

DAFTAR PUSTAKA

- Akhadiarto, Sindu, M. N. R. (2017). Estimasi Emisi Gas Metana dari Fermentasi Enterik Ternak Ruminansia Menggunakan Metode Tier-1 di Indonesia Estimate of Methane Emissions from Enteric Fermentation by Ruminant Animals Using Tier-1 Methods in Indonesia. *Jurnal Teknologi Lingkungan*, 18(1), 1–8.
- Annison, E. F., & Bryden, W. L. (1998). Perspectives on ruminant nutrition and metabolism I. Metabolism in the Rumen. *Nutrition Research Reviews*, 11(2), 173–198. <https://doi.org/10.1079/nrr19980014>
- Arboleda, J. W., & Fa, M. (2007). *Detection of α-amylase inhibitors by a zymography method , performed in isoelectric focusing electrophoretic PhastGels.* 366, 113–115. <https://doi.org/10.1016/j.ab.2007.04.005>
- Azzaz, H. H., Morsy, T. A., & Murad, H. A. (2016). Microbial Feed Enhancement Supplements for Ruminant's Performance Enchacement. *Asian J. Agric. Res.*, 10(1), 1–14. <https://doi.org/10.3923/ajar.2016.1.14>
- Bata, M. (2008). Pengaruh Molases Pada Amoniasi Jerami Padi Menggunakan Urea Terhadap Kecernaan Bahan Kering dan Bahan Organik In Vitro (The effect of molasses on ammoniated straw by using urea on dry and organic matter digestibility as in vitro). *Agripet*, 8(2), 15–20.
- Bata, M., & Purwanto, T. (2019). *Kadar Vfa Dan N-Nh 3 Domba Lokal Yang Diberi Pakan Dengan Bahan Pembawa Yang Berbeda Secara In Vitro Vfa And N-Nh 3 Levels Of Sheep Fed Diet Containing Of Waru Flowers (Hibiscus Tiliaceus) Extract With Different Carriers In Vitro*. 1(2), 137–144.
- Bata, M., & Rahayu, S. (2017). Evaluation of Bioactive Substances in Hibiscus tiliaceus and its Potential as a Ruminant Feed Additive. *Bentham Science*, 13, 157–164. <https://doi.org/10.2174/15734072136661701091519>
- Bata, M., Rahayu, S., & Hidayat, N. (2016). *Performan Sapi Sumba Ongole (SO) yang Diberi Jerami Padi Amoniasi dan Konsentrasi yang Disuplementasi dengan Tepung Daun Waru (Hibiscus Tiliaceus)*. 16(2), 106–113.
- Bata, M., Rahayu, S., & Oktora, M. (2021). Efisiensi Metabolisme Rumen Pakan Berbasis Jerami Padi Amoniasi dan Konsentrasi yang Disuplementasi Ekstrak Daun Waru (Hibiscus tiliaceus) (In-Vitro). *Jurnal Agripet*, 21(2), 113–121. <https://doi.org/10.17969/agripet.v21i2.19463>
- Bekuma, A. (2019). Rumen Manipulation: One of the Promising Strategies to Improve Livestock Productivity-Review. *Journal of Dairy & Veterinary Sciences*, 9(2). <https://doi.org/10.19080/jdvs.2019.09.555758>
- Broucek, J. (2014). *Production of Methane Emissions from Ruminant Husbandry :*

A Review. November, 1482–1493.

- Chauvelieras-Durand, F., Masséglia, S., Fonty, G., & Forano, E. (2010). Influence of the Composition of the Cellulolytic Flora on the Development of Hydrogenotrophic Microorganisms, Hydrogen Utilization, and Methane Production in the Rumens of Gnotobiotically Reared Lambs. *Appl. Environ. Microbiol.*, 76(24), 7931–7937.
- Dawes, E. A., & Holms, W. H. (1957). Metabolism of Sarcina Lutea. *J. Bacteriol.*, 75(4), 390–399.
- Elghandour, M. M. Y., Salem, A. Z. M., Castañeda, J. S. M., Camacho, L. M., Kholif, A. E., & Chagoyán, J. C. V. (2015). Direct-fed microbes : A tool for improving the utilization of low quality roughages in ruminants. *Journal of Integrative Agriculture*, 14(3), 526–533. [https://doi.org/10.1016/S2095-3119\(14\)60834-0](https://doi.org/10.1016/S2095-3119(14)60834-0)
- Gong, X., Gruninger, R. J., Qi, M., Paterson, L., Forster, R. J., Teather, R. M., & McAllister, T. A. (2012). Cloning and identification of novel hydrolase genes from a dairy cow rumen metagenomic library and characterization of a cellulase gene. *BMC Research Notes*, 5(1), 2101791285670509. <https://doi.org/10.1186/1756-0500-5-2101791285670509>
- Grochowska, Nowak, S. W., Mikula, R., & Kasprowicz-Potocka, M. (2012). The effect Saccharomyces cerevisiae on ruminal fermentation in sheep fed high or low NDF rations. *J. Anim. Feed. Sci.*, 21, 276–284.
- Hanum, T. A., & Setyari, W. (2018). Analisis Impor Daging Sapi di Indonesia Tahun 2000 - 2015. *E-Jurnal Ekonomi Pembangunan*, 7(8), 1587–1825. <https://ojs.unud.ac.id/index.php/eep/article/view/39881>
- Herdian, H., L. Istiqomah, A. Febrisiantosa, dan D. S. (2011). Pengaruh Penambahan Daun Morinda citrifolia sebagai Sumber Saponin terhadap Karakteristik Fermentasi , Defaunasi Protozoa , Produksi Gas dan Metana Cairan Rumen secara In Vitro. *JITV*, 16(2), 99–104.
- Inal, F., Gurbuz, E., Coskun, B., Alatas, M. S., Citil, O. B., Polat, E. S., Seker, E., & Ozcan, C. (2010). The effect of live yeast culture(Saccharomyces cerevisiae) on Rumen Fermentation and Nutrient Degradability in Yearling Lambs. *Kakfas Univ. Vet. Fak. Derg.*, 16(5), 799–804.
- Iskandar, S. (2009a). Hasil-Hasil Penelitian Balai Penelitian Ternak TA 2006 – 2008. *Seminar Nasional Teknologi Peternakan Dan Veteriner*, 2008, 18–27.
- Iskandar, S. (2009b). Hasil-Hasil Penelitian Balai Penelitian Ternak TA 2006 – 2008. *Pros. Seminar Nasional Teknologi Peternakan Dan Veteriner*, 18–27.
- Jayanegara, A. (2008). Reducing methane emissions from livestock. *Institut Pertanian Bogor*, 1–4.

- Junaidi, Y., Pertiwiningrum, A., Erwanto, Y., & Fitriyanto, N. A. (2017). Semi Purification and Identifications Molecule Protein Weigh of Alkaline Protease Enzyme from *Bacillus cereus* LS2B. *International Journal of Bio-Science and Bio-Technology*, 9(3), 89–100. <https://doi.org/10.14257/ijbsbt.2017.9.3.08>
- Krehbiel, C. R., Rust, S. R., Zhang, G., & Gilliland, S. E. (2002). *Bacterial direct-fed microbials in ruminant diets : Performance response and mode of action 1 , 2 Bacterial direct-fed microbials in ruminant diets : Performance response and mode of action 1 , 2. October 2014.*
- Krehbiel, C. R., Rust, S. R., Zhang, G., & Gilliland, S. E. (2003). Bacterial direct-fed microbials in ruminant diets : Performance response and mode of action. *J. Anim. Sci.*, 18(14), E120–E132.
- Kulkarni, N., Shendye, A., & Rao, M. (1999). Molecular and biotechnological aspects of xylanases. *FEMS Microbiology Reviews*, 23(4), 411–456. [https://doi.org/10.1016/S0168-6445\(99\)00006-6](https://doi.org/10.1016/S0168-6445(99)00006-6)
- Lakshmi, B. K. M., Muni Kumar, D., & Hemalatha, K. P. J. (2018). Purification and characterization of alkaline protease with novel properties from *Bacillus cereus* strain S8. *Journal of Genetic Engineering and Biotechnology*, 16(2), 295–304. <https://doi.org/10.1016/j.jgeb.2018.05.009>
- Malmuthuge, N., & Guan, L. L. (2017). Understanding host-microbial interactions in rumen: Searching the best opportunity for microbiota manipulation. *Journal of Animal Science and Biotechnology*, 8(1), 1–7. <https://doi.org/10.1186/s40104-016-0135-3>
- Mcallister, T. A., Beauchemin, K. A., Alazzeh, A. Y., Baah, J., Teather, R. M., & Stanford, K. (2011). *Review: The use of direct fed microbials to mitigate pathogens and enhance production in cattle.* <https://doi.org/10.4141/CJAS10047>
- McMurphy, C. P., Duff, G. C., Sanders, S. R., Cuneo, S. P., & Chirase, N. K. (2011). Effects of supplementing humates on rumen fermentation in Holstein steers. *South African Journal of Animal Sciences*, 41(2), 134–140. <https://doi.org/10.4314/sajas.v41i2.71017>
- Mehrzed, J., Desrosiers, C., Lauzon, K., Robitaille, G., Zhao, X., & Lacasse, P. (2005). Proteases involved in mammary tissue damage during endotoxin-induced mastitis in dairy cows. *Journal of Dairy Science*, 88(1), 211–222. [https://doi.org/10.3168/jds.S0022-0302\(05\)72679-5](https://doi.org/10.3168/jds.S0022-0302(05)72679-5)
- Mikulec, Z., Masek, T., Habrun, B., & Valpotic, H. (2010). Influence of live yeast cells (*Saccharomyces cerevisiae*) supplementation to the diet of fattening lambs on growth performance and rumen bacterial number. *Veterinarski Arhiv*, 80(6), 695–703.
- Mutaqin. (2018). *IOP Conference Series : Earth and Environmental Science Invitro*

Study on the Fluid From Banana Stem Bioprocess as Direct Fed Microbial.

- Patra, A. K., & Saxena, J. (2009). The effect and mode of action of saponins on the microbial populations and fermentation in the rumen and ruminant production. *Nutrition Research Reviews*, 22(2), 204–219. <https://doi.org/10.1017/S0954422409990163>
- Rajak, R. A. M. C. (2005). *An improved zymographic method for detection of amylolytic enzymes of fungi on polyacrylamide gels*. 19(November), 100–102. <https://doi.org/10.1017/S0269915X05004015>
- Santoso, S. E., Soesanto, L., & Haryanto, T. A. D. (2007). Penekanan hayati penyakit moler pada bawang merah dengan Trichoderma harzianum, Trichoderma koningii, dan Pseudomonas P60. *J. HPT Tropika*, 7(1), 53–61.
- Seo, J. K., Kim, S., Kim, M. H., Upadhyaya, S. D., Kam, D. K., & Ha, J. K. (2010). *Direct-fed Microbials for Ruminant Animals* *. 23(12), 1657–1667.
- Singh, S. K., Singh, S. K., Tripathi, V. R., & Garg, S. K. (2012). Purification, characterization and secondary structure elucidation of a detergent stable, halotolerant, thermoalkaline protease from *Bacillus cereus* SIU1. *Process Biochemistry*, 47(10), 1479–1487. <https://doi.org/10.1016/j.procbio.2012.05.021>
- Suryani, H., Zain, M., Jamarun, N., & Ningrat, R. W. S. (2015). Peran Direct Fed Microbials (DFM) *Saccharomyces cerevisiae* dan *Aspergillus oryzae* terhadap Produktivitas Ternak Ruminansia : Review. *Jurnal Peternakan Indonesia (Indonesian Journal of Animal Science)*, 17(1), 27. <https://doi.org/10.25077/jpi.17.1.27-37.2015>
- Susanti, U. T. (2014). *Yang Berpotensi Menekan Gas Metana Secara in-Vitro*. 14(1), 29–38.
- Thalib, A. (2011). Perkembangan Teknologi Peternakan Terkait Perubahan Iklim : Teknologi Mitigasi Gas Metan Enterik Pada Ternak Ruminansia. *Seminar Dan Lokakarya Nasional Kerbau*, 39–48.
- Thalib, A., Haryanto, B., Hanid, H., Suherman, D., & Mulyani. (2001). Pengaruh Kombinasi Defaunator dan Probiotik terhadap Ekosistem Rumen dan Performa Ternak Domba. *JITV*, 6(2), 83–88.
- Veira, D. M., Ivan, M., & Jui, P. Y. (1984). The Effect of Ciliate Protozoa on The Flow of Amino Acids From The Stomach of Sheep. *Can. J. Anim. Sci.*, 64(5), 22–23.
- Wang, Y., & McAllister, T. A. (2002). Rumen microbes, enzymes and feed digestion-A review. *Asian-Australasian Journal of Animal Sciences*, 15(11), 1659–1676. <https://doi.org/10.5713/ajas.2002.1659>

Widyawati, S. D., Silalahi, S. F., & Astuti, I. (2017). Efektivitas Daun Kembang Sepatu sebagai Agensi Defaunasi dalam Pakan Konsentrat Tinggi Menggunakan Jenis Hijauan Berbeda pada Kecernaan Nutrien Kambing Kacang. *Sains Pet.*, 15(2), 87–91.

Winugroho, M., & Widiawati, Y. (2003). Candida utilis sebagai pengganti *Saccharomyces cerevisiae* pendamping bioplus untuk meningkatkan produktivitas ternak. *Pros. Seminar Nasional Teknologi Peternakan Dan Veteriner*, 142–145.

