

DAFTAR PUSTAKA

- Adi, D.S., D.W. Harjanti dan R. Hartanto. 2020. Evaluasi konsumsi protein dan energi terhadap produksi susu sapi perah awal laktasi. *Jurnal Peternakan Indonesia*. 22(3): 292-305.
- Adriani, A. Latif, S. Fachri dan I. Sulaksana. 2014. Peningkatan produksi dan kualitas susu kambing Peranakan Ettawa sebagai respon perbaikan kualitas pakan. *Jurnal Ilmiah Ilmu-Ilmu Peternakan*. 17(1): 15-21.
- Agustono, B., M. Lamid, A. Ma'ruf dan M.T.E. Purnama. 2017. Identifikasi limbah pertanian dan perkebunan sebagai bahan pakan inkonvensional di Banyuwangi. *Jurnal Medik Veteriner*. 1(1): 12-22.
- Amanlou, H., T.A. Farahani dan N.E. Farsuni. 2017. Effects of rumen undegradable protein supplementation on productive performance and indicators of protein and energy metabolism in Holstein fresh cows. *Journal of Dairy Science*. 100(5): 3628-3640.
- Amrudin, R., P. Sambodho dan T.H. Suprayogi. 2014. Pengaruh frekuensi pemberian hijauan yang berbeda terhadap produksi dan bahan kering susu kambing perah. *Animal Agriculture Journal*. 3(2): 242-248.
- AOAC. 2005. Official Method of Association of Official Analytical Chemist. 12th Edition. Published by Association of Official Analytical Chemist. Benjamin Franklin Station. Washington DC.
- Arief, N. Jamarun, R. Pazla and B. Satria. 2018. Milk quality of Etawa Crossbred Dairy Goat fed by product of palm oil industry. *International Journal of Dairy Science*. 13(1): 15-21.
- Arief, Rusdimansyah, S. Sowmen, R. Pazla and Rizqian. 2020. Milk production and quality of Etawa Crossbreed dairy goat that given *Tithonia diversifolia*, corn waste, and concentrate based palm kernel cake. *Biodiversitas*. 21(9): 4004-4009.
- Astuti, A., A. Agus dan S.P.S. Budhi. 2009. Pengaruh penggunaan *high quality feed supplement* terhadap konsumsi dan pencernaan nutrisi sapi perah awal laktasi. *Buletin Peternakan*. 33(2): 81-87.
- Astuti, A., Rochijan, B.P. Widyobroto and C.T. Noviandi. 2021. Nutrient status, hematological and blood metabolite profile of mid-lactating dairy cows during wet and dry seasons raised under Indonesian tropical environmental condition. *Journal of Animal Behaviour and Biometeorology*. 10(1): 1-6.
- Avondo, M., L. Biondi, R.I. Pagano, A. Bonnano and L. Lutri. 2008. Dairy Goats Feeding and Nutrition: Feed Intake. CABI International. United Kingdom. pp 147-160.

- Ayuni, T., W. Kurniawan, A. Napirah and Rahman. 2017. Fermentation characteristics of corn stover and *Gliricydia sepium* combination silage with different presentations. The 7th International Seminar on Tropical Animal Production. Yogyakarta: 12-14 September 2017. pp. 107-111.
- Bahan, Y., M. Yunus dan H.T. Handayani. 2020. Pengaruh pemberian pakan konsentrat yang mengandung tepung tongkol jagung terfermentasi terhadap konsumsi pencernaan karbohidrat dan lemak kasar pada sapi Bali dara pola peternak. *Jurnal Peternakan Lahan Kering*. 2(4): 1095-1102.
- Bava, L., L. Rapetti, G.M. Crovetto, A. Tamburini, A. Sandrucci, G. Galassi and G. Succi. 2001. Effects of a nonforage diet on milk production, energy, and nitrogen metabolism in dairy goats throughout lactation. *Journal of Dairy Science*. 84(11): 2450-2459.
- Bonanno, A., M. Todaro, A.D. Grigoli, M.L. Scatassa, G. Tornambe and M.L. Alicata. 2008. Relationships between dietary factors and milk urea nitrogen level in goats grazing herbaceous pasture. *Italian Journal of Animal Science*. 7(2): 219-235.
- BPS. 2021. *Statistik Peternakan dan Kesehatan Hewan 2021*. Direktorat Jenderal Peternakan dan Kesehatan Hewan. Jakarta. P. 141.
- Bui, S., E.D.W. Lawa, L.S. Enawati, E.J.L. Lazarus. 2020. Efek pemanfaatan limbah kubis (*Brassica oleracea*) dalam ransum terhadap konsumsi dan pencernaan bahan kering, bahan organik, dan *neutral detergent fiber* (NDF) ransum ternak kambing kacang. *Jurnal Peternakan Lahan Kering*. 2(4): 1070-1079.
- Canaes, T.S., F. Zanferari, B.L. Maganhe, C.S. Takiya, T.H. Silva, T.A.D. Valle and F.P. Renno. 2017. Increasing dietary levels of citral oil on nutrient total tract digestibility, ruminal fermentation, and milk composition in Saanen goats. *Animal Feed Science and Technology*. 229: 47-56.
- Ceballos, L.S., E.R. Morales, G.D.L.T. Adarve, J.D. Castro, L.P. Martinez and M.R.S. Sampelayo. 2009. Composition of goat and cow milk produced under similar condition and analyzed by identical methodology. *Journal of Food Composition and Analysis*. 22(4):322-329.
- Chen, Z.H., G.A. Broderick, N.D. Luchini, B.K. Sloan and E. Devillard. 2011. Effect of feeding different sources of rumen-protected methionine on milk production and N-utilization in lactating dairy cows. *Journal of Dairy Science*. 94(4): 1978-1988.
- Chilliard, Y., A. Ferlay, J. Rouel and G. Lamberet. 2003. A review of nutritional and physiological factors affecting goat milk lipid synthesis and lipolysis. *Journal of Dairy Science*. 86(5): 1751-1770.

- Ditjen PKH. 2021. Kementan berkomitmen kembangkan produksi susu segar dalam negeri. Tersedia di www.ditjenpkh.pertanian.go.id. Pada tanggal 20 Februari 2022.
- Doepel, L., D. Pacheco, J.J. Kennelly, M.D. Hanigan, L.F. Lopez and H. Lapiere. 2004. Milk protein synthesis as a function of amino acid supply. *Journal of Dairy Science*. 87(5): 1279-1297.
- Dwiyana, T., T. Akbarillah dan Hidayat. 2021. Pengaruh penggunaan ampas kelapa (*Cocos nucifera* L.) dalam konsentrat dengan level berbeda terhadap produksi susu kambing Nubian. *Jurnal Sain Peternakan Indonesia*. 16(1): 8-16.
- Elihasridas dan R.W.S. Ningrat. 2015. Degradasi *in vitro* fraksi serat ransum berbasis limbah jagung amoniasi. *Jurnal Peternakan Indonesia*. 17(2): 116-122.
- Farda, F.T., A.K. Wijaya, Liman, Muhtarudin, D. Putri dan M. Hasanah. 2020. Pengaruh varietas dan jarak tanam yang berbeda terhadap kandungan nutrisi hijauan jagung. *Jurnal Ilmiah Peternakan Terpadu*. 8(2): 83-90.
- Frida, G.S., S. Sembiring, N.N. Suryani dan J. Ly. 2020. Pengaruh penggunaan tepung krokot (*Portulaca oleracea* L.) dalam ransum terhadap konsumsi dan pencernaan serat kasar dan lemak kasar ternak babi Peranakan Landrace fase *grower-finisher*. *Jurnal Peternakan Lahan Kering*. 2(2): 799-805.
- Guntoro, B., A.N. Rakhman and Y.Y. Suranindyah. 2016. Innovation adoption of dairy goat farmers in Yogyakarta, Indonesia. *International Journal of Environmental and Agriculture Research*. 2(2): 98-109.
- Haiam, A., Sayed and M.M. El-Maghraby. 2017. Effect of dietary roughage to concentrate rations with sunflower oil supplement, on digestibility, rumen fermentation, milk production, and milk fatty acid profile of dairy goats. *Egyptian Journal on Sheep and Goat Sciences*. 12(3): 25-35.
- Handayanta, E., Ifar S., Hartatik and Kusmartono. 2014. Botanical composition and quality of ruminant feed resources in the dry land farming areas in Yogyakarta, Indonesia. *Journal of Biology, Agriculture, and Healthcare*. 4(4): 26-33.
- Hanifa, A. 2008. Pengaruh pemberian ransum dengan kualitas berbeda terhadap profil darah, produksi susu dan pertambahan bobot badan sapi perah. *Sains Peternakan*. 6(1): 26-33.
- Hanim, C., I.G.S. Suparta and R.D. Pratiwi. 2017. The effect of Alfalfa meal supplementation in concentrate on feed digestibility of Ettawa Crossbred Goat. *The 7th International Seminar on Tropical Animal Production*. Yogyakarta: 12-14 September 2017. pp. 97-102.

- Harjanti, D.W., A. Mustaqim dan R. Hartanto. 2021. Produksi susu dan komposisi susu sapi *Friesian Holstein* yang mendapat suplemen tepung temulawak (*Curcuma xanthorrhiza* Roxb). Jurnal Agripet. 21(1): 40-48.
- Hartadi, H., S. Reksohadiprodjo, S. Lebdosukojo, A.D. Tillman, L.C. Kearl and L.E. Harris. 1980. Tables of Feed Composition for Indonesia. Gadjah Mada University Press. Yogyakarta.
- Harun, N.L.A., A.R. Alimon, M.F. Jahromi and A.A. Samsudin. 2017. Effects of feeding goats with *Leucaena leucocephala* and *Manihot utilissima* leaves supplemented diets on rumen fermentation profiles, urinary purine derivatives and rumen microbial population. Journal of Applied Animal Research. 45(1): 409-416.
- Haryanto, B. 2012. Perkembangan penelitian nutrisi ruminansia. Wartazoa. 22(4): 169-177.
- Heinrichs, J., C.M. Jones and K. Bailey. 2016. Milk components understanding milk fat and protein variation in your dairy herd. Pennstate Extension. Pennsylvania State University.
- Hwang, S.Y., M.J. Lee and P.W.S. Chiou. 2000. Monitoring nutritional status of dairy cows in Taiwan using milk protein and milk urea nitrogen. Asian Australasian Journal of Animal Sciences. 13(12): 1667-1673.
- Jarmuji, D., Suherman, E. Silvia dan I. Apriyani. 2018. Peningkatan produksi susu dan *income over feed cost* (IOFC) kambing perah dengan penambahan katuk (*Sauropus androgunus*) dan kunyit (*Curcuma longa*) pada sakura blok. Jurnal Sain Peternakan Indonesia. 13(3): 310-317.
- Kamal, M. 1998. Bahan Pakan dan Ransum Ternak. Yogyakarta: Fakultas Peternakan. Universitas Gadjah Mada.
- Karuhgair, S.D., E.D. Sulistijo dan M. Yunus. 2022. Pengaruh pemberian konsentrat mengandung tepung ubi kayu dan bonggol pisang sebagai sumber energi alternatif terhadap konsumsi dan pencernaan serat kasar serta lemak kasar sapi Bali penggemukan pola peternak. Jurnal Peternakan Lahan Kering. 4(2): 2083-2089.
- Khairi, F., A. Muktiani dan Y.S. Ondho. 2014. Pengaruh suplementasi vitamin E, mineral selenium dan zink terhadap konsumsi nutrisi, produksi dan kualitas semen sapi Simental. Jurnal Agripet. 14(1): 6-16.
- Klau, M.Y., A.F. Pendong, R.A.V. Tuturoong dan M.R. Waani. 2020. Kecernaan energi dan kecernaan nutrisi total pada ternak sapi perah yang diberikan pakan lengkap berbasis tebon jagung. Zootec. 40(2): 561-569.

- Koten, B.B., R. Wea, R.D. Soetrisno, N. Ngadiyono dan B. Suwignyo. 2014. Konsumsi nutrisi ternak kambing yang mendapatkan hijauan hasil tumpangsari Arbila (*Phaseolus lunatus*) dengan sorgum sebagai tanaman sela pada jarak tanam Arbila dan jumlah baris sorgum yang berbeda. *Jurnal Ilmu Ternak*. 1(8): 38-45.
- Krisnan, R., L. Praharani, Supriyati dan A.K. Pangestu. 2015. Kecukupan nutrisi kambing Peranakan Etawah periode laktasi. *Prosiding Seminar Nasional Teknologi Peternakan dan Veteriner*. 374-380.
- Kustantinah, A., D.A. Astuti and E.R. Orskov. 2013. Goat farming and livelihood of small holder farmers in Indonesia. *Proceedings of the 4th international conference on sustainable animal agriculture for developing countries*. 10: 68-74.
- Kustantinah, H. Hartadi, L.M. Yusiati, R. Utomo, A. Agus, B. Suhartanto, F. Hoilil and E. Dahono. 2005. The effect of protein feed supplementation to various roughage basal feed on the performance of Bligon goats. *Buletin Peternakan*. 29(4): 163-168.
- Laksana, A.A., E. Rianto dan M. Arifin. 2013. Pengaruh kualitas ransum terhadap pencernaan dan retensi protein ransum pada kambing Kacang jantan. *Animal Agriculture Journal*. 2(4): 63-72.
- Lee, M.C., S.Y. Hwang and W.S. Chiou. 2001. Application of rumen undegradable protein on early lactating dairy goats. *Asian-Australian Journal of Animal Sciences*. 14(11): 1549-1554.
- Leondro, H., B.P. Widyobroto, Adiarto and A. Agus. 2019. Effects of undegradable dietary protein on milk production and composition of lactating dairy cows. *IOP Conference Series: Earth and Environmental Science*. 387: 1-5.
- Li, F., Z. Li, S. Li, J.D. Ferguson, Y. Cao, J. Yao, F. Sun, X. Wang and T. Yang. 2014. Effect of dietary physically effective fiber on ruminal fermentation and the fatty acid profile of milk in dairy goats. *Journal of Dairy Science*. 97(4): 2291-2290.
- Lima, M.V.S., A.R. Bagaldo, M. Muller, E.E.G. Pinheiro, B.J. Almeida, L.C. Mugab, F.L. Araujo, L.R. Bezerra and R.L. Olivera. 2020. Intake, digestibility, ingestive behavior, production and composition of goat milk supplemented with detoxified castor bean meal added urea as a replacement of soybean meal. *Tropical Animal Health and Production*. 52(4): 2135-2143.
- Lokapirnasari, W.P., A.M. Sahidu, K. Soepranianondo, A. Supriyanto, A.B. Yulianto and A. Al Arif. 2018. Potency of lactic acid bacteria isolated from Balinese bovine (*Bos sondaicus*) intestinal waste from slaughterhouse to improve nutrient content of wheat pollard as animal feedstuff by fermentation process. *Veterinary World*. 11(8): 1127-1134.

- Lu, C.D., J.R. Kawas, and O.G. Mahgoub. 2005. Fibre digestion and utilization in goats. *Small Ruminant Research*. 60: 45-52.
- Marhaenyanto, E., S. Susanti, B. Siswanto and A.T. Murti. 2020. Use of *Gliricidia sepium*, *Leucaena leucocephala*, and *Paraserianthes falcataria* leaves in concentrates to improve the appearance of young male goats Peranakan Etawa in East Java, Indonesia. *IOSR Journal of Agriculture and Veterinary Science*. 13(1): 32-37.
- McDonald, P., R.A. Edwards, J.F.D. Greenhalgh and C.A. Morgan. 2002. *Animal Nutrition*. 6th Edition. Ashford Colour Ltd., Gosport. New Zealand.
- McDonald, P., R.A. Edwards, J.F.D. Greenhalgh, C.A. Morgan, L.A. Sinclair and R.G. Wilkinson. 2010. *Animal Nutrition Seventh Edition*. Pearson.
- Mertens, D.R. and R.J. Grant. 2020. Digestibility and Intake. Forage: The Science of Grassland Agriculture. 7th Edition. John Wiley and Sons Ltd. United Kingdom. pp 609-631.
- Min, B.R., S.P. Hart, T. Sahlul and L.D. Satter. 2005. The effect of diets on milk production and composition and on lactation curves in pastured dairy goats. *Journal of Dairy Science*. 88: 2604-2615.
- Munyaneza, N., J. Niyukuri and Y.E. Hachimi. 2017. Milk urea nitrogen as an indicator of nitrogen metabolism efficiency in dairy cows: A review. *Theriogenology Insight*. 7(3): 145-159.
- Nascimento, T.V.C., R.L. Oliveira, D.R. Menezes, A.R.F. de Lecune, M.A.A. Queiroz, A.G.V.O. Lima, R.D.X. Ribeiro and L.R. Bezerra. 2021. Effects of condensed tannin amended cassava silage blend diets on feeding behaviour, digestibility, nitrogen balance, milk yield, and milk composition in dairy goats. *The International Journal of Animal Biosciences*. 15(1): 1-7.
- Novika, D. 2013. Degradasi Fraksi Serat (NDF, ADF, Selulosa dan Hemiselulosa) Ransum yang Menggunakan Daun Coklat secara *In-vitro*. Skripsi Sarjana Fakultas Peternakan. Universitas Andalas. Padang.
- Nozad, S., A.G. Ramin, G.H. Moghadam, S. Asri-Rezaei and A. Babapour. 2011. Diurnal variations in milk urea, protein and lactose concentrations in Holstein dairy cows. *Acta Veterinaria*. 61(1): 3-11.
- NRC. 1981. Nutrient requirements of goats: Angora, Dairy, and Meat Goats in Temperate And Tropical Countries. National Academy Press, Washington D.C. USA.
- NRC. 2001. Nutrient Requirement of Dairy Cattle. 8th Edition. National Academic of Science. Washington D.C. USA.

- Nurhaita, N. Defianti dan N. Hidayah. 2020. Karakteristik fermentabilitas dalam rumen *in vitro* pada pelepah sawit fermentasi yang disuplementasi tepung kulit jengkol. *Jurnal Peternakan*. 17(1): 399-44.
- Olafadehan, O.A., A.A. Njidda, S.A. Okunade, M.K. Adewumi, K.J. Awosanmi, T.O. Ijanmi and A. Raymond. 2016. Effects of feeding *Ficus polita* foliage-based complete rations with varying forage:concentrate ratio on performance and ruminal fermentation in growing goats. *Animal Nutrition and Feed Technology*. 16(3): 373-382.
- Olafadehan, O.A., M.K Adewumi and S.A. Okunade. 2014. Effects of feeding tannin-containing forage in varying proportion with concentrate on the voluntary intake, haematological and biochemical indices of goats. *Trakia Journal of Science*. 12(1): 73-81.
- Park, Y.W. and G.F.W. Haenlein. 2006. *Handbook of Milk of Non-Bovine Mammals*. Blackwell Publishing. United Kingdom. P. 45.
- Park, Y.W., M. Juarez, M. Ramos and G.F.W. Haenlein. 2007. Physico-chemical characteristics of goat and sheep milk. *Small Ruminant Research*. 68: 88-113.
- Perdhana, P.W., J. Riyanto, A. Ratriyanto, S.D. Widyawati dan W.P.S. Suprayogi. 2013. Pengaruh penggunaan tepung ikan dan menir kedelai terproteksi dalam ransum terhadap pencernaan nutrisi pada sapi persilangan Simmental Peranakan Ongole Jantan. 2(1): 1-7.
- Permana, A.H., I. Hernaman dan N. Mayasari. 2020. Profil protein daerah sapi perah masa transisi dengan *Indigofera zollingeriana* sebagai pengganti konsentrat serta penambahan mineral dalam pakan. *Sains Peternakan*. 18(1): 53-59.
- Phillips, A.D.M. 2009. Milk urea nitrogen a nutritional evaluation tool. *Extention Dairy Nutritionist*. University of Kentucky.
- Prabawati, S.A., B.A. Nugroho and S. Azizah. 2021. Feed carrying capacity index for the Etawa Goats breeding area in Ampelgading District, Malang Regency, East Java, Indonesia. *International Research Journal of Advanced Engineering and Science*. 6(4): 30-34.
- Pratama, A.M., O. Herawati, N.R. Nuranisa, N. Hanifah, A.D. Wijayanti, S. Rahmatullah, E. Nuraini and A. Budiyanto. 2022. Identification of Poisonous plants and their solutions for traditional livestock in Bojonegoro District, East Java, Indonesia. *Biodiversitas*. 23(1): 446-452.
- Restitrisnani, V., A. Purnomoadi and E. Rianto. 2013. The production and body composition of kacang goat fed different quality of diets. *Journal of the Indonesian Tropical Animal Agriculture*. 38(3): 163-170.

- Ribeiro, G.O., R.J. Gruninger, A. Badhan and T.A. McAllister. 2016. Mining the rumen for fibrolytic feed enzymes. *Animal Frontiers*. 6(2): 20-26.
- Rinaldi, R., I. Hernaman dan B. Ayuningsih. 2017. Evaluasi kecukupan nutrisi pada sapi perah laktasi produksi sedang milik anggota koperasi di Koperasi Peternakan Bandung Selatan (KPBS) Pangalengan. *Students e-Journal*. 6(1): 1-7.
- Riyanto, J., Sudibya and S.J. Anhardhika. 2019. Influence of soybean groat protected used in the consumption and digestibility of dry matter, organic matter, and crude protein on the bligon goats. *IOP Conference Series: Earth and Environmental Science*. 372: 1-6.
- Rocateli, A. and H. Zhang. 2017. Forage quality interpretations. Division of Agricultural Sciences and Natural Resources. Oklahoma State University. Available at <https://extension.okstate.edu/fact-sheets/forage-quality-interpretations.html>. Accession date 12th June 2022.
- Rochijan. 2014. Pengaruh Pemberian Rumen Undegraded Protein terhadap Produksi dan Reproduksi Sapi Perah. Tesis Program Pascasarjana Fakultas Peternakan. Universitas Gadjah Mada. Yogyakarta.
- Rosartio, R., Y. Suranindyah, S. Bintara dan Ismaya. 2015. Produksi dan komposisi susu Kambing Peranakan Ettawa di dataran tinggi dan dataran rendah Daerah Istimewa Yogyakarta. *Buletin Peternakan*. 39(3): 180-188.
- Roy, B., B. Brahma, S. Ghosh, P.K. Pankaj and G. Mandal. 2011. Evaluation of milk urea concentration as useful indicator for dairy herd management: A Review. *Asian Journal of Animal and Veterinary Advances*. 6(1): 1-19.
- Sahroni, W. P., I. G. Permana and Despal. 2021. Reformulation of dairy cow diets based on rumen degradable protein and total digestible nutrient with varying levels on in vitro fermentability and digestibility. *IOP Conference Series: Earth and Environmental Science*. 88: 1-9.
- Santos, A. B., M. L. A. Pereira, H. G. O. Silva, M. S. Pedreira, G. G. P. Carvalho, L. S. O. Ribeiro, P. J. P. Almeida, T. C. J. Pereira, and J. V. Moreira. 2014. Nitrogen metabolism in lactating goats fed with diets containing different protein sources. *Asian-Australian Journal of Animal Sciences*. 27(5): 658-666.
- Septori, R., Erwanto dan R. Sutrisna. 2014. Status nutrisi sapi Peranakan Ongole di Kecamatan Bumi Agung Kabupaten Lampung Timur. *Jurnal Ilmiah Peternakan Terpadu*. 2(3): 88-95.
- Siska, I. dan Y.L. Anggrayni. 2021. Hubungan konsumsi protein kasar terhadap total protein darah dan kandungan protein susu Kambing Peranakan Ettawa (PE). *Jurnal Ilmu Ternak Universitas Padjadjaran*. 21(2): 102-108.

- Supriyati, R. Krisnan, I.G.M. Budiarsana and L. Praharani. 2016. Effect of different protein and energy levels in concentrates diets on nutrient intake and milk yield of Saanen x Etawah Grade Goats. *Jurnal Ilmu Ternak dan Veteriner*. 21(2): 88-95.
- Suranindyah, Y. and A. Astuti. 2012. The effects of feeding dried fermented cassava peel on milk production and composition of Ettawah Crossedbred Goat. *International Journal of Nutrition and Food Engineering*. 6(10): 911-914.
- Suranindyah, Y., B.P. Widyobroto, S.D. Astuti, T.W. Murti and Adiarto. 2020. Lactation characteristic of Etawah Crossed Breed goats under intensive management. *Buletin Peternakan*. 44(1): 22-26.
- Suranindyah, Y.Y., D.H.A. Khairy, N. Firdaus and Rochijan. 2018a. Milk production and composition of Etawah Crossbred, Sapera, and Saperong dairy goats in Yogyakarta, Indonesia. *International Journal of Dairy Science*. 13(1): 1-6.
- Suranindyah, Y.Y., Rochijan, Adiarto, B.P. Widyobroto, S.D. Astuti and T.W. Murti. 2018b. Effect of feeding high proportion concentrates containing tofu waste on nutrient consumption, milk production, body condition score, and postpartum mating period of dairy goats in Yogyakarta, Indonesia. *Pakistan Journal of Nutrition*. 17(12): 702-708.
- Suryani, A.I., Sulastri dan I. Harris. 2016. Perbedaan bobot dan ukuran tubuh Kambing Boerawa *grade* 1 umur satu tahun dari beberapa pejantan Kambing Boer di Kecamatan Sumberejo. *Jurnal Ilmiah Peternakan Terpadu*. 4(1): 86-93.
- Suryani, N.N., I.K.M. Budiasa dan I.P.A. Astawa. 2014. Fermentasi rumen dan sintesis protein mikrobial Kambing Peranakan Ettawa yang diberi pakan dengan komposisi hijauan beragam dan level konsentrat berbeda. *Majalah Ilmiah Peternakan*. 17(2): 56-60.
- Suwignyo, B., Panjono, Aryanto, Sarmin and I. Widiyono. 2018. Body weight, physiological status and volatile fatty acid on Kacang and Etawah Crossbred Goat by reduction and refeeding of feed quantity. *Jurnal Sain Veteriner*. 36(2): 191-199.
- Tantalo, S., Liman dan F. Fathul. 2019. Efek umur pemangkasan *Indigofera (Indigofera zollingeriana)* pada musim kemarau terhadap kandungan *neutral detergent fiber* dan *acid detergent fiber*. *Jurnal Ilmiah Peternakan Terpadu*. 7(2): 241-246.
- Tereso, J.M. and H. Martens. 2014. Calcium and magnesium physiology and nutrition in relation to the prevention of milk fever and tetany (dietary management of macrominerals in preventing disease). *Veterinary Clinics of North America: Food Animal Practice*. 30(3): 643-670.

- Tsiplakou, E., L. Yiasoumis, A.C. Maragou, A. Mavrommatis, K. Sotirakoglou, G. Moatsou and G. Zervas. 2017. The respons of goats to different starch/NDF rations of concentrates on the milk chemical composition, fatty acid profile, casein fractions and rennet clotting properties. *Small Ruminant Research*. 156: 82-88.
- Utomo, R., A. Agus, C.T. Noviandi, A. Astuti dan A.R. Alimon. 2020. *Bahan Pakan dan Formulasi Ransum*. Gadjah Mada University Press. Yogyakarta.
- Wattiaux, M.A. 2015. *Protein Metabolism in Dairy Cows*. Babcock Institute for International Dairy Research and Development. University of Wisconsin. Madison. pp 17-20.
- Wattiaux, M.A. and L.E. Armentano. 2015. *Carbohydrate Metabolism in Dairy Cows*. Babcock Institute for International Dairy Research and Development. University of Wisconsin. Madison. pp 9-12.
- Widyawati, S.D., R.F. Hadi and A. Hanifa. 2019. The effects of linsed supplementation in ration on milk production and quality of lactating Ettawa Crossbreed dairy goats. *IOP Conference Series: Earth and Enviromental Science*. 292: 1-6.
- Widyobroto, B.P. 2013. *Implementasi Sistem Penyusunan Ransum Sapi Perah di Indonesia berdasarkan Protein Tercerna di Intestinum*. Pidato Pengukuhan Guru Besar pada Fakultas Peternakan. Universitas Gadjah Mada. Yogyakarta.
- Widyobroto, B.P., Rochijan, C.T. Noviandi and A. Astuti. 2019. Microenvironment identification and the feed availability for dairy cows during dry and wet seasons in the main dairy areas of Yogyakarta – Indonesia. *Journal of Animal Behaviour and Biometeoroly*. 7(2): 86-91.
- Widyobroto, B.P., Rochijan, F.S. Pradana and L.M. Yusiati. 2018. Effect of different rumen undegraded protein level on feed consumption, nutrient digestion, body weight, and body condition score in early lactating dairy cattle. *Online Journal of Biological Sciences*. 18(2): 247-253.
- Widyobroto, B.P., Rochijan, Ismaya, Adiarto and Y.Y. Suranindyah. 2016. The impact of balanced energy and protein supplementation to milk production and quality in early lactating dairy cows. *Journal of the Indonesian Tropical Animal Agriculture*. 41(2): 83-90.
- Widyobroto, B.P., S. Priyon, S. Budhi dan A. Agus. 2008. Pengaruh aras *undegraded protein* dan energi terhadap *intake* dan pencernaan nutrien serta metabolit darah pada sapi perah. *Animal Production*. 10(2): 96-101.
- Widyobroto, B.P., S.P.S. Budhi and A. Agus. 2010. Effect of protein undegraded supplementation on production and composition of milk

in dairy cows. *Journal of the Indonesian Tropical Animal Agriculture*. 35(1): 27-33.

Widyobroto, B.P., S.P.S. Budhi dan A. Agus. 2007. Pengaruh aras *undegraded protein* dan energi terhadap kinetik fermentasi rumen dan sintesis protein mikroba pada sapi. *Journal of the Indonesian Tropical Animal Agriculture*. 32(3): 194-200.

Wirayudha, P., W. Setyono, I.G.S Budisatria, Rahmawati and Kustantinah. 2022. Effect of dietary supplementation with jackfruit leaves and soybean meal on nutrient intake and digestibility in sheep. *The 6th International Seminar of Animal Nutrition and Feed Science*. pp 82-85.

Yakubu, H. and W.Z. Mohamed. 2019. Effect of commercial fatty acids, organic acids and mineral supplementation on milk yield and blood characteristics of dairy goats in selected farms in Kelantan, Malaysia. *Journal of Tropical Resources and Sustainable Science*. 7(1): 1-11.

Zhou, M., L. Xu, F. Zhao and H. Liu. 2021. Regulation of milk protein synthesis by free and peptide bound amino acids in dairy cows. *Biology*. 10(10): 1-14.