

DAFTAR PUSTAKA

- Adeyeye, S.A., Ayodele, S.O., Oloruntola, O.D., Agbede, J.O. 2019. Processed Cocoa Pod Husk Dietary Inclusion: Effects on the Performance, Carcass, Haematogram, Biochemical Indices, Antioxidant Enzyme and Histology of the Liver and Kidney in Broiler Chicken. *Bull. Natl. Res. Cent.* 43 (54): 1-9.
- Adhi, P.D.P., Ardana, I.B.K., Kendran, A.A.S. 2020. Aktivitas Alanin Aminotransferase dan Aspartat Aminotransferase pada Broiler yang Diberikan Penambahan Tepung Temulawak dalam Pakan. *Buletin Veteriner Udayana.* 12 (1): 45-49.
- Ahmed-Farid, O.A., Salah, A.S., Nassan, M.A., El-Tabarany, M.S. 2021. Effects of Chronic Thermal Stress on Performance, Energy Metabolism, Antioxidant Activity, Brain Serotonin, and Blood Biochemical Indices of Broiler Chickens. *Animals.* 11 (2554): 1-10.
- Akbarian, A., Golian, A., Kermanshahi, H., Smet, S.D., Michiels, J. 2014. Antioxidant Enzyme Activities, Plasma Hormone Levels and Serum Metabolites of Finishing Broiler Chickens Reared Under High Ambient Temperature and Fed Lemon and Orange Peel Extracts and *Curcuma xanthorrhiza* Essential Oil. *J. Anim. Physiol. Anim. Nutr.* 99 (1): 150-162.
- Alshamy, Z., Richardson, K.C., Harash, G., Hunigen, H., Rohe, I., Hafez, H.M., Plendl, J., Masri, S.A. 2019. Structure and Age-Dependent Growth of the Chicken Liver Together with Liver Fat Quantification: A Comparison Between a Dual-Purpose and A Broiler Chicken Line. *Plos One*, 14 (2): 1-18.
- Aughey, E. dan Frye, F.L. 2001. *Comparative Veterinary Histology with Clinical Correlates*. Manson Publishing. UK: 124.
- Bacha, W.J. dan Bacha, L.M. 2000. *Color Atlas of Veterinary Histology*, 2nd Edition. Lippincott Williams & Wilkins. USA: 161.
- Badran, A.M.M., Basuony, H.A., Elsayed, M.A., Abdel-Moneim, A.M.E. 2020. Effect of Dietary Curcumin and Curcumin Nanoparticles Supplementation on Growth Performance, Immune Response and Antioxidant of Broiler Chickens. *Egypt. Poult. Sci. J.* 40 (1): 325-343.
- Candra, A.A. 2013. Aktivitas Hepatoprotektor Temulawak pada Ayam yang Diinduksi Pemberian Parasetamol. *Jurnal Penelitian Pertanian Terapan*, 13 (2): 137-143.
- Cattley, R.C. dan Cullen, C.M. 2018. *Liver and Gall Bladder*. Dalam: Wallig, M.A., Haschek, W.M., Rousseaux, C.G., Bolon, B. 2018. *Fundamentals of Toxicologic Pathology*, 3rd Edition. Academic Press. Cambridge. USA: 125-151.

- Cochran, P.E. 2004. *Laboratory Manual for Comparative Anatomy and Physiology*. Thomson Learning. Clifton Park. USA: 175.
- Coles, B.H. 2007. *Essentials of Avian Medicine and Surgery, 3rd Edition*. Blackwell Publishing Ltd. Hongkong: 69-71.
- Da Costa, S., Basri, M., Shamsudin, N., Basri, H. 2014. Stability of Positively Charged Nanoemulsion Formulation Containing Steroidal Drug for Effective Transdermal Application. *J. Chem.* 748680: 1-15.
- Dai, D., Qiu, K., Zhang, H., Wu, S., Han, Y., Wu, Y., Qi, G., Wang, J. 2021. Organic Acids as Alternatives for Antibiotic Growth Promoters Alter the Interstitial Structure and Microbiota and Improve the Growth Performance in Broilers. *Front. Microbiol.* 11 (618144): 1-14.
- Dosoky, N.S. dan Setzer, W.N. 2018. Chemical Composition and Biological Activities of Essential Oils of *Curcuma* Species. *Nutrients*. 10 (1196): 1-42.
- Dyce, K.M., Sack, W.O., dan Wensing, C.J.G. 2010. *Textbook of Veterinary Anatomy, 4th Edition*. Elsevier. USA: 798-799.
- El-Hack, M.E.A., Alaidaroos, B.A., Farsi, R.M., Abou-Kassem, D.E., El-Saadony, M.T., Saad, A.M., Shafi, M.E., Albaqami, N.M., Taha, A.E., Ashour, E.A. 2021. Impacts of Supplementing Broiler Diets with Biological Curcumin, Zinc Nanoparticles and *Bacillus licheniformis* on Growth, Carcass Traits, Blood Indices, Meat Quality and Cecal Microbial Load. *Animals*. 11 (1878): 1-24.
- Etikaningrum dan Iwantoro, S. 2017. Kajian Residu Antibiotika pada Produk Ternak Unggas di Indonesia. *JIPTHP*. 5 (1): 29-33.
- Firdaus, I., Suastika, P., Merdana, I.M., Sudimartini, L.M. 2021. Histopatologi Hepar Ayam Broiler yang Diberikan Infusa Daun Dadap (*Erythrina subumbrans*) dan Mengalami Stres Pengangkutan. *Indones. Med. Veterinus*. 10 (4): 564-575.
- Fitri, A.N., Fitriana, I., Rosetyadewi, A.W., Pratama, A.M., Septiana, A.I., Setiawan, D.C.B., Wijayanti, A.D. 2021. The Effect of Colistin Administration as Medicated Feed on Alanine Aminotransferase and Creatinine Level in Broiler Infected with *Escherichia coli*. *ICAVESS 2021: BIO Web Conf.* 33 (03002): 1-8.
- Gurpreet, K. dan Singh, S.K. 2018. Review of Nanoemulsion Formulation and Characterization Techniques. *Indian J. Pharm. Sci.* 80 (5): 781-789.
- Handharyani, E., Sutardi, L.N., Mustika, A.A., Andriani, A., Yuliani, S. 2020. Antibacterial Activity of *Curcuma longa* (turmeric), *Curcuma zedoaria* (zedoary), and *Allium sativum* (garlic) Nanoparticle Extract on Chicken with

- Chronic Respiratory Disease Complex: In Vivo Study. *E3S Web Conf.* 151 (01054): 1-5.
- Haque, Md.I., Ahmad, N., Miah, M.A. 2017. Comparative Analysis of Body Weight and Serum Biochemistry in Broilers Supplemented with Some Selected Probiotics and Antibiotic Growth Promoters. *J. Adv. Vet. Anim. Res.* 4 (3): 288-294.
- Harwansh, R.K., Deshmukh, R., Rahman, Md.A. 2019. Nanoemulsion: Promising Nanocarrier System for Delivery of Herbal Bioactives. *J. Drug. Deliv. Sci. Technol.* 51 (1): 224-233.
- Hosseini, S.M., Nazarizadeh, H., Ahani, S., Azghandi, M.V. 2016. Effects of Mannan Oligosaccharide and *Curcuma xanthorrhiza* Essential Oil on the Intestinal Morphology and Stress Indicators of Broilers Subjected to Cyclic Heat Stress. *Arch. Anim. Breed.* 59 (1): 285-291.
- Ibrahim, D., Abdelfattah-Hassan, A., Badawi, M., Ismail, T.A., Bendary, M.M., Abdelaziz, A.M., Mosbah, R.A., Mohamed, D.I., Arisha, A.H., dan El-Hamid, M.I.Abd. 2021. Thymol Nanoemulsion Promoted Broiler Chicken's Growth, Gastrointestinal Barrier and Bacterial Community and Conferred Protection against *Salmonella typhimurium*. *Sci. Rep.* 11 (7742): 1-20.
- Iriyanti, N. dan Hartoyo, B. 2019. Encapsulated Fermeherbafit Bioavailability and the Application to Broilers. *J. Agric. Sci. Technol. A.* 9 (1): 157-165.
- Khanam, S. 2020. Toxicological Effect of Zinc on Liver of Broiler Chicks. *Egypt. Liver J.* 10 (21): 1-5.
- Khosravinia, H., Ghasemi, S., Alavi, E.R. 2013. The Effect of Savory (*Satureja khuzistanica*) Essential Oils on Performance, Liver and Kidney Functions in Broiler Chickens. *J. Anim. Feed. Sci.* 22 (1): 50-55.
- Kokoszynski, D., Bernacki, Z., Saleh, M., Steczny, K., Binkowska, M. 2017. Body Conformation and Internal Organs Characteristics of Different Commercial Broiler Lines. *Rev. Bras. Cienc. Avic.* 19 (1): 47-51.
- Kumar, M., Bishnoi, R.S., Shukla, A.K., Jain, C.P. 2019. Techniques for Formulation of Nanoemulsion Drug Delivery System: A Review. *Prev. Nutr. Food Sci.* 24 (3): 225-234.
- McClements, D.J. dan Rao, J. 2011. Food-Grade Nanoemulsions: Formulation, Fabrication, Properties, Performance, Biological Fate, and Potential Toxicity. *Crit. Rev. Food Sci. Nutr.* 51 (4): 285-330.
- McClements, D.J. 2021. Advances in Edible Nanoemulsions: Digestion, Bioavailability and Potential Toxicity. *Prog. Lipid Res.* 81 (101081): 1-14.

- McLelland, J. 1990. *A Colour Atlas of Avian Anatomy*. Wolfe Publishing, Ltd. London. England: 58.
- Mei, W., Hao, Y., Xie, H., Ni Y., Zhao, R. 2020. Hepatic Inflammatory Response to Exogenous LPS Challenge is Exacerbated in Broilers with Fatty Liver Disease. *Animals*. 10 (514): 1-12.
- Miao, Q., Si, X., Xie, Y., Chen, L., Liu, Z., Liu, L., Tang, X., Zhang, H. 2020. Effects of Acute Heat Stress at Different Ambient Temperature on Hepatic Redox Status in Broilers. *Poultry Sci*. 99 (9): 4113-4122.
- Mishra, J., Bhardwaj, A., Misra, K. 2018. *Curcuma sp.*: The Nature's Souvenir for High-Altitude Illness. *Management of High-Altitude Pathophysiology*. Elsevier. London. UK: 153-169.
- Mohamed, A.B., Al-Rubae, M.A.M., Jalil, A.Q. 2012. Effect of Ginger (*Zingiber officinale*) on Performance and Blood Serum Parameters of Broiler. *Int. J. Poult. Sci*. 11 (2): 143-146.
- Neves, D.P., Banhazi, T.M., Naas, I.A. 2014. Feeding Behaviour of Broiler Chickens: a Review on the Biomechanical Characteristics. *Rev. Bras. Cienc. Avic*. 16 (2): 1-16.
- NM, J., Joseph, A., Maliakel, B., IM, K. 2018. Dietary addition of a standardized extract of turmeric (TurmaFEED™) improves growth performance and carcass quality of broilers. *J. Anim. Sci. Technol*. 60 (8): 1-9.
- Orinetha, J., Salsabil, J.K., Putri, S.M., Pratama, A.M. 2022. Temulawak (*Curcuma xanthorrhiza* Roxb.) Nanoemulsion can be Substituted as Natural Growth Promoter in Broiler Chickens. *Pak. Vet. J.* [In Press Article]. DOI: 10.29261/pakvetj/2022.022.
- Pramono, S., Arifah, F.H., Pribadi, F.H., Nugroho, A.E. 2018. Hepatoprotective Activity of *Curcuma xanthorrhiza* Roxb. on Paracetamol-Induced Liver Damage in Rats and Correlation with Their Chemical Compounds. *Thai J. Pharm. Sci*. 42 (4): 188-195.
- Poland, G. dan Raftery, A. 2019. *BSAVA Manual of Backyard Poultry Medicine and Surgery*. British Small Animal Veterinary Association. UK: 99-100.
- Purnamasari, L., Agus, A., Noviandi, C.T. 2019. Physiological Response on Broiler Chicken's Liver Supplemented Amino Acid Metionine-Cystine in Feed Contaminated with Aflatoxin B1. *Livest. Sci. Prod*. 3 (1): 136-147.
- Rachmawati, H., Larasati, A., Adi, A.C., Shegokar, R. 2020. Chapter 2: Role of Nanocarriers and Their Surface Modification in Targeting Delivery of Bioactive Compounds. *Nanopharmaceuticals*. Elsevier, UK: 17-43.

- Rahmat, E., Lee, J., Kang, Y. 2021. Javanese Turmeric (*Curcuma xanthorrhiza* Roxb.): Ethnobotany, Phytochemistry, Biotechnology, and Pharmacological Activities. *Evid. Based Complementary Altern. Med.* 9960813: 1-15.
- Rajkumari, S. dan Sanatombi, K. 2017. Nutritional Value, Phytochemical Composition, and Biological Activities of Edible *Curcuma* species: A Review. *Int. J. Food. Prop.* 20 (3): 2668-2687.
- Reyes, F.C.C., Aguirre, A.T.A., Agbisit Jr., E.M., Merca, F.E., Manulat, G.L., Angeles, A.A. 2018. Growth Performances and Carcass Characteristics of Broiler Chickens Fed Akasya [*Samanea saman* (Jacq.) Merr.] Pod Meal. *Trop. Anim. Sci. J.* 41 (1): 46-52.
- Riki, Kurniatin, P.A., Ambarsari, L., Nurcholis, W., Darusman, L.K. 2016. Characterization and Toxicity of Temulawak Curcuminoid Nanoparticles. *Current Biochemistry*, 3 (1): 43-53.
- Ritchie, B.W., Harrison, G.J., Harrison, L.R. 1994. *Avian Medicine: Principles and Application*. Wingers Publishing, Inc. Florida. USA: 228-229.
- Ross, M.H. dan Pawlina, W. 2011. *Histology A Text and Atlas*. 6th Edition. Lippincott Williams & Wilkins. USA: 628-635.
- Saleemi, M.K., Hussan, M.F.U., Khan, M.Z., Khan, A., Abbas, R.Z., Ahmad, A. 2013. Hemato-Biochemical Effects of Colistin Administered Intramuscularly in Growing Broiler Birds. *Pak. Vet. J.* 34 (1): 78-81.
- Samour, J. 2016. *Avian Medicine*, 3rd Edition. Elsevier. Missouri. USA: 102.
- Shahsavandi, S., Ebrahimi, M.M., Ghadiri, M.B., Samiee, M.R. 2020. The Tween 80 Toxicity in Chicken Embryos and Effect on the Kinetics of Newcastle Disease Virus Replication. *Iran. J. Toxicol.* 14 (4): 229-236.
- Siddiqui, S.H., Kang, D., Park, J., Choi, H.W., Shim, K. 2020. Acute Heat Stress Induces the Differential Expression of Heat Shock Proteins in Different Sections of the Small Intestine of Chickens Based on Exposure Duration. *Animals*. 10 (1234): 1-13.
- Suwarda dan Hanafie, R. 2021. The Production Risk of Broiler Farm Management at Plasma Breeders: Evidence from Indonesia. *JSeD*. 4 (1): 134-144.
- Tarek, K., Amine, B., Eddine, R.D., Abdelhafidh, M., Hanane, A. 2018. Morpho-Histological Comparisons of Liver between the Broiler Chickens and Wild Boar in Algeria. *Adv. Anim. Vet. Sci.* 7 (1): 24-29.
- Thrall, M.A., Weiser, G., Allison, R.W., Campbell, T.W. 2012. *Veterinary Hematology and Clinical Chemistry*, 2nd Edition. John Wiley & Sons, Inc. UK: 589-592.

- Tumova, E. dan Chodova, D. 2018. Performance and Changes in Body Composition of Broiler Chickens Depending on Feeding Regime and Sex. *Czech J. Anim. Sci.*, 63 (12): 518-525.
- Umiarti, A.T. 2020. *Manajemen Pemeliharaan Broiler*. Pustaka Larasan. Bali. Indonesia: 1-14.
- USAID. 2013. *Indonesia's Poultry Value Chain: Costs, Margins, Prices, and Other Issues*. Nathan Associates Inc. USA:1-46.
- Widodo, W., Rahayu, I.D., Sutanto, A., Setyobudi, R.H., Mel, M. 2019. The Effectiveness of *Curcuma (Curcuma xanthorrhiza* Roxb.) Addition in the Feed toward Super Kampong Chicken Performances. *Proc. Pak. Acad. Sci: B*. 56 (4): 1-9.