Gantner, V., Bobić, T., Gantner, R., et al. (2021) 'Heat stress in dairy cows—physiological indicators and production performance', *Animals*, 11(4), pp.1-14.
- Hadi, P.U. dan Ilham, N. (2022) 'Kinerja usaha sapi perah rakyat di Indonesia', *Jurnal Sosial Ekonomi Peternakan*, 17(1), pp. 45-56.
- Kelly, W.R., 1967. Veterinary clinical diagnosis.
- Kumalasari, N. R., Suharti, S., Zahra, W. A., Rosmalia, A., Permana, I. G. and Sunardi, S. (2025) "Seasonal Adaptation in Feed Management: Assessing Forage and Feedstuff Variations in Small-Sized Dairy Farms in Boyolali, Central Java", *Jurnal Sain Peternakan Indonesia*, 20(2), pp. 111-116.
- Karuniawati, R. and Fariyanti, A., 2013, March. Faktor-faktor yang mempengaruhi produksi susu sapi perah di kecamatan megamendung kabupaten bogor provinsi Jawa Barat. In *Forum Agribisnis: Agribusiness Forum* (Vol. 3, No. 1, pp. 73-86).

- Keong, L.Y.E., Toh, M., Lu, Y. and Liu, S.Q., 2023. Biotransformation of okara (soybean residue) through solid-state fermentation using probiotic *Bacillus subtilis* and *Bacillus coagulans*. *Food Bioscience*, 55, p.103056.
- Linstädt, J., Thöne-Reineke, C. and Merle, R., 2024. Animal-based welfare indicators for dairy cows and their validity and practicality: a systematic review of the existing literature. *Frontiers in veterinary science*, 11, p.1429097.
- Malik, M., Gahlawat, V.K., Mor, R.S. and Singh, M.K., 2024. Unlocking dairy traceability: Current trends, applications, and future opportunities. *Future Foods*, 10, p.100426.
- Mariana, E., Sumantri, C., Astuti, D.A., Anggraeni, A. and Gunawan, A., 2019. Mikroklimat, termoregulasi dan produktivitas sapi perah Friesians Holstein pada ketinggian tempat berbeda. *Jurnal Ilmu Dan Teknologi Peternakan Tropis*, 6(1), pp.70-77.
- McAllister, T. and Engle, T., 2025. Nutritional Challenges Related to Animal Welfare in Feedlot and Dairy Cattle. *Veterinary Clinics: Food Animal Practice*, 41(3), pp.333-343.
- Muarifah, H., Susilorini, T.E., Mukaromahwati, A. and Winandi, R.R., 2023. Penilaian Aspek Teknis Pemeliharaan Ternak Sapi Perah Menuju Good Dairy Farming Practices di Peternakan Rakyat Jawa Timur. *Jurnal Agriovet*, 5(2), pp.81-98.
- Munoz, C., Campbell, A., Hemsworth, P. and Doyle, R., 2017. Animal-based measures to assess the welfare of extensively managed ewes. *Animals*, 8(1), p.2.
- Morgan, T.G., 2004. International Dairy Federation; Food and Agriculture Organization of the United Nations. *Guide to Good Dairy Farming Practice; International Dairy Federation: Brussels, Belgium*.
- Mutiarahmi, C.N., Hartady, T. and Lesmana, R., 2021. Kajian Pustaka: Penggunaan Mencit sebagai hewan coba di laboratorium yang mengacu pada prinsip kesejahteraan hewan. *Jurnal Indonesia Medicus Veterinus*, 10(1), pp.134-145.
- National Research Council, Committee on Animal Nutrition and Subcommittee on Dairy Cattle Nutrition, 2001. *Nutrient requirements of dairy cattle: 2001*. National Academies Press.
- Olivina Viola Putri, O. and Hasanah, H. (2025) "Comparison Of Physiological Responses Of Empty And Lactating Buffalo Mothers In

Semi-Intensive Rearing System In Pemalang District, Central Java”, *Jurnal Peternakan Nusantara*, 11(1), pp. 53-64.

Pangestu, Mulyoto *et al.* (2000) *Heat Tolerance and Productivity of Local and Imported Holstein-Friesian Cows in Indonesia*, Article in *Journal of Animal Science*.

Peterson, C.B. and Mitloehner, F.M., 2021. Sustainability of the dairy industry: Emissions and mitigation opportunities. *Frontiers in Animal Science*, 2, p.760310

Phillips, C.J.C., Beerda, B., Knierim, U., Waiblinger, S., Lidfors, L., Krohn, C.C., Canali, E., Valk, H., Veissier, I. and Hopster, H., 2013. A review of the impact of housing on dairy cow behaviour, health and welfare. *Livestock housing*, pp.37-54.

Pinotti, L. and Dell’Orto, V., 2011. Feed safety in the feed supply chain. *BASE*.

P M, O. (2020) “Year Round Feed and Fodder Availability in Smallholder Dairy Farms across High and Low Altitude Areas in Eastern Africa”, *Journal of Experimental Agriculture International*, 42(7), pp. 39-53

Prasetyo, A. and Yuwono, S.S., 2018. Pengaruh komposisi kimia terhadap kualitas fisik susu sapi FH di Jawa Timur. *Jurnal Teknologi Hasil Ternak*, 9(2), pp.45-53.

Prasetyo, L. (2024). Pentingnya pencatatan produksi dalam manajemen usaha sapi perah. *Jurnal Manajemen Agribisnis*, 12(1), pp.33-41.

Priyashantha, H., 2025. World dairy system sustainability: a milk quality perspective. *Frontiers in Sustainable Resource Management*, 4, p.1572962.

Putra, Y.E., Mulyati, S. and Mumpuni, S.S. (2019) ‘Hubungan morfometri dengan produksi susu sapi perah Peranakan Friesian Holstein (PFH)’, *Ovozoa: Journal of Animal Reproduction*, 8(1), pp. 49-53.

Rahmat, R. (2021). Pengendalian kesehatan ternak sebagai upaya peningkatan produksi susu. *Jurnal Peternakan Nusantara*, 13(2), pp.101-110.

Rasby, R. J., L. A. Stalker, dan R. N. Funston. 2007. EC07-281 body condition scoring beef cows: a tool for managing the nutrition program for beef herds. Historical Materials from University of Nebraska-Lincoln Extension. 3541.

- Richmond, S.E., Wemelsfelder, F., De Heredia, I.B., Ruiz, R., Canali, E. and Dwyer, C.M., 2017. Evaluation of animal-based indicators to be used in a welfare assessment protocol for sheep. *Frontiers in Veterinary Science*, 4, p.210.
- Roibas, D. and Alvarez, A., 2010. Impact of genetic progress on the profits of dairy farmers. *Journal of dairy science*, 93(9), pp.4366-4373.
- Rukkwamsuk, T., Kruip, T.A.M. and Wensing, T., 1999. Relationship between overfeeding and overconditioning in the dry period and the problems of high producing dairy cows during the postparturient period. *Veterinary Quarterly*, 21(3), pp.71-77.
- Sandi, S., Desiarni, M. and -, A. (2019) 'Manajemen Pakan Ternak Sapi Potong di Peternakan Rakyat di Desa Sejaru Sakti Kecamatan Indralaya Kabupaten Ogan Ilir', *Jurnal Peternakan Sriwijaya*, 7(1), pp. 21–29.
- Singh, A.K., Bhakat, C. and Singh, P., 2022. A review on water intake in dairy cattle: associated factors, management practices, and corresponding effects. *Tropical Animal Health and Production*, 54(2), p.154.
- Sudono, A., Rosdiana, R.F. and Setiawan, B.S., 2003. Beternak sapi perah secara intensif. *Agromedia Pustaka. Jakarta*.
- Susanto, R. (2020) *Sistem Beternak Sapi Perah di Indonesia*. Malang: UB Press.
- Van Soest, P.J. (1994). *Nutritional Ecology of the Ruminant*. 2nd ed. Cornell University Press.
- Wattiaux, M.A., 2023. Sustainability of dairy systems through the lenses of the sustainable development goals. *Frontiers in Animal Science*, 4, p.1135381.
- Welfare, Q., 2009. Welfare Quality® Assessment Protocol for Cattle (Fattening Cattle, Dairy Cows, Veal Calves). *Welfare Quality® Consortium: Lelystad, The Netherlands*.
- West, J.W., 2020. Effects of heat-stress on production in dairy cattle. *Journal of Dairy Science*, 103(6), pp. 5441-5452.
- Wibowo, D. (2020). Praktik pemerahan higienis pada peternakan sapi perah skala kecil. *Jurnal Teknologi Hasil Ternak*, 7(3), pp.87-95.
- Yani, A.B.P.P. and Purwanto, B.P., 2006. Pengaruh iklim mikro terhadap respons fisiologis sapi peranakan Fries Holland dan modifikasi

lingkungan untuk meningkatkan produktivitasnya (ulasan). *Tropical Animal Science Journal*, 29(1).

Zhou, X.Q., Zhang, Y.D., Zhao, M., Zhang, T., Zhu, D., Bu, D.P. and Wang, J.Q., 2015. Effect of dietary energy source and level on nutrient digestibility, rumen microbial protein synthesis, and milk performance in lactating dairy cows. *Journal of Dairy Science*, 98(10), pp.7209-7217.

Asmarasari, S.A., Azizah, N., Sutikno, S., Puastuti, W., Amir, A., Praharani, L., Rusdiana, S., Hidayat, C., Hafid, A., Kusumaningrum, D.A. and Saputra, F., 2023. A review of dairy cattle heat stress mitigation in Indonesia. *Veterinary World*, 16(5), p.1098.

Tasripin, D.S., Tanuwiria, U.H., Mushawwir, A. and Susilawati, I., 2025. Response of local dairy cows on lipid modulation in different temperature–humidity index (THI) zone. *Journal of Advanced Veterinary and Animal Research*, 12(2), p.661.

Aditya, S., Bahutala, M.B., Hibatullah, D.N., Pourazad, P., Wahyono, T., Kumar, M., Penagos-Tabares, F. and Wulansari, N., 2023. Evaluation of milk yield and composition, feed intake, chewing activities, and clinical variables in dairy cows under hot-humid climate of tropical zone. *Journal of Thermal Biology*, 114, p.103608.

Herbut, P., Angrecka, S. and Walczak, J., 2018. Environmental parameters to assessing of heat stress in dairy cattle—a review. *International journal of biometeorology*, 62(12), pp.2089-2097.

Polsky, L. and Von Keyserlingk, M.A., 2017. Invited review: Effects of heat stress on dairy cattle welfare. *Journal of dairy science*, 100(11), pp.8645-8657.

Rashamol, V.P., Sejian, V., Pragna, P., Lees, A.M., Bagath, M., Krishnan, G. and Gaughan, J.B., 2019. Prediction models, assessment methodologies and biotechnological tools to quantify heat stress response in ruminant livestock. *International journal of biometeorology*, 63(9), pp.1265-1281.

Das, R., Sailo, L., Verma, N., Bharti, P., Saikia, J. and Kumar, R., 2016. Impact of heat stress on health and performance of dairy animals: A review. *Veterinary world*, 9(3), p.260.

Armstrong, D.V., 1994. Heat stress interaction with shade and cooling. *Journal of dairy science*, 77(7), pp.2044-2050.

Benezra, M. V. (1954). *An index of adaptability for selecting dairy cattle for tropical climate*. *Journal of Animal Science*, 13(4), 1015.

Kumar, A., Choudhary, P.K., Maurya, P.K., Kumar, P., Srivastava, D.P., Singh, H.K. and Rai, V., 2023. Study of cattle adoptability in the central plain zone of Uttar Pradesh throughout the spring and summer seasons.