DAFTAR PUSTAKA

Adams M.R. and M.O. Moss. 2000. Food Microbiology. 2nd ed. The Royal Society of Chemistry, UK.

Astuti, M. 1981. Rancangan Percobaan dan Analisis Statistik. Bagian II. Fakultas Peternakan Universitas Gadjah Mada. Yogyakarta.

Agus A. 2008. Panduan Bahan Pakan Ternak Ruminansia. Ardana Media, Yogyakarta.

Amaha, K., Y. Sasahi, and T. Segawa. 1996. Utilization of Tofu (*Soybean Curd*) By-Product as Feed for Cattle. National Grassland Research Institute Ministry of Agriculture, Forestry and Fisheries Nishinasuno, Tochigi, 329 - 327 Japan.

AOAC. 2005. Official Method of Analysis of the Association of Official Analitycal Chemists. 18th ed. Maryland.

An Kuo Su and Heng-Chu, A. 2004. Utilization of Agricultural By-Product in Taiwan. Taiwan Livestock Research Institute Taiwan.

Arora, S.P. 1995. Pencernaan Mikrobia pada Ruminansia. Gadjah Mada University Press. Yogyakarta.

Beauchemin, K.A., W.Z. Yang., D.P. Morgavi., G.R. Ghorbani., W. Kautz., and J.A.Z. Leedle. 2003. Effects of bacterial direct-fed microbes and yeast on site and extent of digestion, blood chemistry, and subclinical ruminal acidosis in feedlot cattle. J. Anim. Sci. 81: 1628 - 1640.

Beauchemin, K. 2007. Ruminal Acidosis in Dairy Cows: Balancing Physically Effective Fiber with Starch Availability. Lethbridge Research Centre Lethbridge Agriculture and Agri-Food Canada.

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. J. Anim. Feed Sci. and Technol. 40: 109 – 119.

Bondi, A.A. 1987. Animal Nutrition. John Willey and Sons Puble. New York.

Bolsen, K.K., G. Ashbell., and J.M. Wilkinnson. 1995. Silage Additives in Biotechnology in Animal Feeding. R.J. Wallace & A. Chesson (Eds). VCH, Weinheim.

Brock, T.D. 1979. Biology of Microorganism, 3nd ed, Prentice-Hall. Inc, Englewood, Cliffs, New Yersey.

Cakra, I.G.L.O. 1996. Penggunaan Natrium Bikarbonat dan Natrium Karbonat dalam Manipulasi Fermentasi Rumen pada Kerbau. Tesis Program Pasca Sarjana. Institut Pertanian Bogor, Bogor.

Calsamiglia, S., P.W. Cardoso, A. Ferret and A. Bach. 2008. Changes in rumen microbial fermentation are due to a combined effect of type of diet and ph. J. Anim. Sci. 86: 702 – 711 (Abstr.).

Cao, Y., T. Takahashi., and K.I. Horiguchi. 2009. Effect of addition of food by-product in the fermentation quality og total mixed ratio with crop rise and its digesbility, preference, and rumen fermentation in sheep. Anim. Feed. Sci. Tech. 151: 1 - 11.

Chaney, A.L. and E.P. Marbach. 1962. Modified reagents for determination of urea and ammonia. Clinical Chemistry. 8: 130 - 132.

Church, D.C. 1988. Digestive Physiology and Nutrition Of Ruminant. Vol 2. Departement of Animal Science. Oregon State University Corvalis. Oregon.

Coblentz, W. 2003. Principles of Silage Making. University Of Arkansas. Payetteville.

Cooper, R.J., T.J. Klopfenstein., R.A. Stock., C.T. Milton., D.W. Herold., and J.C. Parrot. 1999. Effects of imposed feed intake variation on acidosis and performance of finishing steers. J. Anim. Sci. 77: 1093 - 1099.

Coppock, C.E., G.T. Schelling., F.M. Byers., J.W. West., and J.M. Labore. 1986. A naturally occuring mineral as a buffer in the diet of lactating dairy cow. J. Dairy Sci. 69: 111-123.

Darwis, A. 1990. Produksi enzim sellulase dan biomasa untuk pakan ternak dan biokonversi coklat oleh *Trichorderma viridae*. Karya Ilmiah. Fakultas Peternakan Universitas Jambi. Jambi.

Dehority, B.A., 2003. Rumen Microbiology. Nottingham Univ. Press, Nottingham, UK.

Ella, A., S. Hardjosoewignyo., T.R. Wiradaryadan., dan M. Winugroho. 1997. Pengukuran produksi gas dari hasil proses fermentasi beberapa jenis leguminosa pakan. Prosiding Seminar Nasional II. INMT. Institut Pertanian Bogor, Bogor.

Ennahar. S., Y. Cai., and Y. Fujita. 2003. Phylogenetic diversity of lactic acid bacteria associated with paddy rice silage as determined by 16S ribosomal DNA analysis. Applied and Environmental Microbiology. 69: 444 - 451.

Filya, I. 2003. The effect of *Lactobacillus buchneri* and *Lactobacillus plantarum* on the fermentation, aerobic stability, and ruminan degradability of low dry matter corn and sorghum silages. J. Dairy Sci. 86: 3575 – 3581.

Firkin, J.L., L.L. Berger., N.P. Mercher., G.C. Fahey., and D.R. Nelson. 1986. Effect of feed intake and protein degradability on ruminal characteristic and site of digestion in steer. J. Dairy Sci. 69: 2111 - 2123.

Forster, C.F. and D.A.J. Wase. 1987. Environmental Biotechnology. John Wiley and Sons, New York.

Forsythe, J.S. 2010. The Microbiology of Safe Food. 2nd Ed. Blackwell Publishing Ltd, United Kingdom.

Gunawan, C. 1975. Percobaan membuat inokulum untuk tempe dan oncom. Makalah Ceramah Ilmiah LKN. LIPI Bandung, Bandung.

Halliwell, G. and J. Lovelady. 1981. Utilization of carboxymethylcellulose and enzyme synthesis by Trichoderma koningii. J. General Microbiol. 126: 211 - 217.

Halliwel, G., N.N.B.A. Wahab., and A.H. Patle. 1985. Chemical composition of endo 1,4-β-glucanase to cellulolitic in trichoderma koningii. J. App. Biochemistry. 7: 43 - 45.

Hartadi, H., S. Reksohadiprodjo., dan A.D. Tillman. 2005. Tabel Komposisi Pakan untuk Indonesia. Gadjah Mada University Press. Yogyakarta.

Harwanto. 2013. Pengaruh Penambahan Kayu Manis (*Cinnamomum burmanni* ness ex bl.) Sebagai Sumber Sinamaldehid Dalam Pakan Terhadap Produksi Metan dan Kinerja Domba Ekor Tipis. Tesis. Program Pascasarjana. Fakultas Peternakan Universitas Gadjah Mada. Yogyakarta.

Hernaman, I., R. Hidayat., dan Mansyur. 2005. Pengaruh penggunaan molases dalam pembuatan silase campuran ampas tahu dan pucuk tebu kering terhadap nilai pH dan komposisi zat-zat makanannya. J. Ilmu Ternak.5 : 94 – 99.

Hoover, W.H. and T.K. Miller. 1991. Rumen digestive physiology and microbial ecology. Vet Clin North Am Food Anim. Pract. 7: 311 – 325 (Abstr.).

Hume, J. D. 1982. The Digestive Physiology and Nutrition of Marsupials. Cambridge University Press: London.

Ibrahim, T.M., Khairiah., dan E. Sembiring. 2011. Petunjuk teknis pembuatan silase untuk pakan ternak sapi. Balai Pengkajian Teknologi Pertanian Sumatera Utara.

Johnson, ER. 1996. Anatomical Factors Influencing Butt Shape of Steers Prepared for The Australian Domestic. Proc. Aust. Soc. Anim. Prod. Melbourne.

Joseph. 2001. Status asam basa pada ternak kerbau lumpur *(Bubalus bubalis)* yang diberi pakan jerami padi dan konsentrat dengan penambahan natrium. J. Ilmu Ternak dan Veteriner 6: 235 - 238.

Kamra, D.N. 2005. Rumen microbial ecosystem. Current Science. 89: 1.

Khorasani, G.R. and J.J. Kennelly. 2001. Influence of carbohydrate source and buffer on rumen fermentation characteristics, milk yield, and milk composition in latelactation Holstein cows. J. Dairy Sci. 84: 1707 – 1716.

Keidane, D. and E. Birgele. 2003. The efficacy of feed on the intra ruminal and intra abomasal pH dynamics in goats. Veterinarija IR Zootechnika. 22: 58 - 61.

Kung, L. 2000. Silage Fermentation and Additives. In: Directfed Microbial, Enzyme and Forage Additive Compendium. Miller Publishing Co. Minnetonka, MN.

Kurniawati, A. 2007.Teknik produksi gas *in vitro* untuk evaluasi pakan ternak: volume produksi gas dan kecernaan bahan pakan. J. Ilmiah Aplikasi Isotop dan Radiasi. 3 : 40 – 51.

Kurniawati, A. 2009. Evaluasi Suplementasi Ekstrak Lerak (*Sapindus rarak)* Terhadap Populasi Protozoa, Bakteri dan Karakteristik Fermentasi Rumen Sapi Peranakan Ongole Secara *In vitro.* Skripsi. Fakultas Peternakan Institut Pertanian Bogor, Bogor.

Leng, R.A. 1985. Determining the nutritive value of roughage. In: Blair, G.J., Ivory, D.A. and Evans, T.R. (eds), Forages in Southeast Asian and South Pacific Agriculture. ACIAR Proceedings, Canberra. 12: 111 - 123.

McDonald, P. 1981. The Biochemistry of Silase. John Willey and Sons, New York, USA.

McDonald, P., R.A. Edwards., J.F.D. Greenhalgh., and C.A. Morgan. 2002. Animal Nutrition. 6th Edition. Pearson Education Limited. Harlow, United Kingdom.

Meeske, R., V.D. Merwe., J.F. Greyling., and C.W. Cruywagen. 2002. The effect of adding an enzyme containing lactic acid bacterial inoculant to big round bale oat silage on intake, milk production and milk composition of Jersey cows. Anim. Feed Sci. and Technol. 97: 159 - 167.

Menke, K.H., L. Raab, A. Selewski, H. Steingass, D. Fritz, and W. Schneider. 1979. The estimation of digestibility and metabolizable energy content of ruminant feedstuff from the gas production when they are incubated with rumen liquor *in vitro*. J. Agric. Sci 93: 217 – 220.

Menke, K.H. and H. Steinngas. 1988. Estimation of energetic feed value obtained from chemical analysis and in vitro gas production using rumen fluid. Anim. Res. Develop. 28: 7 - 55.

Muslim, G., J.E. Sihombing., S. Fauziah., A. Abrar., dan A. Fariani. 2014. Aktivitas proporsi berbagai cairan rumen dalam mengatasi tannin dengan teknik *in vitro*. Jurnal peternakan Sriwijaya. 3: 25 - 36.

Ohmomo, S., O. Tanaka., H.K. Kitamoto., and Y. Cai. 2002. Silage and microbial performance, old story but new problem. 36: 59 - 71.

Orskov, R.R., and McDonald. 1979. The estimation of protein degradability in the rumen from incubation measurement weighted according to rate of passage. J.Agric. Sci 92 : 499 - 503.

Orskov, E. R. 1992. Protein Nutrition in Ruminants. Academic Press. San Diego. CA.

Plummer, D.T. 1987. An Introduction to Practical Biochemistry. Third Edition. Mc. Graw-Hill Book Company Ltd. New Delhi.

Preston, T.R. and R.A. Leng. 1987. Matching ruminant production systems with available resources in the tropics and sub-tropics. Penambul Book Armidale. 78: 80 - 81.

Pulungan, H., J.E. Van Eys., dan M. Rangkuti. 1985. Penggunaan ampas tahu sebagai makanan tambahan pada domba lepas sapih yang memperoleh rumput lapangan. Ilmu dan Peternakan. 1: 331 – 335.

Putra, S. dan A. W. Puger. 1995. Manipulasi mikrobia dalam fermentasi rumen salah satu alternatif untuk meningkatkan efisiensi penggunaan zat-zat makanan. Fakultas Peternakan, Universitas Hasanuddin, Denpasar.

Ray, B. and A. Bhunia. 2008. Fundamental Food Microbiology. 4th ed. CRC Press, Taylor and Francis Grup. New York.

Russel, J.B ., J .D. O'connors., D.G. Fox., P.J. Van Soest., and C.J. Sniffen. 1992. A net carbohydrate and protein system for evaluating cattle diets: l. Ruminal fermentation. J. Anim . Sci . 70 : 3551 - 3561 .

Sa'id, E. G. 1987. Bioindustri : Penerapan Teknologi Fermentasi. Mediyatama Sarana Perkasa, Jakarta.

Schlegel, H. G. dan K. Schmidt. 1994. Mikrobiologi Umum. Gadjah Mada University Press, Yogyakarta (Diterjemahkan oleh T. Baskoro dan J. R. Wattimena).

Setiawan, A.R. 2014. Pengaruh Daun Sereh (*Cymbopogon citratus*) Sebagai Sumber Minyak Esensial Terhadap Aktivitas Enzim di dalam Rumen. Skripsi. Fakultas Peternakan Universitas Gadjah Mada. Yogyakarta.

Siregar, C.J.P. dan S. Wikarsa. 2010. Teknologi Farmasi Sediaan Tablet Dasar-Dasar Praktis. Kedokteran EGC. Jakarta.

Soepranianondo, K. 2005. Dampak isi rumen sapi sebagai substitusi rumput raja terhadap produk metabolik pada kambing Peranakan Etawa. Media Kedok Hewan. 21: 94 - 96.

Stefani, J.W.H., F. Driehuis., J.C. Gottschal., and S.F. Spoelstra. 2010. Silage fermentation processes and their manipulation: Electronic conference on tropical silage. Food Agriculture Organization.

Sujaya, I N., Y. Ramona., N.P. Widarini., N.P. Suariani., N.M.U. Dwipayanti., K.A. Nocianitri., dan N.W. Nursini. 2008. Isolasi dan karakteristik bakteri asam laktat dari susu kuda Sumbawa. J. Vet. 9: 52 – 59.

Suryani, N.N., I.K.M. Budiasa., dan I.P.A. Astawa. 2014. Fermentasi rumen dan sintesis protein mikrobia kambing peranakan ettawa yang diberi pakan dengan komposisi hijauan beragam dan level konsentrat berbeda. Majalah Ilmiah Peternakan. Fakultas Peternakan Universitas Udayana, Bali.

Van Soest. 1994. Nutritional Ecology of The Ruminant. 2nd ed. Cornell University. New York.

Vranjes, V. and C Wenk. 1995. The influence of extruded vs untreated barley in the feed, with and without dietary enzyme supplement on broiler performance. Anim Feed Sci. and Tech. 54: 21 - 32.

Wang, Y. and T.A. McAllister. 2002. Rumen microbes, enzymes and feed digestion: A Review. Asian-Aust. J. Anim. Sci. 15: 1659 - 1676.

Weimer, P.J. 1996. Ruminal Cellulolytic Bacteria: Physiology, Ecology and Beyond. U.S. Dairy Forage Research Center. Informational Conference with Dairy and Forage Industries.

Weinberg, Z.G., R.E. Muck., P.J. Weimer., Y. Chen., and M. Gamburg. 2004. Lactic acid bacteria used in inoculants for silage as probiotics for ruminants. Applied Biochem and Biotechnol 118: 1 - 10.

Weinberg, Z.G. 2003. Effect of Lactic acid bacteria on animal performance. Indian J. Biotechnol. 2: 378 – 381.

Winarno, F. G., S. Fardiaz., dan D. Fardiaz. 1980. Pengantar Teknologi Pangan. Penerbit PT.Gramedia, Jakarta.