DAFTAR PUSTAKA

Allen, M.S. 1996. Physical constraints on voluntary intake of forages by ruminants. J. Anim. Sci., 74:3063-3075.

Anonim. 1991. Survei Pertanian Produksi Tanaman Padi dan Palawija di Indonesia Tahun 1989. Biro Pusat Statistik, Jakarta.

AOAC, 1975. Official Methods of Analysis. 12th ed. Association of Official Analytical Chemists, Washington, DC.

Arora, S.P. 1989. Pencernaan Mikrobia pada Ruminansia. Gadjah Mada University Press, Yogyalcarta.

Astuti, T. dan Ign. Suharto.1988. Penggemukan sapi potong menggunakan jerami padi amoniasi dan pakan konsentrat pada tingkat petani-peternak di pedesaan. Dalam: Limbah Pertanian Sebagai Pakan dan Manfaat Lainnya. M. Soejono, A. Musofie, R. Utomo, N.K. Wardhani dan J.B. Schiere (eds). Proceedings Bioconversion Project Second Workshop on Residues for feed and Other Purposes. Grati. pp. 106–116.

Bae, H.D., T.A. McAlister, E.G. Kokko, F.L. Leggett, L.J. Yanke, K.D. Jakober, J.K. Ha, H.T. Shin and K.-J. Cheng. 1997. Effect of silica on the colonization of rice straw by ruminal bacteria. Anim. Feed Sci. Tech., 65: 165 – 181.

Bourquin, L.D., E.C. Titgemeyer, N.R. Merchen and G.C. Fahey, Jr. 1994. Forage level and particle size effects on Orchardgrass digestion by steers: I. Site and extent of organic matter, nitrogen, and cell wall digestion. J. Anim. Sci. 72: 746-758.

Buletin Statistik Bulanan lndikator Elconomi, Mei 2001. Badan Pusat Statistik, Jakarta.

Cahyono, E.W. 1994. Pengaruh pakan serat kasar dari jerami padi terhadap karalcteristik biokimia cairan rumen ternak aiminansia. Tesis S-2. Program Pascasarjana, Universitas Gadjah Mada, Yogyakarta.

Carro, M.D., S. Lopez, J.S. Gonzales and F.J. Ovejero. 1991. The use of the rumen degradation characteristics of hay as predictors of its voluntary intake by sheep. Anim. Prod., 52:133-139.

Chen, X.B. 1994. Neway Program. International Feed Resources Center, Rowett Research Institute, Bucksburn, Aberdeen, Scotland.

Chesson, A. and C.W. Forsberg. 1988. Polysaccharide degradation by rumen microorganisms. In: The Rumen Microbial Ecosystem. P.N. Hobson (ed). Elsevier Science Publishers Ltd., London, England. pp. 251-284.

Chesson, A. and E.R. Orskov. 1984. Microbial degradation in the digestive tract. In: Straw and other fibrous by-products as feed. F. Sundstol and E. Owen (eds). Elsevier Science Publishers B.V., Amsterdam, The Netherlands. pp. 330-339.

Chuzaemi, S. dan M. Soejono. 1988. Pengaruh urea amoniasi terhadap komposisi lcimia dan nilai gizi jerami padi untulc sapi Peranakan Ongole. Dalam: Limbah Pertanian Sebagai Pakan dan Manfaat Lainnya. M. Soejono, A. Musofie, R. Utomo, N. K. Wardhani dan J.B. Schiere (eds). Proceedings Bioconversion Project Second Workshop on Crop Residues for Feed and Other Purposes. Grati. pp. 67–74.

Chuzaemi, S. , Hermanto, Soebarinoto dan FI. Sudarwati. 1997. Evaluasi protein pakan ruminansia melalui pendekatan sintesis protein mikrobial di dalam rumen: evaluasi kandungan RDP dan UDP pada beberapa jenis hijauan segar, limbah pertanian dan konsentrat. Jurnal Penelitian Ilmu-ilmu Hayati (Life Sciences), 9:77-89.

Chuzaemi, S. 1994. Potensi jerami padi sebagai pakan ternak ditinjau dari kinetilca degradasi dan retensi jerami pada di dalam rumen. Disertasi Doktor. Universitas Gadjah Mada, Yogyakarta.

Conway, E.J. 1957. Microdiffusion Analyses and Volumetric Error. 2nd ed. Crosby Lockwood and Sons, London.

Demeyer, D.I. 1991. Quantitative aspects of microbial metabolism in the rumen and hindgut. In: Rumen Microbial Metabolism and Ruminant Digestion. J.P. Jouany (ed). 1NRA, Paris. pp. 217-237.

Egan, A.R. 1985. Factors affecting nitrogen requirements for ruminants and the roles of supplemental protein. In: The Utilization of Fibrous Agricultural Residues as Animal Feeds. P.T. Doyle (ed). International Development Program of Australian Universities and Colleges Limited (IDP), Canberra. pp. 25-33.

Ehle, F.R. 1984. Influence of feed particle density on particulate passage frpm rumen on Holstein cow. J. Dairy Sci. 67:693-697.

Flint, H.J. and C.W. Forsberg. 1995. Polysaccharide degradation in the rumen: biochemistry and genetics. In: Ruminant Physiology: Digestion, Metabolism, Growth and Reproduction. W.V. Engelhardt, S. Leonhard-Marelc, G. Breves and D. Giesecke (eds). Proceedings of the Eighth International Symposium on Ruminant Physiology. Ferdinand Enke Verlag, Stuttgart. pp. 43-70.

Goering, H.K. and P.J. Van Soest. 1970. Forage Fiber Analyses (apparatus, reagents, procedures and some applications). Agricultural Plandbook No. 379, USDA, Washington, DC.

Grenet, E. and J.M. Besle, 1991. Microbes and fibre degradation. In: Rumen Microbial Metabolism and Ruminant Digestion. J.P. Jouany (ed). INRA, Paris. pp. 107-129.

Hartutik. 1993. Nilai degradasi secara *in sacco* beberapa spesies hijauan sumber protein di daerah pegunungan kapur dan bukan kapur, Kabupaten Malang. Tesis S-2. Program Pascasarjana, Universitas Gadjah Mada, Yogyakarta.

Hume, I.D. 1982. Digestion and protein metabolism. In: A Course Manual in Nutrition and Growth. FI. Lloyd Davies (ed). Australian Universities' International Development Program (AUDP), Melbourne. pp. 25-45.

Hussein, H.S., M.R. Cameron, G.C. Fahey, Jr., N.R. Merchen and J.H. Clark. 1995. Influence of altering ruminal degradation of soybean meal protein on in situ ruminal fiber disappearance of forages and fibrous byproducts. J. Anim. Sci. 73: 2428-2437.

Hvelplund, T. 1991. Volatile fatty acids and protein production in the rumen. In: Rumen Microbial Metabolism and Ruminant Digestion. J.P. Jouany (ed). INRA, Paris. pp. 165-178.

Kamra, D.N. and N.N. Pathak. 1996. Nutritional Microbiology of Farm Animals. Vikas Publishing House Pvt. Ltd., New Delhi.

Kempton, R.J., J.V. Nolan and R.A. Leng. 1978. Principles for use protein nitrogen and by-pass protein in diet of ruminant. In: Ruminant Nutrition. World Anim. Review, FAO, Rome.

Keyserlingk, M.A.G. von, M.L. Swift, R. Puchala and J.A. Shelford. 1996. Degradability characteristics of dry matter and cmde protein of forages in ruminants. Anim. Feed Sci. Tech., 57: 291-311.

Komar, A. 1984. Telcnologi Pengolahan Jerami Sebagai Makanan Ternak. Yayasan Dian Grahita Indonesia, Bandung.

Kustantinah, H. Hartadi dan Y. Usman. 1997. Evaluasi parameter fermentasi dan aktivitas degradasi mikrobia di dalam rumen yang diberi pakan tunggal jerami kacang tanah dan jerami jagung. Buletin Peternakan, Edisi Tambahan: 123-132.

Kustantinah, Z. Bachrudin dan FI. Hartadi. 1993. Evaluasi pakan berserat pada ruminansia. Kumpulan Makalah Kelompok A/1 Sub Bidang Pakan dan Nutrisi Ternak. Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta.

Leng, R.A. 1980. Principles and Practice of Feeding Tropical Crops and by-products to Ruminant. Department of Biochemistry and Nutrition. University of New England, Armidale, Australia.

Mahadevan, S., J.D. Erfle and F.D. Sauer. 1980. Degradation of soluble and insoluble proteins by *Bacteroides amylophilus* protease and by rumen microorganisms. J. Anim. Sci., 50:723-728.

Marinucci, M.T., B.A. Dehority and S.C. Loerch. 1992. In vitro and in vivo studies of factors affecting digestion of feeds in synthetic fiber bags. J. Anim. Sci., 70:296-307.

McDonald, P., R.A. Edwards and J.F.D. Greenhalgh and C.H. Morgan. 1995. Animal Nutrition. 5th ed. Longman Sigapore Publishers (Pte) Ltd., Singapore.

Netemeyer, D.T., L.J. Bush and F.N. Owens. 1980. Effect of particle size of soybean meal on protein utilization in steers and lactating cows. J. Dairy Sci., 63:574-578.

Nocelc, J.E. 1985. Evaluation of specific variables affecting in situ estimates of ruminal dry matter and protein digestion. J. Anim. Sci., 60:1347-1358.

Nursetyo, M. 2000. Degradasi *in sacco* jerami padi pada sapi Peranakan Ongole dan kerbau lumpur yang mendapat pakan berbeda. Skripsi Sarjana Peternakan. Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta.

Olubobokun, J.A., W.M. Craig and ICR. Pond. 1990. Effects of mastication and microbial contamination on ruminal in situ forage disappearance. J. Anim. Sci., 68:3371-3381.

Oosting, S.J. and Waanders . 1993. The effect of rumen ammonia nitrogen concentration on intake and digestion of wheat straw by goats. Anim. Feed Sci. Tech., 43:31-40.

Orslcov, E.R. 1994. Plant factors limiting roughage intake in ruminants. In: Livestock Production in the 21st Century: priorities and research needs. P.A, Thacker (ed). University of Saskatchewan, Department of Animal and Poultry Science Saskatoon, Saskatchewan, Canada. pp. 1-9.

Orskov, E.R. 1992. Protein Nutrition in Ruminants. 2nd ed. Academic Press Ltd., London.

Orskov, E.R. 1985. Evaluation of crop residues and agro-industrial by-products using the nylon bag method. In: Better utilization of crop residues and by-products in animal feeding: research guidelines. T.R Preston, Vappu L. Kossila, J. Goodwin and Sheila B. Reed (eds). FAO Animal Production and

Health, Paper 50. Food and Agriculture Organization of The United Nations, Rome. pp. 153 – 161.

Orskov, E.R. 1987. The Feeding of Ruminants Principles and Practice. Chalcombe Publications. Marlow Bottom, Marlow, Bucks.

Orskov, E.R. and M. Ryle. 1990. Energy Nutrition in Ruminants. Elsevier Applied Science, London and New York.

Owens, F.N. and A.L. Goetsch. 1988. Ruminal fermentation. In: The Ruminant Animal Digestive Physiology and Nutrition. D.C. Church (ed). Prentice Hall, Englewood Cliffs, New Jersey. pp. 145-171.

Owens, F.N. and R. Zinn. 1988. Protein metabolism of ruminant animals. In: The Ruminant Animal Digestive Physiology and Nutrition. D.C. Church (ed). Prentice Flail, Englewood Cliffs, New Jersey. pp. 227-249.

Padmowijoto, S., R. Utomo, B. Prasetyo dan H. Basri. 1988. Pengaruh pemeraman campuran jerami padi-urea-molase terhadap performan sapi Friesian Holstein jantan. Dalam: Limbah Pertanian Sebagai Palcan dan Manfaat Lainnya. M. Soejono, A. Musofie, R. Utomo, N.K. Wardhani dan J. B. Schiere (eds). Proceedings Bioconversion Projet Second Workshop on Crop Residues for Feed and Other Purposes. Grati. pp. 165-171.

Paraklcasi, A. 1999. Ilmu Nutrisi dan Makanan Ternalc Ruminan. Ul-Press, Jakarta.

Park, K.K., L.J. Krysl, B.A. McCraken, M.B. Judkins and D.W. Holcombe. 1994. Steers grazing intermediate wheatgrass at various stages of maturity: Effects on nutrient quality forage intake, digesta kinetics, ruminal fermentation, and serum hormones and metabolites. J. Anim. Sci. 72: 478-486.

Perry, T.W. 1980. Beef Cattle Feeding and Nutrition. Academic Press, Inc., New York.

Poncet, C. 1991. The outflow of particles from the reticulo-rumen. In: Rumen Microbial Metabolism ad Ruminant Digestion. J.P. Jouany (ed). INRA, Paris. pp. 297-322.

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

Preston, T.R. 1986. Better utilization of crop residues and by-products in animal feeding: research guidelines. FAO Animal Production and Health. Paper 50/2. Food and Agriculture Organization of The United Nations, Rome.

Roxas, D.B., L.S. Castillo, A.R. Obsioma, R.M. Lapitan, V.G. Momongan and B.O. Juliano. 1984. Chemical composition and in vitro digestibility of straw from different varieties of rice. In: The Utilization of Fibrous Agricultural

Residues as Animal Feeds. P.T. Doyle (ed). Proceedings of the Third Annual Workshop of the Australian – Asian Fibrous Agricultural Residues Research Network. School of Agricultural and Forestry, University of Melbourne, Parkville, Victoria.

Sauvant,D., R. Baumont and Faverdin. 1996. Development of a mechanistic model of intake and chewing activities of sheep. J. Anim. Sci., 74:2785-2802.

Schiere, J.B. and M.N.M. Ibrahim. 1989. Feeding of urea-ammonia treated rice straw: a compilation of miscellaneous reports produced by the Straw Utilization Project (Sri Lanka). Pudoc, Centre for Agricultural Publishing and Documentation, Wageningen.

Siregar, S.B. 1994. Ransum Ternak Ruminansia. PT. Penebar Swadaya, Jakarta.

Soejono, M. 1992. Aplikasi bioteknologi di bidang pakan dan nutrisi ternak. Buletin Peternakan, Edisi Khusus: 57-66.

Soejono, M. 1988. Pengaruh lama peram pada amoniasi urea jerami padi terhadap kecernaan *in vivo*. Dalam: Limbah Pertanian Sebagai Pakan dan Manfaat Lainnya. M. Soejono, A. Musofie, R. Utomo, N.K. Wardhani dan J.B. Schiere (eds). Proceedings Bioconversion Project Second Workshop on Crop Residues for Feed and Other Purposes. Grati. pp. 59-66a.

Soejono, M. 1995. Ruminologi. Bahan Kuliah PTM 732. Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta.

Soejono, M. 1996. Perubahan struktur dan kecernaan jerami padiakibat perlakuan urea sebagai pakan sapi potong. Disertasi Dolctor. Universitas Gadjah Mada, Yogyakarta.

Steel, R.G.D. dan J.H. Torrie. 1989. Prinsip dan Prosedur Statistik: suatu pendekatan biometrik. PT. Gramedia, Jakarta.

Sutrisno, C.I. 1988. Teknologi pemenfaatan jerami padi sebagai penunjang usaha peternakan di Indonesia. Dalam: Proceedings Seminar Program Penyediaan Pakan dalam Upaya Mendukung Industri Peternakan Menyongsong PELITA V. Sunarso, B. Dwiloka, Soepardie, Widiyanto, Soelistiyono H.S. (eds). Fakultas Peternakan, UNDIP, Semarang. pp. 1-8.

Tampubolon, Y.L. 2000. Degradasi *in sacco* jerami padi amoniasi pada sapi Peranalcan Ongole dan kerbau yang mendapat pakan berbeda. Skripsi Sarjana Peternakan. Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta.

Tillman, A.D., FI. Hartadi, S. Reksohadiprodjo, S. Prawirokusumo dan S. Lebdosoekojo. 1989. Ilmu Makanan Ternak Dasar. Cetakan keempat. Gadjah Mada University Press, Yogyakarta.

Uden, P. and P.J. Van Soest. 1984. Investigation of the in situ bag technique and a comparison of the fermentation in heifers, sheep, ponies and rabbits. J. Anim. Sci., 58: 213-221.

Usman, Y. 1998. Evaluasi degradasi dan laju aliran partikel pakan berserat sisa tanaman pertanian (jerami kacang tanah, jerami jagung dan pucuk tebu) di dalam aimen sapi. Tesis S-2. Program Pascasarjana, Universitas Gadjah Mada, Yogyakarta.

Utomo, R., M. Soejono and J.B. Schiere. 1988. Review of duration and concentration urea treated straw of digestibility. Dalam: Limbah Pertanian Sebagai Pakan dan Manfaat Lainnya. M. Soejono, A. Musofie, R. Utomo, N.K. Wardhani dan J.B. Schiere (eds). Proceedings Bioconversion Project Second Workshop on Crop Residues for Feed and Other Purposes. Grati. pp. 36-58.

Van Soest, P.J. 1994. Nutritional Ecology of the Ruminants. 2nd ed. Cornell University Press, USA.

Varel, V.H. and K.K. Kreikemeier. 1995. Technical note: comparison of in vitro and in situ digestibility methods. J. Anim. Sci., 73:578-582.

Waani, M.R. 1999. Konsumsi dan lcecernaan jerami padi, jerami padi amoniasi atau jerami kacang kedelai pada sapi Peranakan Ongole. Tesis S-2. Program Pascasarjana, Universitas Gadjah Mada, Yogyakarta.

Wallace, R.J. 1991. Rumen proteolysis and its control. In: J.P. Jouany (ed). Rumen Microbial Metabolism ad Ruminant Digestion. INRA, Paris. pp. 131-150.

Wallace, R.J. and M.A. Cotta. 1988. metabolism of nitrogen-containing compounds. In: P.N. Hobson (ed). The Rumen Microbial Ecosystem. Elsevier Science Publishers Ltd., Essex, England. pp. 217-249.

Weakley, D.C., M.D. Stern and L.D. Satter. 1983. Factors affecting disappearance offeedstuffs from bags suspended in the rumen. J. Anim. Sci., 56:493-507.

Welch, J.G. 1982. Rumination, particle size and passage from the rumen. J. Anim. Sci., 54:885-894.

Weston, R.H. 1984. Principles of feed intake control in ruminants given roughages. In: The Utilization of Fibrous Agricultural Residues as Animal Feeds. P.T. Doyle (ed). Australian Universities' International Development Program, Melbourne. pp. 14-27.

Widyobroto, B.P., S. Padmowijoto dan R. Utomo. 1994. Pendugaan kualitas protein bahan pakan untuk ruminansia. Laporan Penelitian. Fakultas Peternakan, Universitas Gadjah Mada, Yogyakarta.