

PUSTAKA ACUAN

- Ajmal, W., Same, N., and Saifullah, M. 2023. Protein and energy supplements on broiler chicken growth with or without feed additives. *Journal for Research in Applied Sciences and Biotechnology*, 2(1): 258–263. <https://doi.org/10.55544/jrasb.2.1.36>.
- Aktar, S., Aesha, M., Islam, M.M., and Gofur, M.R. 2023. Post-hatch age related development of spleen of broiler chicken: A biometric and histomorphometric view. *Asian Journal of Biological Sciences*, 16(4): 515–522. <https://doi.org/10.3923/ajbs.2023.514.521>.
- Alkhalf, A., Alhaj, M., and Al-Homidan, I. 2010. Influence of probiotic supplementation on immune response of broiler chicks. *Egyptian Poultry Science Journal*, 30(1): 271–280.
- Aprillia, N.D., Atmomarsono, U., dan Isroli. 2018. Pengaruh kepadatan kandang yang berbeda terhadap bobot organ limfoid pada ayam broiler. *Agromeda*, 36(2): 25–30.
- Ariyanti, M., Suherman, C., Maxiselly, Y. dan Rosniawati, S. 2018. Pertumbuhan tanaman kelapa (*Cocos nucifera* L.) dengan pemberian air kelapa. *Jurnal Hutan Pulau-Pulau Kecil*, 2(2): 201–212. doi: 10.30598/jhppk.2018.2.2.201.
- Ashifudin, M., Kurnianto, E., dan Sutopo. 2017. Karakteristik morfometrik ayam kedu jengger merah dan jengger hitam generasi pertama di satker ayam Maron-Temanggung. *Jurnal Ilmu Ternak*, 17(1): 40–46.
- Astungkarawati, D., Suthama, N., dan Atmowarsono, U. 2014. Penggunaan protein dan pertumbuhan pada ayam broiler yang diberi ransum dengan penambahan tepung temu kunci (*Boersenbergia pandurata* ROXB.). *Animal Agricultural Journal*, 3(2): 163–171.
- Ayuti, S.R. Purnama, H.R., Azhari, Isa, M., Helmi, T.Z., Novita, A., Herrialfian, Darniati dan Makmur, A. 2022. Pengaruh penambahan ampas kelapa (*Cocos nucifera* L.) fermentasi pada pakan terhadap persentase karkas dan kadar lemak ayam broiler. *Jurnal Peternakan Indonesia*, 24(3): 288–297. doi: 10.25077/jpi.24.3.288-297.2022.
- Beski, S.S.M., Swick, R.A., and Iji, P.A. 2015. Specialized protein products in broiler chicken nutrition: A review. *Animal Nutrition*, 1: 47–53. <https://doi.org/10.1016/j.aninu.2015.05.005>.
- Borkar, S.G. 2021. Mucormycosis: A surge in mucorales fungal infection in post-covid patients in indian states and insight into known and unknown factors. *International Journal of Global Health*, 1(3): 26-50. doi: <https://doi.org/10.14302/issn.2693-1176.ijgh-21-3907>.
- Cazaban, C., Masferrer, N.M., Pascual, R.D., Espadamala, M.N., Costa, T. and Gardin, Y. 2015. Proposed bursa of fabricius weight to body weight ratio standard in commercial broilers. *Poultry Science*, 94(9): 2088–2093. doi: 10.3382/ps/pev230.
- Dabbou, S., Gai, F., Biasato, I., Capucchio, M.T., Biasibetti, E., Dezzutto, D., Meneguz, M., Placha, I., Gasco, L. and Schiavone, A. 2019. Black soldier fly defatted meal as a dietary protein source for broiler chickens: Effects on carcass traits, breast meat quality and safety. *Animal*, 13(10): 2397–2405. doi: 10.1017/S1751731119000685.

- DebMandal, M. and Mandal, S. 2011. Coconut (*Cocos nucifera* L.: Arecaceae): In health promotion and disease prevention. *Asian Pacific Journal of Tropical Medicine*, 4(3): 241–247. doi: 10.1016/S1995-7645(11)60078-3.
- Direktorat Jenderal Peternakan dan Kesehatan Hewan. 2021. *Statistik Peternakan dan Kesehatan Hewan 2023* (pp. 79-132). Kementrian Pertanian RI. Jakarta.
- Eriksson, M., Waldenstedt, L., Engström, B., and Elwinger, K. 2009. Protein supply in organic broiler diets. *Acta Agriculturae Scandinavica Section A*, 59: 211–219. <https://doi.org/10.1080/09064700903358256>.
- Fatmaningsih, R., Riyanti dan Khaira, N. 2016. Performa ayam pedaging pada sistem brooding konvensional dan thermos. *Jurnal Ilmiah Peternakan Terpadu*, 4(3): 222–229.
- Fortomaris, P., Arsenos, G., Gosi, A.T., and Yannakopoulos, A. 2007. Performance and behaviour of broiler chickens as affected by the housing system. *Archiv Fur Geflugelkunde*, 71(3): 97–104.
- Fransiska, V.C., Erina, Abrar, M., Yaman, M.A., Balqis, U. dan Jalaluddin, M. 2020. Bursa body weight ratio in ALPU chickens. *Jurnal Medika Veterinaria Februari*, 14(1): 81–87.
- Freitas, L.F.V.B.D., Sakomura, N.K., Reis, M.D.P., Mariani, A.B., Lambert, W., Andretta, I., and Létourneau-Montminy, M.P. 2023. Coccidiosis infection and growth performance of broilers in experimental trials: Insights from a meta-analysis including modulating factors. *Poultry Science*, 102(11): 1–10. <https://doi.org/10.1016/j.psj.2023.103021>.
- Hada, F.H., Malheiros, R.D., Silva, J. D.T., Marques, R.H., Gravena, R.A., Silva, V.K., and Moraes, V.M.B. 2013. Effect of protein, carbohydrate, lipid, and selenium levels on the performance, carcass yield, and blood changes in broilers. *Brazilian Journal of Poultry Science*, 15(4): 385–394. <https://doi.org/10.1590/S1516-635X2013000400014>
- Hanum, S., Budiman, H. dan Masyitha, D. 2017. Histological finding of spleen in local chicken (*Gallus gallus domesticus*) at different ages 1. *Jurnal Ilmiah Mahasiswa Veteriner*, 1(3): 552–557.
- Hasan, A.E.Z., Agustiani, I., Pratama, O.W., Khaerani, S., Mutholaah, Zulkifli, M., Andrianto, D., and Setiyono, A. 2020. Performance of broilers chickens due to the provision of raw propolis. *Indonesian Journal of Applied Research*, 1(2): 86–102.
- Hasnita, Masyitha, D. dan Budiman, H. 2017. Gambaran histologis bursa fabricius ayam kampung (*Gallus gallus domesticus*) pada umur berbeda. *Jurnal Ilmiah Mahasiswa Veteriner*, 1(3): 398–403.
- Hidayat, D. F., Widodo, A., Diyantoro, and Yuliani, M.G.A. 2020. The effect of providing fermented milk on the performance of *Gallus domesticus*. *Journal of Applied Veterinary Science And Technology*, 1(2): 43-47. doi: 10.20473/javest.v1.i2.2020.43-47.
- Hidayat, M.N., Malaka, R., Agustina, L. and Pakiding, W. 2020. Effect of probiotic *Lactobacillus paracasei* on hematology and relative weight of lymphoid organs of broiler. *IOP Conference Series: Earth and Environmental Science*, 492(1): 1-7. doi: 10.1088/1755-1315/492/1/012127.
- Hidayat, M. N., Syam, J. dan Irmawaty. 2021. Bobot relatif organ pencernaan dan limfoid ayam broiler yang diberikan temulawak, kencur, dan mineral zink.

- Jurnal Ilmu dan Teknologi Peternakan Tropis*, 8(3): 296–303. doi: 10.33772/jitro.v8i3.17445.
- Hidayat, R. and Wulandari, P. 2021. Euthanasia procedure of animal model in biomedical research. *Bioscientia Medicina: Journal of Biomedicine & Translational Research Euthanasia*, 5(6): 540–544.
- Houshmand, M., Azhar, K., Zulkifli, I., Bejo, M. H., and Kamyab, A. 2012. Effects of prebiotic, protein level, and stocking density on performance, immunity, and stress indicators of broilers. *Poultry Science*, 91(2): 393–401. <https://doi.org/10.3382/ps.2010-01050>.
- Integrated Taxonomic Information System (ITIS) online database. 2023. *Gallus gallus*. At https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=678002#null. Accessed on 5 April 2023.
- Integrated Taxonomic Information System (ITIS) online database. 2023. *Cocos nucifera* L. At https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=42451#null. Accessed on 5 April 2023.
- Jahanian, R. 2009. Immunological responses as affected by dietary protein and arginine concentrations in starting broiler chicks. *Poultry Science*, 88(9): 1818–1824. <https://doi.org/10.3382/ps.2008-00386>.
- Jamilah, Suthama, N., dan Mahfudz, L.D. 2013. Performa produksi dan ketahanan tubuh broiler yang diberi pakan *step down* dengan penambahan asam sitrat sebagai acidifier. *Jurnal Ilmu Ternak dan Veteriner*, 18(4): 251–257. <https://doi.org/10.14334/jitv.v18i4.331.A>.
- Jingga, M.E., Setiawan, H., Nuriliani, A., and Saragih, H.T. 2019. Biosupplementation of ethanolic extract of cashew leaf (*Anacardium occidentale* L.) to improve weight gain and immunity of jawa super chicken. *Acta Veterinaria Indonesiana*, 7(2): 57–65. <https://doi.org/10.29244/avi.7.2.57-65>.
- Kasio, U., Bahri, S., Sosidi, H., Khairuddin, Sumarni, N.K. dan Ridhay, A. 2021. Pembuatan konsentrat protein ampas kelapa (*Cocos nucifera* L.) bebas lemak pada berbagai konsentrasi NaOH. *KOVALEN: Jurnal Riset Kimia*, 7(3): 220–226. doi: 10.22487/kovalen.2021.v7.i3.14235.
- Kiha, A.F., Murningsih, W., dan Tristiarti. 2012. Pengaruh pemeraman ransum dengan sari daun pepaya terhadap pencernaan lemak dan energi metabolisme ayam broiler. *Animal Agricultural Journal*, 1(1): 265–276.
- Krismiyo, L., Suthama, N., dan Mangisah, I. 2020. Pemanfaatan sumber minyak berbeda terhadap pencernaan lemak dan kualitas daging ayam broiler. *Jurnal Ilmu Dan Teknologi Peternakan Tropis*, 7(1): 77–81.
- Kuietche, H.M., Kana, J.R., Defang, H.F., Tadondjou, C.D., Yemdjie, D.D.M., and Tegua, A. 2014. Effect of dietary energy level on growth performance and morphometric parameters of local barred chickens at the starter phase. *International Journal of Biological and Chemical Sciences*, 8(3): 882–890. <https://doi.org/10.4314/ijbcs.v8i3.5>.
- Kurniawan, H., Utomo, R. dan Yusiati, L. M. 2016. Kualitas nutrisi ampas kelapa (*Cocos nucifera* L.) fermentasi menggunakan *Aspergillus niger*. *Buletin Peternakan*, 40(1): 26–33. doi: <https://doi.org/10.21059/buletinpeternak.v40i1>.

- Lembayu, R. P., Armandu, A. C. and Saragih, H. 2022. Histological structure of pectoralis thoracicus, small intestine, and growth performance of broiler chicken after supplementation of peanut hulls (*Arachis hypogaea* L.). *Jurnal Ilmu-Ilmu Peternakan*, 32(1): 42–51. doi: 10.21776/ub.jiip.2022.032.01.05.
- Liu, Y.S., Zhang, Y.Y., Xing, T., Li, J.L., Wang, X.F., Zhu, X.D., Zhang, L., Gao, F., Zhang, Y.Y., Xing, T., Li, J.L., Wang, X.F., Zhu, X.D., Zhang, L., and Gao, F. 2020. Glucose and lipid metabolism of broiler chickens fed diets with graded levels of corn resistant starch. *British Poultry Science*, 61(5): 599–607. <https://doi.org/10.1080/00071668.2020.1774511>.
- Lu, X.L., Najafzadeh, M.J., Dolatabadi, S., Ran, Y.P., Gerrits van den Ende, A.H.G., Shen, Y.N., Li, C.Y., Xi, L.Y., Hao, F., Zhang, Q.Q., Li, R.Y., Hu, Z.M., Lu, G.X., Wang, J.J., Drogari-Apiranthitou, M., Klaassen, C., Meis, J.F., Hagen, F., Liu, W.D., and de Hoog, G.S. 2013. Taxonomy and epidemiology of *Mucor irregularis*, agent of chronic cutaneous mucormycosis. *Persoonia: Molecular Phylogeny and Evolution of Fungi*, 30: 48–56. <https://doi.org/10.3767/003158513X665539>.
- Maurer, A. J. 2003. Poultry: Chicken. In *Encyclopedia of Food Sciences and Nutrition* (pp. 4680–4686). Elsevier Science Ltd. Maryland.
- Morin-Sardin, S., Nodet, P., Coton, E. and Jany, J.L. 2017. Mucor: A janus-faced fungal genus with human health impact and industrial applications. *Fungal Biology Reviews*, 31(1): 12–32. doi: 10.1016/j.fbr.2016.11.002.
- Nuraisyah, A., Nugroho, S.A. and Fatimah, T. 2021. Physical characterization of coconut fruit (*Cocos nucifera* L.) in the region of Jember regency. *IOP Conference Series: Earth and Environmental Science*, 672(1): 1-8. doi: 10.1088/1755-1315/672/1/012008.
- Oláh, I., Nagy, N. and Vervelde, L. 2013. Structure of the Avian Lymphoid System. In *Avian Immunology: Second Edition* (pp. 11–44). Academic Press. San Diego. doi: 10.1016/B978-0-12-396965-1.00002-9.
- Panda, A.K., Bhanja, S.K., and Sunder, G.S. 2015. Early post hatch nutrition on immune system development and function in broiler chickens. *World's Poultry Science Journal*, 71: 285–296. <https://doi.org/10.1017/S004393391500029X>.
- Parvin, N., Mandal, T.K., Saxena, V., Sarkar, S., and Saxena, A.K. 2010. Effect of increasing protein percentage feed on the performance and carcass characteristics of the broiler chicks. *Asian Journal of Poultry Science*, 4(2): 53–59. <https://doi.org/10.3923/ajpsaj.2010.53.59>.
- Payte, G.S., Purnamasari, L., Olarve, J.P., and dela Cruz, J.F. 2022. Correlation between body weight Day Old Chick (DOC) and body weight each week from commercial farms in province of Rizal, Philippines. *Jurnal Ilmu Produksi Dan Teknologi Hasil Peternakan*, 10(3): 126–131. <https://doi.org/10.29244/jipthp.10.3.126-131>.
- Putri, A.B.S.R.N. dan Depison, G. 2020. Bobot badan dan karakteristik morfometrik beberapa galur ayam lokal. *Jurnal Ilmu dan Teknologi Peternakan Tropis*, 7(3): 256–263.
- Qaid, M., Albatshan, H., Shafey, T., Hussein, E. and Abudabos, A.M. 2016. Effect of stocking density on the performance and immunity of 1-to 14-d- old broiler chicks. *Brazilian Journal of Poultry Science*, 18(4): 683–692. doi: 10.1590/1806-9061-2016-0289.

- Rahayu, I.H.S., Darwati, S., and 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. <https://doi.org/10.29244/jipthp.7.2.75-80>
- Rahmatullah, S. N. , Effendi, Z., Mayulu, H., Ardhani, F. dan Sulaiman, A. 2018. Perbandingan Morfometrik Ayam Loal Kalimantan Timur Berdasarkan Pendekatan Analisis Diskriminan. *Journal of Tropical Animal Science*, 6(3): 817–828.
- Rasyaf, M., 2008. *Panduan Beternak Ayam Pedaging*. Penebar Swadaya. Depok.
- Sahito, H.A., Abro, M.R., Memon, A., Soomro, R.N., Soomro, H., and Ujjan, N.A. 2012. Effect of various protein source feed ingredients on the growth performance of broiler. *International Journal of Medicinal Plant Research*, 1(4): 38–44.
- Saragih, H.T.S.S.G., Salsabila, N., Deliaputri, R., Firdaus, A.B.I., and Kurnianto, H. 2024. Growth morphology of the gastrointestinal tract, pectoralis thoracicus muscle, lymphoid organ and visceral index of kampung chicken. *Journal of the Saudi Society of Agricultural Sciences*, 23: 34–41. <https://doi.org/10.1016/j.jssas.2023.08.005>.
- Sikandar, A., Zaneb, H., Younus, M., Masood, S., Aslam, A., Shah, M., and Rehman, H. 2017. Growth performance, immune status and organ morphometry in broilers fed bacillus subtilis-supplemented diet. *South African Journal of Animal Science*, 47(3): 378–388. <https://doi.org/10.4314/sajas.v47i3.14>.
- Skiada, A., Apiranthitou, M.D., Pavleas, I., Daikou, E. and Petrikkos, G. 2022. Global cutaneous mucormycosis: a systematic review. *Journal of Fungi*, 8(2): 1–17. doi: 10.3390/jof8020194.
- Somashekar, D., Venkateshwaran, G., Sambaiah, K., and Lokesh, B. R. 2002. Effect of culture conditions on lipid and gamma-linolenic acid production by mucoraceous fungi. *Process Biochemistry*, 38(12): 1719–1724. [https://doi.org/10.1016/S0032-9592\(02\)00258-3](https://doi.org/10.1016/S0032-9592(02)00258-3).
- Sugiharto, S. and Ranjitkar, S. 2019. Recent advances in fermented feeds towards improved broiler chicken performance, gastrointestinal tract microecology and immune responses: A review. *Animal Nutrition*, 5(1): 1–10. doi: 10.1016/j.aninu.2018.11.001.
- Suthama, N., Sukamto, B., Mangisah, I. and Krismiyo, L. 2021. Immune status and growth of broiler fed diet with microparticle protein added with natural acidifier. *Tropical Animal Science Journal*, 44(2): 198–204. doi: 10.5398/TASJ.2021.44.2.198.
- Syahri, Y.F. and Syahrir. 2016. Potency of dregs coconut fermentation (*Cocos nucifera*) as an alternative feed for fish and poultry 'PA-BIO'. *Agrotech Journal*, 1(1): 45–49. doi: 10.31327/atj.v1i1.198.
- Tallentire, C.W., Leinonen, I. and Kyriazakis, I. 2016. Breeding for efficiency in the broiler chicken: A review. *Agronomy for Sustainable Development*, 36(4): 66–82. doi: 10.1007/s13593-016-0398-2.
- The Global Biodiversity Information Facility (GBIF) Backbone Taxonomy. 2023. *Mucor irregularis* Stchigel, Cano, Guarro & E.Álvarez. At <https://www.gbif.org/species/7707082>. Accessed on 10 July 2024.

- Udoumoh, A.F., Nwaogu, I.C., Igwebuikwe, U.M., and Obidike, I.R. 2022. Pre-hatch and post-hatch development of the bursa of Fabricius in broiler chicken: A morphological study. *Veterinary Research Forum*, 13(3): 301–308. <https://doi.org/10.30466/vrf.2020.127741.2953>.
- Wu, B., Cui, H., Peng, X., Fang, J., Cui, W., and Liu, X. 2013. Pathology of bursae of fabricius in methionine-deficient broiler chickens. *Nutrients*, 5: 877–886. <https://doi.org/10.3390/nu5030877>.
- Wu, Q.J., Zheng, X.C., Wang, T., and Zhang, T.Y. 2018. Effects of dietary supplementation with oridonin on the growth performance, relative organ weight, lymphocyte proliferation, and cytokine concentration in broiler chickens. *BMC Veterinary Research*, 14(34): 1–6. <https://doi.org/10.1186/s12917-018-1359-6>.
- Zulfa, R., Indrat, H. dan Sugiharto. 2019. Bobot relatif organ limfoid ayam broiler yang diberi ekstrak tomat sebagai air minum dan diinfeksi bakteri *Escherichia coli*. In Sumber Daya Pertanian Berkelanjutan dalam Mendukung Ketahanan dan Keamanan Pangan Indonesia pada Era Revolusi Industri 4.0. Paper presented in Seminar Nasional dalam Rangka Dies Natalis UNS ke-43, Universitas Sebelas Maret, Surakarta, 27-28 Maret 2019 (pp. 42–48).