

## DAFTAR PUSTAKA

- Abbas, M. H., A. Arifin, S. Anwar, A. Agustar, Y. Heryandi dan Zedril. 1997. Studi ayam Kokok Balenggek di Kecamatan Payung Sakaki, Kabupaten Solok: Potensi wilayah dan genetika. Laporan Penelitian. Padang: Pusat Pengkajian Peternakan dan Perikanan. Fakultas Peternakan Universitas Andalas - Dinas Peternakan Provinsi Sumatera Barat.
- \_\_\_\_\_, dan Rusfidra. 2015. Ayam Kokok Balenggek ayam penyayi Sumatera.
- Andriano, D. 2018. Ragam suara ayam Kokok Balenggek yang dipelihara diasosiasi pecinta ayam kokok balenggek Sumatera Barat. Skripsi. Fakultas Peternakan Universitas Andalas. Padang.
- Apeldoorn, E. J., J. W. Schrama, M. M. Mashaly, and H. K. Parmentier. 1999. Effect of hormon melatonin and lighting schedule on energy metabolism in broiler chickens. *Poult. Sci*, 78: 223-227.
- Ardiansyah, T. 2023. Peforma suara Kokok Balenggek (AKB) di atas tenggeran dan tanpa tenggeran. Skripsi. Fakultas Peternakan Universitas Andalas. Padang.
- Arlina, F., D. Ahmad, T. Afriani, dan L. Madina. 2007. Karakteristik morfogenetik ayam Kokok Balenggek di Kecamatan Tigo Lurah Kabupaten Solok. *Peternakan Indonesia*, 12(1): 12-17.
- \_\_\_\_\_, H. Abbas, and S. Anwar. 2015. Qualitative And Quantitative Traits of Kokok Balenggek Chicken, the Rare Indigeneous Chicken in West Sumatera.
- \_\_\_\_\_, Rusfidra, D. Andriano, and C. Sumatri. 2020. Short communication: The type and sound diversity of kukuak balenggek chicken (*Gallus gallus domesticus*) reared in West Sumatra, Indonesia. *Biodiversitas*, 21(5): 1914-1919.
- Asmara, I. Y., N. Hilmia, and D. Garnida. 2023. The long crowing chickens in Indonesia: A review. *Agriculture*, 8(1).
- Ball, G., C. B. Castelino, D.L. Maney, D. Appeltants, and J. Balthazart. 2003. The activation of birdsong by testosterone multiple sites of action and role of ascending catecholamine projections. *Annals of the New York Academy of Sciences*, 1007: 211-231.
- Balthazart, J., T. D. Charlier, J. M Barker, T. Yamamura, and G. F. Ball. 2010. Sex steroid induced neuroplasticity and behavioral activation in birds. *European Journal of Neuroscience*, 32(12): 2116-2132.
- Banakar, A., M. Sharaf, and G. Li. 2024. Relationship between reproductive indicators and sound structure in broiler breeder roosters. *Applied Animal Behaviour Science*: 270.

- Barrett, R. K., and J. S. Takahashi. 1995. Temperature compensation and temperature entrainment of the chick pineal cell circadian clock. *Journal of Neuroscience*, 75.
- Bentley, G. E., T. J. Vant Hof, and G. F. Ball. 1999. Seasonal neuroplasticity in the songbird telencephalon: A role for hormone melatonin. *Proc. Natl. Acad. Sci. USA*, 96: 4674-4679.
- Binkley S., E. Kluth, and M. Menaker. 1971. Pineal locomotor activity: levels and arrhythmia in sparrows. *J Comp Physiol*, 77: 163-169.
- Brainard, M., and A, J, Doupe. 2002. What songbirds teach us about learning. *Nature*, 417: 351358
- Brown, S. D., and S. W. Bottjer. 1993. Testosterone induced changes in adult canary brain are reversible. *Journal of Neurobiology*, 24(5): 627-640.
- Brzezinski, A. 1997. Melatonin in Humans. *New England Journal of Medicine*, 336(3): 186-195.
- Bugiwati. S. R. A, and F. Ashari. 2013. Crowing sound analysis of Gaga chicken : local chicken from south Sulawesi Indonesia. *Internasional Jounal of Plant. Animal and Environment Science*, 3:163-168.
- \_\_\_\_\_, M. I. A. Dagong and T. Tokunaga. 2020. Crowing characteristics of native singing chicken breeds in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 492(1).
- Carolina, F.V., and M. Gahr. 2018. Androgen and estrogen sensitivity of bird song: a comparative view on gene regulatory levels. *Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology*, 204(1): 113-126.
- Catchpole C. K and Slater. P, J, B. 2008. *Bird Song: Biological Themes and Variations*. 2nd ed. Cambridge University Press
- Campbell dan A, Neil. 2004. *Biologi*. Edisi Kelima, Jilid 3. Jakarta : Erlangga.
- Cassone, V. M. 2014. Avian circadian organization: A chorus of clocks. *Molecular Neuroscience*. 35(1): 76-88.
- Claustrat, B., J. Brun., G. Chazot. 2005. The basic physiology and pathophysiology of melatonin, *Sleep Medicine Reviews*, 9 (1): 11-24.
- Datta, P. C., and M. G. King. 1978. Hormone melatonin: Effects on brain and behavior. *Neuroscience and Biobehavioral Reviews*, 4: 451-458.

- Deregnacourt, S., S. Saar, and M. Gahr. 2012. Hormon melatonin affects the temporal pattern of vocal signatures in birds. *Journal of Pineal Research*, 53(3): 24-258.
- Dioniak, S and P. Deviche. 2001. Effects of testosterone and photoperiodic conditional on song production and vocal control region volume in adult male dark eyes juncos (*Junco hyemalis*). *Journal Hormones and Behaviour*. Vol. 39: 95-105.
- Dittrich, F., C. Ramenda, D. Grillitsch, C. F. Vilches, M. C. Ko, M. Hertel, W. Goymann, A. T. Maat and M. Gahr. 2014. Regulatory mechanisms of testosterone stimulated song in the sensorimotor nucleus HVC of female songbirds. *BMC Neurosci*. 15: 128.
- Djunaidi, I. H., Khaeruddin, A. Pamungkas, L. Purnamasari, A. Rizkuna, A. S. Imanullah, A. F. Fanani, N. Fati, A. F. Nurhidayah, R. Yusuf, H. Singgili, W. Sulisty, dan S. Aisyah. R. 2025. *Manajemen Ternak Unggas*. Azzia Karya Bersama, Padang.
- Engvall, E., and Perlmann, P. 1971. Enzyme-linked immunosorbent assay (ELISA). Quantitative assay of immunoglobulin G. *Immunochemistry*, 8(9): 871-874.
- Elemans, C., J. Rasmussen, C. Herbst, D. Doring, S. A. Zollinger, and H. Brumm. 2015. Universal mechanisms of sound production and control in birds and mammals. *Nature Communications*, 6: 8978.
- Faluhelyi, N., and V. Csernus. 2005. The effects of periodic alteration of the temperature on the rhythmic hormone melatonin release of explanted chicken pineals. *Neuroendocrinol Lett*, 26(5): 503-510.
- Febriani, H., dan K. Manalu. 2020. Pengaruh fotoperiode terhadap berat ovarium dan jumlah folikel burung puyuh (*Coturnix coturnix japonica*). Skripsi, Fakultas Sains dan Teknologi Universitas Islam Negeri Sumatera Utara.
- Feng, N. Y., and A. H. Bass. 2014. Hormon melatonin action in a midbrain vocal acoustic network. *Journal of Experimental Biology*, 217(7): 1046-1057.
- Field, A., 2013. *Discovering Statistics Using IBM SPSS Statistics*. 4th ed. London: SAGE Publications.
- Findlay, J. W., and Dillard, R. F. 2007. Appropriate calibration curve fitting in ligand binding assays. *The AAPS journal*, 9(2): 260-267.
- Fu, Z., H. Kato, K. Sugahara, and T. Kubo. 1997. Circadian rhythm of pineal hormone melatonin in Silky Chicks. *Jpn. Poult. Sci*, 35(1).
- Fumihito, A., T. Miyaket, S. I. Sumit, M. Takadat, S. Ohno, and N. Kondo. 1994. One subspecies of the red junglefowl (*Gallus gallus gallus*) suffices as the matriarchic ancestor of all domestic breeds. *Proc. Natl. Acad. Sci. USA*, 91.

- Ginting, A. V., Hamdan, dan T. H. 2015. Identifikasi dan karakterisasi pola kokok pada ayam pelihara berdasarkan pendekatan bioakustik. *Jurnal Peternakan Integratif*, 3(2): 142-155.
- Goller, F and R. A. Suthers. 1996. Role of syringeal muscles in controlling the phonology of bird song. *Journal of Neurophysiology*, 76(1): 287-300.
- Heffner, L.J., dan D.J. Schust. 2010. *At A Glance: Sistem Reproduksi*. Edisi Kedua. Erlangga, Jakarta.
- Helm, B., T. Greives, and M. Zeman. 2024. Endocrine circadian interactions in birds: implications when nights are no longer dark. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 379.
- Hidayatullah. 2017. Karakteristik suara dan analisis suara kokok ayam kokok balenggek di UPT Fakultas Peternakan Universitas Andalas. Skripsi. Fakultas Peternakan Universitas Andalas. Padang.
- Horodincu, L., and C. Solcan. 2023. Influence of different light spectra on hormon melatonin synthesis by the pineal gland and influence on the immune system in Chickens. *Animals*, 13: 2095.
- Husmaini, Sabrina, F. Arlina, L. Suhartati, and Y. Martilova. 2022. Effect of probiotic supplementation lactococcus plantarum and pediococcus pentasaceus with purple sweet potato media on performance and egg quality of laying hens. *Animal and veterinary sciences*, 10(9): 2075-2080.
- Jatmiko. 2001. Studi fenotipe ayam pelung untuk seleksi tipe ayam penyanyi. Tesis. Program Pascasarjana Pertanian Bogor. Bogor.
- Jia, Y., M. Yang, K. Zhu, L. Wang, Y. Song, J. wang, W. Qin, Z. Xu, Y. Chen, and G. Liu. 2016. Hormon melatonin implantation improved the egg laying rate and quality in hens past their peak egg laying age. *Scientific Reports*, 6:39799.
- Kalem, H. A. 2024. Denizliirki horozlarin otus ozellikleri. Tesis, Turki.
- Kaczor, T. 2010. An overview of melatonin and breast cancer. *Natural Medicine Journal*, 2 (10).
- Kepmentan. 2011. Surat Keputusan Menteri Pertanian No. 2919/Kpts/OT.140/6/2011, tentang penetapan rumpun ayam kokok balenggek.
- Kurnianto, E. 2010. Ilmu Pemuliaan Ternak. Lembaga Pengembangan dan Penjaminan Mutu Pendidikan. Universitas Diponegoro. Semarang.

- Lequin R. M. 2005. Enzyme immunoassay (EIA)/ enzyme-linked immunosorbent assay (ELISA). *Clinical chemistry*, 51(12): 2415-2418.
- Liandy, D., D. Garnida, dan I. Yudha Asmara. 2016. Identifikasi karakteristik suara ayam Kokok Balenggek jantan dewasa di kabupaten solok sumatera barat.
- Liou, S. S., L. A. Cogburn, and H. V. Biellier. 1987. Photoperiodic regulation of plasma hormon melatonin levels in the laying chicken (*Gallus domesticus*). *General and comparative endocrinology*, 67: 221-226.
- Lundberg, A. and R.V. Alatalo. 1992. *The Pied Flycatcher*. Poyser Monographs.
- Madison, F. N., M. L. Rouse, J. Balthazart, and G. F. Ball. 2015. Reversing song behavior phenotype: Testosterone driven induction of singing and measures of song quality in adult male and female canaries (*Serinus canaria*). *General and Comparative Endocrinology*, 215: 61–75.
- Marler, P and A. J. Doupe. 2000. Singing in the brain. *Journal Procidia*, 97 (7) : 2965-2967.
- McCormick, K., S, Jesus, P, Jon, and W, Andrew. 2017. *SPSS Statistics For Data Analysis And Visualization*. Wiley.
- Migut, B, R., and Paprocka, J. 2020. Melatonin measurement methods and the factors modifying the results. A systematic review of the literature. *International Journal of Environmental Research and Public Health*, 17(6): 1916.
- Mufarid, H. 1990. *Beternak Ayam Hutan*, Cetakan 4. Penebar Swadaya, Jakarta.
- Nemeth, E., N. Pieretti, S. A. Zollinger, N. Geberzahn, J. Partecke, A. C. Miranda, and H. Brumm. 2013. Bird song and anthropogenic noise: Vocal constraints may explain why birds sing higher frequency songs in cities. *Proceedings of the Royal Society B: Biological Sciences*, 280.
- Nottebohm, F. 2005. The neural basis of birdsong. *PLoS Biology*, 3(5): 759-761.
- Podos, J., Sarah K. Huber, and B. Taft. 2004. Bird Song: the interface of evolution and mechanism. *Annual review ecology, evolution, and systematics*. 35:55-87.
- Prawira, A. P. 2014. *Struktur anatomi syrinx pada ayam ketawa*. Skripsi. Fakultas kedokteran, Universitas Hasanuddin, Makassar.
- Prayitno, D. 2004. *Pencahayaan Sebagai Upaya Pencegahan Cekaman Pada Unggas Tropis Berwawasan Animal Welfare*. Pidato Pengukuhan Guru Besar, Universitas Diponegoro.

- Prusik, M., and B. Lewczuk. 2020. Diurnal rhythm of plasma hormon melatonin concentration in the domestic turkey and its regulation by light and endogenous oscillators. *Animals*, 10(4): 678.
- Putra, F. A. 2021. Performa suara Ayam Kokok Balenggek yang dipelihara di peternakan Kharisma Farm. Skripsi. Fakultas Peternakan, Universitas Andalas. Padang.
- Putri, M. G. T., L. Wijaya, dan P. K. Sasmita. 2015. Hormon melatonin sebagai antipenuaan kulit akibat sinar ultraviolet. *Damianus journal of medicine*, 14(1): 67-69.
- Rahman, B. A. 2025. Performa suara kokok ayam Kokok Balenggek (AKB) di atas tenggeran dalam kandang dan di luar kandang. Skripsi. Fakultas Peternakan Universitas Andalas. Padang.
- Relly, S. A. 2018. Performa ayam Kokok Balenggek pada lomba kemerduan suara ayam kokok balenggek di Kabupaten Solok. Skripsi. Fakultas Peternakan Universitas Andalas. Padang.
- Riters L. V. 2012. The role of motivation and reward neural systems in vocal communication in songbirds. *Frontiers in neuroendocrinology*, 33(2): 194-209.
- Rohman, A. 2016. Performans suara kokok ayam Kokok Balenggek yang dipelihara di UPTD BPPMT Dinas Provinsi Sumatera Barat. Skripsi. Fakultas Peternakan Universitas Andalas. Padang.
- Rohman, H. 2024. Performa suara ayam Kokok Balenggek generasi pertama (g1) di UPT Fakultas Peternakan Universitas Andalas. Skripsi. Fakultas Peternakan, Universitas Andalas. Padang.
- Rukmana, R. 2003. Ayam Buras : Intensifikasi dan Kiat Pengembangan. Kanisius: Yogyakarta.
- Rusfidra. 2004. Karakterisasi sifat-sifat fenotipik sebagai strategi awal konservasi ayam Kokok Balenggek di Sumatera Barat. Disertasi. Sekolah Pascasarjana Institut Pertanian Bogor, Bogor.
- \_\_\_\_\_. 2005. Ayam Kokok Balenggek; ayam penyanyi dari ranah minang. <http://.Sumbarprov.go.id>. Diakses Tanggal 9 September 2025, 10:50 WIB. Padang.
- \_\_\_\_\_. 2006. Pengembangan Riset Bioakustik di Indonesia: Studi pada ayam Kokok Balenggek, Ayam Pelung dan Ayam Bekisar. Seminar nasional MIPA 2006. Universitas Negeri Yogyakarta, Yogyakarta.

- \_\_\_\_\_, Y. Y. Tumatra, M. H. Abbas, Y. Heryandi, and F. Arlina. 2012. Identification of bioacoustic marker of Kokok Balenggek *song fowl* inside a captive breeding farm in “Agutalok” Solok regency, indonesia. *Jurnal peternakan indonesia*, 14(1): 303-307.
- \_\_\_\_\_, Y. Y. Tumatra, M. H. Abbas, Y. Heryandi, and F. Arlina. 2014. Characterization of number of crow and qualitative marker of Kokok Balenggek *song fowl* inside a captive breeding farm in Solok regency, West Sumatera province, Indonesia. *International Journal of Poultry Science*, 13(6): 343-346.
- \_\_\_\_\_. 2015. Ayam Kokok Balenggek Kajian Biokustik, Strategi Pengembangan dan Konservasi. Press, Padang.
- Sakata, J. T., and Vehrencamp, S. L. 2012. Integrating perspectives on vocal performance and consistency. *The Journal of experimental biology*, 215(2): 201-209.
- Schober, P., C. Boer and L. A. Schwarte. 2018. Correlation coefficients: appropriate use and interpretation. *Anesthesia and Analgesia*, 126 (5): 1763-1768.
- Seltmann, S., L. Trost, A. T. Maat, and M. Gahr. 2016. Natural hormon melatonin fluctuation and its minimally invasive simulation in the zebra finch. *PeerJ*, 4:1939.
- Shimmura, T., and T. Yoshimura. 2013. Circadian clock determines the timing of rooster crowing. *Current Biology*, 23(6).
- Sigfienza, A. F., J. M. Recio, M. Sanchez, and M. T. Agapito. 1988. Endogenous regulation of the pineal hormon melatonin secretion in *Gallus domesticus*. *Journal of Comparative Physiology B*, (158): 381-386.
- Song, Y., and M. Yoon. 2025. Hormon melatonin effects on animal behavior: circadian rhythm, stress response, and modulation of behavioral patterns. *Journal of Animal Science and Technology*, 67(1): 1-16.
- Suthers, R., F. Goller, and C. Pytte. 1999. The neuromuscular control of birdsong. *Philos Trans R Soc Lond B Biol Sci*, 354 (1385): 927-939.
- Syah, M. I. A. 2022. Analisis suara kokok ayam Kokok Balenggek generasi induk (g0) di UPT Peternakan Fakultas Peternakan Universitas Andalas. Skripsi. Fakultas Peternakan, Universitas Andalas. Padang.
- Syamsul, T. D., dan R. Natzir. 2023. Anatomi Fisiologi Sistem Endokrin. Tahta Media, Makassar.
- Tarigan, N. dan Hermanto. 1991. Bekisar: Pemeliharaan dan Pengembangbiakan Secara Modern. Kanisius, Yogyakarta.

- Tarmudji. 2005. Respiratory diseases in poultry clinical and pathological aspects and their occurrence in Indonesia. *Wartazoa*, 15(2): 72-83.
- Tsudzuki, M. 2003. Japanese native chickens. Dalam: Chang, H.L. and Y. C. Huang. The relationship between indigenous Animals and Human in APEC Region. The Chinese Society of Animal Sciences. Chinese Taipei: 91-116.
- Utomo, D. W., Suprpto, dan N. Hidayat. 2017. Pemodelan sistem pakar diagnosis penyakit pada sistem endokrin manusia dengan metode Dempster Shafer. *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*, 1(9): 893-903.
- Wang, G., C. E. Harpole, A. K. Trivedi, and V. M. Cassone. 2012. Circadian regulation of bird song, *call*, and locomotor behavior by pineal hormon melatonin in the zebra finch. *Journal of Biological Rhythms*, 27(2): 145-155.
- Yang, Y., W. Cong, J. Liu, M. Zhao, P. Xu, W. Han, D. Wang, and R. Zhao. 2022. Constant light in early life induces fear related behavior in chickens with suppressed hormon melatonin secretion and disrupted hippocampal expression of clock and BDNF associated genes. *Journal of Animal Science and Biotechnology*, 13(1).
- Young, J. Z. 1981. *The Life of Vertebrata*. Ed. Ke-3. Oxford: Clarendon Press.
- Yulianasari, N. 2018. Pengaruh hormon melatonin terhadap bone remodelling. *Proceeding Apkkm Ke-6 Fakultas Kedokteran Universitas Muhammadiyah Surabaya*. Surabaya.
- Yuniko, M. 1993. Ayam kokok balenggek. Makalah pada Pertemuan Aplikasi Paket Teknologi Pertanian Sub Sektor Peternakan. 2-5 Februrari 1993. Bukittinggi.
- Zeman, M., J. Buyse, D. Lamosova, I. Herichova, and E. Decuyper. 1999. Perinatal development of circadian hormon melatonin production in domestic chicks. *Journal of Pineal Research*, 26: 28-34.
- Zeitler, J. M., Dijk, D. J., Kronauer, R. E., Brown, E. N. and Czeisler, C. A. 2000. Sensitivity of the human circadian pacemaker to nocturnal light: melatonin phase resetting and suppression. *The Journal of Physiology*, 526(3): 695-702.
- Zhao, R. X., C. H. Cai, P. Wang, L. Zheng, J. S. Wang, K. X. Li, W. Liu, X. Y. Guo, X. A. Zhan, and K. Y. Wang. 2019. Effect of night light regimen on growth performance, antioxidant status and health of broiler chickens from 1 to 21 days of age. *Asian Australasian Journal of Animal Sciences*, 32(6): 904-911.

\_\_\_\_\_, Y. Bai, F., and Yang. 2024. Melatonin in animal husbandry: functions and applications. *Frontiers in veterinary science*, 11, 1444578.

Zimmerman, N., and M. Menaker. 1979. The pineal gland: a pacemaker within the circadian system of the house sparrow. *Proc Natl Acad Sci Usa*, 76: 999-1003.

