

DAFTAR PUSTAKA

- Abdel-Latif, M. A., El-Far, A. H., El-Sayed, S. A., & Alagawany, M. (2017). Effects of Lysozyme Supplementation on Growth Performance, Intestinal Immunity and Microbiota in Broiler Chickens. *Journal of Animal Physiology and Animal*, 101(6), e124-e136.
- Affandi, A., Nahrowi, & Mutia, R. (2024). Dampak Pelanggaran Antibiotic Growth Promoters (AGP) dalam Pakan Terhadap Produksi dan Mortalitas Ayam Pedaging: Studi Kasus di Farm Peternak Ayam Ras Pegading di Kabupaten Kuningan. *Jurnal Nutrisi Ternak Tropis dan Ilmu Pakan*, 6(1): 35-48.
- Anggraini, D. (2008). *Gambaran Histopatologi Ginjal Tikus Putih (Rattus norvegicus) yang Diinfeksi Parasit Plasmodium berghei*. Bogor: Institut Pertanian Bogor.
- Arif, M., Baty, R. S., Althubaiti, E. H., Ijaz, M. T., Fayyaz, M., Shafi, M. E., Elnesr, S. S. (2021). The Impact of Betaine Supplementation in Quail Diet On Growth Performance, Blood Chemistry, and Carcass Traits. *Saudi Journal of Biological Science*, 29(3): 1604–1610.
- Arome, D., & Chinedu, E. (2013). The Importance of Toxicity Testing. *Journal of Pharmaceutical and BioSciences*, 4(1): 146-148.
- Asmawati. (2014). *Pengaruh Pemberian Pakan In Ovo Terhadap Bobot Penetasan dan Perkembangan Jaringan Usus Kecil Ayam Kampung*. Makassar: Universitas Hasanudin.
- Auerbach, B. J., Reynolds, S. J., Lamorde, M., Merry, C., Kukunda-Byobona C., dan Ocama, P. (2012). Traditional Herbal Medicine Use Associated with Liver Fibrosis in Rural Rakai. *Journal PONE*, 10: 13-71.
- Austic, R. E., & Nesheim. (1990). *Produksi Unggas*. Philadelphia: Lea and Febiger.
- Awad, W. A., Ghareeb, K., Nitclu, S., Pasteiner, S., Raheem, S. A., & Bohm, J. (2008). Effect of Dietary Inclusion of Probiotic, Prebiotic and Symbiotic on Intestinal Mucose Absorbtion of Broiler Chickens. *Journal Poultry Science*, 7: 688-691.
- Aziz, T. A., Fletcher, O. J., Barnes, H. J., Shivaprasad, H. L., & Swayne, D. E. (2016). *Avian Histopathology 4th Edition*. Madison: Omnipress.
- Bacha, W. J., & Bacha, L. M. (2000). *Atlas Warna Histologi Hewan (edisi ke-2)*. Philadelphia: Lippincott Williams & Wilkins.
- Bacha, W. J., & Bacha, L. M. (2012). *Color Atlas of Veterinary Histology*. New Jersey: John Wiley & Sons.
- Badan Pusat Statistik. (2023). *Buku Outlook Komoditas Peternakan Daging Ayam Ras Pedaging*. Jakarta: Sekretariat Jenderal Kementerian Pertanian.
- Bahri, S., Masbulan, E., & Kusumaningsih, A. (2005). Proses Pra Produksi Sebagai Faktor Penting dalam Menghasilkan Produk Ternak yang Aman untuk Manusia. *Jurnal Litbang Pertanian*, 24(1): 27-35.
- Balgis, Soepraptini, M., & Santosa, P. E. (2014). Pengaruh Pemberian Infusa Daun Salam (*Syzygium polyanthum*) terhadap Gambaran Histopatologi Ginjal Ayam Broiler. *Jurnal Ilmiah Peternakan Terpadu*, 2(1): 93–98.
- Bastamy, M., Raheel, I., Elbestawy, A., Diab, M., Hammad, E., Elebeedy, L., & Orabi, A. (2024). Postbiotic Anti-Inflammatory, and Immunomodulatory

- Effects of Aqueous Microbial Lysozyme in Broiler Chickens. *Animals Biotechnology*, 7: 1-20.
- Bermawie, N. (2006). *Mengatasi Demam Berdarah dengan Tanaman Obat*. Jakarta: Warta Penelitian dan Pengembangan Pertanian.
- Cahyono, B. (2011). *Top Business Management of Broiler Chickens*. Jakarta: Penebar Swadaya.
- Cai, H. Y., & Wang, Y. (2010). *Approach to Authorization of Novel Technologies on Alternatives to Antibiotic in China*. China: IABS Presentation.
- Carlton, W. W., & McGavin, M. D. (2001). *Thomson's Special Veterinary Pathology*. Missouri: Mosby.
- Castanon, J. I. (2007). History of the Use of Antibiotic as Growth Promoters in European Poultry Feeds. *Poultry Science*, 86(11): 2466-2471.
- Chen, J., Kang, B., Yao, K., Fu, C., & Zhao, Y. (2019). Effects of Dietary Macleaya cordata Extract on Growth Performance, Immune Responses, Antioxidant Capacity, and Intestinal Development. *Journal of Applied Animals*, 47(1), 189-200.
- Choudhary, M., Datta, A., Jat, H. S., Yadav, A. K., Gathala, M. K., Sapkota, T. B., & Ladha, J. K. (2018). Changes in Soil Biology Under Conservation Agriculture Based Sustainable Intensification of Cereal Systems in Indo-Gangetic Plains. *Geoderma*, 313(1): 193-204.
- Coles, E. H. (1986). *Veterinary Clinical Pathology (4th ed.)*. Philadelphia: W.B. Saunders Company.
- Collins, M., Michot, J. M., Danlos, F. X., Mussini, C., Soularue, E., Mateus, C., & Carbonnel, F. (2017). Inflammatory Gastrointestinal Diseases Associated With PD-1 Blockade Antibodies. *Elsevier*, 28(11): 2860-2865.
- Costanzo, L. S. (2014). *Board Review Series Physiology*. Philadelphia: Lippincott Williams and Wilkins.
- Cronquist, A. (1981). *An Integrated System of Classification of Flowering Plants*. New York: Columbia University Press.
- Dayat, D., Jayanegara, A., & Sukria, H. A. (2023). Evaluasi Kualitas Pakan Ayam Ras Pedaging (Broiler) yang Beredar terhadap Penerapan Standar Nasional Indonesia. *Jurnal Nutrisi Ternak Tropis dan Ilmu Pakan*, 5(3): 103-114.
- Dharmawati, S., Firahmi, N., & Parwanto. (2013). Penambahan Tepung Bawang Putih (*Allium sativum L*) Sebagai Feed Additif Dalam Ransum Terhadap Penampilan Ayam Pedaging. *Ziraa'ah*, 38(3): 17-22.
- Dienstag, J. L., & Isselbacher, K. J. (2000). *Prinsip-Prinsip Ilmu Penyakit Dalam*. Jakarta: EGC.
- Doneley, R. (2016). The Clinical Examination. *Elsevier*, 11(3): 49-72.
- El-Hack, M. E., El-Saadony, M. T., Salem, H. M., El-Tahan, A. M., Soliman, M. M., Youssef, G. B., & Swelum, A. A. (2022). Alternatives to Antibiotics for Organic Poultry Production. *Poultry Science*, 101(4): 1-70.
- El-Ratel, I. T., EL-Deep, M. H., Alharbi, N. K., Alyoubi, W. A., El-Kholy, K. H., Badawy, A. A., & Fouda, S. F. (2024). Lysozyme As an Alternative to Antibiotics Improves Growth, Antioxidants Status, Immunity, and Intestinal Bacteria in Broiler Chickens During the Fattening Period. *The Archives Animal Breeding*, 67: 185-195.

- El-Saadony, M. T., Zabermawi, N. M., Burollus, M. A., Shafi, M. E., Alagawany, M., Yehia, N., & El-Hack, M. E. (2021). Nutritional Aspects and Health Benefits of Bioactive Plant Compounds Against Infectious Diseases: A Review. *Journal of Environmental Sciences*, 106: 1-14.
- Eroschenko, V. P. (2008). *DiFiore's Atlas of Histology with Functional Correlations (11th ed.)*. Philadelphia: Lippincott Williams & Wilkins.
- Estévez, M. (2021). Critical Overview Of The Use Of Plant Antioxidants In The Meat Industry: Opportunities, Innovative Applications And Future Perspectives. *Meat Science*, 181: 1-13.
- Farrell, K. T. (1990). *Spices, Condiments, and Seasonings*. Netherlands: Van Nostrand Reinhold.
- Florou-Paneri, P., Christaki, E., & Giannenas, I. (2020). *Feed Additives : Aromatic Plants and Herbs in Animal Nutrition and Health*. Pennsylvania: Elsevier.
- Gadde, U., Oh, S., Lillehoj, H., & Lillehoj, E. (2018). Antibiotic Growth Promoter-Induced Changes In the Chicken Intestine: A Metabolomics Analysis of Virginiamycin and Bacitracin Methylene Disalicylate. *Scientific Reports*, 8(1): 3592.
- Ganong, W. F. (2002). *Buku Ajar Fisiologi Kedokteran (20th ed.)*. Jakarta: EGC.
- Gartner, L. P., & Hiatt, J. L. (2008). *Color Atlas and Text of Histology (5th ed.)*. Philadelphia: Lippincott Williams & Wilkins.
- Guyton, A. C. (1997). *Buku Ajar Fisiologi Kedokteran (9th ed.)*. Jakarta: EGC.
- Haroen, U., & Budiansyah, A. (2018). Penggunaan Ekstrak Fermentasi Jahe (*Zingiber officinale*) Dalam Air Minum Terhadap Kualitas Karkas Ayam broiler. *Jurnal Ilmiah Ilmu-Ilmu Peternakan*, 21(2): 86-97.
- Hegazy, S. K., El-Bedewy, M., Yagi, A. (2012). Antifibrotic effect of aloe vera in viral infection-induced hepatic periportal fibrosis. *World J Gastroenterol*, 18(17): 2026-2034.
- Ibrahim. (2008). Hubungan Ukuran-Ukuran Usus Halus Dengan Berat Badan Broiler. *Agripet*, 2: 42-46.
- Iji, P. A., Hughes, R. J., Choct, M., & Tivey, D. R. (2001). Intestinal Structure and Function of Broiler Chickens on Wheat-Based Diets Supplemented with Microbial Enzyme. *Asian-Australia Journal Animal Science*, 14(1): 54-60.
- Kaur, R., Tiwari, A., Manish, M., Maurya, I. K., Bhatnagar, R., & Singh, S. (2021). Common Garlic (*Allium sativum* L.) Has Potent Anti-Bacillus Anthracis Activity. *Journal of Ethnopharmacology*, 264: 1-18.
- Kementerian Pertanian. (2017). *Peraturan Menteri Pertanian Nomor 14/PERMENTAN/PK.350/5/2017 Tahun 2017 tentang Klasifikasi Obat Hewan*. Jakarta: Kementerian Pertanian.
- Kementerian Pertanian. (2017). *Peraturan Menteri Pertanian Nomor 22/PERMENTAN/PK.110/6/2017 tentang Pendaftaran dan Peredaran Pakan*. Jakarta: Kementerian Pertanian.
- Khamas, W., & Rutllant, J. (2024). *Anatomy and Histology of the Domestic Chicken*. New Jersey: John Wiley & Sons, Inc.
- Kiczorowska, B., Al-Yasiry, A. R., Salmoliska, W., Marek, A., & E, P. (2016). The Effect of Dietary Supplementation of the Broiler Chicken Diet with *Boswellia serrata* Resin on Growth Performance, Digestibility, and

- Gastrointestinal Characteristics, Morphology, and Microbiota. *Elsevier*, 191: 117-124.
- Kleiner, D. E., Brunt, E. M., Natta, M. V., Behling, C., Ferrel, L. D., Liu, Y. C., & Sanyal, A. J. (2005). Design and Validation of A Histological Scoring System for Nonalcoholic Fatty Liver Disease. *Hepatology*, 41(1): 1313-1321.
- Koswara, S. (1995). *Jahe dan Hasil Olahannya*. Jakarta: Pustaka Sinar Harapan.
- Kuehnelt, W. (2003). *Color Atlas of Cytology, Histology, and Microscopic Anatomy (4th ed.)*. Stuttgart: Georg Thieme Verlag.
- Kumar, V., Abbas, A. K., & Fausto, N. (2009). *Adaptasi, Cedera dan Kematian Sel*. Jakarta: EGC.
- Leeson, S., Noblet, J. P., & Summers, J. D. (1995). *Commercial Poultry Nutrition*. Guelph: University Books.
- Liebler-Tenorio, E. M., & Pabst, R. (2006). MALT Structure and Function in Farm Animals. *Veterinary Research*, 37(3): 57-80.
- Lillehoj, H. S., & Lee, K. W. (2012). Immune Modulation of Innate Immunity as Alternatives-to-Antibiotics Strategies to Mitigate the Use of Drugs in Poultry Production. *Poultry Science*, 91(6): 86-91.
- Lunardi, W., & Husen, A. F. (2023). *Budidaya Ayam Broiler*. Jakarta: Edu Farmers International Foundation.
- Ma, X. K., Zhang, S., Pan, L., & Piao, X. S. (2017). Effects of Lysozyme on the Growth Performance, Nutrient Digestibility, Intestinal Barrier, and Microbiota of Rier, and Microbiota Fed Diets Containing Spray Dried Whole Egg or Albumen Powder. *Journal Animals Sciences*, 97(1): 466-475.
- Marković, R., Šefer, D., Krstić, M., & Petrujkić, B. (2009). Effect of Different Growth Promoters on Broiler Performance and Gut Morphology. *Archivos de Medicina Veterinaria*, 41(2): 163-169.
- Mashur, C. D., Maratun, J., Kunti, T. S., & Oktaviana, D. (2020). Potensi Daun Ashitba (*Angelica keiskei*) Sebagai Sumber Fitobiotik dalam Pakan terhadap Produksi Lemak Abdominal Ayam Broiler. *Jurnal Vitek Bidang Kedokteran Hewan*, 10: 38-43.
- Maulina, M. (2018). *Zat-zat yang Mempengaruhi Histopatologi Hepar*. Lhokseumawe: Unimal Press.
- McGavin, M. D., & Zachary, J. F. (2007). *Pathologic Basis of Veterinary Disease*. Missouri: Mosby Elsevier.
- Melissa, A., Suci, A. P., Ridwan, K., Putri, N. H., & Al-Ghozi. (2022). Acute Toxicity Effects on Poultry Kidney. *Journal of Veterinary Pathology*, 59(2): 112-125.
- Memarpoor-Yazdi, M., Asoodeh, A., & Chamani, J. (2012). Structure and ACE-inhibitory Activity of Peptides Derived from Hen Egg White Lysozyme. *International Journal of Peptide Research and Therapeutics*, 18(4): 353-360.
- Mile, R. D., Butcher, G. D., Henry, P. R., & Littell, R. C. (2006). Effect of antibiotic growth promoters on broiler performance, Intestinal Growth Parameters, and Quantitative Morphology. *Journal of Poultry Science*, 85: 476-485.

- Mitchell, M. A., & Carlisle, A. J. (1992). The Effects of Chronic Exposure to Elevated Environmental Temperature on Intestinal Morphology and Nutrient Absorption in the Domestic Fowl (*Gallus domesticus*). *Comparative Biochemistry and Physiology Part A: Physiology*, 101(1): 137-142.
- Moslen, M. T. (2001). *Toxicology: the Basic Science of Poisons 6th Edition*. New York: McGraw Hill.
- Mousa, M. A., Asman, A. S., Ali, R. M., Sayed, R. K., Majrashi, K., A Fakiha, K. G., & Selim, S. (2023). Impacts of Dietary Lysine and Crude Protein on Performance, Hepatic and Renal Functions, Biochemical Parameters, and Histomorphology of Small Intestine, Liver, and Kidney in Broiler Chicken. *Veterinary Science*, 10(2): 98.
- Muntasir, Abdulkadir, W. S., Harun, A. I., Tenda, P. E., Makkasau, Muliyadi, & Wonga, T. M. (2022). *Antibiotik dan Resistensi Antibiotik*. Jakarta: Rizmedia Pustaka Indonesia.
- Murdiati, T. B. (1997). Pemakaian Antibiotika dalam Usaha Peternakan. *Wartazoa*, 6: 18-21.
- Murugesan, G. R., Syed, B., Haldar, S., & Pender, C. (2015). Phytogenic Feed Additives as an Alternative to Antibiotic Growth Promoters in Broiler Chickens. *Frontiers in Veterinary Science*, 2: 21.
- Napirah, A., Supadmo, & Zuprizal. (2013). Pengaruh Penambahan Tepung Kunyit (*Curcuma domestica vale*) dalam Pakan terhadap Parameter Hematologi Puyuh (*Coturnix Japonica*) Pedaging. *Buletin Peternakan*, 37(2): 114-119.
- Nasyuha, A. H., & Hafizah. (2020). Implementasi Teorema Bayes Dalam Diagnosa Penyakit Ayam Broiler. *Media Informasi Budidarma*, 4(4): 1062-1068.
- Nawaz, N., Wen, S., Wang, F., Nawaz, S., Raza, J., Iftikhar, M., & Usman, M. (2022). Lysozyme and Its Application as Antibacterial Agent in Food Industry. *Molecules*, 27(6305): 1-18.
- Ningtias, A. S. (2013). *Comparison of Growth Performance of Broilers, Kampong, and Backcross3 (Gallus gallus domesticus Linnaeus, 1758) Based on Morphometri and Histological Structure of Ileum and Breast Muscle*. Yogyakarta: Fakultas Biologi Universitas Gajah Mada.
- Noor, S. M., Susanti, Wiyono, A., Bahri, S., Muharsini, S., Adjid, R. M., & Nuradji, H. (2017). *Antimicrobial Resistance In Indonesia*. Bogor: Balai Besar Penelitian Veteriner.
- Ody, P. (2018). *Turmeric: Nature's Miracle Healer: Fact or Fiction*. London: Souvenir Press.
- Olkowski, B. (2018). Feeding High Lupine Based Diets for Broiler Chickens: Effect of Soybean Meal Substitution With Yellow Lupine Meal at Various Time Points of Growth Cycle. *Livestock Science*, 218: 14-118.
- Pemerintah Pusat. (2009). *Undang-undang (UU) Nomor 18 Tahun 2009 tentang Peternakan dan Kesehatan Hewan*. Jakarta: Pemerintah Pusat.
- Pemerintah Pusat. (2014). *Undang-undang (UU) Nomor 41 Tahun 2014 tentang Perubahan atas Undang-Undang Nomor 18 Tahun 2009 Tentang Peternakan dan Kesehatan Hewan*. Jakarta: Pemerintah Pusat.

- Pluske, J. R., Hampson, D. J., & Williams, I. H. (1997). Factors Influencing the Structure and Function of the Small Intestine in the Weaned Pig: A Review. *Livestock Production Science*, 51(1-3); 215-236.
- Pradhan, K., & Anoop, S. (2025). A Review On The Multifaceted Role Of Lysozyme In Host Defense: Beyond Antimicrobial Action. *International Journal of Current Science (IJCS PUB)*, 15(1): 205-216.
- Prakasita, V. C., Asmara, W., Widyarini, S., & Wahyuni, A. E. (2019). Combinations of Herbs and Probiotics as an Alternative Growth Promoter: An In Vitro Study. *Vet World*, 12(4): 614-620.
- Prasetyo, A. F., Ulum, M. Y., Prasetyo, B., & Sanyoto, J. I. (2020). Performa Pertumbuhan Broiler Pasca Penghentian Antibiotic Growth Promoters (AGP) dalam Pakan Ternak Pola Kemitraan di Kabupaten Jember. *Jurnal Peternakan*, 17(1): 25-30.
- Rahardian, G. (2022). *Tanaman Obat Keluarga: Mengenal Ragam dan Khasiat Toga*. Kendari: Balai POM Kendari.
- Rahmawati. (2016). *Histologi Saluran Pencernaan Ayam Buras Hasil In Ovo Feeding Asam Amino L-Arginine*. Makassar: Fakultas Peternakan Universitas Hasanudin Makassar.
- Rahmawati, Fawwas, M., Razak, R., & Islamiati, U. (2018). Potential of Anticoagulan Garlic Extract (*Allium sativum*) Using Lee-White Method and Blood Destruction. *Majalah Farmaseutik*, 14(1): 42-48.
- Rasidi. (2000). *Formulasi Pakan Lokal Alternatif untuk Unggas*. Jakarta: Penebar Swadaya.
- Reshag, A. F., Dhyaa, A. A., & Khayoon, E. S. (2017). Histological and Histochemical Characteristics of the Kidneys in Different Avian Species. *Australian Journal of Basic and Applied Sciences*, 11(16): 36-44.
- Ressang, A. A. (1984). *Patologi Khusus Veteriner untuk Mahasiswa, Dokter Hewan dan Peternakan*. Bali: NV Percetakan Bali.
- Ressang, A. A. (1984). *Patologi Veteriner*. Bogor: Institut Pertanian Bogor.
- Robertson, A. L., Avagyan, S., Gansner, J. M., & Zon, L. I. (2016). Understanding the Regulation of Vertebrate Hematopoiesis and Blood Disorders: Big Lessons From a Small Fish. *ZFIN*, 590(22): 4016-4033.
- Rohma, L. N., Sjojfan, O., & Natsir, M. H. (2019). Komposisi Minyak Atsiri dan Aktivitas Antimikroba Rimpang Temu Putih dan Jahe Gajah sebagai Fitobiotik Pakan Unggas. *Jurnal Ilmu dan Teknologi Peternakan Tropis*, 6(2):181-187.
- Rullier, A., Trimoulet, P., & Neau, D. (2004). Fibrosis is Worse in HIV HCV Patients With Low-Level Immunodepression Referred For HCV Treatment Than in HCV-Matched Patients. *Human Pathology*, 35(1): 1088-1094.
- Saif, S., Hanif, M. A., Rehman, R., & Riaz, M. (2020). Garlic. *Medicinal Plants of South Asia*, 301-315.
- Salim, H. H. (2016). Pengaruh Aktivitas Antimikroba Ekstrak Bawang Putih (*Allium sativum*) terhadap Bakteri Gram Positif (*Staphylococcus aureus*) dan Gram Negatif (*Escherichia coli*) secara In Vitro. *Jurnal Kedokteran Lampung*, 7: 66-70.

- Samuelson, D. A. (2007). *Textbook of Veterinary Histology*. St. Louis: Saunders Elsevier.
- Sayuti, A. I., Umayah, E., & Puspitasari, E. (2014). Uji Aktivitas Antibakteri Kombinasi Minyak Atsiri Lempuyang Wangi (*Zingiber aromaticum* Val.) dan Bangle (*Zingiber cassumunar* Roxb.) terhadap Bakteri *Staphylococcus aureus* dan *Escherichia coli*. *Artikel Ilmiah Hasil Penelitian Mahasiswa*, 1(1): 1-13.
- Shamba, S. U. (2024). *The Handbook on Broiler Farming*. Germany: The Mediae Company.
- Shames, B. (2019). Anatomy and Physiology of the Duodenum. *Elsevier*, 1: 786-803.
- Sheppy, C. (2001). The Current Feed Enzyme Market and Likely Trends. *Animals Nutrition*, 1(1): 1-10.
- Sihombing, D. E., & Fajri, A. I. (2024). Produktivitas dan Kesehatan Ayam Broiler Pasca Pelarangan Anti Growth Promoters di Indonesia. *Jurnal Vitek Bidang Kedokteran Hewan*, 14(2): 112-123.
- Sijid, A., Hafsan, H., & Khudair, F. (2024). Pemanfaatan Enzim untuk Formulasi Pakan Unggas yang Optimal (Ulasan Pendek). *Jurnal Sainsmat*, 13(1): 1-18.
- Soepraptini, E., Mujiran, S; Sutadji, M & Asep, K. (2012). Efek Toksisitas pada Glomerulus dan Tubulus Ginjal. *Jurnal Patologi Indonesia*, 21(2): 78-89.
- Stacey, M. D. (2004). *Sternbergs's Diagnostic Surgical Pathology 4th Edition*. Philadelphia: Lippincott Williams and Wilkins.
- Strika, I., Bašić, A., & Halilović, N. (2017). Bulletin of the Chemists and Technologists of Bosnia and Herzegovina Antimicrobial Effects of Garlic (*Allium sativum* L.). *Organic Scientist*, 47: 1-10.
- Suardana, I. W., Utama, I. i., Putriningsih, A. S., & Rudyanto, M. D. (2014). Uji Kepekaan Antibiotika Isolat *Escherichia coli* O157:H7 Asal Feses Ayam. *Buletin Veteriner Udayana*, 6(1): 19-27.
- Sugito, M. W., A, A. D., Handharyani, & Chairul, E. (2007). Histopatologi hati dan Ginjal pada Ayam Broiler yang Dipapar Cekaman Panas dan Diberi Ekstrak Kulit Batang Jaloh (*Salix tetrasperma* Roxb). *JITV*, 12: 68-73.
- Sulistyoningsih, M., Dzakiy, M. A., & Nurwahyunani, A. (2014). Optimalisasi Feed Additive Herbal Terhadap Bobot Badan, Lemak Abdominal dan Glukosa Darah Ayam Broiler. *Bioma*, 3: 1-16.
- Sunarno, & Nagari, A. P. (2022). Efek Dinamika Faktor Lingkungan terhadap Perilaku Ayam Broiler di Kandang Close House. *Jurnal Peternakan Indonesia*, 24(1): 8-20.
- Suprijatna, E., Atmomarsono, U., & Kartasudjana, R. (2005). *Ilmu Dasar Ternak Unggas*. Jakarta: Penebar Swadaya.
- Suprijatna, E., Ma'rifah, B., Mahfudz, L. D., Sunarti, D., Kismiati, S., Sarjana, T. A., & Muryani, R. (2008). Digestive Tract Development of Crossbreed Native Chickens due to Effect of *Terminalia catappa* Leaf (*T. catappa* L) Extract in Drinking Water. *IOP Conference Series: Earth and Environmental Science*, 1246(1): 20-25.

- Suprijatna, E., Umiyati, E., & Ruhayat, K. (2008). *Ilmu Dasar Ternak Unggas Cetakan 2*. Jakarta: Penebar Swadaya.
- Suryadi, T. (2023). Histopathological Preparation Procedure of Animal Tissues Using Paraffin Embedding and Hematoxylin-Eosin Staining Method. *International Journal of Current Research*, 15(6): 23024-23029.
- Sutardi, N., Wientarsih, L., Handharyani, I. E., & Setiyono, A. (2015). Indonesian Wild Ginger (*Zingiber sp*) Extract: Antibacterial Activity Against *Mycoplasma gallisepticum*. *IOSR Journal Of Pharmacy*, 5(10): 59–64.
- Sutinah. (2009). *Sehatkan Badan Lewat Khasiat Jahe*. Jakarta: Penebar Swadaya.
- Syafiq, M. N., & Wajdi, F. (2023). Efektivitas Penambahan Probiotik Plus Herbal Terhadap Produktivitas Broiler. *Dinamika Rekasatwa*, 6(1): 1-7.
- Syarah, N. A. (2020). Uji Efektivitas Antibakteri Minyak Atsiri Jahe Merah (*Zingiber officinale* var. *rubrum*) terhadap Bakteri *Streptococcus sanguinis*. *Doctoral dissertation*, 50-62.
- Tapsell, L. C., Hemphill, I., Cobiac, L., Patch, C. S., Sullivan, D. R., Fenech, M., & Inge, K. E. (2006). Health Benefits of Herbs and Spices: The Past, The Present, The Future. *Medical Journal of Australia*, 185(2): 4-24.
- Uni, Z., Noy, Y., & Sklan, D. (1999). Posthatch Development of Small Intestinal Function in the Poult. *Poultry Science*, 78: 215-222.
- USDA. (2016). *National Nutrient Database for Standard Reference of raw garlic*. United States: Departement of Agriculture.
- US National Plant Database. (2004). *Plants Database*. Los Angeles: Departements of Agriculture.
- Vifta, R. L., & Hasri, A. P. (2022). Potensi Herba Jahe Merah (*Zingiber officinale*) Asal Desa Kemetul Kabupaten Semarang Sebagai Sumber Antioksidan Alami. *Media Informasi Penelitian Kabupaten Semarang*, 4(2): 30-40.
- Wahyu, S., Hasbi, B. E., Wiryansya, E. P., & Royani, I. (2024). Efek Pemberian Jahe (*Zingiber Officinale*) Terhadap Reinfeksi Covid-19. *Innovative: Journal Of Social Science Research*, 4(1): 4872-4885.
- Wahyuni, A. E., Prakasita, V. C., Nahak, T. E., Tae, A. V., Chandra, J., Ajiguna, A., & Fauziah, I. (2019). Peluang Imbuhan Pakan Herbal-Probiotik Komersial "Promix" Sebagai Pengganti Antibiotic Growth Promoter pada Ayam Pedaging yang Diberi Vaksin ND . *Jurnal Sain Veteriner*, 37(2): 180-184.
- Wang, S. H., Dong, L., Luo, J. Y., Gong, J., Li, L., Lu, X. L., & Han, S. P. (2007). Decreased expression of serotonin in the jejunum and increased numbers of mast cells in the terminal ileum in patients with irritable bowel syndrome. *World Journal of Gastroenterology*, 13(45): 6041.
- Wang, W., Chen, D., Yu, B., Huang, Z., Mao, X., Zheng, P., & He, J. (2020). Effects of Dietary Inulin Supplementation on Growth Performance, Intestinal Barrier Integrity and Microbial Populations in Weaned Pigs. *British Journal of Nutrition*, 124(3), 295-305.
- Wasnaeni, Y., Iqbal, A., & Ismoyowati. (2015). Broilers Farm's Behavior in Administering Antibiotic and Types of Antibiotic Content in Comercian Feed. *Animal Production*, 17(1): 62-68.

- Wickramasuriya, S. S., Ault, J., Ritchie, S., Gay, C. G., & Lillehoj, H. S. (2024). Alternatives to Antibiotic Growth Promoters for Poultry: A Bibliometric Analysis of the Research Journals. *Poultry Science*, 103(9): 1-12.
- Widaningsih, R., Susanti, A. A., Putera, R. K., Darmawan, R., & Iskandar, E. A. (2023). *Daging Ayam Ras Pedaging*. Jakarta: Pusat Data dan Sistem Informasi Pertanian Sekretariat Jenderal Kementerian Pertanian.
- Wijtten, P. J., Langhout, D. J., & Verstegen, M. W. (2012). Small Intestine Development in Chicks After Hatch and Relation with Nutrition. *Acta Agriculturae Scandinavica*, 62(1):1-12.
- Willing, B. P., & Kessel, A. G. (2007). Enterocyte Proliferation and Apoptosis in the Caudal Small Intestine is Influenced by the Composition of Colonizing Commensal Bacteria. *Journal of Animal Science*, 82(12): 3256-3266.
- Winarto, W. P. (2003). *Khasiat & Manfaat Kunyit*. Jakarta: Agromedia Pustaka.
- Windisch, W., Schedle, K., Plitzner, C., & Kroismayr, A. (2008). Use of Phytogetic Products as Feed Additives for Swine and Poultry. *Journal of Animal Science*, 86(14): E140-E148.
- Yob, N. J., Zakaria, Z. A., Jofry, S. M., Affandi, M. M., & Teh, L. K. (2011). A review of its Ethnomedicinal, Chemical, and Pharmacological Uses. *Evid Based Complement Alternative Medication*, 5(4): 13-21.
- Yondra, A. D., Jose, C., & Teruna, H. Y. (2014). Total Fenolik, Flavonoid serta Aktivitas Antioksidan Ekstrak N-Heksana, Diklorometan dan Metanol *Amaranthus spinosus* L Em5-Bawang Putih. *JOM FMIPA* , 1(2): 359-369.