

DAFTAR PUSTAKA

- Ami, D., Mereghetti, P., and Maria, D.S. 2012. Multivariate Analysis for Fourier Transform Infrared Spectra of Complex Biological Systems and Processes. Italia. Italian Institute of Technology.
- Anonim, 2013. *Methylation: The Molecule That Unlocks The Body's Healing Response* . www.anma.org/(diakses pada tanggal 24 Juni 2015).
- Anwar, R. 2005. *Biosintesis, Sekresi Dan Mekanisme Kerja Hormon*. Subbagian Fertilitas Dan Endokrinologi Reproduksi Bagian Obstetri Dan Ginekologi Fakultas Kedokteran Unpad. Bandung.
- Astuti P., Sarmin, A. Kusumawati, C M Airin, H Maheswari, dan Sjahfirdi L. 2010. Physiology respon of Bligon bucks transportation : Relation to level of Thyroid Hormone. Journal of Veteriner, Juni Vol.11, No 2:87-92.
- Astuti P, Airin C.M, Widiyanto S, Hana A, Maheswari H, Sjahfirdi L, 2013, *Penentuan Kadar Stres Sapi Menggunakan Fourier Transform Infrared (FTIR) : Studi awal pembuatan detektor stres*. Jurnal Fakultas Kedokteran Hewan Universitas Gadjah Mada : Yogyakarta.
- Astuti P, Airin C M, Widiyanto S, Hana A, H Maheswari, dan Sjahfirdi L. 2014. Fourier Transform Infrared Sebagai Metode Alternatif Penetapan Tingkat Stres pada Sapi. Journal Veteriner Vol 15 No. 1: 57-63.
- Blum.J.W., Schams, D., Bruckmaier, R. 1989. Catecholamines oxytocin and milk removal in dairy cows. J. Dairy. Res., 56.167-177.
- Bruckmaier R.M., Wellnitz O., Blum J.W., 1997. Inhibition of milk ejection in cows by oxytocin receptor blockade, α -adrenergik receptor stimulation and in unfamiliar surroundings. Journal of Dairy Research,64,315-325.
- Budinova, G. J. Salva, dan K. Volka. 2000. Application of Molecular Spectroscopy in the Mid-Infrared Region to the Determination of Glucose and Cholesterol in Whole Blood and in Blood Serum. Society of Applied Spectroscopy. Volume 51, Number 5 (May 1997) Page 631-635
- Bruckmeier, R.M. 2005. *Normal and Disturbed Milk Ejection in Dairy Cows*. J. Dom Anim End, 29. Pp 268-273.
- Borell, V.E., Dobson, H., and Prunier, A. 2007. *Stress, Behavior and Reproductive Performance in Female Cattle and Pigs*. J Hormons and Behavior, 52(1). Pp 130-8
- Connolly, C.C., Steiner, K.E., Stevenson, R.W., Neal, D.W., Williams, P.E., Alberti, K.G.M.M., and Cherrington, A. D.1991. Regulation of glucose metabolism by norepinephrine in conscious dogs. Am.J.Physiol. 261. E764-E772.

- Cunningham, James G. 2007. *Textbook of Veterinary Physiology Fourth Edition*. 11830 Westline Industrial Drive St. Louis, Missouri. Elsevier.
- Crowther, J.R. 2001. *The ELISA Guidebook*. Humana Press. Totowa, New Jersey.
- Deleris G dan Pettibois C. 2003. Applications of FT-IR spectrometry to plasma content analysis and monitoring. *Vibrational Spectroscopy* 32:129.
- Dantzer, R. and Mormede, P. (1983). "Stress in farm animals: A need for re-evaluation". *J. Anim. Sci.*, July, 57(1):6-18.
- Dimitrova M., D. Ivanova, I. Karamancheva, A. Milev, dan I. Dobrev, 2009. *Application of FTIR-spectroscopy for diagnosis of breast cancer tumors, Journal of The University of Chemical Technology and Metalurgy*, 44(3), 297-300.
- Ensminger, M. E dan Tyler, H. D 2006. *Dairy Cattle Science*. 4th Ed. Danville: The Interstate Printers and Publisher, Inc.
- Farkash Y., Timberg R, Orly J. 1986. Preparation of antiserum to rat cytochrome P-450 cholesterol side chain cleavage and its use for ultrastructural localization of the immunoreactive enzyme by protein A-gold technique. *Endocrinology* 118 (4): 1353-65.
- Friend, T. 1980. The feasibility of using vocalization scoring as an indicator of poor welfare during slaughter. *Appl. Anim. Behav. Sci.*
- Fujiwara, T., Cherrington, A.D., Neal, D.W., and McGuiness O.P., 1996. Role of cortisol in the metabolic response to stress hormone infusion in the conscious dog. *Metabolism* 45:571-578
- Gill G: *Biosynthesis, secretion, and metabolism of hormones* .1987. In: *Endocrinology and Metabolism*, 2nd ed. McGraw-Hill ; 11 – 32
- Gunasekaran, Renuga Devi T S, Sreenevasakumar M, Santhosam K. 2007. Analysis of renal failure blood sera- a spectroscopic approach. *Asian Journal of Microbiology, Biotechnology and Environmental Science*, 9: 281-286.
- Guyton. 2000. *Fisiologi Manusia dan Mekanisme Penyakit*. Penerbit Buku Kedokteran EGC: Jakarta.
- Gremlich, H.U., 1994. *Infrared and Raman Spectroscopy*. In *Ullmann's Encyclopedia of Industrial Chemistry*, Vol. B5. Weinheim, Switzerland : VCH, pp. 429-469.
- Hanna, C. 1965. Metabolism of Catecholamines. University of Arkansas Medical Center. *Investigative Ophthalmology* Volume 4 Number 6.
- Hanukoglu A, Fried D, Nakash I, Hanukoglu I. 1995. *Selective Increases in adrenal steroidogenic capacity during acute respiratory disease in infants*. *Eur J Endocrinol* 133 (5) : 552-6.
- Hanukoglu I, 1992. *Steroidogenic Enzymes : structure, function, and role in regulation of steroid hormone biosynthesis*. *J Steroid Biochem Mol Biol* 43 (8) : 779-804. doi : 10.1016/0960-0760(92)90307-5.

- Hanukoglu I, Feuchtwanger R, Hanukoglu A., 1990. *Mechanism of corticotrophin and cAMP induction of mitochondrial cytochrome P450 system enzyme in adrenal cortex cells.*
- Hanukoglu I, Suh BS, Himmelhoch S, Amsterdam A. 1990. *Induction and mitochondrial localization of cytochromes P450scc system enzyme in normals and transformed ovarian granulose cells.*
- Hanukoglu I, Privalle CT, Jefcoate CR., 1981. *Mechanism of ionic activation of adrenal mitochondrial cytochromes P-450scc and P-45011 beta.* J Biol Chem 256 (90):4329-35.
- Hedge, A. 2013. Biological Rhythm DEA 3250/6510. Cornell University.
- Heise H M, Marbach R, Bittner A. 1998. Clinical chemistry and near infrared spectroscopy: multicomponent assay for human plasma and its evaluation for the determination of blood substrates. Journal of Near Infrared Spectroscopy, 6: 361-374.
- Heise H M, Marbach R, Kochinsky T H, Gries F A. 1994. Multicomponent assay for blood substrates in human plasma by mid-infrared spectroscopy and its evaluation for clinical analysis. Applied Spectroscopy. 48: 85-95.
- Hemsworth, P.H., Barnett, J.L., Coleman, G.J., Hansen, C. (1989). A study of the relationships between the attitudinal and behavioural profiles of stockpersons and the level of fear of humans and reproductive performance of commercial pigs. Applied Animal Behaviour Science 23, 301-314
- Hontela, A. 1997. Endocrine and physiological responses of fish to xenobiotics : Role of glucocorticosteroid hormones. In reviews in toxicology, Vol. I. Environmental toxicology. Pp. 1-46. ISO press. Netherlands.
- Hontela, A. 2005. Adrenal Toxicology *Environmental pollutants and the HPI axis. In Biochemistry and Molecular Biology of Fishes, Volume 6, Environmental Toxicology (T. P. Mommsen and T. W. Moon, Eds.), pp. 331–363: chap12, Elsevier B. V., Amsterdam, Netherlands.*
- Hopster, H., 1998. Coping strategies in dairy cows. Ph.D. Thesis. Agricultural University of Wageningen, Wageningen, 152 pp
- Jackson, M. B. Ramjiawan, M. Hewko, dan M.M Mantsch. 1998. Infrared microscopic functional group mapping and spectral clustering analysis of hypercholesterolemic rabbit liver. Cell. Mol. Biol. 44: 89-98.
- Kanaghatara N., Thirunavukkarasu M., Esther Jeyanti C., Shenbagarajan. 2011. FTIR and UV-Visble Spectral Study On Normal Blood Samples. Vol.1, Issue 2.
- Khaustova S., Shkurnikova M., Tonevitsky E., Artyusenkoa V., Tonevitsky A. 2010. Noninvasive biochemical monitoring of physiological stress by Fourier Transform Infrared saliva spectroscopy. Vol.135, pp 3183-3192.
- Kunitsy V.G., dan Panin, L. 2013. Mechanism of Eritrosit deformation under the aaction of stress hormones. International journal of biophysics 2013, 3(1):14.

- Kleiner, J. Ramesh, M. Huleihel, B. Cohen, K. Kantarovich, C. Levi, B. Polyak, R.S. Marks, J. Mordehai, Z. Cohen, dan S. Mordechai. 2002. *A comparative study of gallstones from children and adults using FTIR spectroscopy and fluorescence microscopy*, BMC Gastroenterology, 2(3), 1-14.
- Lau, C. 2001. *Effects of Stress on Lactating*. Breastfeeding 2001, Part 1 : The Evidence for Breastfeeding, 48(1). Pp 221-217.
- Lay D.C.T.H., Friend K.E., Grissom, C.L., Bowers, and M.E. Mal. 1992. Effect of freeze or hot-iron branding of Angus calves on some physiological and behavioral indicators of stress. Appl. Anim. Behav. Sci. 33:137.
- Lavoie H A dan King S R. 2009. Transcriptional regulation of steroidogenic genes : STARD1, CYP11A1, dan HSD3B. Exp. Biol. Med. (Maywood) 234 (8): 880-907.
- Lazarus, R.S. 1993. From psychological stress to the emotion : A history of changing outlooks. In : Porter, L.W., M.R. Rosenzweig, (Eds), Annual Review of Psychology, 44 : 1-21
- Lefcourt A.M., Akers R.M. 1991. Teat stimulation-induced oxytocin and catecholamine release in pregnant and lactating Holstein heifers. Dom. Anim. Endocrinol. 8, 235-243.
- Lefcourt, A.M., and Elasser, T.H. 1995. Adrenal responses of Angus x Hereford cattle to the stress of weaning. J. Anim. Sci. 73:2669-2676.
- Lefcourt A.M., Paul G., Mayer H., Schams D., Bruckmaier R.M., 1997. Response of catecholamines to manual teat stimulation or machine-milking of Lacaune and Friesian dairy ewes. J. Dairy Sci, 80, 3205-3211.
- Lundberg, U. and M. Frankenhauser. 1980. Pituitary adrenal and sympathetic-adrenal correlates of distress and effort. J. Psychosomat Res., 24 : 125-130.
- Lee, C. N. (1993). *Environmental stress effects on bovine reproduction*. Vet. Clin. North America. Food Anim. Pract. 9(2): 263-273.
- Luthfirda, Sjahfirdi.; Nur Aziz, Safar; Maheswari, Hera; Astuti, Pudji; Suyatna, Frans D; dan Nasikin, Muhammad. 2011. Estrus Period Determination of Female Rats by FTIR through Identification of Reproductive Hormones Metabolites in Urine Samples. International Journal of Basic and Applied Science IJBAS-IJENS Vol.11 N0.03.
- Martin, M.C., 2001. Fourier Transform Infrared Spectroscopy. United States. Advanced Light Source Division. Ernest Orlando Lawrence Berkeley National Laboratories.
- McGuinness, O.P., Vickie, S., Benson, E.M., Lewis, M., Robert, T., Snowden, J.E., Greene, D.W., Neal, D.W., and Cherrington A.D., 1997. Role of epinephrine and norepinephrine in the metabolic response to stress hormone infusion in the conscious dog. Am. J. Physiol. Endocrinol. and Metabol. 273:E674-E681.

- Mitrovic I, *Introduction to the Hypothalamo-Pituitary-Adrenal (HPA) Axis* (Lecture). <https://docs.google.com> (diakses tanggal 14 Januari 2015).
- Mitruka, Brij.M., and Rawnsley, Howard. M. 1981. Clinical Biochemical and Hematological Reference Value in Normal Experimental Animala and Normal Human. Masson Publishing USA.
- Morrow C J., Klover E S., Verkerk G A., Mathews L R.. 2002. Fecal glucocorticoid metabolites as a measure of adrenal activity in dairy cattle. *Gen Comp Endocriol*; 126:229-41.
- Moros, J., Garrigues, S., and de la Guardia, M. 2010. Vibrational Spectroscopy Provides a Green Tool for Multi-Component Analysis. *Trends in Analytical Chemistry* 29(7), 578-591.
- Naik, S.V., Mahendra, S., and Sharma, H.D., 2014. Short term changes in plasma hormones, metabolites, milk yield and physiological responses in epinephrine administration cows. *J.Bio.Innov.*3(2),pp:63-72.
- Obled, C, Papet, I, Breuillé, D. 2002. *Metabolic bases of amino acid requirements in acute diseases*. *Curr Opin Clin Nutr Metab Care* 5: pp. 189-197
- Palme R, Fischer P, Schildorfer H, Ismail M N. 1996. Excretion of infused 14-C steroid hormones via faeces and urine in domestic livestock. *Anim Reprod Science*; 43:43-63.
- Palme R dan Mostl E. 2000. Determination Of Faecal Cortisol Metabolites In Domestic Livestock For Non-Invasive Monitoring Of disturbance. In : *Aktuelle Arbeiten zur artgemaben Tierhaltung. Kuratorium fur Technik und Bauwesen inder Landwirtschaft Ev (KTLB), Darmstadt, Germany, KTPL-Schrift* 2001;403:3 17.
- Pavia, D.L., Lampman, G.M., and Kriz-jr, G.S. 2009. *Introduction to Spectroscopy: A Guide for Student of Organic Chemistry*. Philadelphia, USA: W.B. Saunders Company.
- Petibois C, A-M Melin, A. Perromat, G. Cazorla, dan Deleris G. 2000. Glucose and Lactate concentration determination on single microsample by Fourier Transform Infrared Spectroscopy. *J. Lab. Clin. Med.* 135: 210-215.
- Petibois C, Cazorla G, Cassaigne A, Deleris G. 2000. FT-IR Spectroscopy Utilization to Sportsmen Fatigability Evaluation and Control. *Medicine and Science in Sports and Exercise*. Pp 1804.
- Petibois C, V. Rigalleau, Melin A M. 1999. Determination o glucose in dried serum samples by Fourier Transform Infrared Spectroscopy. *Clinical Chemical.* 45: 1530-1535.
- Petibois C, Cazorla G, Cassaigne A, Perromat A, Deleris G. 2001. Plasma Protein Contents Determined by Fourier Transform Infrared Spectrometry. *Clinical Chemistry*, 47: 730-738.

- Petibois C., Cazorla G., Cassaigne A., Deleris G., 2002. Application of FT-IR Spectrometry to Determine the Global Metabolic Adaptation to Physical Conditioning in Sportsmen. *Applied Spectroscopy*, 56: 1259-1265.
- Pesce, G., Guillaume, V., Jezova, D., Faudon, M., Grino, M., Oliver, C., 1990. Epinephrine in rat hypophysial portal blood is derived mainly from the adrenal medulla. *Neuroendocrinology* 52, 322-327.
- Quick, J.C., J.D. Quick, Nelson and J.J. Hurrell. 1997. Preventive stress management in organizations. Washington, DC. American Physiological Association.
- Randall, M. 2010. The Physiology of Stress: Cortisol and the Hypothalamic-Pituitary-Adrenal Axis. *Dartmouth Undergraduate Journal of Science*. DUJS online.
- Reeds, P.J, Jahoor, F., 2001. *The amino acid requirements of disease*. Clin Nutr 20: pp. 15-22
- Reece, J.B., Urray, L.A., Cain, M.L., Wasserman, S.A., Minorsky, P.V., and Jackson, R.B. 2013. *Campbell Biology* 10th Edition.
- Rohleder D, Gerber K, Kiefer W, Kohler W, Mocks J, Petrich W. 2005. Comparison of mid infrared and Raman spectroscopy in the quantitative analysis of serum. *Journal of Biomedical Optics*, 10: 311-318.
- Rohman, Abdul. 2012. *Pengembangan dan Analisa Produk Halal*. Yogyakarta. Pustaka Pelajar.
- Rushen, J., Taylor, A.A., and De Pessille, A.M. 1999. *Domestic Animals Fear of Humans and Its Effect On Welfare*. J Appl Animal Behav Scie, 65. Pp 285-303.
- Rushen, J., Munksgaard, L., Marnet, P.G., and De Pesille A.M. 2001. Human Contact and the Effect of Acute Stress on Cows at Milking. *J of App An Behav Sci*, 73(1).Pp 1-14.
- Senger, P.L. 2003. *Pathway to Pregnancy and Parturition (2nd edition)*. Cadmus Profesional Communication. United State America. Pp 335-343.
- Sjahfridi L, Aziz SN, Maheswari H, Astuti P, Suyatna FD, Nasikin M, 2011. *Estrus Period Determination Of Female Rats (Rattus Norvegicus) By Fourier Transform Infrared (FTIR) Through Identification Of Reproductive Hormones Metabolites In Urine*. International journal of basic and applied sciences IJBAS-IJENS (11) (03) : 158-163.
- Shaw R A, S. Kotowich, M. Leroux, dan H.H. Mantsch. 1998. Multivariate serum analysis using mid-infrared spectroscopy. *Ann. Clin. Biochem* 35: 624-362.
- Shaw R A dan Mantsch H. 1997. *Infrared spectroscopy in clinical and diagnostic analysis*. Institute for Biodiagnostic, National Research Council of Canada. Winnipeg, Canada.

- Sockalingum, G.D., W. Bouhedra, P. Pina, P. Allouch, C. Bloy, dan M. Manfait. 1998. FT-IR Spectroscopy as a emerging method for rapid characterization of microorganism. *Cell. Mol. Boil.* 44(1): 261-269.
- Speroff L, Fritz MA. *Hormone biosynthesis, metabolism and mechanism of action. In Clinical Gynecologic endocrinology and infertility.* Seven Ed. Lippincot Williams & Wilkins. Philadelphia. 2005 ; 25 – 96.
- Squires E J. 2003. *Applied Animal Endocrinology.* CAB International Publishing Wallingford, Oxon 8 DE, UK.
- Stull, C. L. (1997). "Stress and Dairy Calves. Davis: University of California, Davis.
- Subramanian, Anand dan Rodriquez-Saona, Luis. 2009. Fourier Transform Infrared (FTIR) spectroscopy dalam Infrared spectroscopy for food quality and analysis control, Academic Press, New York.
- Sudjadi. 1983. *Penentuan Struktur SenyawaOrganik.* Ghalia Indonesia. Jakarta.
- Syahriza, Z.A., Che Man, Y.B., Selamat, J. and Bakar, J. 2005. Detection of lard adulteration in cake formulation by Fourier transform infrared (FTIR) spectroscopy. *Food Chemistry* 92: 365–37.
- Tillbrook A J., A.I Turner, dan I.J Clarke. 2000. Effects of stressor reproduction in non-rodent mammals : the role of glucocorticoids and sex differences, *Journal of Reproduction and Fertility.* 1359-6004/2000.
- Titisari, N. 2013. *Pemerahan Susu pada Sapi Perah dengan Menggunakan Mesin Perah Portable: Kajian tentang Kortisol, Ratio Netrofil/Limfosit (N/L) dan Tingkah Laku Hewan.* Thesis.
- Tsunoda, Makoto. 2005. Development of an analytical method for catecholamines with HPLC-Chemiluminescence detection and its application. *Chromatography, Vol.26.No.3.*
- Zhou Y P, Xu L, Tang L J, Jiang J H, Shen G L, Yu R Q, Ozaki Y. 2007. Gas chromatography inductively coupled plasma-mass spectrometry for mercury speciation in seafood. *Analytical sciences,* 23: 793-798.
- Wandelaar B, S.E. 1997. The Stress Response in Fish. *Physiol. Rev.* 77, 591-625.
- Wellnitz O., Bruckmaier R.M., 2001. Central and peripheral inhibition of milk ejection. *Livestock Production Series,* 70, 135-140.
- Werner, G. H, D. Boecker, H-P Haar, H-J Kuhr, dan R. Mischler. 1998. Multicomponent assay for blood substrate in human sera and hemolized blood by mid-infrared spectroscopy . *infrared Spectroscopy : New Tool in Medicine, Proceeding of SPIE . San Jose, CA,* pp 91-100.