

## DAFTAR PUSTAKA

- Abd Manan, E., Abd Gani, S. S., Zaidan, U. H., & Halmi, M. I. E. 2019. Characterization of antioxidant activities in red dragon fruit (*Hylocereus polyrhizus*) pulp water-based extract. *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences* 61(2), 170-180.
- Adams, G. R., & Haddad, F. 1996. The relationships among IGF-1, DNA content, and protein accumulation during skeletal muscle hypertrophy. *Journal of Applied Physiology* 81(6), 2509-2516.
- Adnan, L., Osman, A., & Abdul Hamid, A. 2011. Antioxidant activity of different extracts of red pitaya (*Hylocereus polyrhizus*) seed. *International Journal of Food Properties* 14(6), 1171-1181.
- Adom, K. K., & Liu, R. H. 2002. Antioxidant activity of grains. *Journal of Agricultural and Food Chemistry* 50(21), 6182-6187.
- Ahmadipour, B., Kalantar, M., Schreurs, N. M., Raza, S. H. A., Khan, R., Khan, S. Samira, A. 2020. Flavonoid bioactive compounds of hawthorn extract can promote growth, regulate electrocardiogram waves, and improve cardiac parameters of pulmonary hypertensive chickens. *Poultry Science* 99(2), 974–980.
- Ahmed, S. T., Islam, M. M., Bostami, A. B. M. R., Mun, H. S., Kim, Y. J., & Yang, C. J. 2015. Meat composition, fatty acid profile and oxidative stability of meat from broilers supplemented with pomegranate (*Punica granatum* L.) by-products. *Food Chemistry* 188, 481–488.
- Albab, L. U. 2020. Morfologi Usus Halus dan Performa Pertumbuhan Ayam Petelur [*Gallus gallus gallus* (Linnaeus, 1758)] Setelah Pemberian *Infused Water* Buah Kurma (*Phoenix dactylifera* L.). *Tesis*. Fakultas Biologi, Universitas Gadjah Mada. p. 63.
- Amad, A. A., Wendler, K. R., & Zentek, J. 2013. Effects of a phytogenic feed additive on growth performance, selected blood criteria and jejunal morphology in broiler chickens. *Emirates Journal of Food and Agriculture* 25(7), 549–554.
- Andriyanto., Satyaningtijas, A. S., Yufiandri, R., Wulandari, R., Darwin, V. M., & Santa Nova, A. S. 2015. Performa dan Kecernaan Pakan Ayam Broiler yang diberi Hormon Testosteron dengan Dosis Bertingkat. *Acta Veterinaria Indonesiana* 3(1), 29-37.
- Anggraito, Y. U., Susanti, R., Iswari, R. S., Yuniastuti, A., Lisdiana. Nugrahaningsih, WH., Habibah, N. A., Bintari, S.h., 2018. *Metabolit Sekunder dari Tanaman: Aplikasi dan Produksi*. FMIPA Universitas Negeri Semarang, Semarang p. 97.
- Antolovich, M., Prenzler, P. D., Patsalides, E., McDonald, S., & Robards, K. 2002.

Methods for testing antioxidant activity. *Analyst* 127(1), 183-198.

- Ashton, C., Bayol, S., Mcentee, G., Maltby, V., & Stickland, N. 2005. Prenatal influences on skeletal muscle development in mammals, birds and fish. *Arch. Tierz., Dummerstorf* 48, 04-10.
- Bahri, S., Masbulan, E., & Kusumaningsih, A. 2005. Proses Praproduksi Sebagai Faktor Penting dalam Menghasilkan Produk Ternak yang Aman untuk Manusia. *Jurnal Litbang Pertanian* 24(1), 27–35.
- Barbieri, E., & Sestili, P. 2012. Reactive oxygen species in skeletal muscle signaling. *Journal of Signal Transduction*. 1-17.
- Berchtold, M. W., Brinkmeier, H., & Müntener, M. 2000. Calcium ion in skeletal muscle: Its crucial role for muscle function, plasticity, and disease. *Physiological Reviews* 80(3), 1215–1265.
- Beski, S. S., Swick, R. A., & Iji, P. A. 2015. Specialized protein products in broiler chicken nutrition: A review. *Animal Nutrition* 1(2), 47-53.
- Bolser, J. A., Alan, R. R., Smith, A. D., Li, L., Seeram, N. P., & McWilliams, S. R. 2013. Birds select fruits with more anthocyanins and phenolic compounds during autumn migration. *The Wilson Journal of Ornithology* 125(1), 97-108.
- Buchanan, N. P., Hott, J. M., Cutlip, S. E., Rack, A. L., Asamer, A., & Moritz, J. S. 2008. The effects of a natural antibiotic alternative and a natural growth Promoters feed additive on broiler performance and carcass quality. *Journal of Applied Poultry Research* 17(2), 202–210.
- Cardona, F., Andrés-Lacueva, C., Tulipani, S., Tinahones, F. J., & Queipo-Ortuño, M. I. 2013. Benefits of polyphenols on gut microbiota and implications in human health. *The Journal of Nutritional Biochemistry* 24(8), 1415-1422.
- Catoni, C., Schaefer, H. M., & Peters, A. 2008. Fruit for health: the effect of flavonoids on humoral immune response and food selection in a frugivorous bird. *Functional Ecology* 22(4), 649-654.
- Chang, P. T., Hsieh, C. C., & Jiang, Y. L. 2016. Responses of “Shih Huo Chuan” pitaya (*Hylocereus polyrhizus* (Weber) Britt. & Rose) to different degrees of shading nets. *Scientia Horticulturae* 198, 154–162.
- Choo, W. S., & Yong, W. K. 2011. Antioxidant properties of two species of *Hylocereus* fruits. *Advances in Applied Science Research* 2(3), 418-425.
- Compassion in World Farming Trust (CIWFT) . 2005. *The Welfare Of Broiler Chickens In The European Union*. CIWF Trust.
- Damayanti, S. C. 2021. Struktur Histologi Duodenum dan Jejunum Ayam Broiler [*Gallus gallus gallus* (Linnaeus, 1758)] Setelah Pemberian *Infused Water* Buah Naga Merah (*Hylocereus polyrhizus* (F.A.C. Weber) Britton & Rose]. *Skripsi. Fakultas Biologi, Universitas Gadjah Mada*. p. 35.

- Devatkal, S. K., Naveena, B. M., & Kotaiah, T. 2019. Quality, composition, and consumer evaluation of meat from slow-growing broilers relative to commercial broilers. *Poultry Science* 98(11), 6177–6186.
- Diarra, M. S., Rempel, H., Champagne, J., Masson, L., Pritchard, J., & Topp, E. 2010. Distribution of antimicrobial resistance and virulence genes in enterococcus spp. and characterization of isolates from broiler chickens. *Applied and Environmental Microbiology* 76(24), 8033–8043.
- Febrianti, N., Purbosari, P. P., Hertiani, T., Moeljopawiro, S., & Haryana, S. M. 2020. Antioxidant Potency of Red Dragon Fruit Flesh and Peel Prepared by Different Methods. *Current Nutrition & Food Science* 16(7), 1106-1111.
- Feldman, A. T., & Wolfe, D. 2014. Tissue processing and hematoxylin and eosin staining. *In Histopathology* 1180. 31-43.
- Fischer, A. H., Jacobson, K. A., Rose, J., & Zeller, R. 2008. Hematoxylin and eosin staining of tissue and cell sections. *Cold spring harbor protocols* 3(5), 1-3.
- Glass, D. J. 2005. Skeletal muscle hypertrophy and atrophy signaling pathways. *The international journal of biochemistry & cell biology* 37(10), 1974-1984.
- Goliomytis, M., Tsourekis, D., Simitzis, P. E., Charismiadou, M. A., Hager-Theodorides, A. L., & Deligeorgis, S. G. 2014. The effects of quercetin dietary supplementation on broiler growth performance, meat quality, and oxidative stability. *Poultry science* 93(8), 1957-1962.
- Gunawan., & Sihombing. D.T.H. 2004. Pengaruh Suhu Lingkungan Tinggi Terhadap Kondisi Fisiologis dan Produktivitas Ayam Buras. *Wartazoa* 14(1), 31-38.
- Gupta, V. K., & Sharma, S. K., 2006. Plants as Natural Antioxidants. *Natural Product Radiance* 5(4), 326-334.
- Han, X., Shen, T., & Lou, H. 2007. Catha edulis: A threatened tree in the West Usambara Mountains, Tanzania. *Journal of Tropical Forest Science* 17(4), 526–531.
- Handayaningsih, A. E., Iguchi, G., Fukuoka, H., Nishizawa, H., Takahashi, M., Yamamoto, M., & Takahashi, Y. 2011. Reactive oxygen species play an essential role in IGF-I signaling and IGF-I-induced myocyte hypertrophy in C2C12 myocytes. *Endocrinology* 152(3), 912-921.
- Hendra, R., Masdeatresa, L., Abdulah, R., & Haryani, Y. 2020. Red dragon peel (*Hylocereus polyrhizus*) as antioxidant source. *In AIP Conference Proceedings*, Vol. 2243, No. 1, p. 030007.
- Huy , L. A. P., He, H., & Huy, C. P. 2008. Free Radicals, Antioxidants in Disease and Health. *International Journal of Biomedical Science* 4(2), 89-96.
- Huyut, Z., Beydemir, Ş., & Gülçin, I. 2017. Antioxidant and antiradical properties of selected flavonoids and phenolic compounds. *Biochemistry Research International*, 1-10.

- Integrated Taxonomic Information System (IT IS). 2011. [https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=908792#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=908792#null) diakses pada tanggal 19 Mei 2020.
- Jaafar, R. A., Abdul Rahman, A. R. Bin, Mahmod, N. Z. C., & Vasudevan, R. 2009. Proximate analysis of dragon fruit (*Hylecereus polyhizus*). *American Journal of Applied Sciences* 6(7), 1341–1346.
- Joiner, K. S., Hamlin, G. A., Lien, R. J., & Bilgili, S. F. 2014. Evaluation of Capillary and Myofiber Density in the Pectoralis Major Muscles of Rapidly Growing, High-Yield Broiler Chickens During Increased Heat Stress. *Avian Diseases* 58(3), 377–382.
- Kamboh, A. A., Arain, M. A., Mughal, M. J., Zaman, A., Arain, Z. M., & Soomro, A. H. 2015. Flavonoids: health promoting phytochemicals for animal production-a review. *Journal of Animal Health and Production* 3(1), 6-13.
- Kasote, D. M., Katyare, S. S., Hegde, M. V., Bae, H. 2015. Significance of Antioxidant Potential of Plants and its Relevance to Therapeutic Applications. *International Journal of Biological Sciences* 11(8), 982-991.
- Kementerian Pertanian. 2018. *Statistik Peternakan dan Kesehatan Hewan*. Direktorat Jenderal Peternakan dan Kesehatan Hewan, Jakarta.
- Kemenpan. 2020. *Statistik Peternakan Dan Kesehatan Hewan*. Dorektoriat Jenderal Peternakan dan Kesehatan Hewan Kementerian Pertanian RI, Jakarta.
- Khalid, M., Saeed-ur-Rahman, Bilal, M., & HUANG, D. feng. 2019. Role of flavonoids in plant interactions with the environment and against human pathogens — A review. *Journal of Integrative Agriculture* 18(1), 211–230.
- Kompiang, P. 2009. Pemanfaatan mikroorganiesm sebagai probiotik untuk meningkatkan produksi ternak unggas di Indonesia Putu Kompiang. *Pengembangan Inovasi Pertanian* 2(3), 177–191.
- Kopjar, M., Orsolic, M., & Pilizota, V. 2014. Anthocyanins, phenols, and antioxidant activity of sour cherry puree extracts and their stability during storage. *International Journal of Food Properties* 17(6), 1393–1405.
- Kristanto, D. 2008. *Buah Naga Pembudidayaan di Pot dan di Kebun*. Penebar Swadaya, Suranaya p. 18.
- Kurniawan, B., & Aryana, W. F. 2015. Binahong (*Cassia Alata* L) As Inhibitor Of *Escherichiacoli* Growth. *Jurnal Majority* 4(4).
- Kusbiantoro, D., & Purwaningrum, Y. 2018. Pemanfaatan Kandungan Metabolit Sekunder pada Tanaman Kunyit dalam Mendukung Peningkatan Pendapatan Masyarakat. *Jurnal Kultivasi* 17(1) 544-549.
- Kusnadi, E. 2006. Suplementasi vitamin C sebagai penangkal cekaman panas pada ayam broiler. *Jitv* 11(4), 249-253.

- Kusnadi, E. 2008. Pengaruh temperatur kandang terhadap konsumsi ransum dan komponen darah ayam broiler. *J. Indon. Trop. Anim. Agrie* 33(3), 22-24.
- Lambertz, C., Leopold, J., Damme, K., Vogt-Kaute, W., Ammer, S., & Leiber, F. 2019. Effects of a riboflavin source suitable for use in organic broiler diets on performance traits and health indicators. *Animal* 14(4), 716-724.
- Laron, Z. 2001. Insulin-like growth factor 1 (IGF-1): a growth hormone. *Molecular Pathology* 54(5), 311-315.
- Leong, H. Y., Ooi, C. W., Law, C. L., Julkifle, A. L., Ling, T. C., & Show, P. L. 2018. Application of liquid biphasic flotation for betacyanins extraction from peel and flesh of *Hylocereus polyrhizus* and antioxidant activity evaluation. *Separation and Purification Technology* 201, 156–166.
- Li, G., Zhao, Y., Purswell, J. L., Chesser, G. D., Lowe, J. W., & Wu, T. L. 2020. Effects of antibiotic-free diet and stocking density on male broilers reared to 35 days of age. Part 2: feeding and drinking behaviours of broilers. *Journal of Applied Poultry Research*, 1–11.
- Li, J., Xing, S., Zhao, G., Zheng, M., Yang, X., Sun, J., & Liu, R. 2020. Identification of diverse cell populations in skeletal muscles and biomarkers for intramuscular fat of chicken by single-cell RNA sequencing. *BMC genomics* 21(1), 1-11.
- Lim, T. K. 2012. *Hylocereus polyrhizus*. *Edible Medicinal and Non-Medicinal Plants* 1, 643-649.
- Lira, S. M., Dionísio, A. P., Holanda, M. O., Marques, C. G., Silva, G. S. da, Correa, L. C., ... Zocolo, G. J. 2020. Metabolic profile of pitaya (*Hylocereus polyrhizus* (F.A.C. Weber) Britton & Rose) by UPLC-QTOF-MSE and assessment of its toxicity and anxiolytic-like effect in adult zebrafish. *Food Research International* 127(May 2019).
- Lobo, V., Patil, A., Phatak, A., & Chandra, N. 2010. Free radicals, antioxidants and functional foods: Impact on human health. *Pharmacognosy reviews* 4(8), 118.
- Long, X., Gao, Y., Liu, W., Liu, X., Hayashi, T., Mizuno, K., & Ikejima, T. 2020. Natural flavonoid silibinin promotes the migration and myogenic differentiation of murine C2C12 myoblasts via modulation of ROS generation and down-regulation of estrogen receptor  $\alpha$  expression. *Molecular and Cellular Biochemistry* 474(1), 243-261.
- Luo, H., Cai, Y., Peng, Z., Liu, T., & Yang, S. 2014. Chemical composition and in vitro evaluation of the cytotoxic and antioxidant activities of supercritical carbon dioxide extracts of pitaya (dragon fruit) peel. *Chemistry Central Journal* 8(1), 1–7.
- Magalhães, D. S., da Silva, D. M., Ramos, J. D., Salles Pio, L. A., Pasqual, M., Vilas Boas, E. V. B., de Melo, E. T. 2019. Changes in the physical and physico-chemical characteristics of red-pulp dragon fruit during its development. *Scientia Horticulturae* 253, 180–186.



- Mahfudz, L. D., Maulana, F. L., Atmomarsono, U., & Sarjana, T. A. 2009. Karkas dan Lemak Abdominal Ayam Broiler yang diberi Ampas Bir dalam Ransum. *Seminar Nasional Kebangkitan Peternakan*. 596-605.
- Manafi, M., Hedayati, M., Pirany, N., & Omede, A. A. 2019. Comparison of performance and feed digestibility of the non-antibiotic feed supplement (Novacid) and an antibiotic growth Promoters in broiler chickens. *Poultry Science* 98(2), 904–911.
- Marcotte, E. M., Pellegrini, M., Ng, H. L., Rice, D. W., Yeates, T. O., & Eisenberg, D. 1999. Detecting protein function and protein-protein interactions from genome sequences. *Science* 285(5428), 751-753.
- Maria Cardinal, K., Kipper, M., Andretta, I., & Machado Leal Ribeiro, A. 2019. Withdrawal of antibiotic growth Promoters from broiler diets: performance indexes and economic impact. *Poultry Science* 98(12), 6659–6667.
- Maroof, K., Chand, N., Khan, S., Qureshi, M. S., & Tanweer, A. J. 2012. Comparative effect of different schedules of administration of medicinal plants (Allium sativum, Berberis lycium, Eclipta alba and Mangifera indica) infusion on the immunity and overall performance of broiler chicks. *Sarhad Journal of Agriculture* 28(2), 319–326.
- Mawaddah. Setiawan, H., & Saragih, H. T. S. S. . 2020. Aktivitas Ekstrak Etanolik Daun Jambu Mete Terhadap Otot Pektoralis Thoracicus Ayam Jawa Super. *Jurnal Peternakan Indonesia* 22(1), 80–88.
- Mescher, Anthony L. 2016. *Histologi Dasar Junqueira Teks & Atlas : Edisi 14*. Penerbit Buku Kedokteran EGC, Jakarta pp. 221-227.
- Muharlieni, Achmanu, & R.Rachmawati. 2011. Meningkatkan Produksi Ayam Pedaging Melalui Pengaturan Proporsi Sekam, Pasir dan Kapur Sebagai Litter. *Jurnal Ternak Tropika* 12(1), 38–45.
- Mukund, K., & Subramaniam, S. 2020. Skeletal muscle: A review of molecular structure and function, in health and disease. *Wiley Interdisciplinary Reviews: Systems Biology and Medicine* 12(1), 1–46.
- Namroud, N. F., Shivazad, M., & Zaghari, M. 2008. Effects of fortifying low crude protein diet with crystalline amino acids on performance, blood ammonia level, and excreta characteristics of broiler chicks. *Poultry science* 87(11), 2250-2258.
- Narinç, D., Narinç, N. Ö., & Aygün, A. 2017. Growth curve analyses in poultry science. *World's Poultry Science Journal* 73(2), 395-408.
- Niewold, T. A. 2007. The nonantibiotic anti-inflammatory effect of antimicrobial growth Promoters, the real mode of action? A hypothesis. *Poultry Science* 86(4), 605–609.
- Nugraha, Y. A., Nissa, K., Nurbaeti, N., Amrullah, F. M., & Harjanti, D. W. 2017. Pertambahan bobot badan dan *feed conversion rate* ayam broiler yang dipelihara

- menggunakan desinfektan herbal. *Jurnal Ilmu-Ilmu Peternakan* 27(2), 19-24.
- Nurul, S. R., & Asmah, R. 2014. Variability in nutritional composition and phytochemical properties of red pitaya (*Hylocereus polyrhizus*) from Malaysia and Australia. *International Food Research Journal* 21(4), 1689–1697.
- Oka, I. M., & Parwata, A. D. I. 2016. *Diktat / Bahan Ajar Kimia Organik Bahan Alam "Flavonoid"*. Laboratorium Kimia Organik FMIPA Universitas Udayana, Denpasar p. 2.
- Olagaray, K. E., & Bradford, B. J. 2019. Plant flavonoids to improve productivity of ruminants – A review. *Animal Feed Science and Technology* 25, 21–36.
- Ortiz-Hernández, Y. D., & Carrillo-Salazar, J. A. 2012. Pitahaya (*Hylocereus* spp.): A short review. *Comunicata Scientiae* 3(4), 220–237.
- Peña, J. E. M., Vieira, S. L., López, J., Reis, R. N., Barros, R., Furtado, F. V. F., & Silva, P. X. 2008. Ascorbic acid and citric flavonoids for broilers under heat stress: Effects on performance and meat quality. *Revista Brasileira de Ciencia Avicola* 10(2), 125–130.
- Petracci, M., Mudalal, S., Soglia, F., & Cavani, C. 2015. Meat quality in fast-growing broiler chickens. *World's Poultry Science Journal* 71(2), 363–374.
- Philippou, A., Halapas, A., Maridaki, M., & Koutsilieris, M. 2007. Type I insulin-like growth factor receptor signaling in skeletal muscle regeneration and hypertrophy. *J Musculoskelet Neuronal Interact* 7(3), 208-218.
- PIC. 2016. *Practical Guidelines for On-Farm Euthanasia of Poultry*. 2<sup>nd</sup> penyunt. Puslinch : Poultry Industry Council.
- Poudel, S., Zhang, L., Tabler, G. T., Lin, J., & Zhai, W. 2020. Effects of riboflavin and *Bacillus subtilis* on internal organ development and intestinal health of Ross 708 male broilers with or without coccidial challenge. *Poultry Science* 100(4), 1-20.
- Powers, S. K., Ji, L. L., Kavazis, A. N., & Jackson, M. J. 2011. Reactive oxygen species: impact on skeletal muscle. *Comprehensive Physiology* 1(2), 941.
- Prabowo, I., Utomo, E. P., Nurfaizy, A., Widodo, A., Widjajanto, E., & Rahadju, P. 2019. Characteristics and antioxidant activities of anthocyanin fraction in red dragon fruit peels (*Hylocereus polyrhizus*) extract. *Drug Invention Today* 12(4), 670-678.
- Pramana, I. D. G. A., Ardiaria, M., & Syauqy, A. 2016. Perbedaan efek seduhan kulit dan jus buah naga merah (*Hylocereus polyrhizus*) terhadap kadar trigliserida serum tikus sprague dawley dislipidemia. *Diponegoro Medical Journal* 5(4), 994-1006.
- Puspita, U. E., Utomo, R. T., Perdamaian, A. B. I., Lesmana, I., Arijuddin, H., Erwanto, Y., Saragih, H. T. S. G. 2017. Effect of Varying Levels of Protein and Energy in Pre-starter Feeds on Pectoralis Muscle Development of Kampung

- Super Chicks (*Gallus gallus gallus*). *Asian Journal of Animal and Veterinary Advances* 12(1), 31–37.
- Rafiei, F., & Khajali, F. 2021. Flavonoid antioxidants in chicken meat production: Potential application and future trends. *World's Poultry Science Journal* 1-15.
- Rahayu, H. S.I., Darwati, S., & Mu'iz, A. 2019. Morfometrik ayam broiler dengan pemeliharaan intensif dan akses free range di daerah tropis. *Jurnal Ilmu Produksi dan Teknologi Hasil Peternakan* 7(2), 75-80.
- Rasyaf, M. 2012. *Panduan Beternak Ayam Pedaging*. Penebar Swadaya, Jakarta p. 10.
- Rebecca, O. P. S., Boyce, A. N., & Chandran, S. 2010. Pigment identification and antioxidant properties of red dragon fruit (*Hylocereus polyrhizus*). *African Journal of Biotechnology* 9(10), 1450-1454.
- Riley, P. A. 1994. Free radicals in biology: oxidative stress and the effects of ionizing radiation. *International journal of radiation biology* 65(1), 27-33.
- Rini, S. R., Sugiharto, S., & Mahfudz, L. D. 2019. Pengaruh Perbedaan Suhu Pemeliharaan Terhadap Kualitas Fisik Daging Ayam Broiler Periode Finisher. *Jurnal Sain Peternakan Indonesia* 14(4), 387-395.
- Rufino, M. do S. M., Alves, R. E., de Brito, E. S., Pérez-Jiménez, J., Saura-Calixto, F., & Mancini-Filho, J. 2010. Bioactive compounds and antioxidant capacities of 18 non-traditional tropical fruits from Brazil. *Food Chemistry* 121(4), 996–1002.
- Saeed, M., Naveed, M., Arain, M. A., Arif, M., Abd El-Hack, M. E., Alagawany, M., & Sun, C. 2017. Quercetin: Nutritional and beneficial effects in poultry. *World's Poultry Science Journal* 73(2), 355-364.
- Santoso, H & Susaryani, T. 2015. *Panduan Praktis Pembesaran Ayam Pedaging: Edisi Revisi*. Penebar Swadaya, Tangerang p. 9.
- Saragih, H., & Daryono, B. S. 2012. Effect of High-Protein Diet on Body Weight and Pectoralis thoracicus Muscle Performance on Pelung and Broiler Chicken (*Gallus gallus domesticus*). *Animal Production* 14(3), 199–204.
- Saragih, H. T. S. S. G., Alawi, M. F., Rafieiy, M., Lesmana, I., & Sujadmiko, H. 2017. Pakan Aditif Ekstrak Etanol Lumut Hati Meningkatkan Pertumbuhan Morfologi Duodenum dan Perkembangan Otot Dada Ayam Pedaging. *Jurnal Veteriner* 18(4), 617.
- Schwarz, T., Połtowicz, K., Nowak, J., Murawski, M., Małopolska, M. M., Andres, K., Bartlewski, P. M. 2019. Quantitative echotextural attributes of pectoralis major muscles in broiler chickens: Physicochemical correlates and effects of dietary fat source. *Animals* 9(6).
- Setyorini, S. D., & Yusnawan, E. 2016. Peningkatan Kandungan Metabolit Sekunder Tanaman Aneka Kacang sebagai Respon Cekaman Biotik. *Iptek Tanaman*



*Pangan* 11, 167-174.

- Sigarlaki, E. D., & Tjiptaningrum, A. 2016. Pengaruh pemberian buah naga merah (*Hylocereus polyrhizus*) terhadap kadar kolesterol total. *Jurnal Majority* 5(5), 14-17.
- Sinaga, A. A., Luliana, S., & Fahrurroji, A. 2015. Losio Antioksidan Buah Naga Merah (*Hylocereus polyrhizus* Britton and Rose). *Pharmaceutical Sciences & Research* 2(1), 11-20.
- Sinaga, F. A. 2016. Stress oksidatif dan status antioksidan pada aktivitas fisik maksimal. *Generasi Kampus* 9(2). 176-189.
- Singh, J., & Gaikwad, D. S. 2020. Phytogetic Feed Additives in Animal Nutrition. *In Natural Bioactive Products in Sustainable Agriculture*. Springer, Singapore pp. 273-289.
- Sim Choo, W., & Khing Yong, W. 2011. Antioxidant properties of two species of *Hylocereus* fruits. *Advances in Applied Science Research* 2(3), 418–425.
- Simanjuntak, L., Sinaga, C., & Fatimah. 2014. Ekstraksi Pigmen Antosianin dari Kulit Buah Naga Merah (*Hylocereus polyrhizus*). *Jurnal Teknik Kimia* 3, 25-29.
- Sitompul, S. A., Sjoefjan, O., & Djunaidi, I. H. 2016. Pengaruh Beberapa Jenis Pakan Komersial terhadap Kinerja Produksi Kuantitatif dan Kualitatif Ayam Pedaging. *Buletin Peternakan* 40(3), 187.
- Stintzing, F. C., Schieber, A., & Carle, R. 2002. Betacyanins in fruits from red-purple pitaya, *Hylocereus polyrhizus* (Weber) Britton & Rose. *Food Chemistry* 77(1), 101–106.
- Subekti, K. 2009. Pengaruh pola waktu pemberian pakan dengan suplementasi beberapa level Vitamin C terhadap performans produksi dan organ fisiologis ayam broiler. *Jurnal Ilmiah Ilmu-Ilmu Peternakan* 7(4) 203-213.
- Suparyanto, A., Martojo, H., Hardjosworo, P. S., & Prasetyo, L. H. 2004. Kurva pertumbuhan morfologi itik betina hasil silang antara Pekin dengan Mojosari Putih. *Jurnal Ilmu Ternak dan Veteriner* 9(2), 87-97.
- Susbilla, J. P., Tarvid, I., Gow, C. B., & Frankel, T. L. 2003. Quantitative feed restriction or meal-feeding of broiler chicks alter functional development of enzymes for protein digestion. *British poultry science* 44(5), 698-709.
- Tajbakhsh, S. 2009. Skeletal muscle stem cells in developmental versus regenerative myogenesis. *Journal of Internal Medicine* 266(4), 372–389.
- Tamalluddin, F. 2014. *Panduan Lengkap Ayam Broiler*. Penebar Swadaya, Tasikmalaya p. 24.
- Tenore, G. C., Novellino, E., & Basile, A. 2012. Nutraceutical potential and antioxidant benefits of red pitaya (*Hylocereus polyrhizus*) extracts. *Journal of Functional Foods* 4(1), 129–136.

- Teoh, E. S. 2015. Secondary Metabolites of Plants. *Nature Public Health Emergency Collection* 59-73.
- Thirugnanasambandham, K., & Sivakumar, V. 2017. Microwave assisted extraction process of betalain from dragon fruit and its antioxidant activities. *Journal of the Saudi Society of Agricultural Sciences* 16(1), 41–48.
- Toomer, O. T., Livingston, M., Wall, B., Sanders, E., Vu, T., Malheiros, R. D., Dean, L. L. 2020. Feeding high-oleic peanuts to meat-type broiler chickens enhances the fatty acid profile of the meat produced. *Poultry Science* 99(4), 2236–2245.
- Ulupi, N., & Inayah, S. K. 2015. Performa Ayam Broiler dengan Pemberian Serbuk Pinang sebagai Feed Aditive. *Jurnal Ilmu Produksi Dan Teknologi Hasil Peternakan* 3(1), 8–11.
- Ulupi, N., Nuraini, H., Parulian, J., & Kusuma, S. Q. 2018. Karakteristik Karkas dan Non Karkas Ayam Broiler Jantan dan Betina pada Umur Pemotongan 30 Hari. *Jurnal Ilmu Produksi dan Teknologi Hasil Peternakan* 6: 1-5.
- Umam, M. K., Prayogi, H. S., & Nurgiartiningsih, V. M. A. 2015. The Performance of Broiler Rearing in System Stage Floor and Double Floor. *Jurnal Ilmu-Ilmu Peternakan* 24(3), 79–87.
- Virden, W. S., & Kidd, M. T. 2009. Physiological stress in broilers: Ramifications on nutrient digestibility and responses. *Journal of Applied Poultry Research* 18(2), 338-347.
- Wahyuninghasti, R., Praseno, K., & Mardiaty, S. M. 2017. Bobot dan keempukan musculus pectoralis puyuh (*Coturnix coturnix japonica* L) setelah pemberian vitamin A, B12, C, dan kombinasi ketiganya sebagai air minum. *Buletin Anatomi dan Fisiologi* 2(1), 50-57.
- Wang, H., Cao, G., & Prior, R. L. 1996. Total antioxidant capacity of fruits. *Journal of agricultural and food chemistry* 44(3), 701-705.
- Wang, X., Jia, Q., Xiao, J., Jiao, H., & Lin, H. 2015. Glucocorticoids retard skeletal muscle development and myoblast protein synthesis through a mechanistic target of rapamycin (mTOR)-signaling pathway in broilers (*Gallus gallus domesticus*). *Stress* 18(6), 686-698.
- Wang, Y., Jia, X., Hsieh, J. C., Monson, M. S., Zhang, J., Shu, D., & Lamont, S. J. 2021. Transcriptome Response of Liver and Muscle in Heat-Stressed Laying Hens. *Genes* 12(2), 255.
- Widianingsih, M. 2017. Aktivitas antioksidan ekstrak metanol buah naga merah (*Hylocereus polyrhizus* (FAC Weber) Britton & Rose) hasil maserasi dan dipekatkan dengan kering angin. *Jurnal Wiyata: Penelitian Sains dan Kesehatan* 3(2), 146-150.
- Widodo, A., Sarengat, W., & Suprijatna, E. 2012. Pengaruh lama periode pemberian pakan terhadap laju pertumbuhan pada beberapa bagian tubuh ayam pelung

umur 1-11 minggu. *Animal Agriculture Journal* 1(2), 120-125.

- Widodo, Eko. Natsir, M.H. & Sjoifjan, Osfar. 2019. *Pakan Aditif Unggas Pengganti Antibiotik*. UB press, Malang.
- Widodo, T. S., Sulistiyanto, B., & Utama, C. S. 2015. Jumlah Bakteri Asam Laktat (BAL) dalam Digesta Usus Halus dan Sekum Ayam Broiler yang diberi Pakan Ceceran Pabrik Pakan yang Difermentasi. *Jurnal Agripet* 15(2), 98-103.
- Widodo, W. 2002. *Nutrisi dan Pakan Unggas Kontekstual*. Universitas Muhammadiyah Malang, Malang pp. 75-80.
- Wink, Michael. 2008. Plant Secondary Metabolism: Diversity, Function and its Evolution. *Natural Product Communications* 3, 1205-1216.
- Wu, G. 2010. Functional amino acids in growth, reproduction, and health. *Advances in nutrition* 1(1), 31-37.
- Wu, G. 2013. Functional amino acids in nutrition and health. *Amino Acids* 45 : 407-411.
- Wu, L. C., Hsu, H. W., Chen, Y. C., Chiu, C. C., Lin, Y. I., & Ho, J. A. A. 2006. Antioxidant and antiproliferative activities of red pitaya. *Food Chemistry* 95(2), 319-327.
- Xu, DP., Li, Y., Meng, X., Zhou, T., Zhou, Y., Zheng, J., Zhang, JJ., & Li, HB. 2017. Natural Antioxidants in Foods and Medicinal Plants: Extraction, Assessment and Resources. *International Journal of Molecular Sciences* 18(96), 1-32.
- Yong, Y. Y., Dykes, G., Lee, S. M., & Choo, W. S. 2018. Effect of refrigerated storage on betacyanin composition, antibacterial activity of red pitahaya (*Hylocereus polyrhizus*) and cytotoxicity evaluation of betacyanin rich extract on normal human cell lines. *LWT - Food Science and Technology* 91, 491-497.
- Young, V. R., & Pellett, P. L. 1994. Plant proteins in relation to human protein and amino acid nutrition. *The American journal of clinical nutrition* 59(5), 1203S-1212S.
- Yuslianti, E. R. 2018. *Pengantar Radikal Bebas dan Antioksidan*. Deepublish, Yogyakarta.
- Zhang, S., & Kim, I. H. 2020. Effect of quercetin (flavonoid) supplementation on growth performance, meat stability, and immunological response in broiler chickens. *Livestock Science* 242, 104286.
- Zhuang, P., An, J., Chua, C. K., & Tan, L. P. 2018. Bioprinting of 3D in vitro Skeletal Muscle Models: A Review. *Pre-Proof*, 183135.