

DAFTAR PUSTAKA

- AOAC. 2005. Official Method of Analysis. 18th ed. W. Horwitz (ed). AOAC International. United States of America.
- Arora, S.P. 1989. Pencernaan Mikrobia pada Ruminansia. Gadjah Mada University. Press, Yogyakarta.
- Astuti, M. 2007. Pengantar Ilmu Statistik untuk Peternakan dan Kesehatan Hewan. Cetakan Pertama. Binasti Publihser. Bogor.
- Beever, D.E., and F.L. Mould. 2000. Forage Evaluation for efficient ruminant livestock production. In: *Forage Evaluation in Ruminant Nutrition*, Givens, D.I., E. Owen, R.F.E Axford, and H.M. Omed (eds). CABI Publishing, New York. Pp : 15-38.
- Blummel, M., and E.R. Orskov. 1993. Comparison of in vitro gas production and nylon bag degradability of roughages in predicting feed intake in cattle. In: Kursus Singkat Teknik Evaluasi Pakan Ruminansia. Fakultas Peternakan. Universitas Gadjah Mada. Yogyakarta.
- Cheeke, P.E and L.R. Shull. 1985. Natural Toxicans in Feeds and Poisonous Plants. AVI Publishing Company, Connecticut.
- Chen, X.B. 1994. Neway Excel. International Feed Resources Unit. Rowett Research Institute. Bucksburn, Aberdeen.
- Church, D.C. 1988. Digestive Physiology and Nutrition of Ruminant 2nd Ed. Prentice Hall. Englewood Chiffs. New Jersey.
- Czerkawski, W.J. 1986. An Introduction Rumen Studies. Pergamon Press Inc. New York.
- Daning, D.R.A. 2010. Tanin Limbah Teh Hitam (*Camellia sinensis*) sebagai Agen Defaunasi Untuk Menurunkan Produksi Metan secara *In Vitro*. Skripsi Sarjana Peternakan. Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta.
- El-Wazyri, A.M., Nasser, M.E.A. and Sallam, S.M.A. 2005. Processing Methods of Soybean Meal : 1-effect of Roasting and Tannic Acid Treated-Soybean Meal on Gas Production and Rumen Fermentation In Vitro. *Journal of Applied Sciences Research* 1(3): 313-320.

Fahey, G. C., and L.L. Berger. 1988. Carbohydrate nutrition of ruminants. In: *The Ruminant Animal Digestive Physiology and Nutrition*, Church, D.C (ed). Prentice Hall, New Jersey. Pp : 269-295.

Getachew, G., M. Blümmel, H. P. S. Makkar & K. Becker. 1998. *In vitro* gas measuring techniques for assessment of nutritional quality of feeds: a review. *Anim. Feed Sci. Technol.* 72: 261-281.

Hagerman, A.E. 1992. Tanin protein interactions. In: *Phenolic Compound in Food and Their Effect on Health*, Chintang, H., Y.L Chang and Mou Tuan H. (eds). American Chemical Society, Washington D.C. Pp : 237-247.

Idiyahsari. 2014. Pengaruh Kulit Buah Manggis (*Garcinia mangostana L.*) Sebagai Sumber Tanin Terhadap Parameter Fermentasi Dan Kecernaan Nutrien Secara *In Vitro*. Skripsi Sarjana Peternakan. Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta.

Jayanegara, A., A. Sofyan, H.P.S Makkar, K. Becker. 2009. Kinetika Produksi Gas, Kecernaan Bahan Organik dan Produksi Gas Metana *in Vitro* pada Hay dan Jerami yang Disuplementasi Hijauan Mengandung Tanin. *Media Peternakan* Agustus 2009 : 120-129. Yogyakarta.

Jouany, J.P. 1991. Defaunation of the rumen. In: *Rumen Microbial Metabolism and Ruminant Digestion*, Jouany J.P. (ed). Institute Nationale de la Recherche Agronomique. INRA.

Lowry, J.B., and J. Seebeck. 1997. The Potential for tropical Agroforestry in Wood and Animal Feed Production. Rural Industries Research and Development Corporation. Queensland.

Makkar, H.P.S. 1993. Antinutritional factors in foods for livestock. *Animal Production in Developing Countries*. Occasional Publication. No. 16:73-85.

Makkar, H. P. S. 1998. Effect of antinutrients on the nutritional value of legume diets. *Proceedings of the 7th Scientific Workshop in Tromso*. Pp : 173-185.

Makkar, H.P.S. 2005. *Quantification of Tannins in Tree and Shrub Foliage. A Laboratory Manual*. Kluwer Academic Publishers.

Marwa, F. A., A. N. Nour El-Din, K.A. El-Shazly, and S.M. Sallam. 2013. Effect of quebracho tannins supplementation on nutrients

utilization and rumen fermentation characteristic in sheep. *Alex. J. Agric. Res* 58: 165-171.

Mezzomo, R., P.V.R. Paulino, E. Detmann, S.C. Valadares Filho, M.F. Paulino, J.P.I.S. Monnerat, M.S. Duarte, L.H.P. Silva, L.S. Moura. 2011. Influence of condensed tannin on intake, digestibility, and efficiency of protein utilization in beef steers fed high concentrate diet. *J. Livestock Sci.* 141: 1-11.

McAllister, T.A., H.D. Boe. L.J. Yanke, K.J. Change, and A. Muir. 1994. Effect of condensed tanins from birdsfoot trefoil on endoglucanase activity and the digestion of cellulose filter paper by ruminant fungi. *J. Microbiol.* 40: 298-305.

McDonald, P. R. Edwards and J. Greenhalgh. 2002. *Animal Nutrition*. 6th Edition. New York.

McSweeney, C., S.B. Palmer, D.M. McNeill, and D.O. Krause. 2001. Microbial interaction with tanins: nutritional consequences for ruminants. *Anim. Feed Sci.* 81: 83-93.

Mendoza, G.D., R.A. Britton and R.A. Stock. 1993. Influence of ruminal protozoa on site and extent of starch digestion and ruminal fermentation. *J. Anim Sci.* 71: 1572-1577.

Moss, A.R, J. P. Jouany, and J. Newbold. 2000. Methane production by ruminants: Its contribution to global warming. *Anim. Zootech.* 49: 231-253.

Muhammadabadi, T. Dan M. Chaji. 2011. The influence of the plant tannins on in vitro ruminal degradation and improving nutritive value of sunflower meal in ruminants. *Pakistan Veterinary Journal* 32: 225-228.

NRC. 1976. *Urea and Other Protein Nitrogen Compounds in Animal Nutrition*. National Academy of Science. Washington DC.

Nugroho, B. 2011. Limbah Teh Hitam (*Camelia sinensis*) sebagai Sumber Tanin untuk Proteksi Protein dari Degradasi Mikrobial Rumén secara *In Vitro*. Skripsi Sarjana Peternakan. Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta.

Oktaviyani, U.D. 2013. Pengaruh Penambahan Serasah Daun Jati Terhadap Kecernaan Pakan Dalam Rusitec. Skripsi Sarjana

Peternakan. Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta.

Orskov, E.R and M. Ryle. 1990. Energy Nutrition in Ruminants. Elsevier Science Publishing Co., Inc. New York. USA.

Orskov, E.R. 1992. Protein Nutrition in Ruminant. Academic Press Ltd. London.

Owen, N.F., and A.L. Goestch. 1988. Ruminal fermentation. *In: The Ruminant Animal Digestive Physiology dan Nutrition*, Church, D.C (ed). Prentice Hall, New Jersey. Pp : 145-170.

Pellikaan, W.F., E. Stringano, J. Leenaars, J.G.M. Bongers, S. L. Schuppen, J. Plant, I. M. Harvey. 2011. Evaluating effects of tannins on extent and rate of in vitro gas and CH₄ production using an automated pressure evaluation system (APES). *Anim. Feed Sci. And Technol.* 167: 377-390.

Prawirokusumo, S. 1994. Ilmu Gizi Komperatif. BPFE. Yogyakarta.

Sahoo, A., B. Sigh, T.K. Bhat. 2010. Effect of tannins on *in vitro* ruminal protein degradability of various tree forages. *Livestock Research for Rural Development* 22: 1-9.

Sasongko, W.T. 2010. Pemanfaatan Tanin Daun Nangka untuk Meningkatkan Nilai Rumén *Undegraded* Protein pada Bahan Pakan Protein Tinggi. Thesis. Program Pasca Sarjana, Universitas Gadjah Mada, Yogyakarta.

Satter, L.D., L.L. Slyter. 1974. Effect of ammonia concentration on rumen microbial protein production *in vitro*. *Brit.J.Nutr.* 32:199-208.

Schingoethe, D.J., F.M. Byers, and G.T. Schelling. 1988. Nutrient needs during critical periods of the live cycle. *In: The Ruminant Animal Digestive Physiology and Nutrition*, Church, D.C (ed). Prentice Hall, New Jersey. Pp : 421-437.

Sevilla, C.C., S.W. Purbojo. 2005. Addition of mimosa tannin protected the protein in gliricida from rumen microbial degradation. *Philippine J. Vet. Sci* 31: 29-36.

Shariffi, M., A.A. Naserian, and H. Khorasani. 2010. Effect of tannin extract from pistachio by product on *in vitro* gas production. *Iranian Journal of Applied Animal Science* 34: 667-671.

- Stiadi, P. 2013. Serasah Daun Jati Sebagai Sumber Tanin Untuk Peningkatan Efisiensi Fermentasi Rumen Secara *In Vitro* Rusitec. Skripsi Sarjana Peternakan. Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta.
- Subrata, A., L.M. Yusiati, A. Agus. 2005. Pemanfaatan tanin ampas teh terhadap efek defaunasi, parameter fermentasi rumen dan sintesis protein mikrobial secara *in vitro*. Program Pascasarjana Fakultas Peternakan UGM. Pp: 473-488.
- Sumarna, Y. 2003. Budidaya Jati. Cetakan III. Penebar Swadaya. Jakarta.
- Sutardi, T. N. 1980. Landasan ilmu Nutrisi Jilid 1. Fakultas Peternakan. Institut Pertanian Bogor, Bogor.
- Suwignyo, B. 2010. Effect of Tannin on The Rumen Ecology of Carabao (*Bubalus bubalis*) and cattle (*Bos indicus*). Disertation. University of Philipines, Los Banos.
- Takahashi, J. 2006. Emissions of green gass (GHG) from livestock production in Japan. Elseiver B. V. 13-20.
- Tavendale MH, Meagher LP, Pacheco D, Walker N, Attwood GT, Sivakumaran S. 2005. Methane production from *in vitro* rumen incubations with *Lotus pedunculatus* and *Medicago sativa*, and effects of extracable condensed tannin fractions on methanogenesis. *Anim. Feed. Sci. Technol.* 123-124:403-419.
- Van Soest, P. 1994. Nutritional Ecology of the Ruminant. 2nd Ed. Cornell University Press. United States.
- Widodo,W. 2005. Tanaman Beracun Dalam Kehidupan Ternak. UMM Press. Malang
- Williams, B.A., 2000. Cumulative gas production techniques for forage evaluation. In: *Forage Evaluation in Ruminant Nutrition* Givens, D.I., E. Owen, R.F.E Axford, and H.M. Omed. (eds). CABI Publishing, New York. Pp : 189-208.
- Windyasmara L, A. Pertiwiningrum, dan L.M. Yusiati. 2011. Pengaruh penggunaan jenis kotoran ternak sebagai substrat dengan penambahan serasah daun jati (*Tectona grandis*) terhadap proses fermentasi metanogenik. *Buletin Peternakan* 36: 40-47. Yogyakarta.

- Yokohama, M.T., and K.A. Johnson. 1988. Microbiology of the rumen and intestine. In: *The Ruminant Animal Digestive Physiology and Nutrition*, Church, D.C (ed). Prentice Hall, New Jersey. Pp : 125-144.
- Yusiati, L.M. 1996. Teknik Produksi Gas. Kursus Singkat Teknik Produksi Evaluasi pakan Ruminansia. Fakultas Peternakan UGM, Yogyakarta.