

DAFTAR PUSTAKA

- Ahmadi, F. dan F. Rahimi. 2013. Factors affecting quality and quantity of egg production in laying hens: a review. *World Applied Science Journal*. 12(3): 372-384.
- Al-Shami, M. A., M. E. Salih dan T. E. Abbas. 2012. Effects of dietary inclusion of Alfalfa (*Medicago sativa* L.) leaf meal and Xylam enzyme on laying hens' performance and egg quality. *Research Opinions in Animal and Veterinary Sciences*. 2(1):14-18.
- Anderson, J. O. 1957. Effects of Alfalfa saponin on the performance of chicks and laying hens. *Journal of Poultry Science*. 36(4): 873-876.
- Anene, D. O., Y. Akter, P. C. Thomson, P. Groves, S. Liu dan C. J. O'Shea. 2021. Hens that exhibit poorer feed efficiency produce eggs with lower albumen quality and are prone to being overweight. *Animals Journal*. 11(10): 2986.
- Anggitasari, S., O. Sjoftan dan I. H. Djunaidi. 2016. Pengaruh beberapa jenis pakan komersial terhadap kinerja produksi kuantitatif dan kualitatif ayam pedaging. *Buletin Peternakan*. 40(3): 187-196.
- Anggorodi, R. 1985. *Kemajuan Mutakhir dalam Ilmu Makanan Ternak Unggas*. Cetakan ke-1. UI Press. Jakarta.
- Anonim. 2018. *Hy-Line Brown Commercial Layer Management Guide*. Hy-Line International.
- Anonim. 2020. <https://www.bps.go.id/indicator/24/491/1/produksi-telur-ayam-petelur-menurut-provinsi.html>. Diakses pada 2 September 2021 pukul 15.35 WIB.
- Anonim. 2020. *Lohmann Brown-Lite Layers*. Lohmann Tierzucht. Germany.
- Anonim. 2021. *Analisis Perkembangan Harga Bahan Pangan Pokok di Pasar Domestik dan Internasional*. Jakarta. Kementerian Perdagangan Republik Indonesia.
- Apostol, L., S. Iorga, C. Mosoiu, R. C. Racovita, O. M. Niculae dan G. Vlasceanu. 2017. Alfalfa concentrate-a rich source of nutrients for use in food products. *Journal of International Science Publications*. 5(1):66-73.
- Bonekamp, R. P. R. T., A. Lemme, P. J. A. Wijtten, dan J. K. W. M. Sparla. 2010. Effects of amino acids on egg number and egg mass of brown (heavy breed) and white (light breed) laying hens. *Journal of Poultry Science*. 89(3): 522-529.

- Desbruslais, A., A. Wealleans, D. Gonzalez-Sanchez dan M. di Benedetto. 2021. Dietary fibre in laying hens: a review of effects on performance, gut health and feather pecking. *World's Poultry Science Journal*, 77(4): 797-823.
- Deinum, B dan A. Maassen. 1994. Effects of drying temperature on chemical composition and in vitro digestibility of forages. *Animal Feed Science and Technology*. 46: 75-86
- Dozier III, W. A., K. C. Behnke, C. K. Gehring dan S. L. Branton. 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.
- Englmaierova, M., M. Skřivan dan T. Vit. 2019. Alfalfa meal as a source of carotenoids in combination with ascorbic acid in the diet of laying hens. *Czech Journal of Animal Science*. 64(1): 17-25.
- Ensminger, M. E. 1992. *Poultry Science (Animal Agriculture series)*. Interstate Publisher. Inc. Danville, Illinois.
- Francis, G., Z. Kareem, H. P. S. Makkar dan K. Becker. 2002. The biological action of saponins in animal systems: a review. *British Journal of Nutrition*. 88(6): 587-605.
- Gietama, B. 2005. *The Basic of Chicken Farming (In the Tropics)*. Agromisa Foundation. Wageningen, The Netherlands. 52.
- Guclu, B., K. M. Iscan, F. Uyanik, M. Eren dan A. Agca. 2004. Effect of Alfalfa meal in diets of laying quails on performance, egg quality and some serum parameters. *Archives of Animal Nutrition*. 58(3): 255-263.
- Gustira, D. E., T. Riyanti dan Kurtini. 2015. Pengaruh Kepadatan Kandang Terhadap Performa Produksi Ayam Petelur Fase Awal Grower. *Jurnal Ilmiah Peternakan Terpadu*. 3(1): 87-92.
- Hassan, I. I., A. S. Omar, M. H. Osman, M. S. Shoeib dan H. M. Azouz. 2009. Effect of dried Alfalfa meal and chromium on the performance of inhash layers. *Journal Production and Development*. 14(3): 719-746.
- Hartadi, H. 1980. *Tabel-tabel dari Komposisi Bahan Makanan Ternak untuk Indonesia*. Gamapress. Yogyakarta.
- Hewyang, B. W., dan H. R. Bird. 1953. The effect of Alfalfa saponin on the growth, diet consumption, and efficiency of diet utilization of chicks. *Journal of Poultry Science*. 33(2): 239-241.
- Hewyang, B. W., dan C. R. Thompson. 1959. Effect of Alfalfa saponin on laying chickens. *Journal of Poultry Science*. 38(4): 968-971.

- Hurnik, J. F., J. D. Summers, B. S. Reinhart dan E. M. Swierczewska. 1977. Effect of age on the performance of laying hens during the first year of production. *Journal of Poultry Science*. 56(1): 222-230.
- Jiang, J. F., X. M. Song, X. Huang, J. L. Wu, W. D. Zhou, H. C. Zheng, dan Y. Q. Jiang. 2012. Effects of alfalfa meal on carcass quality and fat metabolism of Muscovy ducks. *British Poultry Science*. 53 (5): 681–688.
- Kim, H. S., S. M. Kim, J. J. Noh, J. I. Lee, H. J. Lee, dan C. R. Jo. 2012. Effect of age of laying hens and grade of egg shell abnormality on internal egg quality. *Journal of Animal Science and Technology*. 54(1): 43-49.
- Klita, P. T., G. W. Mathison dan T. W. Fenton. 1996. Effect of Alfalfa biological actions of saponins 601 root saponins on digestive function in sheep. *Journal of Animal Science*. 74(5):1144–1156.
- Lacefield, G. D., J. C. Henning, M. Rasnake dan M. Collins. 2011. *Alfalfa the Queen of Forage Crops*. Cooperative Extension Service. University Kentucky.
- Laudadio, V., E. Ceci, N. M. B. Lastella, M. Introna dan V. Tufarelli. 2014. Low-fiber Alfalfa (*Medicago sativa* L.) meal in the laying hen diet: effects on productive traits and egg quality. *Journal of Poultry Science*. 93(7): 1868–1874.
- Lestari, V. S., A. Natsir, S. N. Sirajuddin, K. Kasim, H. M. Ali, S. Saadah dan M. Mawardi. 2012. Factors influencing biosecurity adoption on laying hen farmers. *Journal of the Indonesian Tropical Animal Agriculture*. 37(4): 302-307.
- Liu, X. T., M. Y. Ling, Z. W. Dong dan Z. C. Qiao. 2018. Age-related changes of yolk precursor formation in the liver of laying hens. *Journal of Zhejiang University*. 19(5): 390-399.
- Liu, H. X., P. Rajapaksha, Z. Wang, N. E. Kramer dan B. J. Marshall. 2018. An update on the sense of taste in chickens: a better developed system than previously appreciated. *Journal of Nutrition and Food Sciences*. 8(2): 1-12.
- Lukanov, H. dan D. Alexieva. 2013. Trends in battery cage husbandry systems for laying hens. Enriched cages for housing laying hens. *Journal of Agricultural Science and Technology*. 5(2): 143-152.
- Mayulu, H., B. Suryanto, Sunarso, M. Christiyanto, F. I. Ballo dan Refa'i. 2009. Feasibility of complete feed based on ammoniated fermented rice straw utilization on the beef cattle farming. *Journal of The Indonesian Tropical Animal Agriculture*. 34(3): 74-78.

- Mourão, J. L., P. I. P. Ponte, J. A. M. Prates, M. S. J. Centeno, L. M. A. Ferreira, M. A. C. Soares, dan C. M. G. A. Fontes. 2006. Use of β -glucanases and β -1, 4-xylanases to supplement diets containing Alfalfa and rye for laying hens: Effects on bird performance and egg quality. *Journal of Applied Poultry Research*.15(2): 256-265.
- Najm, E. K dan Y. Cufadar. 2020. Effect of enzyme addition to diets containing different levels of Alfalfa meal on performance and egg quality parameters of laying hens. *Selcuk Journal of Agriculture and Food Sciences*. 34(1): 8-14.
- Nizhamuddien, M., Isdiantoni dan R. W. Purwati. 2019 Analisis permintaan telur konsumsi di Pasar Anom Baru Kabupaten Sumenep. *Seminar Nasional Optimalisasi Sumberdaya Lokal di Era Revolusi Industri 4.0*. 314-323.
- Nuga, O. 2019. An Application of the Two-Factor Mixed Model Design in Educational Research. *Journal Mathematical Sciences and Computing*. 4(1): 24-32.
- Okoro, V. M. O., K. E. Ravhuhali, T. H. Mapholi, E. F. Mbajorgu, dan C. A. Mbajorgu. 2017. Effect of age on production characteristics of Boschveld indigenous chickens of South Africa reared intensively. *South African Journal of Animal Science*. 47(2): 157-167.
- Patriani, P., H. Hafid, T. H. Wahyuni dan T. V. Sari. 2020. Sifat fisik daging ayam petelur afkir pada perbedaan waktu marinasi menggunakan asam potong (*Garcinia atroviridis*). *Prosiding Seminar Nasional Teknologi Peternakan dan Veteriner* 20(20): 644-652.
- Pond, W. G., D. C. Church dan K. R. Pond. 1995. *Basic Animal Nutrition and Feeding 4th Edition*. John Willey and Sons. New York.
- Ponte, P. I., I. Mendes, M. Quaresma, M. N. Aguiar, J. P. Lemos, L. M. Ferreira, M. A. Soares, C. M. Alfaia, J. A. Prates dan C. M. Fontes. 2004. Cholesterol levels and sensory characteristics of meat from broilers consuming moderate to high levels of Alfalfa. *Journal of Poultry Science*. 83(5): 810–814.
- Radović, J., D. Sokolović, dan J. J. B. A. H. Marković. 2009. Alfalfa-most important perennial forage legume in animal husbandry. *Journal of Biotechnology in Animal Husbandry*. 25(5): 465-475.
- Rahayu, N. dan T. Widjastuti. 2019. Egg weight and hen day production (HDP) layer commercial at high and low altitude. *Journal of Physics: Conference Series*.1179(1):1-5.
- Sajimin. 2011. *Medicago sativa* L. (Alfalfa) sebagai tanaman pakan ternak harapan di Indonesia. *Wartazoa*. 21(2): 91-99.

- Sen, S., H. P. Makkar, dan K. Becker. 1998. Alfalfa saponins and their implications in animal nutrition. *Journal of Agriculture Food Chemistry*. 46(1):131–140
- Sirait, J., A. Tarigan dan K. Simanihuruk. 2011. Pemanfaatan Alfalfa yang ditanam di dataran tinggi Tobasa, Provinsi Sumatera Utara untuk pakan kambing Boerka sedang tumbuh. *Jurnal Ilmu Ternak dan Veteriner*. 16(4):294-303.
- Sjofjan, O. 2008. Efek penggunaan tepung daun kelor (*Moringa oleifera*) dalam pakan terhadap penampilan produksi ayam pedaging. *Prosiding Seminar Nasional Teknologi Peternakan dan Veteriner*. Fakultas Peternakan Universitas Brawijaya. Malang.
- SNI. 2016. *Pakan Ayam Ras Petelur Masa Produksi (Layer)*. Badan Standarisasi Nasional Indonesia.
- Stadelman, W. J. dan O. J. Cotterill. 1995. *Egg Science and Technology 4th*. Binghamton. New York Food Product Press Haworth Press.
- Sulaiman, B. F. dan S. Y. T. Al-Sadary. 2021. Alfalfa meal supplementation producing vitamin e and minerals enriched table eggs. *Conference Series: Earth and Environmental Science*. 761(1): 1-10.
- Suryani, A. 2011. *Pengaruh Pemberian Kombinasi Tepung Keong Mas (*Pomacea canaliculata*) dan Tepung Paku Air (*Azolla pinnata*) Terfermentasi Terhadap Konsumsi Ransum, Pertambahan Berat Badan dan Konversi Rasum Ayam Petelur Strain Isa Brown Periode Layer*. Skripsi. UIN Maulana Malik Ibrahim. Malang.
- Suwignyo, B., A. Mustika, Kustantinah, L. M. Yusiati dan B. Suhartanto. 2020. Effect of drying method on physical-chemical characteristic and amino acid content of tropical Alfalfa (*Medicago sativa* L.) hay for poultry feed. *American Journal of Animal and Veterinary Science*. 15(2): 118-122.
- Suwignyo, B., B. Suhartanto, C. T. Noviandi, N. Umami dan N. Suseno. 2017. Generative plant characteristics alfalfa (*Medicago sativa* L.) on different levels of dolomite and lighting duration. *Proceeding of the 1st International Conference on Tropical Agriculture*. Switzerland.
- Suwignyo, B., E. A. Rini, M. K. Fadli dan B. Ariyadi. 2021. Effects of alfalfa (*Medicago sativa* L.) supplementation in the diet on the growth, small intestinal histomorphology, and digestibility of hybrid ducks. *Veterinary World*. 14 (10): 2719-2726.
- Suwignyo, B., E. Suryanto, H. Sasongko, Y. Erwanto dan E. A. Rini. 2020. The effect of fresh and hay Alfalfa (*Medicago sativa* L.) supplementation on carcass quality of hybrid duck. *IOP Conference Series: Earth and Environmental Science*. 478: 12024

- Suwignyo, B., E. Suryanto, S. I. N. Sanur. dan C. Hanim. 2021. The effect of hay Alfalfa (*Medicago sativa* L.) supplementation in different basal feed on the feed intake (FI), body weight, and feed conversion ratio of hybrid ducks. *IOP Conference Series: Earth and Environmental Science*. 686:12039
- Suwignyo, B., F. Izzati, A. Astuti dan A. Rini. 2020. Nutrient content of Alfalfa (*Medicago sativa* L.) regrowth I in different fertilizers and lighting. *IOP Conference: Improving Tropical Animal Production for Food Security*. 465: 12035.
- Suwignyo, B., L. Arifin, N. Umami, Muhlisin, dan B. Suhartanto. 2021. The performance and genetic variation of first and second generations tropical Alfalfa (*Medicago sativa* L.). *Biodiversitas Journal of Biological Diversity*. 22(6): 3265-3270.
- Tugiyanti, E. dan N. Iriyanti. 2012. Kualitas eksternal telur ayam petelur yang mendapat ransum dengan penambahan tepung ikan fermentasi menggunakan isolat produser antihistamin. *Jurnal Aplikasi teknologi pangan*. 1(2): 44-47.
- USDA United States Department of Agriculture National Nutrient Database. 2011. *Medicago sativa* L.. National Agricultural Library. USA.
- Wahju, J. 2004. *Ilmu Nutrisi Unggas*. Gadjah Mada University Press. Yogyakarta.
- Widyasworo, A. K. dan E. Trijana. 2016. Pengaruh perbedaan kandang terhadap produktifitas ayam petelur fase grower. *Jurnal Aves*. 10(2): 44-49
- Xie, Z., J. Huang, X. Xu, dan Z. Jin. 2008. Antioxidant activity of peptides isolated from Alfalfa leaf protein hydrolystat. *Journal of Food Chemistry*. 15(2): 474-487.
- Yanuartono, H. Purnamaningsih, A. Nururrozi dan S. Indarjulianto. 2017. Saponin: Dampak terhadap Ternak (Ulasan). *Jurnal Peternakan Sriwijaya*, 6(2): 79-90
- Yildiz, A. Ö., E. T. Şentürk, dan O. Olgun. 2020. Use of Alfalfa meal in layer diets—a review. *World's Poultry Science Journal*. 76(1): 134-143.
- Zheng, M., P. Mao, X. Tian, Q. Guo dan Meng, L., 2019. Effects of dietary supplementation of Alfalfa meal on growth performance, carcass characteristics, meat and egg quality, and intestinal microbiota in Beijing-you chicken. *Journal of Poultry Science*. 98(5): 2250-2259.
- Zhou, L., Y. Shi, R. Guo, M. Liang, X. Zhu dan C. Wang. 2014. Digital gene-expression profiling analysis of the cholesterol-lowering effects of alfalfa saponin extract on laying hens. *PLoS One*. 9(6): 98578.