

BAB VI PENUTUP

6.1. Kesimpulan

1. Penambahan variasi konsentrasi susu skim memberikan perbedaan nyata terhadap pH, total asam laktat dan sineresis yoghurt kolostrum.
2. Semakin tinggi konsentrasi susu skim yang ditambahkan maka semakin meningkatkan pH dan total asam laktat akan tetapi menurunkan sineresis.
3. Berdasarkan hasil penelitian dapat diketahui nilai pH yoghurt kolostrum berkisar 4,324-4,832, total asam laktat 0,9164-1,0370%, sineresis 0,61-3,57%.

6.2. Saran

1. Dapat dilakukan pengujian organoleptik hingga perlakuan S₅ untuk mengetahui perlakuan terbaik serta tingkat penerimaan konsumen terhadap yoghurt kolostrum.
2. Dapat dilakukan penelitian karakteristik yoghurt kolostrum selama penyimpanan.

DAFTAR PUSTAKA

- Aak. 1995. *Petunjuk Praktis Beternak Sapi Perah*. Yogyakarta: Kanisius.
- Adam, M. R. and M. O. Moss. 2000. *Food Microbiology 2nd edition*. UK: MDG Books Ltd.
- Ahmadi, M., Velciov, A-B., Scurtu M., Ahmadi, T. dan Olariu, L. 2011. Benefits of Bovine Colostrum in Nutraceutical Products, *Journal of Agroalimentary Processes and Technologies*. 17 (1): 42-45.
- Apriyantono, A., D. Fardiaz, N. L. Puspitasari, Sedarnawati, dan S. Budiyo. 1989. *Petunjuk Laboratorium Analisa Pangan*. Bogor: Pusat Antar Universitas Pangan dan Gizi Institut Pertanian Bogor.
- Amatayakul, T., F. Sherkat, dan N. P. Shah. 2006. Syneresis in Set Yogurt As Affected by EPS Starter Cultures and Levels of Solids. *International Journal of Dairy Technology Vol. 59, No 3*.
- Badan Pengawasan Obat dan Makanan. Surat Keputusan KA. Badan POM RI No.: HK.00.05.52.4040. Tanggal: 9 Oktober 2006 Tentang Kategori Pangan. http://www2.pom.go.id/public/hukum_perundangan/pdf/COMBINE_03032011.pdf. (16 April 2013)
- Badan Standarisasi Nasional. *SNI 3141.1:2011: Susu Segar: Bagian 1-Sapi*. http://sisni.bsn.go.id/index.php?/sni_main/sni/detail_sni/11914. (16 April 2013).
- Badan Standarisasi Nasional. *SNI 2981:2009: Yogurt*. http://sisni.bsn.go.id/index.php?/sni_main/sni/detail_sni/10235. (4 April 2013).
- Bakirci, I. and A. Kavaz. 2008. An Investigation of Some Properties of Banana Yogurts Made with Commercial ABT-2 Starter Culture during Storage. *International Journal of Dairy Technology* 61 (3): 270-276.
- Beal, C; Skonova, J; Latrille, M; Martin, N and Corrieu, G. 1999. Combined Effects of Culture Conditions and Storage Time on Acidification and Viscosity of Stirred Yogurt. *Journal Dairy Science* 82: 673-681.

- Blum, J. W. dan Hammon, H. 2000. Colostrum Effects on The Gastrointestinal Tract, and on Nutritional, Endocrine and Metabolic Parameters in Neonatal Calves, *Livestock Production Science*. 66: 151-159.
- Buck, S. Rondinini, A. K. Covington, F. G. K. Baucke, C. M. A. Brett, M. F. Camoes, M. J. T. Milton, T. Mussini, R. Naumann, K. W. Pratt, P. Spitzer, G. S. Wilson. 2001. *The Measurement of pH-Definitation, Standards and Procedure*. IUPAC WP pH DOCUMENT.
- Buckle, K.A., Edwards, R. A., Fleet, G. H. dan Wootton, M. 2009. *Ilmu Pangan*. Penerjemah: Hari Purnomo dan Adiono. Jakarta: UI Press.
- Chandan, R.C., White, C.H., Kilara, A., Hui, Y.H. 2006. *Manufacturing Yogurt and Fermented Milks*. USA: Blackwell Publishing.
- Conte, F. dan Scarantino, S. 2008. A Study on The Quality of Bovine Colostrum: Physical, Chemical and Safety Assessment, *Int. Food Research J.* 20 (2): 925-931.
- Considine, D. M. and D. D. Considine. 1982. *Foods and Food Production Encyclopedia*. New York: Van Nostrand Reinhold Company.
- Cronk, J. D. 2009. *Urea Cycle*. Gonzaga University. http://guweb2.gonzaga.edu/faculty/cronk/biochem/uindex.cfm?definition=urea_cycle. (6 Februari 2014).
- DeMan, J.M. 1997. *Kimia Makanan*. Bandung: Penerbit Institut Teknologi Bandung.
- Dwidjoseputro, D. 2010. *Dasar-dasar Mikrobiologi*. Jakarta: Djambatan.
- Early, R., (Ed.). 1998. *The Technology of Dairy Products Second Edition*. UK: Blackie Academic & Professional.
- Effendi, H. M. S. 2009. *Teknologi Pengolahan dan Pengawetan Pangan*. Bandung: Alfabeta.
- Fardiaz, Srikandi. *Mikrobiologi Pengolahan Pangan Lanjut*. Bogor: IPB Press, 1992.

- Food Standards Australia New Zealand. *Milk, Cow, Fluid, Regular Fat (4%)*. <http://www.foodstandards.gov.au/consumerinformation/nuttab2010/nuttab2010onlinesearchabledatabase/onlineversion.cfm?&action=getFood&foodID=09A10163>. (11 April 2013).
- Food Standards Australia New Zealand. *Yogurt, Natural, Regular Fat (3,5%)*. <http://www.foodstandards.gov.au/consumerinformation/nuttab2010/nuttab2010onlinesearchabledatabase/onlineversion.cfm?&action=getFood&foodID=09C10088>. (8 April 2013).
- Georgiev, I. P. 2005. Alteration in Chemical Composition of Colostrum in Relationship to Post-Partum Time, *Bulgarian Journal of Veterinary Medicine*. 8(1): 35-39.
- Georgiev, I. P. 2008. Differences in Chemical Composition Between Cow Colostrum and Milk, *Bularian Journal of Veterinary Medicine*. 11(1): 3-12.
- Heinrichs, J. dan Jones, C. Composition and Hygiene of Colostrum on Modern Pennsylvania Dairy Farms, Departemen of Dairy and Animal Science, The Pennsylvania State University.
- Hui, Y. H., (Ed.) 1991. *Encyclopedia of Food Science and Technology Vol. 4*. USA: A Wiley-Interscience Publications.
- Hurley, W. L. *The Neonate and Colostrums*. <http://nutriweb.org.my/publications/mjn1Onl.art1.pdf>. (13 Oktober 2013)
- Ide, P. 2008. *Health Secret of Kefir: Mengungkap Keajaiban Susu Asam untuk Penyembuhan Berbagai Penyakit*. Jakarta: Elex Media Komputindo.
- Institute of Food Science and Technology, Nanjing Agricultural University. Microbime. <http://jpkc.njau.edu.cn/spwswx/cankao/ShowArticle.asp?ArticleID=314>. (23 September 2013).
- Jacobson, N. L. 1969. Energy and Protein Requirements of The Calf, *J. Dairy Sci*. 52: 1316-1321.
- Kelly, G. S. 2003. Bovine Colostrum: A Review of Clinical Uses, *Alternative Medicine Review*. 8(4): 378-394.

- Kertz, A. 2008. Composition of Bovine Colostrum Variable, *Feedstuffs*. 80(36): 1-2.
- Landge, V.L. 2009. Quality of Yogurt Supplemented with Whey Protein Concentrate and Effects of Whey Protein Denaturation *M.Sc. Thesis*. Kansas State University, Kansas.
- Lee, W. J and Lucey, J. A. 2010. Formation and Physical Properties of Yogurt, *Asian-Aust. J. Anim. Sci.* 23 (9): 1127-1136.
- Lister, E. E. dan Lodge, G. A. 1973. Effect of Increasing The Energy Value of A Whole Milk Diet for Calves: I. Nutrient Digestibility and Nitrogen Retention, *Can. J. Anim. Sci.* 53: 307-316.
- Manab, A. 2008. Kajian Sifat Fisik Yoghurt Selama Penyimpanan pada Suhu 4°C, *Jurnal Ilmu dan Teknologi Hasil Ternak*. 3(1): 52-58.
- Moeljanto, R. D. dan Wiryanta, B. T. W. 2002. *Khasiat dan Manfaat Susu Kambing: Susu Terbaik dari Hewan Ruminansia*. Tangerang: AgroMedia Pustaka.
- Ohiokpehai, O. 2003. Processed Food Products and Nutrient Composition of Goat Milk, *Pakistan. J. Nutr.* 2 (22): 68-71.
- Pernoud, S., C. Fremaux, A. Sepulchre, G. Corrieu, dan C. Monnet. 2004. *Effect of the Metabolism of Urea on the Acidifying Activity of Streptococcus thermophilus*. *J. Dairy Sci.* 87 (3), 550-555.
- Prescott, L.M, J.P. Harley and O.A. Klein. 2002. Human Diseases Caused by Bacteria, (dalam *Microbiology 5th ed.*), Mc Graw-Hill Publishers, 732-735.
- Rice, D., Rogers, D. G. 1990. *Colostrum Quality and Absorption in Baby Calves, Feeding and Nutrition*. Institute of Agriculture and Natural Resources, Universitas Nebraska-Lincoln: Cooperative Extension.
- Rogosa, M. 1974. Lactobacillaceae/Bifidobacteriaceae. *In: Bergey's Manual of Determinative Bacteriology*. Batimore: The William and Wilkins Co.

- Saputra, F. 2008. Perbandingan Komposisi dan Daya Antimikroba antara Susu Sapi Segar (UHT), Kolostrum Sapi Segar dan Kolostrum Sapi Bubuk, *Skripsi S-1*, Fakultas Teknobiologi, Universitas Katolik Indonesia Atma Jaya, Jakarta.
- Sawitri, M. E., Manab, A., Palupi, T. W. L. 2008. Kajian Penambahan Gelatin Terhadap Keasaman, pH, Daya Ikat Air dan Sineresis Yoghurt, *Jurnal Ilmu dan Teknologi Hasil Ternak*. 3(1): 35-42.
- Sharma, Ranjan. 2013. Sensory Quality Aspects of Yoghurt. <http://www.dairyaustralia.com.au/~media/2B52E95DA7E24F54B97961F78234F3FC.pdf>. (12 Maret 2014).
- Stelwagen, K., Carpenter, E., Haigh, B., Hodgkinson, A. dan Wheeler, T. T. 2009. Immune Components of Bovine Colostrum and Milk, *J. Anim. Sci.* 87: 3-9.
- Stokes, B. C. dan Bourne, J. F. 1989. Mucosal Immunity-Immunoglobulin in Cow Colostrum, (dalam *Veterinary Clinical Immunology*, Halliwell, R. E dan Gorman, N. T., Eds.), Philadelphia: WB Saunders Comp, 198-203.
- Struff, W. G. dan Sprotte, G.. 2007. Bovine Colostrum as A Biologic in Clinical Medicine: A Review, *International Journal of Clinical Pharmacology and Therapeutics*. 45 (4): 193-202.
- Struff, W. G. dan Sprotte, G.. 2008. Bovine Colostrum as A Biologic in Clinical Medicine: A Review-Part II, *International Journal of Clinical Pharmacology and Therapeutics*. 46 (5): 211-225.
- Sumarmono, J. 2012. Teknologi Hasil Ternak: Susu Fermentasi dan Keju. <http://panganhewani.blog.unsoed.ac.id/files/2012/04/THT-Kuliah-5-dan-6.pdf>. (3 April 2013).
- Surajudin, Kusuma, F. R. dan Purnomo, D. 2008. *Yoghurt: Susu Fermentasi yang Menyehatkan*. Tangerang: AgroMedia Pustaka.
- Surono, I. S. 2004. *Probiotik Susu Fermentasi dan Kesehatan*. Jakarta. Yayasan Pengusaha Makanan dan Minuman Seluruh Indonesia.
- Tamime, A.Y. and Robinson, R.K. 2007. *Yoghurt Science and Technology Third Edition*. England: Woodhead Publishing Limited.

- Trachoo, N. 2002. Yoghurt: The Fermented Milk, *Songklanakarin J. Sci. Technol.* 24 (4): 727-737.
- Vincu, M. A., Ahmadi, T. dan Ahmadi, J. 2005. Colostrum As Nutritional Supplement In Sport, *Agroalimentary Processes and Technologies.* 11(1): 33-40.
- Walstra, P. dan R. Jenness. 1983. *Dairy Chemistry and Physics.* New York: John Wiley and Sons, Inc.
- Winarno, F.G., Ahnan, W.W. dan Widjajanto, W. 2003. *Flora Usus dan Yogurt.* Bogor: M-Brio Press.
- Winarno, F. G. dan Fernandez, I. E. 2007. *Susu dan Produk Fermentasinya.* Bogor: M-Brio Press.