

DAFTAR PUSTAKA

- Amrullah, I. K. 2003. *Nutrisi Ayam Broiler*. Lembaga Satu Gunung Budi, Bogor.
- Amrullah, I. K. 2004. *Nutrisi Ayam Broiler*. Cetakan Ketiga. Lembaga Satu Gunung budi, Bogor.
- Avellaneda, Y., J. Hernandez, C. Ariza, and T. Afanador. 2008. Effect of L-Glutamine and L-Glutamate (Aminogut) supplementation on the early growth of broilers. *Rev. Med. Vet. Zoot.* 55: 77-90.
- Bartell, S., Batal, A., 2007. The effect of supplemental glutamine on growth performance, development of the gastrointestinal tract, and humoral immune response of broilers. *Poultry Sci.* 86:1940-1947.
- Bell, D. D, and W. D. Weaver. 2002. *Commercial Chicken Meat And Egg Production*. 5th edition. Springer Science And Busines Media, Inc, New York.
- Berres, J., Vieira S. L., Dozier W. A., Cortês, M. E. M., Barros, R. de., Nogueira E. T., Kutschenko M. 2010. Broiler responses to reduced-protein diets supplemented with valine, isoleucine, glycine, and glutamic acid. *Journal of Applied Poultry Research*. 19 :68-79.
- Bezerra, Costa, Givisiezfreitas., S. Goulart, Souza, Bran, Lima, Melo, Rodrigues, Nogueira and Vieira. 2016. Effect of L-glutamate acid supplementation on performance and nitrogen balance of broilers fed low protein diets. *Jurnal of Animal Physiology and Animal Nutrition*. 100 : 590-600.
- Blakely, J. dan H. D, Bade. 1991. *Ilmu Peternakan*. Yogyakarta. Gadjah Mada University Press.
- Bregendahl, K., J. L. Sell, and D. R. Zimmerman. 2002. Effect of low-protein dietson growth performance and body composition of broiler chicks. *PoultryScience*. 81:1156-1167.
- Dai, S. F., L. K. Wang, A. Y. Wen, L. X. Wang, and G. M. Jin. 2009. Dietary glutamine supplementation improves growth performance, meat quality and colour stability of broilers under heat stress. *Br. Poult. Sci.* 50: 333-340.
- Dewi, H. R. K. 2007. Evaluasi beberapa ransum komersil terhadap persentase bobot karkas, lemak abdomen, dan organ dalam ayam broiler. Skripsi. Fakultas Peternakan Institut Pertanian Bogor, Bogor.
- Ebadiasl, G., 2011. Effects of supplemental glutamine and glutamate on growth performance, gastrointestinal development, jejunum morphology and *Clostridium perfringens* count in caecum of broilers. Degree Diss. Thesis. Swedish University of Agricultural Science, Uppsala, Sweden.

- Fontana, E. W. D. Weaver, Jr. D. M. Denbow, and B. A. Wat Kins. 1993. Early Feed Reaction Of Broiler : Effect of Abdominal Fat, Liver, and Gizzard Weight ; Fat Deposition an Carcas Composition. *Poultry Sci.* 72 : 243-254.
- Francesca, F., M. Casimir., S. Carobbio and P. Maechler. 2008. Tissue specificity of mitochondrial glutamate pathways and the control of metabolic homeostasis. *Biochimica et Biophysica Acta.* 1777: 965-972.
- Frandsen, R. D. 1992. *Anatomi dan Fisiologi Terna Edisi ke-4.* Gadjah Mada University Press. Yogyakarta.
- Frandsen, R.D. 1996. *Anatomi dan Fisiologi Ternak. Edisi keempat.* Gadjah mada University Press. Yogyakarta.
- Gauthier, R. 2002. Intestinal health, the key to productivity (The case of organic acid). XXVII Convencion ANECA-WPDC. Puerto Vallarta. Jal. Mexico.
- Gillespie HS. *Principles and Practice of Clinical Bacteriology.* John Wiley andsons 2nd edition, 2006. 473-480.
- Hardjosworo, P.S. dan M.S. Rukmiasih. 2000. *Meningkatkan Produksi Daging Unggas.* Penebar Swadaya, Yogyakarta.
- Jander G., S.R. Norris., V. Joshi.,M. Fraga., A. Rugg., S.X Yu., L.L Li LL and R.L. Last. 2004. Application of a high-throughput HPLC-MS/MS assay to Arabidopsis mutant screening evidence that threonine aldolase plays a role in seed nutritional quality. *The Plant Journal* 39 : 465-475.
- Jinap, S dan Hajep, P. 2010. Glutamate. Its Application in Food and Contribution to Health. *Journal Appetite.* 55: 1-10.
- Joshua O, Olubodun, I.Zulkifli, A.S.Farjam, M.Hair-Bejo and A. Kasim. 2015. Glutamine and glutamic acid supplementation enhances performance of broiler chickens under the hot and humid tropical condition. *Italian Journal of Animal Science.* 14:1.
- Jull, M. A. 1979. *Poultry Husbandry.* 3rd Edition. Tatu McGraw hill Publishing. Co. Ltd, New York.
- Kasih, N.S. A. Jaelani, dan N. Firahmi. 2012. Pengaruh Lama Penyimpanan Daging Ayam Segar dalam Refrigerator terhadap pH, Susut Masak dan Organoleptik. *Fakultas Pertanian, Program Studi Peternakan, Universitas Islam Kalimantan (UNISKA).*4 : 154-159.

- Khadiga, A. A. A, S. Mohammed, A. M. Saad And H. E. Mohamed. 2009. Response of broiler chicks to dietary monosodium glutamate. Pakistan Vet. Journal. 29 : 165-168.
- Kondoh, T, H.N. Mallick, K, and Torii. 2009. ctivation of the gut-brain axis by dietary glutamate and physiologic significance in energy homeostasis. Am. J. Clin. Nutr. 90: 832-837.
- Larson, S.D., Li, J., Chung, D.H and Evers, B.M., 2007. Molecular mechanisms contributing to glutamine-mediated intestinal cell survival. Am. J. Physiol.Gastr. L. 293:1262-1271.
- Lawal A. K., B. A Oso, A.I Sanni and O.O. Olatunji. 2011. L-Glutamic acid production by *Bacillus* spp. Isolated from vegetable proteins. African Journal of Biotechnology, 10 : 5337-5345.
- Lehninger, A.L. 1990. Dasar-Dasar Biokimia. Terjemahan Maggy Thenawidjaya. Jakarta : Penerbit Erlangga.
- LI, P., Y.L. Yin and D. LI. 2007 Amino acids and immune function. British Journal of Nutrition. 98: 237- 252.
- Liu, M., J. R. Bayjanov, B. Renckens, A. Nauta and R. J. Siezen. 2010. The proteolytic system of lactic acid bacteria revisited: A Genomic Comparison. BMC Genomics. 11 : 1-15.
- Lucke, F.K. 2005. Utilization of microbes to process and preserve meat. Meat Sci. 56:105–115.
- Mile RD, Batcher GD, Henry PR, Little RC. 2006. Effect of antibiotics growth promoters on broiler performance, intestinal growth parameters, and quantitative morphology. J Poultr Sci. 85:476-485.
- Murray, R. K., D. K. Granner; P. A. Mayes and V. W. Rodwell. 1997. Biokimia Harper. Jakarta : EGC Penerbit Buku Kedokteran.
- Nampoothiri K., Madhavan and P. Ashok. 2002. Urease Activity in a Glutamate Producing *Brevibacterium* sp. Procrss Biochemistry. 31 : 471-475.
- Newsholme, P., J. Procopio, M.M.R. Lima, T. Cr Pithon-Curi and R. Curi. 2003. Glutamine and glutamate as vital metabolites. Brazilian Journal of Medical and Biological Research. 36: 153-163.
- Nickle. A. Scummer. E. Selforle and W.G.Siller 1997. Anatomy of The Domestic Bird, Felgentreff and Gosbell. Berlin. Jerman.
- Nuryanto. 2007. Sexing Untuk Perfoma Optimal. Trobos 90 maret 2007 tahun VIII, Jakarta.

- Owen, O. E., S.C. Kalhan and R.W. Hanson. 2002. The key role of anaplerosis and cataplerosis for citric acid cycle function. *J. Biol. Chem.* 277:30409-30412.
- Peraturan Menteri Pertanian Republik Indonesia Nomor 14/Permentan/16/2017 tentang Larangan Penggunaan Antibiotik Sebagai Imbuhan Pakan.
- Pierre-Andre G and M . Yves. 2004. Amino Acids: Beyond the Building Blocks *Poult. Sci.* 83:650-657.
- Pond, W.G., D. C. Church and K. R.Pond. 1995. *Basic Animal Nutrition and Feeding.* 4th Edition. John Wiley and Sons, New York.
- Pryliana.1984. Pengaruh pembatasan pakan terhadap persentase karkas, lemak abdominal, lemak daging paha dan bagian giblet ayam pedaging. Karya Ilmiah. Fakultas Peternakan. Institut Pertanian Bogor, Bogor.
- Purwadaria, T., T. Haryati, T. Setiadi, J. Dharma, A.P. Sinurat dan T. Pasaribu. 1995. Optimalisasi Fermentasi (Teknologi Bioproses) Bungkil Kelapa. Kumpulan Hasil-hasil penelitian APBN Tahun Anggaran 1994/1995. Balai Penelitian Ternak Ciawi, Bogor.
- Putnam, P. A. 1991. *Hand book of Animal Science.* Academic Press. San Diego.
- Reeds, P. J., Burrin, D. G., Stoll, B., Jahoor, F. 2000. Intestinal Glutamate Metabolism. *Journal of Nutrition.* 130: 978-982.
- Reeds, P.J., Burrin, D.G., Stoll, B., 1997. Enteral glutamate is the preferential source for mucosa glutathione synthensis in fed piglets. *Am.J. Physiol.* 273:408-415.
- Ressang, A.A. 1984. *Patologi Khusus Veteriner.* Edisi Kedua. NV Percetakan Bali, Denpasar.
- Ribeiro, Albino, Rostagno, Hannas. 2015. Effects of Dietary L-Glutamine or L-Glutamine Plus L-Glutamic Acid Supplementation Programs on the Performance and Breast Meat Yield Uniformity of 42-d-Old Broilers. *Brazilian Journal of Poultry Science.* 1516-635.
- Setiawan, N.2009. *Daging dan Telur Ayam Sumber Protein Murah.* Unpad. Bandung.
- Shakeri M, I. Zulkifli, I A. F. Soleimani, E. L. O'Reilly, P. D. Eckersall, A. A. Anna, S. kumari and F. F. J. Abdullah. 2014. Response to dietary supplementation of L-glutamine and L-glutamate in broiler chickens reared at different stocking densities under hot, humid tropical conditions. *Poultry Science.* 93 : 1-9.

- Simamora, N. 2001. Performans produksi dan karakteristik organ dalam ayam kampung umur 12-16 minggu yang diinfeksi cacing *Ascaridia galli* dan disuplementasi ekstrak daun jarak pagar (*Jatropha curcas Linn*). Skripsi. Fakultas Peternakan, Institut Pertanian Bogor. Bogor.
- Soeparno. 2005. Ilmu dan Teknologi Daging. Cetakan Ke-4. Gadjah Mada University Press, Yogyakarta.
- Stilborn H.Land E. T. Moran Jr. 2010. Effect of added l-glutamic acid on male broiler performance when using wheat-or corn-based diets and 2 different anticoccidials. Poultry Science Association. 93 :401-414.
- Sturkie, P. D. 1986. Avian Physiology. 3rd Ed. Spinger-verlag, New York.
- Sugito, Manalu, W., Astuti, D. A., Handharyani, E. dan Chairul., 2007. Morfometrik usus dan performan ayam broiler yang diberi cekaman panas dan ekstrak n-heksana kulit batang 'jaloh' (*Salix tetrasperma* Rozb). Media Peternakan. 30:198-206.
- Suprijatna, E., Umiyati A. dan Ruhyat K. 2005. Ilmu Dasar Ternak Unggas. Cetakan I. Penebar Swadaya, Jakarta.
- Tanous, C., E.Chambellon., A.M. Sepulchre and M .Yvon. 2005. The gene encoding the glutamate dehydrogenase in *Lactococcus lactis* is part of a remnant Tn3 transposon carried by a large plasmid. J. Bacteriol. 187: 5019–5022.
- Tanudimadja. K. 1974. Anatomy Veteriner X11. Anatomy Fisiology Ayam. Fakultas Kedokteran Veteriner IPB. Bogor.
- Tarek, M. and H.E. Mostafa. 2010. Screening of potential infants' *lactobacilli* isolates for amino acids production. African Jurnal Microbiol.4: 226-232.
- Watford M. 2008. Glutamine metabolism and function in relation to proline synthesis and the safety of glutamine and proline supplementation. Journal of Nutrition.138:2003.
- Whittow, G., 2002. Sturkies Avian Phsycology. 5th. Academic Press. USA
- Widianingsih, M, N. 2008. Persentase Organ Dalam Broiler yang Diberikan Ransum Crumble Berperekat Onggok, Bentonif dan Tapioka. Skripsi. IPB.
- Winarno F.G.2004. Kimia Pangan dan Gizi. PT Gramedia Pustaka Utama. Jakarta.
- Winarno, F.G. 1990. **Teknologi Fermentasi. Proyek Pengembangan Pusat Fasilitas bersama. Antar Universitas, PAU Pangan dan Gizi, UGM, Yogyakarta.**

- Winedar, H., Listyawati, S dan Sutarno. 2004. Daya Cerna Protein Pakan, Kandungan Protein Daging, dan Pertambahan Berat Badan Ayam Broiler setelah Pemberian Pakan yang Difermentasi dengan *EffectiveMicroorganisms-4* (EM-4). Universitas Sebelas Maret (UNS). Surakarta.
- Wu, G, and Morris, S.M., 1998. Arginine metabolisme: nitric oxide and beyond. *Biochem. J.* 336:1-17.
- Yamauchi K, and Isshiki Y. 1991. Scanning electron microscopis observation on the intestinal vili in growing white lohorn and broiler chicken from 1 to 30 days of age. *Br Poult Sci.* 32:67-78.
- Yi, G. F., G. L. Allee, J. W. Frank, J. D. Spencer, and K. J. Touchette. 2001. Impact of glutamine, menhaden fish meal, and spray-dried plasma on the growth and intestinal morphology of broilers. *Poult. Sci.* 80:201.
- Ymanagguchi, S, and K. Ninomia. 2000. The use and uility of glutamat as flavoling agains in food. *J. Nutr.*130:921-926.
- Young, V.R and A.M. Ajami AM. 2000. Glutamate: an amino acid of particular distinction. *Journal of Nutrition.* 130: 892-900.
- Zalan Z., J. Hudacek, J. Stetina, J. Chumchalava, A. Halasz.2010. Production of organic acids by *Lactobacillus* strains in three different media. *Eur Food Res Technol.*230:395-404.
- Zareian M, A. Ebrahimpour., F.A Bakar., A.K.S. Mohamed., B. Forghani, M.S. B. Ab-Kadir and N. Saari. 2012. A glutamic acid-producing lactic acid bacteria isolated from Malaysian Fermented foods. *International Journal of Molecular Sciences.*
- Zaulin, E. M. 2010. Pengaruh Penambahan Ekstrak Rumput Mutiara (*Hedyotis corymbosa (L) lamk*) Terhadap Bobot Organ Pencernaan Ayam Pedaging Yang Alas Kandang Disemprot *Escherichia coli*. Fakultas Peternakan. Universitas Jambi.
- Zhang, G. Q., Q. G Ma and Ji C. 2008. Effects of dietary inosinic acid on carcass characteristics, meat quality, and deposition of inosinic acid in broilers. *Poult. Sci.*
- Zulkifli, M. Shakeri and A.F. Soleimani. 2016. Dietary supplementation of L-glutamine and L-glutamate in broiler chicks subjected to delayed placement. *Poultry Science.* 1: 1-7.