



DAFTAR PUSTAKA

- Abbas, A., Paly, M. B., dan Rifaid, R. 2021. Karakteristik Telur Berdasarkan Umur Ayam dan Ransum yang Diberikan. *Journal of Tropical Animal and Veterinary Science*. 11(1) : 68.
- Abbasi, M., M. Zaghraria., M. Ganjhanloa, and S. Khalaji. 2014. Is dietary iron requirement of broiler breeder hens at the late stage of production cycle influenced by phytase supplementation. *Journal of Applied Animal Research*. 43 (2) : 1-11.
- Alagawany, M., Elnesr, S. S., Farag, M. R., Tiwari, R., Iqbal Yatoo, M., Karthik, K., dan K. Dhama. 2020. Nutritional significance of amino acids, vitamins and minerals as nutraceuticals in poultry production and health-A comprehensive review. *Veterinary Quarterly*. 1–45.
- Alfauzi, R. A dan Hidayah, N. 2022. Reviu: Itik Magelang sebagai itik lokal potensial dan salah satu alternatif sumber protein hewani. *The 3rd National Conference of Applied Animal Science 2022*. 23-28.
- Alfian, Dasrul, dan Azhar. 2017. Jumlah eritrosit, kadar hemoglobin dan nilai hematokrit pada ayam bangkok, ayam kampung dan ayam peranakan. *Jurnal Ilmiah Mahasiswa Veteriner*. 1(3) : 533–539.
- Andrews, N. C. 2010. A Cell's Sense of Iron. *Science*, 327(5963), 662-663.
- Ariyani, E. 2006. Penetapan Kandungan Kolesterol dalam Kuning Telur pada Ayam Petelur. *Balai Penelitian Ternak*. Bogor.
- Arthur, J. R. 1999. The Role of Selenium in Thyroid Hormone Metabolism. *Endocrine Reviews*, 20(2), 185–196.
- Atmaja, Y. N. D., Siswanto., Erwanto, dan M. Hartono. 2023. Profil hematologi (eritrosit, hemoglobin, dan pcv) pada ayam kampung betina yang diberi sambiloto. *Jurnal Riset dan Inovasi Peternakan*. 7 (2) : 237-243.
- Bain, M. M. 1990. Eggshell strength: a mechanical / ultrastructural evaluation. April.
- Baker, T. 2018. The Earth's Crust: Composition and Structure. In *The Encyclopedia of Earth Sciences Series*. Springer.
- Benoist, B., McLean, E., Egli, I., dan Cogswell, M. 2008. Worldwide Prevalence of Anaemia 1993–2005: WHO Global Database on Anaemia. World Health Organization.
- Brown R., P. Sweeny, and E. Moran Jr. 1982. Collagen levels in tissues from selenium deficient ducks. *Comp. Biochem. Phys. A*. 72 : 383-389.
- Cao, J., Zhu, J., Zhou, Q., Zhao, L., Zou, C., Guo, Y., Curtin, B., Ji, F., Liu, B., dan Yu, D. 2023. Efficacy evaluation of novel organic iron complexes in laying



- hens: effects on laying performance, egg quality, egg iron content, and blood biochemical parameters. *Animal Bioscience*. 36(3) : 498–505.
- Chen W., H. Zhang., S. Wang., D. Ruan., X. Xie., D. Yu, and Y. Lin. 2015. Estimation of dietary selenium requirement for Chinese egg-laying ducks. *Anim. Prod. Sci.* 55 : 1056-1063.
- Chen, Y. J., Cho, J. H., Yoo, J. S., Wang, Y., Huang, Y., dan Kim, I. H. 2008. Evaluation of 5-aminolevulinic acid on serum iron status, blood characteristics, egg performance and quality in laying hens. *Asian-Australasian Journal of Animal Sciences*. 21(9) : 1355–1360.
- Collins, J. F., C. A. Franck., K. V. Kowdley, and F. K. Ghishan. 2005. Identification of differentially expressed genes in response to dietary iron deprivation in rat duodenum. *Am. J. Gastroenterol.* 288 : G964-G971.
- Colville, T dan J. M. Bassert. 2008. *Clinical Anatomy and Physiology for Veterinary Technician*. Missouri: Elsevier.
- Davidson, K. 2013. The Role of Iron in Human Health. *Journal of Nutrition and Metabolism*. 2013 : 794042.
- de Verdal, H., Narcy, A., Bastianelli, D., Chapuis, H., Même, N., Urvoix, S., Le Bihan-Duval, E., dan Mignon-Grasteau, S. 2011. Improving the efficiency of feed utilization in poultry by selection. 1. Genetic parameters of anatomy of the gastro-intestinal tract and digestive efficiency. *BMC Genetics*. 12.
- Djuragic, O., Levic, J., Sredanovic, S., Ivanov, D., Kokic, B. 2009. Importance of carrier for feed premixes production važnost nosača u proizvodnji predsmeša. *PTEP*. 13 (4) : 324-327.
- Dozier, I. A., Behnke, K. C., Gehring, C. K., dan Branton, S. L. 2010. Effects of feed form on growth performance and processing yields of broiler chickens during a 42-day production period. *Journal of Applied Poultry Research*. 19(3) : 219–226.
- Duka, M. Y., Hadisutanto, B., dan Helda. 2015. Status hematologis broiler umur 6 minggu yang diberi ransum komersial dan probio fmplus. *Jurnal Kajian Veteriner*. 3(2) : 165–174.
- El-Husseiny, O., S. A. Fayed, and I. I. Omara. 2009. Response of layer performance to iron and copper pathway and their interactions. *Australian Journal of Basic and Applied Sciences*. 3 (4) : 4199-4213.
- Figueiredo, J. S., Almeida, J. R., dan Mello, J. S. 2021. Effects of Iron Supplementation on Egg Production and Quality in Laying Hens. *Poultry Science*. 100(2) : 123-130.
- Finley, J. W. 2006. Bioavailability of selenium from foods. *Nutrition Reviews*. 64 : 146-151.



Fitasari, E., K. Reo, dan N. Niswi. 2016. Penggunaan kadar protein berbeda pada ayam kampung terhadap penampilan produksi dan kecernaan protein. *Jurnal Ilmu-Ilmu Peternakan*. 26 (2) : 73-83.

Fitro, R., D. Sudrajat, dan E. Dihansih. 2015. Performa ayam pedaging yang diberi ransum komersial mengandung tepung ampas kurma sebagai pengganti jagung. *Jurnal Peternakan Nusantara*. 1 (1) : 1-8.

Fleming, D. J. 2001. Interactions between Copper, Iron, and Zinc in the Intestine and Their Effects on Absorption. *Journal of Nutrition*, 131(4), 1334S–1341S.

Garrick, M. D., dan Friedman, D. B. 2006. Iron Transport and Storage: Overview of Iron Homeostasis and Iron-Related Disorders. *Biometals*. 19(1) : 43-49.

Golubkina, N. A., dan Papazyan, T. T. 2006. Selenium distribution in eggs of avian species. *Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology*. 145(34) : 384–388.

Gou, Z., Q. Fan., L. Li., Z. Jiang., X. Lin., X. Cui., Y. Wang., C. Zheng, and S. Jiang. 2020. Effects of dietary iron on reproductive performance of Chinese Yellow broiler breeder hens during the egg-laying period. *Poultry Science*. 99 (8) : 3921-3929.

Gunnarson, M. 2012. Avian hematology. Institute for Clinical Chemistry Swedish Agricultural University. Swedish.

Guo, X. Y., and I. H. Kim. 2012. Impacts of limestone multi-particle size on production performance, egg shell quality, and egg quality in laying hens. *Asian-Australasian Journal of Animal Sciences*. 25 (6): 839.

Guyton, A. C. dan J. E. Hall. 2010. Textbook of Medical Physiology. 12th Edition. W. B. Saunders Company, Philadelphia

Hartono, T. A., Puger, A. W., dan Nuriyasa, I. M. 2014. The eggs quality of five different plumage colours of kampung chicken. *Peternakan Tropika*. 2 : 153–162.

Hasan, M., Rampai, O. S., Sayuti, A., Daud, R., Harris, A., Armansyah TR, T., dan Gholib, G. 2021. Total level of hemoglobin and hematocrit value of broiler chickens after given moringa leaves fermented flour (*moringa oleifera*) in feed. *Jurnal Medika Veterinaria*. 14(2) : 139–146.

Hentze, M. W., Muckenthaler, M. U., dan Galy, B. 2010. Two to Tango: Regulation of Mammalian Iron Metabolism. *Cell*. 142(1) : 24-38.

Hill, C. H. 1981. The Role of Mineral Interrelationships in Nutrition. *Journal of Animal Science*, 52(3), 800–813.

Hintono, A., Astuti, M., Wuryastuti, H., Rahayu, E. S., Teknologi, F., Universitas, P., dan Mada, G. 2007. Oksitetrasiklin pada ayam terhadap kandungan residu



oksitetrasiklin dan aktivitasnya dalam telur. *J.Indon.Trop.Anim.Agric.* 32(1) : 245–250.

Idayanti, R. W., A. Rahayu., S. Ratnawati, dan N. Anindyawati. 2021. Perilaku peternak dalam pemeliharaan itik magelang guna menghasilkan ternak yang aman, sehat dan produktif di desa ngadirojo kecamatan secang, kabupaten magelang. *Jurnal Ekonomi Pertanian dan Agribisnis.* 5 (4) : 1086-1094.

Ilmia N, Tintin K. V. W. 2014. Pengaruh lama penyimpanan terhadap kualitas internal telur ayam ras pada fase produksi pertama. *Jurnal Ilmiah Peternakan Terpadu.* 2(2) : 16–21.

Invernizzi, G., Agazzi, A., Ferroni, M., Rebucci, R., Fanelli, A., Baldi, A., Dell'Orto, V., dan Savoini, G. 2013. Effects of inclusion of selenium-enriched yeast in the diet of laying hens on performance, eggshell quality, and selenium tissue deposition. *Italian Journal of Animal Science.* 12(1) : 1–8.

Ismoyowati, I., dan Sumarmono, J. 2019. Duck production for food security. *IOP Conference Series: Earth and Environmental Science.* 372(1). 1-11.

Kaya, A., Lee, B. C., dan Gladyshev, V. N. 2015. Regulation of protein function by reversible methionine oxidation and the role of selenoprotein MsrB1. *Antioxidants and Redox Signaling.* 23(10) : 814–822.

Kementerian Pertanian. 2013. Keputusan Menteri Pertanian Nomor 701/Kpts/PD.410/2/2013. Tentang Penetapan Rumpun Itik Magelang (pp. 1–21). pp. 1–21. Jakarta, Indonesia.

Kunnath, S. K, and A. P. Kumar. 2018. Duck farming an alternative to poverty alleviation. *Indian Farmer.* 3 (5) : 258-268.

Kuttappan, V. A., Huff, G. R., Huff, W. E., Hargis, B. M., Apple, J. K., Coon, C., dan Owens, C. M. 2013. Comparison of hematologic and serologic profiles of broiler birds with normal and severe degrees of white striping in breast fillets. *Poultry Science.* 92(2) : 339–345.

Lestari, T. A., A. Jumiono., M. Z. Fanani, dan S. Akil. 2022. Proses pengolahan telur beku. *Jurnal Panggang Halal.* 4 (1) : 35-39.

Lewis, P. D., M. Ciacciariello., N. A. Ciccone., P. J. Sharp, and R. M. Gous. 2005. Lighting regimens and plasma LH and FSH in broiler breeders br. *Poult. Sci.* 46 : 349-353.

Li, R. 2008. The Effect of Low Temperature and Selenium on Growth and Biochemical Indexes of Breeding Ducks in Cage. Master Diss. *Northeast Agricultural University.* Haerbin.

Lonero, A., Pires Rosa, A., Golin Luiggi, F., Oliveira Fernandes, M., Guterres, A., Moura, S. de, Hettwer Pedroso, N., dan Santos, N. 2020. Effect of supplementation with organic and inorganic minerals on the performance, egg



and sperm quality and, hatching characteristics of laying breeder hens. *Animal Reproduction Science*. 215 : 1-9.

Ludwiczek, S., I. Theurl., E. Artner-Dworzak., M. Chorney, and G. Weiss. 2004. Duodenal HFE expression and hepcidin levels determine body iron homeostasis: Modulation by genetic diversity and dietary iron availability. *J. Mol. Med.* 82 : 373–382.

Lukito, D. S., Suharto, dan Isroli. 2020. Profil eritrosit ayam kampung super yang diberi pakan mengandung tepung biji pepaya dan daun pepaya yang difermentasi dengan *Chrysonilia crassa*. Seminar Nasional Pengelolaan Sumber Daya Alam Berkesinambungan di Kawasan Gunung Berapi. 1-5.

Lutfiasari, D., Y. G. Pradian, dan A. Vemidella. 2020. Pengaruh konsumsi telur ayam ras terhadap kadar hemoglobin pada ibu hamil. *Jurnal Bidan Pintar*. 1 (1) : 12-20.

Lynch, S. R., dan Thompson, J. 2009. Iron Bioavailability. In J. F. A. van der Meer (Ed.), *Bioavailability of Nutrients in Food*. CRC Press.

Lyons, G. H., J. C. R. Stangoulis, and R. D. Graham. 2004. Exploiting micronutrient interaction to optimize biofortification programs: The case for inclusion of selenium and iodine in the HarvestPlus program. *Nutrition Reviews*. 62 (6) : 247-252.

Mabe, I., Rapp, C., Bain, M. M., dan Nys, Y. 2003. Supplementation of a corn-soybean meal diet with manganese, copper, and zinc from organic or inorganic sources improves eggshell quality in aged laying hens. *Poultry Science*, 82(12), 1903–1913.

Mackenzie, E. L., K. Iwasaki, and Y. Tsuji. 2008. Intracellular iron transport and storage: from molecular mechanisms to health implications. *Antioxid. Redox. Signal.* 10 : 997-1030.

Maghfiroh, K., I. Mangisah dan V. D. Y. B. Ismad. 2012. Pengaruh penambahan sari jeruk nipis (*Citrus aurantifolia*) dalam ransum terhadap kecernaan protein kasar dan retensi nitrogen pada itik magelang jantan. *Animal Agriculture Journal*. 1 (1) : 669-683.

Mahfudz. L. D, S. Kismati, dan T.A. Sarjana. 2005. Fenotipik dari Itik magelang yang Produktif. Prosiding Seminar Nasional Teknologi Peternakan dan Veteriner. Bogor. 779-785.

Maimunah., dan Rokhman, T. 2018. Klasifikasi Penurunan Kualitas Telur Ayam Ras Berdasarkan Warna Kerabang Menggunakan Support Vector Machine. *Journal Informatics for Educator and Professionals*, 3(1), 43–52.

Maulani, N. L., Sutopo, dan E. Kurnianto. 2016. Keragaman genetik itik magelang berdasarkan lebar kalung leher melalui analisis protein plasma darah di satuan kerja itik unit banyubiru ambarawa. *Jurnal Sain Peternakan Indonesia*. 11 (1) : 23-30.



McDowell, L. R. 2003. *Minerals in Animal and Human Nutrition*. San Diego: Elsevier.

Muhammad, A. I., Mohamed, D. A., Chwen, L. T., Akit, H., dan Samsudin, A. A. 2021. Effect of selenium sources on laying performance, egg quality characteristics, intestinal morphology, microbial population and digesta volatile fatty acids in laying hens. *Animals*, 11(6).

Muharlien. 2010. Meningkatkan kualitas telur melalui penambahan teh hijau dalam pakan ayam petelur. *Jurnal Ilmu dan Teknologi Hasil Ternak*. 5 (1) : 32-37.

Necidová, L., Bursová, Š., Ježek, F., Haruštiaková, D., Vorlová, L., dan Golian, J. 2019. Effect of preservatives on the shelf-life and sensory characteristics of pasteurized liquid whole egg stored at 4°C. *Poultry Science*, 98(11), 5940–5948.

Nimalaratne, C, dan J. Wu. 2015. Hen egg as an antioxidant food commodity a review. *Nutrients*. 7 (10) : 8274-8293.

NRC. 1994. Nutrien Requirement of Poultry. *National Academy Science*: Washington.

Okruszek, A., Ksiazkiewicz, J., Wołoszyn, J., Kisiel, T., Orkusz, A., dan Biernat, J. 2006. Effect of laying period and duck origin on egg characteristics. *Archives Animal Breeding*, 49(4), 400–410. <https://doi.org/10.5194/aab-49-400-2006>

Onagbesan, O. M., S. Metayer, K. Tona, J. Williams, E. Decuypere, and V. Bruggeman. 2006. Effects of genotype and feed allowance on plasma luteinizing hormones, follicle-stimulating hormones, progesterone, estradiol levels, follicle differentiation, and egg production rates of broiler breeder hens. *Poult. Sci.* 85 : 1245-1258.

Pantaya, D., dan Utami, M. M. D. 2018. The blood haematological profile on laying hens that treated by different levels of yeast supplementation. *IOP Conference Series: Earth and Environmental Science*, 207(1).

Park, S. W., Namkung, H., Ahn, H. J., dan Paik, I. K. 2004. Production of iron enriched eggs of laying hens. *Asian-Australasian Journal of Animal Sciences*, 17(12), 1725–1728.

Park, S. Y., S. G. Birkhold, L. F. Kubena, D. J. Nisbet, and S. C. Ricke. 2003. Effect of storage condition on bone breaking strength and bone ash in laying hens at different stages in production cycles. *Poult. Sci.* 82 : 1688-1691.

Patani, A., D. Balram., V. K. Yadav., K. Y. Lian., A. Patel, and D. K. Sahoo. 2023. Harnessing the power of nutritional antioxidants against adrenal hormone imbalance-associated oxidative stress. *Frontiers in Endocrinology*. 14.

Paton, N. D., Cantor, A. H., Pescatore, A. J., Ford, M. J., dan Smith, C. A. 2002. The effect of dietary selenium source and level on the uptake of selenium by developing chick embryos. *Poultry Science*, 81(10), 1548–1554.



- Pine, M., B. Lee, R. Dearth, J. K. Hiney, and W. L. Dees. 2005. Manganese acts centrally to stimulate luteinizing hormone secretion: a potential influence on female pubertal development. *Toxicol Sci.* 85 : 880-885.
- Pollack, A. Z., E. F. Schisterman, L. R. Goldman, S. L. Mumford, P. S. Albert, R. L. Jones, and J. Wactawski-Wende. 2011. Cadmium, lead, and mercury in relation to reproductive hormones and anovulation in premenopausal women. *Environ. Health Perspect.* 119 : 1156-1161.
- Purwaningsih, D., Anwar Djaelani, M., dan Saraswati, T. R. 2016. Kualitas Telur Ayam Ras Setelah Pemberian Olesan Lidah Buaya (Aloe vera) dan Lama Penyimpanan Waktu yang Berbeda. *Buletin Anatomi Dan Fisiologi*, 24(1), 13–20.
- Purwantini, D., Santosa, R. O. S. S. A., Susanto, A., dan Candrasari, D. P. 2021. Performans produksi berdasarkan tipe persilangan yang berbeda pada itik tegal dengan magelang. 8 : 24–25.
- Rahayu, N., dan Widjastuti, T. 2019. Egg Weight and Hen Day Production (HDP) Layer Commercial at High and Low Altitude. *Journal of Physics: Conference Series*, 1179(1), 0–5.
- Rahayu, T. P., L.Waldi, dan M. S. I. Pradipta. 2019. Kualitas ransum itik magelang pada pemeliharaan intensif dan semi intensif terhadap bobot badan dan produksi telur. *Bulletin of Applied Animal Research*. 1 (1): 8-14.
- Rasyaf, I. P. 2002. Formulasi, Pemberian dan Evaluasi Pakan Unggas. Forum Komunikasi Hasil Penelitian Bidang Peternakan. Yogyakarta.
- Riyanti, Prabowo, D., Nova, K., dan Septinova, D. 2022. Jurnal Ilmiah Peternakan Terpadu. *Jurnal Ilmiah Peternakan Terpadu*, 10(March), 92–100.
- Rofiq, M. A., Kurnianto, dan Suprijatna, E. 2018. Seleksi itik magelang jantan berdasarkan sifat produksi dan reproduksi keturunannya di balai pembibitan dan budidaya ternak non ruminansia di banyubiru, ambarawa, kabupaten semarang. *Agromedia: Berkala Ilmiah Ilmu-Ilmu Pertanian*, 36(1) : 47-56.
- Rosita, A., A. Mushawwir, dan D. Latipudin. 2015. Status hematologis (eritrosit, hematokrit, dan hemoglobin) ayam petelur fase layer pada temperature humidity index yang berbeda. *Students e. Journal*. 4 (1) : 1-10.
- Sahin, K., Onder, F., dan Kucuk, O. 2018. Role of Dietary Iron in Egg Production and Quality of Laying Hens. *Poultry Science*, 97(4), 1230-1236.
- Saldanha, E. S. P. B., Garcia, E. A., Pizzolante, C. C., Faittarone, A. B. G., da Sechinato, A., Molino, A. B., dan Laganá, C. 2010. Effect of organic mineral supplementation on the egg quality of semi-heavy layers in their second cycle of lay. *Revista Brasileira de Ciencia Avicola / Brazilian Journal of Poultry Science*, 11(4), 215–222.



- Salim, M. A., S. Lestari, dan N. Sjafani. 2022. Pengaruh pemberian ekstrak daun kemangi (*Ocimum sanctum* L) terhadap produksi telur ayam buras. *Jurnal Inovasi Penelitian*. 2 (8) : 2735-2739.
- Sari, R., Y. Septiasari., Fitriyana, dan N. Saputri. 2020. Pengaruh konsumsi telur terhadap peningkatan kadar hemoglobin pada remaja putri yang mengalami anemia. *Jurnal Wacana Kesehatan*. 5 (2) : 574-582.
- Sastrawan. I P. L, Astawa, A., dan Mahardika, I. G. 2020. Pengaruh Suplementasi (Asam Amino, Mineral, dan Vitamin) Melalui Air Minum terhadap Kualitas Telur yang Disimpan sampai 21 Hari. *Jurnal Peternakan Tropika*, 8(1), 189–201.
- Scheideler, S. E., Weber, P., dan Monsalve, D. 2010. Supplemental vitamin E and selenium effects on egg production, egg quality, and egg deposition of α -tocopherol and selenium. *Journal of Applied Poultry Research*, 19(4), 354–360.
- Sholikha, M., F. C. Natasya, dan L. Puspitasari. 2021. Analisis kandungan logam timbal (pb), besi (fe) dan magnesium (mg) pada pakan ayam ras petelur dengan metode spektrofotometri serapan atom (ssa). *Jurnal Ilmu Kefarmasian*. 14 (2) : 109-113.
- SMC, H. 2021. "Multimineral Fortification of Chicken Egg by Supplementing a Combination of Sodium Selenite, Ferrous Sulphate and Zinc Sulphate in Layer Diet." *Biomedical Journal of Scientific and Technical Research*, 35(2), 27558–27567.
- Soekarto, S. T. 2013. Teknologi Penanganan dan Pengolahan Telur. Penerbit Alfabeta. Bandung.
- Sunde, R. A. 2016. Selenium regulation of the selenoprotein and non-selenoprotein transcriptomes in a variety of species. In *Selenium: Its Molecular Biology and Role in Human Health*, Fourth Edition.
- Sunde, R. A., 2006. Selenium. In: *Present Knowledge in Nutrition* 9th Edition. Washington DC: International Life Sciences Institute. 480-497.
- Surai, P. F. 2002. Selenium in poultry nutrition 2 reproduction, egg and meat quality and practical applications. *Worlds Poultry Science Journal*. 58 : 431-450.
- Surai, P. F., Kochish, I. I., Fisinin, V. I., dan Velichko, O. A. 2018. Selenium in poultry nutrition: From sodium selenite to organic selenium sources. *Journal of Poultry Science*, 55(2), 79–93.
- Suselowati, T., Kurnianto, E., dan Kismiati, S. 2019. Hubungan Indeks Bentuk Telur dan Surface Area Telur terhadap Bobot Telur, Bobot Tetes, Persentase Bobot Tetes dan Mortalitas Embrio pada Itik Pengging. *Sains Peternakan*, 17(2), 24.



- Tako, E., M. A. Rutzke, and R. P. Glanth. 2010. Using the domestic chicken (*Gallus gallus*) as an in vivo model for iron bioavailability. *Poultry Science*. 89 (3) : 514-521.
- Taschetto, D., Vieira, S. L., Angel, C. R., Stefanello, C., Kindlein, L., Ebbing, M. A., dan Simões, C. T. 2017. Iron requirements of broiler breeder hens. *Poultry Science*, 96(11), 3920–3927.
- Tufarelli, V., Ceci, E., dan Laudadio, V. 2016. 2-Hydroxy-4-Methylselenobutanoic Acid as New Organic Selenium Dietary Supplement to Produce Selenium-Enriched Eggs. *Biological Trace Element Research*, 171(2), 453–458.
- Underwood, E. J., dan Suttle, N. F. 2001. *The Mineral Nutrition of Livestock*. Wallingford, UK: CABI Publishing.
- Utomo, R., A. Agus., C. T. Noviandi., A. Astusi, dan A. R. Alimon. 2021. Bahan Pakan dan Formulasi Ransum. Gajah Mada University Press. Yogyakarta.
- Wang, H., W. Gao., L. Huang., J. J. Shen., Y. Liu., C. H. Mo., L. Yang, and Y. W. Zhu. 2020. Mineral requirements in ducks: an update. *Poult Sci*. 99 (12) : 6764-6773.
- Wang, X. 2017. Iron Supplementation Improves Eggshell Quality by Enhancing Calcium Metabolism in Laying Hens. *Poultry Science*, 96(4), 1155–1163.
- Wardhana, A. H., Kencanawati, E., dan Jatmiko, dan C. 2001. Pengaruh pemberian sediaan patikan kebo (*Euphorbia hirta* l) terhadap jumlah eritrosit, kadar hemoglobin, dan nilai hematokrit pada ayam yang diinfeksi dengan *Eimeria tenella*. *Jurnal Ilmu Ternak Dan Veteriner*, 6(2), 126–133.
- Wiener, G. 1994. Antagonistic Effects of Mineral Interactions in Animal Nutrition. *Animal Feed Science and Technology*, 10(1-2), 187–208.
- Wijaya, Y., Suprijatna, E., dan Kismiati, S. 2017. Penggunaan Limbah Industri Jamu dan Bakteri Asam Laktat (*Lactobacillus* sp.) sebagai Sinbiotik untuk Aditif Pakan Terhadap Kualitas Interior Telur Ayam Ras Petelur Utilization of Herbal Industry Waste and Lactic Acid Bacteria (*Lactobacillus* sp.) as Synbiot. *Jurnal Peternakan Indonesia*, 19(2), 47–54.
- Wulandari, Z, dan I. I. Arief. 2022. Review: tepung telur ayam: nilai gizi, sifat fungsional dan manfaat. *Jurnal Ilmu Produksi dan Teknologi Hasil Peternakan*. 10 (2) : 62-68.
- Xie, C., Elwan, H. A. M., Elnesr, S. S., Dong, X. Y., dan Zou, X. T. 2019. Effect of iron glycine chelate supplementation on egg quality and egg iron enrichment in laying hens. *Poultry Science*, 98(12), 7101–7109.
- Yalcin, S., Kucuk, O., dan Sahin, K. 2020. Iron Supplementation in Laying Hens: Effects on Performance and Egg Quality. *Veterinary Research Communications*, 44(1), 39-47



Yanto, S., Patang, dan, dan Program Studi Pendidikan Teknologi Pertanian, A. 2017. Pemanfaatan keong mas (*Pomacea canaliculata* L) dan limbah cangkang rajungan (*portunus pelagicus*) menjadi pakan ternak untuk meningkatkan produksi telur itik Utilization of Golden Snail (*Pomacea Canaliculata* L) and Waste Crab Shell (*Portunus Pelagicus*) To . Jurnal Pendidikan Teknologi Pertanian, 3, 137–147.

Yuwanta, T. 2004. Dasar Ternak Unggas. Kanisius. Yogyakarta.