

## DAFTAR PUSTAKA

- Aban, M.L., L.M.R. Gonzales, and L.C. Bestil. 2015. Voluntary feed intake in goats of foliages with varying pH levels from selected trees and shrubs. *International J. Sci. Res. Pub.* 5 (1): 1 - 4.
- Abebe, R., M. Gebreyohannes, S. Mekuria, F. Abunna, and A. Regassa. 2010. Gastrointestinal nematode infections in small ruminants under the traditional husbandry system during the dry season in Southern Ethiopia. *Trop. Anim. Health. Prod.* 42: 1111 - 1117.
- Addulah, M., Kusmartono, Suyadi, Soebarinoto, and M. Winugroho. 2007. The effect of feeding local and imported fish meal on daily weight gain, sexual performance, and semen production of Kacang buck. *Anim. Prod.* 9 (2): 135 - 144.
- Ajayi, F.T. and F.O. Ogunleke. 2015. Performance, nutrient utilization and rumen fermentation characteristics of West African Dwarf goats fed concentrate diet with corncob in varying inclusion levels. *The Pacific J. Sci. Technol.* 16 (1): 274 - 279.
- Ajibola, A. 2006. Nitrogen retention and water balance in animals fed medium protein diet amidst limited water supply. *Afr. J. Biomed. Res.* 9 (September): 225 - 229.
- Akhsan, F., L.K. Nuswantara, and J. Achmadi. 2015. Combination of soybean meal and *Hibiscus tiliaceus* leaf in the goat diet: effect on some parameters of protein metabolism. *J. Indonesian Trop. Anim. Agric.* 40 (2): 100 - 106.
- Alatas, M.S. and H.D. Umucañlar. 2011. Bacteria of the rumen ecosystem and their roles. *Atatürk Üniversitesi Veteriner Bilimleri Dergisi.* 6 (1): 71 - 83 (Abstr.).
- Alexandre, G., L. Liméa, A. Nepos, J. Fleury, C. Lallo, and H. Archimede. 2010. The ofal components and carcass measurements of Creole kids of Guadeloupe under various feeding regimes. *Livest. Res. for Rural Dev.* 22(5), 2010. (Diakses tanggal 4 Maret 2016).
- Ariyani, S.A., L.K. Nuswantara, E. Pangestu, F. Wahyono, and J. Achmadi. 2014. Parameters of protein metabolism in goats fed diets with different portion of sugarcane bagasse. *J. Indonesian Trop. Anim. Agric.* 39 (2): 111 - 116.
- Armayanti, A.K., L.K. Nuswantara, and J. Achmadi. 2015. Combination of soybean meal and *Hibiscus tiliaceus* leaf in the goat diet: effect on some parameters of carbohydrate metabolism. *J. Indonesian Trop. Anim. Agric.* 40 (3): 153 - 158.

- Asaolu, V., R. Binuomote, J. Akinlade, O. Aderinola, and O. Oyelami. 2012. Intake and growth performance of West African Dwarf goats fed Moringa oleifera, Gliricidia sepium and Leucaena leucocephala dried leaves as supplements to Cassava peels. *J. Biol. Agric. Healthcare*. 2 (10): 76 - 88.
- Astuti, D.A. 2014. AADGN Country Report 2013/14 - Indonesia. [https://www.dropbox.com/s/go1t0drzvg5nhp/4\\_Indonesia.pdf?dl=0](https://www.dropbox.com/s/go1t0drzvg5nhp/4_Indonesia.pdf?dl=0) (Diakses tanggal 16 April 2017).
- Astuti, D.A., A.S. Baba, and I.W.T. Wibawan. 2011. Rumens fermentation, blood metabolites, and performance of sheep fed tropical browse plants. *Media Peternakan*, Desember 2011, Hal. 201 - 206. ISSN 0126-0472. <http://medpet.journal.ipb.ac.id>.
- Atti, N., H. Rouissi, and M. Mahouachi. 2004. The effect of dietary crude protein level on growth, carcass and meat composition of male goat kids in Tunisia. *Small Rum. Res.* 54: 89 - 97.
- Awan Z.A., M. Tariq, M.M. Awan, N.W. Satti, T. Mukhtar, W. Akram, and M.F. Yasin. 2015. Edible by-products of meat. *Veterinaria*. 3 (1): 33 - 36.
- Ayeb, N., A. Ghrab, A. Barmat, and T. Khorchani. 2016. Chemical and tissue composition of meat from carcass cuts of local goats affected by different feeding in Tunisian arid lands. *Turk. J. Vet. Anim. Sci.* 40: 95 - 101.
- Badan Litbang Pertanian. 2013. Legalitas untuk Lindungi Kelestarian Kambing Kacang. <http://www.litbang.deptan.go.id/berita/one/1495/> (Diakses tanggal 19 Sept. 2013).
- Badan Pusat Statistik (BPS). 2013. Populasi Ternak yang Dipelihara oleh Rumah Tangga Usaha Peternakan Sesuai Jenis Ternak yang Diusahakan Menurut Wilayah dan Jenis Ternak. <http://st2013.bps.go.id/dev2/index.php/site/tabel?tid=51&wid=3300000000> (Diakses tanggal 12 Okt. 2015).
- Badan Pusat Statistik, Jawa Tengah (BPS Jateng). 2012. [http://jateng.bps.go.id/index.php?option=com\\_content&view=section&id=17&Itemid=89](http://jateng.bps.go.id/index.php?option=com_content&view=section&id=17&Itemid=89) (Diakses tanggal 19 Sept. 2013).
- Baiti, L.Z., L.K. Nuswantara, E. Pangestu, F. Wahyono, and J. Achmadi. 2013. Effect of bagasse portion in diet on body composition of goat. *J. Indonesian Trop. Anim. Agric.* 38 (3): 199 - 204.
- Balai Penyuluhan Pertanian, Perikanan, dan Kehutanan (BP3K) Kecamatan Mendahara Ulu, Kabupaten Tanjung Jabung Timur, Provinsi Jambi. 2012. Jenis dan Bangsa Kambing. [bppmenlu.blogspot.com/2012/10/jenis-dan-bangsa-kambing.html?m=1](http://bppmenlu.blogspot.com/2012/10/jenis-dan-bangsa-kambing.html?m=1) (Diakses tanggal 19 September 2013).
- Bayati-Zadeh, J. and Z. Moradi-kor. 2013. Ruminant protein degradation and estimation of rumen microbial protein production. *International J. Adv. Biol. Biomed. Res.* 1 (8): 914 - 921.

- Belenguer, A., D. Yanez, J. Balcells, N.O. Baber, and M.G. Ronquillo. 2002. Urinary excretion of purine derivatives and prediction of rumen microbial outflow in goats. *Livest. Prod. Sci.* 77.
- Belo, A.T., M.S. Pereira, H. Babo, and C. Belo. 2009. Meat fatty acids profile of kid goats from Serpentina breed. *In*: Pacheco, F. and P. Morand-Fehr (ed.). *Changes in Sheep and Goat Farming Systems at the Beginning of the 21<sup>st</sup> Century: Research, Tools, Methods and Initiatives in Favour of Sustainable Development*. Zaragoza : CIHEAM / DRAP-Norte / FAO, 2009. p: 245 - 248.
- Borja, M.S., R.L. Oliveira, A.R. Bagaldo, M.L.A. Pereira, R.W. Portela, A.M. Barbosa, C.V.D.M. Ribeiro, and G.G.P. Carvalho. 2014. Microbial protein and blood parameters of goats fed with licury cake. *Ciências Agrárias*. 35 (1): 519 - 530.
- Budisatria, I.G.S. and H.M.J. Udo. 2013. Goat-based aid programme in Central Java: an effective intervention for the poor and vulnerable? *Small Rum. Res.* 109: 76 - 83.
- Budisatria, I.G.S., C.H.A.M. Eilers, H.M.J. Udo, E. Baliarti and A.J. van der Zijpp. 2006. Preferences for sheep or goats in Indonesia. *Dalam: Dynamics of Small Ruminant Development in Central Java, Indonesia* (Ed: I.G.S. Budisatria). ISBN 90-8504-364-6. PhD Thesis, Animal Production Systems Group, Wageningen University. Chapter 3, Page: 39 - 54.
- Budisatria, I.G.S., H.M.J. Udo, T.C. Viets and A.J. van der Zijpp. 2012<sup>a</sup>. Opportunities for change in small ruminant systems in Central Java-Indonesia. *Anim. Prod.* 14 (1): 37 - 46.
- Budisatria, I.G.S., Panjono, A. Agus, dan H.M.J. Udo. 2012<sup>b</sup>. The productivity of Kejombang and Bligon goats, a local Indonesian goats kept by farmers. *Proceedings of the 15<sup>th</sup> AAAP Animal Science Congress, 26-30 November 2012*. Thammasat University, Rangsit Campus, Thailand. 1250 - 1255.
- Coleman, S.W. 2005. Predicting forage intake by grazing ruminants. *Florida Ruminant Nutrition Symposium*. Brooksville, Florida. 72 - 90.
- Conway, E. and E. O'Malley. 1942. Microdiffusion method. ammonia and urea using buffered absorbents. *Biochem.* 36.
- D'Alessandro, A.G., G. Maiorano, B. Kowalyszyn, P. Loiudice, and G. Martemucci. 2012. How the nutritional value and consumer acceptability of suckling lambs meat is affected by the maternal feeding system. *Small Rum. Res.* 106: 83 - 91.
- Damry. 2009. Produksi dan kandungan nutrisi hijauan padang penggembalaan alam di Kecamatan Lore Utara, Kabupaten Poso. *J. Agroland* 16 (4): 296 - 300.

- Darlis, N. Abdullah, R.A. Halim, S. Jalaludin, and Y.W. Ho. 2000<sup>a</sup>. Effects of protein and carbohydrate supplements on feed digestion in indigenous Malaysian goats and sheep. *Asian-Aus. J. Anim. Sci.* 13 (4): 464 - 469.
- Darlis, N. Abdullah, R.A. Halim, S. Jalaludin, and Y.W. Ho. 2000<sup>b</sup>. Rumen parameters and urea kinetics in goats and sheep. *Asian-Aus. J. Anim. Sci.* 13 (7): 922 - 928.
- Das, A.K. and V. Rajkumar. 2010. Comparative study on carcass characteristics and meat quality of three Indian goat breeds. *Indian J. Anim. Sci.* 80 (10): 1014 - 1018.
- Datta, R. 1981. Acidogenic fermentation of lignocelluloses-acid yield and conversion of components. *Biotech. and Bioeng.* 23: 2167 - 2170.
- Devendra, C. 1993. Goats and sheep in Asia. Wodzicka-Tomaszewska, M., S. Gardiner, A. Djajanegara, I.M. Mastika, dan T.R. Wiradarya (Eds). *In Small Ruminant Production in the Humid Tropics (with special reference to Indonesia)*. Sebelas Maret University Press, Surakarta. pp. 1 - 33.
- Dias, A.M.A., A.M.V. Batista, F.F.R. de Carvalho, A. Guim, G. Silva, and A.C. da Silva. 2010. Nutrient intake and digestibility and performance of goats fed rough wheat bran in replacement of corn. *Rev. Bras. Zootec.* 39 (4): 831 - 836.
- Donnelly, P.E. and J.B. Hutton. 1976. Effects of dietary protein and energy on the growth of Friesian bull calves. *New Zealand J. Agr. Res.* 19 (4): 409 - 414.
- Elamin, K.M., A.A.T. Eldar, A.E. Amin, F.S. Abdalla, and H.E. Hassan. 2012. Digestibility and Nitrogen balance of Sudan goat ecotypes fed different energy/protein levels. *Asian J. Anim. Sci.* 6 (5): 230 - 239.
- Elieser, S., Sumadi, I.G.S. Budisatria, and Subandriyo. 2012. Productivity comparison between Boer and Kacang goat dam. *J. Indonesian Trop. Anim. Agric.* 37 (1): 15 - 21.
- Evitayani, L. Warly, A. Fariani, T. Ichinohe, and T. Fujihara. 2004. Seasonal changes in nutritive value of some grass species in West Sumatera, Indonesia. *Asian-Aus. J. Anim. Sci.* 17 (12): 1663 - 1668.
- Ferdous, M.R., M.J. Khan, M.A. Rashid, and M. Kamruzzaman. 2011. Effect of different levels of concentrate supplementation on the performance of Black Bengal goat. *Bang. J. Anim. Sci.* 40 (1-2): 40 - 45.
- Forbes, J.M. 1995. Physical limitation of feed intake in ruminants and its interactions with other factors affecting intake. *In: Ruminant Physiology: Digestion, Metabolism, Growth, and Reproduction*. Proceedings of the Eighth International Symposium on Ruminant Physiology. Engelhardt, W.V., S. Leonhard-Marek, G. Breves, dan D. Giesecke (Editors). Ferdinand Enke Verlag, Stuttgart. 217 - 232.

- Fredriksz, S. 2008. Tingkat penggunaan hijauan gamal sebagai sumber nitrogen dengan sumber energi ubi kayu kukus terhadap parameter metabolisme rumen. *Jurnal Agroforestri*. 3 (1): 57 - 63.
- Gafar, A.A., A.R. Alimon, A.Q. Sazili, Y.C. Man, and A.R. Abubakr. 2013. Effect of varying levels of palm oil decanter cake on feed intake, growth performance and carcass characteristics of Kacang goats. *IOSR J. Agric. and Vet. Sci*. 3 (4): 24 - 29.
- Gasparotto, S.W. 2009. Average Daily Gain: Evaluating Its Use in Goats. Onion Creek Ranch. Tennessee Meat Goat <sup>TM</sup> and Texmaster<sup>TM</sup>. <http://www.tennessee meatgoats.com/articles2/averagedailygain.html>. (Diakses tanggal 9 Mei 2014).
- Hango, A., L.A. Mtenga, G.C. Kifaro, J. Safari, D.E. Mushi and V.R.M. Muhikambele. 2007. A study on growth performance and carcass characteristics of Small East African goats under different feeding regimes. *Livestock Research for Rural Development*. 19 (9), 2007. <http://www.lrrd.org/lrrd19/9/hang19130.htm>. (Diakses tanggal 8 Mei 2014).
- Hartadi, H., S. Reksohadiprodjo, dan A.D. Tillman. 2005. *Tabel Komposisi Pakan untuk 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 esculenta* leaves supplemented diets on rumen fermentation profiles, urinary purine derivatives and rumen microbial population. *J. Applied Anim. Res.* 45 (1): 409 - 416. <http://dx.doi.org/10.1080/09712119.2016.1205499>.
- Heinrichs, J. and A. Kmicikewycz. 2015. Total Mixed Rations for Dairy Cows: Advantages, Disadvantages, and Feeding Management. Penn State University Extension. Retrieve Oct. 13, 2016 from <http://extension.psu.edu/animals/dairy/nutrition/nutrition-and-feeding/diet-formulation-and-evaluation/total-mixed-rations-for-dairy-cows-advantages-disadvantages-and-feeding-management>.
- Ho Bunyeth and T.R. Preston. 2006. Growth performance and parasite infestation of goats given cassava leaf silage, or sun-dried cassava leaves, as supplement to grazing in lowland and upland regions of Cambodia. *Livest. Res. for Rural Dev.* 18 (2), Article #28. <http://www.lrrd.org/lrrd18/2/buny18028.htm>. (Diakses tanggal 28 Agustus 2015).
- Holmstrom, A. and D. Peters. 2011. *The Market Goat Guide to Success*. Oregon State University Extension Service, Hood River County, Oregon. <http://oregonstate.edu/dept/mcarec/sites/default/files/4hyouth/marketgoatguide.pdf>. (Diakses tanggal 9 Mei 2014).
- Hook, S.E., A.G. Wright, and B.W. McBride. 2010. Methanogens: methane producers of the rumen and mitigation strategies. *Hindawi Publishing Corporation Archaea*. pp. 50 - 60. doi:10.1155/2010/945785.

- Hutama, Y.G. 2014. Persentase Karkas dan Komponen Non Karkas Kambing Kacang Jantan Akibat Pemberian Pakan dengan Kadar Protein dan Energi yang Berbeda. Skripsi Fakultas Peternakan dan Pertanian, Universitas Diponegoro. <http://eprints.undip.ac.id/42789/> (Diakses tanggal 23 September 2014).
- Ibrahim, H. 1998. Small Ruminant Production Techniques. ILRI Manual 3. ILRI (International Livestock Research Institute), Nairobi, Kenya.
- Islam, M., H. Abe, F. Terada, K. Iwasaki, and R. Tano. 2000. Effects of levels of feed intake and inclusion of corn on rumen environment, nutrient digestibility, methane emission and energy and protein utilization by goats fed alfalfa pellets. *Asian-Aus. J. Anim. Sci.* 13 (7): 948 - 956.
- Jamhari, L.M. Yusiati, E. Suryanto, M.N. Cahyanto, Y. Erwanto, and M. Muguruma. 2013. Comparative study on angiotensin converting enzyme inhibitory activity of hydriylsate of meat protein of Indonesian local livestock. *J. Indonesian Trop. Anim. Agric.* 38 (1): 27 - 33.
- Jelantik, I.G.N., M.R. Weibsjerg, and J. Madsen. 2012. Intake, rumen degradation and utilisation of urea-ammoniated grass hay by Kacang-goats as affected by supplementation of sun-dried fish or fishmeal. *Anim. Prod.* 14 (2): 77 - 86.
- Johnson C.R., S.P. Doyle and R.S. Long. 2010. Effect of feeding system on meat goat growth performance and carcass traits. *Sheep & Goat Research Journal.* 25: 78-82.
- Jokthan, G.E. 2013. Intake and digestibility of *Gliricidia sepium* by Nunaji bulls. *International J. Res. in Applied, Natural and Soc. Sci.* 1 (5): 9 - 14.
- Judge, M.D., E.D. Aberle, J.C. Forrest, H.B. Hedrick, dan R.A. Merkel. 1989. *Principles of Meat Science.* Kendall/Hunt Publishing Company, Dubuque.
- Jurgens, M.H. 1993. *Animal Feeding and Nutrition. Seventh Edition.* Kendall/Hunt Publishing Company, Dubuque.
- Kearl L. C. 1982. *Nutrient Requirements of Ruminant in Developing Countries.* International Feedstuffs Institute, Utah Agricultural Experiment Station, Utah State University, Logan.
- Kim, S., J. Lee, and S. Park. 2016. Effects of full-fat soybean diet on performance, carcass characteristics, and fatty acid composition of Hanwoo steers. *Turk. J. Vet. Anim. Sci.* 40: 451 - 458.
- Kleinschmidt, J., K. Parker, J. Dunham, and T. Taylor. 2009. *Sheep and Goat Management in Alberta Nutrition.* Alberta Lamb Producers and Alberta Goat Breeders Association. [www.ablamb.ca/images/documents/management.../sgma\\_nutrition\\_module.pdf](http://www.ablamb.ca/images/documents/management.../sgma_nutrition_module.pdf)

- Kohn, R.A., M.M. Dinneen, and E. Russek-Cohen. 2005. Using blood urea Nitrogen to predict Nitrogen excretion and efficiency of Nitrogen utilization in cattle, sheep, goats, horses, pigs, and rats. *Amer. Soc. Anim. Sci.* 83: 879 - 889.
- Krehbiel, C.R. 2014. Applied nutrition of ruminants: fermentation and digestive physiology. *Professional Anim. Scientist.* 30 (2): 129 - 139 (Abstr.).
- Kurnianto, E., S. Sutopo, E. Purbowati, E.T. Setiatin, D. Samsudewa and T. Permatasari. 2013. Multivariate analysis of morphological traits of local goats in Central Java, Indonesia. *Iranian J. Appl. Anim. Sci.* 3 (2): 361 - 367.
- Kustantinah. 2012. Pengukuran Kualitas Pakan Sapi. P.T. Intan Sejati, Klaten.
- Kusumastuti, T.A. 2012. Kelayakan usaha ternak kambing menurut sistem pemeliharaan, bangsa, dan elevasi di Yogyakarta. *Sains Peternakan.* 10 (2): 75 - 84.
- Lawrence, T.L.J. and V.R. Fowler. 2002. *Growth of Farm Animals.* Second edition. CABI Publishing, New York.
- Lawrie, R.A. 1995. Ilmu Daging. Penerbit Universitas Indonesia (UI-Press), Jakarta. (Diterjemahkan oleh: A. Parakkasi).
- Leite-Browning, M.L. 2006. *Haemonchus contortus* (Barber Pole Worm) Infestation in Goats. The Alabama Cooperative Extension System, Alabama A&M University and Auburn University.
- Lima, A.R.C., M.H.M.R. Fernandes, I.A.M.A. Teixeira, R.T.S. Frighetto, T.F.V. Bompadre, B. Biagioli, N.C. Meister, and K.T. Resende. 2016. Effects of feed restriction and forage:concentrate ratio on digestibility, methane emission, and energy utilization by goats. *R. Bras. Zootec.* 45 (12): 781 - 787.
- Limea, L., M. Boval, N. Mandonnet, G. Garcia, H. Archimede, and G. Alexandre. 2009. Growth performance, carcass quality, and non carcass components of indigenous Caribbean goats under varying nutritional densities. *J. Anim. Sci.* 87: 3770 - 3781.
- Linn, Jim. 2016. Feeding total mixed rations. The University of Minnesota Extension. Retrieved: Oct. 13, 2016 from <http://www.extension.umn.edu/agriculture/dairy/feed-and-nutrition/feeding-total-mixed-rations/>.
- Mahmilia F, M. Doloksaribu, S. Elieser, dan F.A. Pamungkas. 2005. Tingkat produktivitas induk kambing persilangan (kambing Kacang dan kambing Boer) berdasarkan total bobot lahir, bobot sapih, litter size, dan daya hidup. *Prosiding Seminar Nasional Teknologi Peternakan dan Veteriner.* pp. 680 - 684.

- Mahmilia, F. dan A. Tarigan. 2004. Karakteristik morfologi dan performans kambing Kacang, kambing Boer, dan persilangannya. Prosiding Lokakarya Nasional Kambing Potong. Bogor, 6 Agustus 2004. Puslitbang Peternakan, Bogor. 209 - 212.
- Maia, M.O., I. Susin, A. Vas Pires, and R.S. Gentil. 2012. Growth, carcass characteristics, chemical composition and fatty acid profile of the *longissimus dorsi* muscle in goat kids fed diets with castor oil. *Revista Brasileira de Zootecnia*. 41 (11): 2343 - 2349.
- Maity S.B., A.K. Mishra, and V.S. Upadhyay. 1999. Effect of wheat bran supplementation on the utilization of mixed straws in goats. *Indian J. Anim. Nutr.* 16 (1): 86 - 88.
- Marjuki. 2008. Penggunaan tepung ikan dalam pakan konsentrat dan pengaruhnya terhadap penambahan bobot badan kambing betina. *J. Ternak Tropika*. 9 (2): 90 - 100.
- Marshall, R., S. Gebrelul, L. Gray, and Y. Ghebreyessus. 2012. Mixed species grazing of cattle and goats on gastrointestinal infections of *Haemonchus contortus*. *Amer. J. Anim. Vet. Sci.* 7(2):61-66.
- Martawidjaja, M., B. Setiadi, dan S.S. Sitorus. 1999. Pengaruh tingkat protein-energi ransum terhadap kinerja produksi kambing Kacang muda. *Jurnal Ilmu Ternak dan Veteriner*. 4 (3): 167 - 172.
- Martz, Fred. 2000. Pasture-Based Finishing of Cattle and Eating Quality of Beef. <http://aes.missouri.edu/fsrc/research/pasture.stm>. (Diakses tanggal 6 November 2013).
- Mirdhayati, I., J. Hermanianto, C.H. Wijaya, and D. Sajuthi. 2014. Profil karkas dan karakteristik kimia daging kambing Kacang (*Capra aegragus hircus*) jantan. *JITV*. 19 (1): 26 - 34.
- Mohammed, S.A., M.A. Razzaque, A.E. Omar, S. Albert, and W.M. Al-Gallaf. 2016. Biochemical and hematological profile of different breeds of goat maintained under intensive production system. *African J. Biotechnol.* 15 (24): 1253 - 1257.
- Mukandiwa, L., P.H. Mugabe, T.E. Halimani, and H. Hamudikuwanda. 2010. A note on the effect of supplementing rangeland grazing with *Acacia angustissima* mixed with pearl millet on growth performance of goats in a smallholder farming area in Zimbabwe. *Livest. Res. for Rural Dev.* 22 (1), Article #9. <http://www.lrrd.org/lrrd22/1/muka22009.htm>. (Diakses tanggal 28 Agustus 2015).
- Musnandar, E., A. Hamidah, and R.A. Muthalib. 2011. The effect of fermented oil palm fronds in diet on body weight gain and meat quality of goat. *J. Indonesian Trop. Anim. Agric.* 36 (2): 120 - 125.

- Nampanzira, D.K., J.D. Kabasa, S.A. Nalule, I. Nakalambe, and J.R.S. Tabuti. 2015. Characterization of the goat feeding system among rural small holder farmers in the semi-arid regions of Uganda. Published online, doi: 10.1186/s40064-015-0961-3.
- Naser, A. 2006. Pengaruh pemberian pakan dalam waktu berbeda terhadap bobot karkas dan persentase karkas kambing Kacang jantan. *J. Agroland*. 13 (3): 282 - 287.
- Never, A. 2015. Some major factors affecting carcass composition in goats. *Scientific J. Anim. Sci.* 4 (7): 81 - 88. DOI: 10.14196/sjas.v4i7.1923.
- Niedziółka, R. and K. Pieniak-Lendzion. 2006. Chemical composition of meat (*M. Adductor*) and fatty acids in intramuscular fat of goat kids and ram lambs. *Slovak J. Anim. Sci.* 39 (4): 197 - 200.
- Nitis, I. M. 2006. Country Pasture/Forage Resource Profiles. Indonesia. Food and Agriculture Organization of the United Nations (FAO). 18 pp.
- Noviandi, C.T., R.E. Ward, D.R. ZoBell, R.D. Stott, B.L. Waldron, M.D. Peel, and J.S. Eun. 2012. Fatty acid composition in adipose tissue of pasture- and feedlot-finished beef steers. *The Professional Animal Scientist*. 28: 184 - 193.
- Nurwantoro, V.P. Bintoro, A.M. Legowo, dan A. Purnomoadi. 2012. Pengaruh metode pemberian pakan terhadap kualitas spesifik daging. *Jurnal Aplikasi Teknologi Pangan*. 1 (3): 54 - 58.
- Ogebe, P.O., A.O. Ogwu, B.S. Mustafa, and L.R. McDowell. 2000. Effect of tethering feeding system on the performance of West African dwarf goats. *Livest. Res. for Rural Dev.* Vol. 12 No. 1, 2000. <http://www.cipav.org.co/lrrd/lrrd12/1/oge121.htm>. (Diakses tanggal 4 Maret 2016).
- Osoro, K., A. Mateos-Sanz, P. Frutos, U. Garcia, L.M. Ortega-Mora, L.M.M. Ferreira, R. Celaya, and I. Ferre. 2007. Anthelmintic and nutritional effects of heather supplementation on Cashmere goats grazing perennial ryegrass-white clover pastures. *J. Anim. Sci.* 85 (3): 861 - 870.
- Owens, F.N. and R. Zinn. 1993. Protein metabolism of ruminants animals. *In* *The Ruminant Animal: Digestive, Physiology, and Nutrition*. D.C. Church (Editor). Waveland Press, Inc., Prospect Height, Illinois. Page: 227-249.
- Padang. 2011. Ekosistem rumen kambing yang diberi kulit buah kakao setelah alkalisasi dengan KOH dan biofermentasi dengan *Saccharomyces cerevisiae*. *J. Agrisains*. 12 (1): 16 - 23.

- Pamp, B., M. Bauer, and G. Lardy. 2004. The Effect of Rumen Degradable and Undegradable Protein Supplementation in Barley-Based High-Grain Finishing Diets on Feedlot Performance and Carcass Traits of Beef Steers. [http://www.ag.ndsu.edu/archive/carringt/livestock/Beef Report 04/The Effect of Rumen Degradable and Undegradable Protein Supplementation in Barley.htm](http://www.ag.ndsu.edu/archive/carringt/livestock/Beef%20Report%2004/The%20Effect%20of%20Rumen%20Degradable%20and%20Undegradable%20Protein%20Supplementation%20in%20Barley.htm) (Diakses tanggal: 10 Juni 2014).
- Panjono, I.G.S. Budisatria, G. Murdjito, N. Ngadiyono, and E. Baliarti. 2012. Reproductive performance of Kacang, Kejobong and Ettawa grade goats does. Proceedings of the 15<sup>th</sup> AAAP Animal Science Congress, 26-30 November 2012. Thammasat University, Rangsit Campus, Thailand. 1274 - 1277.
- Park, Y.W. and A.C. Washington. 1993. Fatty acid composition of goat organ and muscle meat of Alpine and Nubian Breeds. *J. Food Sci.* 58 (2): 245 – 248.
- Peña, F., A. Bonvillani, B. Freire, M. Juárez, J. Perea, and G. Gomez. 2009. Effects of genotype and slaughter weight on the meat quality of Criollo Cordobes and Anglonubian kids produced under extensive feeding conditions. *Meat Sci.* 83 : 417 - 422.
- Penn State Extension. 2014. Feeding the Market Goat. College of Agricultural Sciences. <http://extension.psu.edu/courses/meat-goat/nutrition/feeding-the-market-goat>. (Diakses tanggal 9 Mei 2014).
- Peternakan Etawa Jaya. 2009. Kambing Etawa. [www.etawajaya.com/kambing-etawa/](http://www.etawajaya.com/kambing-etawa/) (Diakses tanggal 19 September 2013).
- Phengvichith, V. dan T.R. Preston. 2011. Effect of feeding processed cassava foliage on growth performance and nematode parasite infestation of local goats in Laos. *Livestock Research for Rural Development*. Vol. 23(1), Article #13. <http://www.lrrd.org/lrrd23/1/vant23013.htm>. (Diakses tanggal 28 Agustus 2015).
- Pinkerton, F. 2015. Factors affecting goat carcass yield and quality. Agricultural Research Service. United States Department of Agriculture. <http://www.goatworld.com/articles/purpose/factorsaffecting.shtml>. (Diakses tanggal 10 Juli 2016).
- Pinkerton, F. dan B. Pinkerton. 2013. Feeding Programs for Meat Goats. Agricultural Research Service, United States Department of Agriculture. <http://www.goatworld.com/articles/nutrition/feedingprograms.shtml> (Diakses tanggal 9 Mei 2014).
- Pond, W.G., D.C. Church, dan K.R. Pond. 1995. *Basic Animal Nutrition and Feeding*. John Wiley & Sons, New York.
- Pratiwi, N.M.W., P.J. Murray, and D.G. Taylor. 2007. Feral goats in Australia: A study on the quality and nutritive value of their meat. *Meat Sci.* 75: 168 - 177.

- Prevolnik, M., M. Candek-Potokar, dan D. Skorjanc. 2004. Ability of NIR Spectroscopy to predict meat chemical composition and quality – a review. *Czech J. Anim. Sci.* 49 (11): 500 - 510.
- Puchala, R. and G.W. Kulasek. 1992. Estimation of microbial protein flow from the rumen of sheep using microbial nucleic acid and urinary excretion of purine derivatives. *Can. J. Anim. Sci.* 72: 821 - 830.
- Pulina, G., M. Avondo, G. Molle, A.H.D. Francesconi, A.S. Atzori, and A. Cannas. 2013. Models for estimating feed intake in small ruminants. *R. Bras. Zootec.* 42 (9). <http://dx.doi.org/10.1590/S1516-35982013000900010>. (Diakses tanggal 3 September 2014).
- Purnomoadi, A. 1997. Determination of Nutritive Value of Feeds Using Lignin Predicted by Near Infrared Reflectance Spectroscopy Method for Farm Usage. Dissertation. Tokyo University of Agriculture, Japan.
- Purnomoadi, A. 2014. Current and Future Inventory Data Activities on Emission of Methane from Livestock in Indonesia; Do We Need a Specific Calculation. [http://peternakan.litbang.pertanian.go.id/fullteks/booklet/data%20inventory\\_2014/03\\_%20purnomoadi.pdf?secure=1](http://peternakan.litbang.pertanian.go.id/fullteks/booklet/data%20inventory_2014/03_%20purnomoadi.pdf?secure=1) (accessed: Jan 10, 2017).
- Purwati, C.S., L.M. Yusiati, dan S.P.S. Budhi. 2013. Kontribusi ekskresi basal purin terhadap total ekskresi derivat purin dalam urin kambing Bligon dan Kejobong. *Buletin Peternakan.* 37 (1): 6 - 11.
- Pusat Budidaya Kambing Indonesia. 2013. Produk Kambing Hidup. [http://pusatkambing.com/?page\\_id=235](http://pusatkambing.com/?page_id=235). (Diakses tanggal 19 Sept. 2013).
- Pusat Penelitian dan Pengembangan Peternakan (Puslitbangnak), 2010. Boerka: Kambing Unggul Silangan Boer dan Kacang. <http://peternakan.litbang.deptan.go.id/index>. (Diakses tanggal 19 Sept. 2013).
- Rahayu, Sri. 2011. Identifikasi Polimorfisme Gen GDF-9 dan BMP-15 pada Kambing Kacang. *Jurnal Natural – B.* Vol. 1 No. 2, Oktober 2011. <http://natural-b.ub.ac.id/index.php/natural-b/article/view/118>. ISSN online : 2301 - 4202.
- Rahman, M.M., R.B. Abdullah, W.E.W. Khadijah, T. Nakagawa, and R. Akashi. 2013. Feed intake, digestibility and growth performance of goats offered Napier grass supplemented with molasses protected palm kernel cake and soya waste. *Asian J. Anim. and Vet. Advances* 8 (3): 527 - 534.
- Rahman, M.M., T. Nakagawa, R.B. Abdullah, W.K.W. Embong, and R. Akashi. 2014. Feed intake and growth performance of goats supplemented with soy waste. *Pesq. agropec. bras., Brasilia.* 49 (7): 554 - 558.

- Rebeca, A., C. Lima, M. Helena, R. Fernandes, I. Auxiliadora, M.D.A. Teixeira, R. Toyoko, S. Frighetto, and T.F. Ventoso. 2016. Effects of Feed Restriction and Forage : Concentrate Ratio on Digestibility , Methane Emission , and Energy Utilization by Goats. *Revista Brasileira de Zootecnia* 45 (12): 781 - 787.
- Restitrisnani, V., A. Purnomoadi dan E. Rianto. 2013. The production and body composition of Kacang goat fed different quality of diets. *J. Indonesian Trop. Anim. Agric.* 38 (3): 163 - 170.
- Riaz, M.Q., K.H. Sudekum, M. Clauss, dan A. Jayanegara. 2014. Voluntary feed intake and digestibility of four domestic ruminant species as influenced by dietary constituents: a meta-analysis. *Livest. Sci.* 162: 76 - 85.
- Rosyidi, Dj., L.K. Radiati, dan N. Uyun. 2009. Kualitas kimia daging kambing Peranakan Etawah (PE) jantan dan kambing Peranakan Boer (PB) kastrasi. *Jurnal Ilmu dan Teknologi Hasil Ternak.* 4 (2): 9 - 16.
- Rudiah. 2011. Respon kambing Kacang jantan terhadap waktu pemberian pakan. *Media Litbang Sulteng.* IV(1): 67 - 74.
- Sadeghi, A.A., A. Nikkiah, P. Shawrang, and M.M. Shahrehabak. 2006. Protein degradation kinetics of untreated and treated soybean meal using SDS-PAGE. *Anim. Feed Sci. and Technol.* 126: 121 - 133.
- Salim, H.M., M. Shahjalal, A.M.M. Tareque, and N. Akter. 2003. Intake and growth performance of female goats and sheep given concentrate supplement under grazing condition. *Pakistan J. Biol. Sci.* 6 (15): 1304 - 1309.
- Sarmin, I. Widiyono, P. Astuti, and P.P. Putro. 2017. Metabolic and endocrine responses to feed restriction and refeeding in Kacang goats. *Pakistan J. Nutr.* 16 (3): 101 - 108.
- Schoenian, S. 2012. Grass-fed lamb and goat. *Small Ruminant Info Sheet.* <http://www.sheepandgoat.com/articles/grassfed.html>. (Diakses tanggal 4 Februari 2014).
- Sebsibe, A., N.H. Casey, W.A. van Niekerk, A. Tegegne, dan R.J. Coertze. 2007. Growth performance and carcass characteristics of three Ethiopian goat breeds fed grainless diets varying in concentrate to roughage ratios. *The South J. Anim. Sci.* 37 (4): 221 - 229.
- Shirima, E.J.M.; L.A. Mtenga, A.E. Kimambo, G.H. Laswai, D.M. Mgheni, D.E. Mushi, D.S. Shija, J.G. Safari, dan W.A. Hozza. 2013. Effects of days in feedlot on physic-chemical properties and meat tenderness from Tanzanian long fat-tailed sheep. *J. Anim. Prod. Adv.* 3 (2): 40 - 48.
- Sianipar, J., A. Batubara, S. Karokaro, dan S.P. Ginting. 2005. Efisiensi nutrisi pada kambing Kosta, Gembrong, dan Kacang. *Prosiding Seminar Nasional Teknologi Peternakan dan Veteriner, 2005.* 630 - 636.

- Singh, M.K., T.K. Dutta, R.B. Sharma, A.K. Das, and N.P. Singh. 2010. Evaluation of growth, feed conservation efficiency and carcass traits of Jamunapari goats under intensive feeding system. *Indian J. Anim. Sci.* 80 (4): 382 - 384.
- Singh, S. and S.S. Kundu. 2013. Eating pattern, nutrient utilization and rumen metabolites in goats fed *Dichanthium annulatum*-browse leaves diets. *Indian J. Anim. Sci.* 83 (4): 407 - 410.
- Sodiq, A. dan M.Y. Sumaryadi. 2002. Reproductive performance of Kacang and Peranakan Etawa goat in Indonesia. *Anim. Prod.* 4 (2): 52 - 59.
- Soeparno. 2011. Ilmu Nutrisi dan Gizi Daging. Gadjah Mada University Press, Yogyakarta. Hal. 48 - 77.
- Soeparno. 2009. Ilmu dan Teknologi Daging. Gadjah Mada University Press, Yogyakarta. Hal. 62 - 130.
- Solaiman, S. and C. Shoemaker. 2009. Intake, digestibility, rumen metabolism and growth performance of goat kids raised under different production systems. *Tropical and Subtropical Agroecosystems.* 11: 219 - 223.
- Solaiman, S.G. 2006. Feeding management of a meat goat herd. Notes on Goats. Technical Paper No. 06-11, November 2006. Tuskegee University.
- Solanki, C.P.S., S. Nanavati, N.K. Nayak, and H.B.S. Bhadoria. 2009. Carcass traits of local goats under different managemental systems. *Indian J. Anim. Sci.* 79 (12): 1277 - 1279.
- Stashenko, E. and J.R. Martínez. 2014. Gas Chromatography - Mass Spectrometry. Available at: [adn.interchopen.com/pdfs/46209.pdf](http://adn.interchopen.com/pdfs/46209.pdf) (Diakses tanggal 8 Januari 2017).
- Steel, R.G.D. and J.H. Torrie. 1991. Prinsip dan Prosedur Statistika. Suatu Pendekatan Biometrik. Edisi Kedua. Diterjemahkan oleh: B. Sumantri. PT. Gramedia Pustaka Utama, Jakarta. Hal. 209 - 233.
- Stern, M.D., A. Bach, and S. Calsamiglia. 2006. New Concepts in Protein Nutrition of Ruminants. Proceedings of the 21<sup>st</sup> Annual Southwest Nutrition & Management Conference, February 23-24, 2006, Tempe, Arizona. 45 - 66.
- Suhartanto, B., R. Utomo, Kustantinah, I.G.S. Budisatria, L.M. Yusiati, dan B.P. Widyobroto. 2014. Pengaruh penambahan formaldehid pada pembuatan *undegraded protein* dan tingkat suplementasinya pada pellet pakan lengkap terhadap aktivitas mikrobia rumen secara *in vitro*. *Buletin Peternakan.* 38 (3): 141 - 149.

- Sumardianto, T.A.P., E. Purbowati, dan Masykuri. 2013. Karakteristik karkas kambing Kacang, kambing Peranakan Ettawa, dan kambing Kejobong jantan pada umur satu tahun. *Anim. Agric. Journal.* 2 (1): 175 - 182. <http://ejournal-S1.undip.ac.id/index.php/aaj>. (Diakses tanggal 19 Sep. 2013).
- Supriadi. 2012. Ciri Kambing Kacang. <http://kembali-alami.blogspot.com/2012/10/ciri-kambing-kacang.html>. (Diakses tanggal 19 Sept. 2013).
- Suryani, N.N., I.K.M. Budiasa, and I.P.A. Astawa. 2014. Fermentasi rumen dan sintesis protein mikroba kambing Peranakan Ettawa yang diberi pakan dengan komposisi hijauan beragam dan level konsentrat berbeda. *Majalah Ilmiah Peternakan.* 17 (2): 56 - 60.
- Terefe, E., Y. Yaqob, K. Dessalegn, A. Tafa, A. Kifle, W. Gebregziabher, and W. Tesfamariam. 2013. Market weight and carcass characteristics of intact yearling Afar goats under semi-intensive feeding management. *International J. Livest. Prod.* 4 (6): 95 - 101.
- Tinkler, S.H. 2014. Common Nutritional and Metabolic Diseases of Small Ruminants. [http://c.ymcdn.com/sites/www.invma.org/resource/resmgr/2014\\_speaker\\_proceedings/dr.\\_tinkler\\_metabolic\\_diseas.pdf](http://c.ymcdn.com/sites/www.invma.org/resource/resmgr/2014_speaker_proceedings/dr._tinkler_metabolic_diseas.pdf) (Tanggal akses: 18 Juni 2014)
- Tshabalala, T., J.L.N. Sikosana, and E. Chivandi. 2013. Nutrient intake, digestibility and Nitrogen retention in indigenous goats fed on *Acacia nilotica* fruits treated for condensed tannins. *South African J. Anim. Sci.* 43 (4): 457 - 463.
- Udo, H.M.J., H.A. Aklilu, L.T. Phong, R.H. Bosma, I.G.S. Budisatria, B.R. Patil, T. Samdup, dan B.O. Bebe. 2011. Impact of intensification of different types of livestock production in smallholder crop-livestock systems. *Livest. Sci.* 139: 22 - 29.
- Utomo, R. 2012. Evaluasi Pakan dengan Metode Noninvasif. Cetakan ke-1. P.T. Citra Aji Parama, Yogyakarta.
- Van Soest, P.J. dan R.H. Wine. 1968. Determination of lignin and cellulose in acid-detergent fiber with permanganate. *Journal of the AOAC.* 51 (4): 780 - 785.
- Wang, L. and B. Xue. 2016. Effects of cellulase supplementation on nutrient digestibility, energy utilization and methane emission by Boer Crossbred goats. *Asian-Aus. J. Anim. Sci.* 29 (2): 204 - 210.
- Webb, E.C. and H.A. O'Neill. 2008. The animal fat paradox and meat quality. *Meat Sci.* 80: 28 - 36.
- Webb, E.C, N.H. Casey, and L. Simela. 2005. Goat Meat Quality. *Small Rum. Res.* 60 (1): 153 - 166.



- 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. *J. Indonesian Trop. Anim. Agric.* 35 (1): 27 - 33.
- Wismer-Pedersen, J. 1987. Chemistry of animal tissues (Part 5. Water). *In: the Science of Meat and Meat Products*. Price, J.F. and B.S. Schweigert (Editors). Food & Nutrition Press, Inc., Westport. pp. 141-154.
- Wood, J.D., R.I. Richardson, G.R. Nute, A.V. Fisher, M.M. Campo, E. Kasapidou, P.R. Sheard, and M. Enser. 2003. Effects of fatty acids on meat quality: a review. *Meat Sci.* 66 (1): 21 - 32.
- Xie, Z., X. Jiang, P. Ye, Y. Zhang, Y. Ni, S. Zhuang, and X. Shen. 2015. Relationship between liver and low rumen pH in goat. *Genetic and Molecular Res.* 14 (1): 209 - 221.
- Yami, A. 2007. Feeding management of sheep and goat. Technical Bulletin. No. 5. Ethiopia Sheep and Goat Productivity Improvement Program.
- Yáñez-Ruiz, D.R., A. Moumen, A.I.M. García, and E.M. Alcaide. 2004. Ruminant fermentation and degradation patterns, protozoa population, and urinary purine derivatives excretion in goats and wethers fed diets based on two-stage olive cake: Effect of PEG supply. *J. Anim. Sci.* 82: 2023 - 2032.
- Yusiati, L.M. and C. Hanim. 2013. Estimation of rumen microbial nitrogen supply based on purine derivatives excreted in the urine of Kejobong and Bligon goat fed by King grass and peanut straw. *Proceeding 3<sup>rd</sup> AINI International Seminar*. Padang, 24 - 25 September 2013. 38 - 42.
- Yusuf, A.L., Y.M. Goh, A.A. Samsudin, A.R. Alimon, and A.Q. Sazili. 2014. Growth performance, carcass characteristics and meat yield of Boer goats fed diets containing leaves or whole parts of *Andrographis paniculata*. *Asian-Australas. J. Anim. Sci.* 27 (4): 503 - 510.