

DAFTAR PUSTAKA

- Abd El-Hack, M. E., Shafi, M. E., Alghamdi, W. Y., Abdelnour, S. A., Shehata, A. M., Noreldin, A. E., Ashour, E. A., Swelum, A. A., Al-Sagan, A. A., Alkhateeb, M., Taha, A. E., Abdel-Moneim, A.-M. E., Tufarelli, V., & Ragni, M. (2020). *Black soldier fly (Hermetia illucens) meal as a promising feed ingredient for poultry: A comprehensive review. Agriculture, 10(8), 339.* <https://doi.org/10.3390/agriculture10080339>
- Adleend. (2015). *Gambaran Histopatologi Ginjal Tikus Putih (Rattus norvegicus) Setelah Pemberian Meloxicam Dosis Toksik*, Universitas Hasanuddin.
- Afriani, Y., Rahayu, R., & Santoso, P. (2023). Fatty Acid And Hematology Profile Of Black Soldier Fly (*Hermetia illucens* L.) Maggot Oil In Wound Healing. *International Journal of Progressive Sciences and Technologies, 39(2), 429–433.* <https://doi.org/10.52155/ijpsat.v39.2.5523>
- Aguwa, U. S., Ogwo, R., Evaristus, C., Aguwa, A., Onyejike, D. N., & Abazuh, U. D. (2025). Delayed tissue fixation for as short as five minutes can distort tissue architecture and falsify research results. *Tropical Journal of Natural Product Research, 9(1), 112–118.* <https://doi.org/10.26538/tjnpr/v9i1.16>
- Aini, N. (2013). *Teknologi fermentasi pada tepung jagung* (Edisi pertama). Graha Ilmu.
- Alsahli, M., & Gerich, J. E. (2017). Renal glucose metabolism in normal physiological conditions and in diabetes. *Diabetes Research and Clinical Practice, 133, 1–9.* <https://doi.org/10.1016/j.diabres.2017.07.033> (ScienceDirect)
- Amandanisa, A., & Suryadarma, P. (2020). Kajian Nutrisi dan Budi Daya Maggot (*Hermetia illucens* L.) Sebagai Alternatif Pakan Ikan Di RT 02 Desa Purwasari, Kecamatan Dramaga, Kabupaten Bogor. *Jurnal Pusat Inovasi Masyarakat, 2(5), 796-804.*
- Aparicio, V. A., Nebot, E., García-del Moral, R., Machado-Vílchez, M., Porres, J. M., Sánchez, C., & Aranda, P. (2013). High-protein diets and renal status in rats. *Nutrición Hospitalaria, 28(1), 232–237.* <https://doi.org/10.3305/nh.2013.28.1.6165>
- Arifuddin, M., Wahyuni, W., & Cita, Q. (2020). Pengaruh Pemberian Tepung Kedelai pada Pakan terhadap Pertambahan Bobot Badan Mencit. *Animal Science, 03(2), 49-54.*
- Aristo & Danarto. (2016). Parameter Prognosis Perbaikan Fungsi Ginjal pada Pasien Obstruksi Uropati. *Jurnal Ilmiah Kedokteran, 3(3), p. 19.*

- Ariyanto, A. J., Sari, D. N. O., Lestari, P. P., Prayoga, A., Syachviar, S. A., & Ulfah, M. (2024). *Budidaya mencit*. RUA Aksara.
- Baharuddin Yusuf, S. N. N. I. (2023). LITERATUR REVIEW : GULA DARAH PUASA PADA PENYAKIT DIABETES MELITUS Baharuddin Yusuf, Syahida Nafisah, Novianti Nuril Inayah. In *Pharmacy Medical Journal* (Vol. 6, Number 1).
- Balla, P. T., Medi, M., Aryawiguna, M. I., & Badaruddin, M. (2021). Respons Peternak Terhadap Pemanfaatan Pakan Dedak Padi Fermentasi Untuk Pertambahan Bobot Ayam Kampung Unggul Balitbangtan (KUB) Fase Grower. *Jurnal Agrisistem: Seri Sosek dan Penyuluhan*, 17(1), 1–7.
- Baxmann, A. C., Ahmed, M. S., Marques, N. C., Menon, V. B., Pereira, A. B., Kirsztajn, G. M., & Heilberg, I. P. (2008). Influence of muscle mass and physical activity on serum and urinary creatinine and serum cystatin C. *Clinical Journal of the American Society of Nephrology*, 3(2), 348–354. <https://doi.org/10.2215/CJN.02870707>
- Beski, S. S. M., Swick, R. A., & Iji, P. A. (2015). Specialized protein products in broiler chicken nutrition: A review. *Animal Nutrition*, 1(2), 47–53. <https://doi.org/10.1016/j.aninu.2015.05.005>
- Bobulescu, I. A., & Moe, O. W. (2012). Renal transport of uric acid: Evolving concepts and uncertainties. *Advances in Chronic Kidney Disease*, 19(6), 358–371. <https://doi.org/10.1053/j.ackd.2012.07.009>
- Boontiam, W., Phaengphairee, P., Hong, J., & Kim, Y. Y. (2022). Full-fatted *Hermetia illucens* larva as a protein alternative: Effects on weaning pig growth performance, gut health, and antioxidant status under poor sanitary conditions. *Journal of Applied Animal Research*, 50(1), 732–739. <https://doi.org/10.1080/09712119.2022.2147185>
- Cahyani, P. M., Maretha, D. E., & Asnilawati. (2020). *Ensiklopedia Insecta*. CV. Amanah.
- Cakir, M., Duzova, H., Taslidere, A., Orhan, G., & Ozyalin, F. (2017). Protective Effects of Salusin- α and Salusin- β on Renal Ischemia/Reperfusion Damage and Their Levels in Ischemic Acute Renal Failure. *Biotechnic and Histochemistry*, Taylor & Francis, 92(2), pp. 122–133. DOI: <https://doi.org/10.1080/10520295.2017.1283056>
- Chen, L., Liu, B., Ren, L., Du, H., Fei, C., Qian, C., Li, B., Zhang, R., Liu, H., Li, Z., & Ma, Z. (2023). Hight Fiber Diet Ameliorates Gut Microbiota, Serum Metabolism and Emotional Mood in Type 2 Diabetes Patients. *Front cell infect*

Microbiol, PMID: 36794003. DOI:
<https://doi.org/10.3389/fcimb.2023.1069954>

- Chen, X. (2016). The Associations of Plant Protein Intake With All-Cause Mortality in CKD. *American Journal of Kidney Diseases*. Elsevier Inc, 67(3), pp. 423–430. doi: 10.1053/j.ajkd.2015.10.018.
- Chen, Y., Chi, S., Zhang, S., Dong, X., Yang, Q., Liu, H., Tan, B., & Xie, S. (2022). Effect of black soldier fly (*Hermetia illucens*) larvae meal on lipid and glucose metabolism of Pacific white shrimp *Litopenaeus vannamei*. *British Journal of Nutrition*, 128, 1674–1688. <https://doi.org/10.1017/S0007114521004670>
- Citra, K., Ginjal, H., Ekstraksi, B., Statistik, F., Perceptron, M., Wulan, T. D., Salim, H. M., Kurniastuti, I., & Bintarti, T. W. (2022). Klasifikasi Citra Histologi Ginjal Berdasarkan Ekstraksi Fitur Statistik Menggunakan Perceptron. *REMIK: Riset Dan E-Jurnal Manajemen Informatika Komputer*, 6(3), 418–425. <https://doi.org/10.33395/REMIK.V6I3.11587>
- Dabbou, S., Gai, F., Biasato, I., Capucchio, M. T., Biasibetti, E., Dezzutto, D., Meneguz, M., Plachà, I., Gasco, L., & Schiavone, A. (2018). Black soldier fly defatted meal as a dietary protein source for broiler chickens: Effects on growth performance, blood traits, gut morphology and histological features. *Journal of Animal Science and Biotechnology*, 9, Article 49. <https://doi.org/10.1186/s40104-018-0266-9>
- Damayanti, A. Y. (2017). Hubungan Asupan Protein Dan Kadar Kreatinin Penderita Gagal Ginjal Kronik Dengan Hemodialisis. *Darussalam Nutrition Journal*, 1(1), 33. <https://doi.org/10.21111/dnj.v1i1.1019>
- de Miguel, R., Vallejo, R., Kegler, K., Kreutzer, R., Mayoral, F. J., Okazaki, Y., Ortega, P., Polledo, L., Razinger, T., Richard, O. K., Sanchez, R., Warfving, N., Domènech, A., & Weber, K. (2025). Onset and progression of postmortem histological changes in the kidneys of RccHanTM:WIST rats. *Frontiers in Veterinary Science*, 12, Article 1578579. <https://doi.org/10.3389/fvets.2025.1578579>
- Debie Anggraini. (2022). *Aspek Klinis Hiperurisemia*. <http://journal.scientic.id/index.php/sciena/issue/view/4>
- Devries, M. C., Sithamparapillai, A., Brimble, K. S., Banfield, L., Morton, R. W., & Phillips, S. M. (2018). Changes in kidney function do not differ between healthy adults consuming higher- compared with lower- or normal-protein diets: A systematic review and meta-analysis. *The Journal of Nutrition*, 148(11), 1760–1775. <https://doi.org/10.1093/jn/nxy197>

- Dewi, S. O., Sartika, F., & Faradila. (2025). Gambaran kadar kreatinin pada penderita gagal ginjal kronik yang menjalani hemodialisa di RSUD Dr. Doris Sylvanus Palangka Raya tahun 2023. *Barigas Medical and Health Science Journal*, 1(1), 20–30. <https://doi.org/10.33084/barigas.v1i1.10003>
- Djabir, Y. Y., Arsyad, M. A., Sartini, S., & Lallo, S. (2017). Potential Roles of *Kleinhovia hospita* L. Leaf Extract in Reducing Doxorubicin Acute Hepatic, Cardiac and Renal Toxicities in Rats. *Pharmacognosy Res*, 9(2), pp. 168–173. DOI: https://doi.org/10.4103/pr.pr_129_16
- Fauzi, A. A., Sampurna, I. P., & Suharsono, H. (2019). Pemanfaatan Dedak Padi Terfermentasi Untuk Meningkatkan Laju Pertumbuhan Dimensi Panjang Itik Bali. *Jurnal Peternakan Indonesia (Indonesian Journal of Animal Science)*, 8(2), 193–204.
- Francois, M., Canal Delgado, I., Shargorodsky, N., Leu, C.-S., & Zeltser, L. (2022). Assessing the effects of stress on feeding behaviors in laboratory mice. *eLife*, 10, e70271. <https://doi.org/10.7554/eLife.70271>
- Frazier, K. S., Seely, J. C., Hard, G. C., Betton, G., Burnett, R., Nakatsuji, S., Nishikawa, A., Durchfeld-Meyer, B., & Bube, A. (2012). Proliferative and nonproliferative lesions of the rat and mouse urinary system. *Toxicologic Pathology*, 40(4 suppl), 14S–86S. <https://doi.org/10.1177/0192623312438736>
- Furuhashi, M. (2020). New insights into purine metabolism in metabolic diseases: Role of xanthine oxidoreductase activity. *American Journal of Physiology-Endocrinology and Metabolism*, 319(5), E827–E834. <https://doi.org/10.1152/ajpendo.00378.2020>
- Gariglio, M., Dabbou, S., Crispo, M., Biasato, I., Gai, F., Gasco, L., Piacente, F., Odetti, P., Bergagna, S., Plachà, I., Valle, E., Colombino, E., Capucchio, M. T., & Schiavone, A. (2019). Effects of the dietary inclusion of partially defatted black soldier fly (*Hermetia illucens*) meal on the blood chemistry and tissue (spleen, liver, thymus, and bursa of Fabricius) histology of Muscovy ducks (*Cairina moschata domestica*). *Animals*, 9(6), 307. <https://doi.org/10.3390/ani9060307>
- Garlick, P. J., McNurlan, M. A., & Patlak, C. S. (1999). Adaptation of protein metabolism in relation to limits to high dietary protein intake. *European Journal of Clinical Nutrition*, 53(1), s34–s43. <https://doi.org/10.1038/SJ.EJCN.1600742;KWRD>
- Gounden, V., Bhatt, H., & Jialal, I. (2024, July 27). *Renal function tests*. In StatPearls. StatPearls Publishing. [https://www.ncbi.nlm.nih.gov/books/NBK507821/\(NCBI\)](https://www.ncbi.nlm.nih.gov/books/NBK507821/(NCBI))

- Granqvist, A. B., Ericsson, A., Sanchez, J., Tonelius, P., William-Olsson, L., Dahlqvist, U., Andersson, A. K., Tesan Tomic, T., Hudkins, K., Alpers, C. E., Pellegrini, G., & Söderberg, M. (2020). High-protein diet accelerates diabetes and kidney disease in the BTBRob/ob mouse. *American Journal of Physiology-Renal Physiology*, 318(3), F763–F771. <https://doi.org/10.1152/ajprenal.00484.2019>
- Gunawan, G., & Khalil, M. (2015). Analisa Proksimat Formulasi Pakan Pelet Dengan Penambahan Bahan Baku Hewani yang Berbeda. *Acta Aquatica*, 2(1): 23-30.
- Gunnerud, U. J., Heinzle, C., Holst, J. J., Östman, E. M., & Björck, I. M. E. (2012). Effects of pre-meal drinks with protein and amino acids on glycemic and metabolic responses at a subsequent composite meal. *PLOS ONE*, 7(9), e44731. <https://doi.org/10.1371/journal.pone.0044731>
- Hall, J. E. (2016) *Guyton dan Hall Buku Ajar Fisiologi Kedokteran Edisi 12*. Edited by E. I et al. Saunders Elsevier.
- Hallberg, S. J., Gershuni, V. M., & Athinarayanan, S. J. (2019). Reversing Type 2 Diabetes: A Narrative Review of the Evidence. *Nutrients*, 11(4), 766. <https://doi.org/10.3390/NU11040766>
- Harningsih, I. S., Allaily, A., & Yaman, M. A. (2023). Pengaruh Penggunaan Tepung Maggot dan Tepung Azolla Dalam Pakan Fermentasi Terhadap Kadar Protein, Glukosa dan Uric Acid Darah Ayam Hibrida. *Jurnal Ilmiah Mahasiswa Pertanian*, 8(3), 306-314.
- Hasanah, U., Rusny., & Masri, M. (2015). Analisis Pertumbuhan Mencit (*M. musculus* L.) ICR Dari Hasil Perkawinan Inbreeding Dengan Pemberian Pakan AD1 dan AD2. UIN Alauddin Makassar.
- Helvacioğlu, F., Özturan Özer, E., Çetinoğlu, C., Ülgen, P., Kılıç, S., Başaran, D. C., Ekenci, B. Y., Yıldırım, F., Kendikal, M. A., & Dağdeviren, A. (2026). Age-related effects of high protein diet on rat liver and kidney. *Irish Journal of Medical Science*. <https://doi.org/10.1007/s11845-025-04265-z>
- Herlina, H. (2025). Evaluation of Creatinine Levels as an Indicator of Kidney Function in Diabetes Mellitus Patients at RSU Haji Medan. *MEDISTRA MEDICAL JOURNAL (MMJ)*, 2(2), 61–66. <https://doi.org/10.35451/mmj.v2i2.2665>
- Hermawan, I. P. (2016). Pengaruh pemberian ekstrak kulit manggis (*Garcinia mangostana* Linn.) terhadap nekrosis glomerulus dan tubulus ginjal mencit jantan (*Mus musculus*) yang dipapar asap rokok [Skripsi, Universitas Airlangga].

- Herrmann, K., Pistollato, F., & Stephens, M. L. (2019). Beyond the 3Rs: Expanding the Use of Humanrelevant Replacement Methods in Biomedical Research. *ALTEX*, 36(3): 343-352.
- Hong, F., Zheng, A., Xu, P., Wang, J., Xue, T., Dai, S., Pan, S., Guo, Y., Xie, X., Li, L., Qiao, X., Liu, G., & Zhai, Y. (2020). High-Protein Diet Induces Hyperuricemia in a New Animal Model for Studying Human Gout. *International Journal of Molecular Sciences* 2020, Vol. 21, Page 2147, 21(6), 2147. <https://doi.org/10.3390/IJMS21062147>
- Indarmawan. (2014). *Hewan Avertebrata Sebagai Pakan Ikan Lele*. Fakultas Biologi Universitas Jenderal Soedirman. Purwokerto.
- Ismunandar, I., Setiawan, D., & Yulianti, W. (2022). Aplikasi Joged (Jamoe Gendong) Berbasis Mobile Dengan Pendekatan UCD. *JEKIN-Jurnal Teknik Informatika*, 2(2): 58–67. <https://doi.org/10.58794/jekin.v2i2.130>
- Kalantar-Zadeh, K., Kramer, H. M., & Fouque, D. (2020). High-protein diet is bad for kidney health: unleashing the taboo. *Nephrology Dialysis Transplantation*, 35(1), 1–4. <https://doi.org/10.1093/ndt/gfz216>
- Khairani, K., Dina, D., Ilyas, S., & Midoen, Y. H. (2024). *Prinsip dan Praktik Hewan Percobaan Mencit (M. musculus)*. Medan : PERS USU.
- Khan, A., Khan, S., Jan, A. A., & Khan, M. (2017). Health Complication Caused by Protein Deficiency. *Journal of Food Science and Nutrition*, 01(01), pp. 2–3.
- Ko, G. J., Rhee, C. M., Kalantar-Zadeh, K., & Joshi, S. (2020). The effects of high-protein diets on kidney health and longevity. *Journal of the American Society of Nephrology*, 31(8), 1667–1679. <https://doi.org/10.1681/ASN.2020010028/-DCSUPPLEMENTAL>
- Kusuma, I. M., Veryanti, P. R., & Saragih, E. T. D. (2019). Pemanfaatan Ekstrak Kulit Buah Kawista (*Limonia acidissima*) Sebagai Anti Asam Urat Secara *In Vivo* Pada Mencit Jantan: In Vivo Study on Methanol Extract of Kawista Fruit (*Limonia acidissima*) Rind as Anti-Uric Acid in Hyperuricemia Male Mice. *Sainstech Farma: Jurnal Ilmu Kefarmasian*, 12(2), 65-69.
- Lapui, A. R., Nopriani, U., & Mongi, H. (2021). Analisis Kandungan Nutrisi Tepung Jagung (*Zea mays* L.) dari Desa Uedele Kecamatan Tojo Kabupaten Tojo Una-Una Untuk Pakan Ternak. *Agropet*, 18(2), 42-46.
- Layman, D. K., Shiue, H., Sather, C., Erickson, D. J., & Baum, J. (2003). Increased dietary protein modifies glucose and insulin homeostasis in adult women during weight loss. *The Journal of Nutrition*, 133(2), 405–410. <https://doi.org/10.1093/jn/133.2.405> (PubMed Central)

- Liu, C.-M., Uehara, T., & Shimoda, M. (2024). *Enhancing the nutritional value of black soldier fly larvae through the nutrient amino acid transporter suppression in the excretion system. Journal of Insects as Food and Feed.* <https://doi.org/10.1163/23524588-00001155>
- Lu, S., Taethaisong, N., Meethip, W., Surakhunthod, J., Sinpru, B., Sroichak, T., Archa, P., Thongpea, S., Paengkoum, S., Purba, R. A. P., & Paengkoum, P. (2022). Nutritional composition of black soldier fly larvae (*Hermetia illucens* L.) and its potential uses as alternative protein sources in animal diets: A review. *Insects*, 13(9), 831. <https://doi.org/10.3390/insects13090831>
- Lubis, S., R. Rachmat, Sudaryono., & S. Nugraha. (2002). *Pengawetan Dedak Dengan Metode Inkubasi*. Balitpa Sukamandi, Kerawang.
- Mafra, D., Brum, I., Borges, N., Leal, V. O., & Fouque, D. (2025). *Low-protein diet for chronic kidney disease: Evidence, controversies, and practical guidelines. Journal of Internal Medicine.* <https://doi.org/10.1111/joim.20117>
- Manocha, A., Fathima, N., & Gowrishankar, S. (2024). Glomerular Diameter Measurements on Light Microscopy: A New Parameter Available to Pathologists and its Utility in IgA Nephropathy. *Indian Journal of Nephrology*, 34(4), 344–349. https://doi.org/10.25259/IJN_361_23
- Mariska, N. U. E. (2020). Pengaruh Diet Tinggi Protein, Rendah Karbohidrat dan Rendah Lemak Pada Fungsi Ginjal Dan Hati Tikus Galur Wistar Jantan. *Tesis*, Universitas Hasanuddin.
- Marono, S., Loponte, R., Lombardi, P., Vassalotti, G., Pero, M. E., Russo, F., Gasco, L., Parisi, G., Piccolo, G., Nizza, S., Di Meo, C., Attia, Y. A., & Bovera, F. (2017). Productive performance and blood profiles of laying hens fed *Hermetia illucens* larvae meal as total replacement of soybean meal from 24 to 45 weeks of age. *Poultry Science*, 96(6), 1783–1790. <https://doi.org/10.3382/ps/pew461>
- Martin, W. F., Armstrong, L. E., & Rodriguez, N. R. (2005). Dietary protein intake and renal function. *Nutrition & Metabolism*, 2, Article 25. <https://doi.org/10.1186/1743-7075-2-25>
- Mezencev, R., Feshuk, M., Kolaczowski, L., Peterson, G. C., Zhao, Q. J., Watford, S., & Weaver, J. A. (2024). The association between histopathologic effects and liver weight changes induced in mice and rats by chemical exposures: an analysis of the data from Toxicity Reference Database (ToxRefDB). *Toxicological Sciences : An Official Journal of the Society of Toxicology*, 200(2), 404–413. <https://doi.org/10.1093/TOXSCI/KFAE056>

- Michael, B., Yano, B., Sellers, R. S., Perry, R., Morton, D., Roome, N., Johnson, J. K., Schafer, K., & Pitsch, S. (2007). Evaluation of organ weights for rodent and non-rodent toxicity studies: a review of regulatory guidelines and a survey of current practices. *Toxicologic Pathology*, 35(5), 742–750. <https://doi.org/10.1080/01926230701595292>
- Milind, P., K, S., & S, N. (2013). Understanding Gout Beyond Doubt. *International Research Journal of Pharmacy*, 4(9), 25–34.
- Mutiarahmi, C. N., Hartady, T., & Lesmana, R. (2021). Kajian Pustaka: Penggunaan Mencit Sebagai Hewan Coba di Laboratorium yang Mengacu pada Prinsip Kesejahteraan Hewan. *Jurnal Indonesia Medicus Veterinus*, 10(1), 134-145.
- Nofiyanti, A., Nurhayati, A., Elva Junita, D., Ambar Wati Prodi Gizi, D., Kesehatan, F., & Aisyah Pringsewu, U. (2025). ASUPAN PROTEIN DENGAN KADAR UREUM DAN KREATININ PASIEN GAGAL GINJAL KRONIK HEMODIALISA RSUD PRINGSEWU Protein Intake Urea and Creatinine in Chronic Kidney Hemodialysis Patients at Pringsewu Hospital. In *Media Gizi Pangan* (Vol. 32).
- Novak, J., Jaric, I., Rosso, M., Rufener, R., Touma, C., & Würbel, H. (2022). Handling method affects measures of anxiety, but not chronic stress in mice. *Scientific Reports*, 12, Article 20938. <https://doi.org/10.1038/s41598-022-25090-9>
- Nurjanah, S. (2013). Analisis Pengembangan Program Bisnis Industri Kreatif Penerapannya Melalui Pendidikan Tinggi. *JMA*, 18(2): 141-151.
- Oba, R., Kanzaki, G., Sasaki, T., Okabayashi, Y., Haruhara, K., Koike, K., Kobayashi, A., Yamamoto, I., Tsuboi, N., & Yokoo, T. (2020). Dietary Protein Intake and Single-Nephron Glomerular Filtration Rate. *Nutrients* 2020, Vol. 12, Page 2549, 12(9), 2549. <https://doi.org/10.3390/NU12092549>
- Ogobuiro, I., & Tuma, F. (2023, July 24). *Physiology, renal*. In *StatPearls*. StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK538339/> (NCBI)
- Pandya, R. D., Pang, S., Lackner, E. M., Reyna-Neyra, A., Li, W.-P., Sy, K., & Burdyniuk, M. (2024). Volume microscopic analysis of membrane contact sites in mouse kidney renal proximal tubule epithelial cells. *Physiology*, 39(Suppl. 1). <https://doi.org/10.1152/physiol.2024.39.S1.1086>
- Parisa, N. (2016). Efek ekstrak daun salam pada kadar glukosa darah. *Jurnal Kedokteran Universitas Lampung*, 1(2), 404–408. <https://doi.org/10.23960/jkunila.v1i2.pp404-408>
- Phaengphairee, P., Boontiam, W., Wealleans, A., Hong, J., & Kim, Y. Y. (2023). Dietary supplementation with full-fat *Hermetia illucens* larvae and multi-

- probiotics, as a substitute for antibiotics, improves the growth performance, gut health, and antioxidative capacity of weaned pigs. *BMC Veterinary Research*, 19, Article 7. <https://doi.org/10.1186/s12917-022-03550-8>
- Pimenta, E., Jensen, M., Jung, D., Schaumann, F., Boxnick, S., & Truebel, H. (2016). Effect of diet on serum creatinine in healthy subjects during a phase I study. *Journal of Clinical Medicine Research*, 8(11), 836–839. <https://doi.org/10.14740/jocmr2738w>
- Prasetyo, B. F., Setiadi, D. R., & Agung, H. D. (2023). Pengaruh Penambahan Tepung Protein Maggot *Black Soldier Fly* (*Hermetia illucens*) Terhadap Palatabilitas Pakan Kucing Komersial. *Jurnal Sain Veteriner*, 41(2), 249-254.
- Putra, A. W., Fauziah, F. A., Widyaputri, T., Widigdyo, A., & Purnomo, P. (2023). Pengaruh Penambahan Variasi Kombinasi Tepung Maggot (*Hermetia illucens*) Pada Campuran Pakan Terhadap Kadar Glukosa dan Asam Urat Ayam Petelur. *TERNAK TROPIKA Journal of Tropical Animal Production*, 24(2), 59–70. <https://doi.org/10.21776/UB.JTAPRO.2023.024.02.1>
- Putra, B. (2022). Pelatihan Penyusunan Ransum Metode *Trial And Error* Pada Calon Peternak Milineal. *Jurnal Pengabdian kita*, 5(1).
- Putri, D. A., Arif, T., Wahyuni, E. S., & Sulastyawati, S. (2025). Hubungan Lama Menjalani Hemodialisis Dengan Kualitas Hidup Pasien Gagal Ginjal Kronis. *Malahayati Nursing Journal*, 7(11), 4833–4843.
- Raharjo, E. I., & Arief, M. (2016). Penggunaan Ampas Tahu Dan Kotoran Ayam Untuk Meningkatkan Produksi Maggot (*Hermetia Illucens*). *Jurnal Ruaya: Jurnal Penelitian Dan Kajian Ilmu Perikanan Dan Kelautan*, 4(1): 10-16.
- Rahayu, R., Afriani, Y., & Santoso, P. (2026). Effectiveness of black soldier fly larvae oil ointment on the healing process of incision wounds in mice. *Indonesian Journal of Pharmacy*, 37(1), 157–167.
- Rahmatillah, Z. (2018). *Pengaruh pemberian pakan berbahan dasar limbah ikan terhadap pertumbuhan mencit (M. musculus)* [Skripsi, Fakultas Sains dan Teknologi, Universitas Islam Negeri Ar-Raniry]. Repositori UIN Ar-Raniry.
- Rambet, V., Umboh, J. F., Tulung, Y. L. R., Kowel, Y. H. S. (2016). Kecernaan Protein dan Energi Ransum Broiler Yang Menggunakan Tepung Maggot (*Hermetia illucens*) Sebagai Pengganti Tepung Ikan. *J ZooteK*. 36:13-22.
- Ran, J., Ma, J., Liu, Y., Tan, R., Liu, H., & Lao, G. (2014). Low Protein Diet Inhibits Uric Acid Synthesis and Attenuates Renal Damage in Streptozotocin-Induced Diabetic Rats. *Journal of Diabetes Research*, 2014, 1–10.

- Rasidi. (2022). Potential Utilization of Mussel Meals as an Alternative Fish Feed Raw Material for Aquaculture. *IOP Conference Series: Earth and Environmental Science*, 1119(1), 0–9.
- Rejeki, P. S., Putri, E. A. C., Prasetya, R. E. 2018. *Ovariektomi Pada Tikus Dan Mencit*. Surabaya: Airlangga University Press
- Ribeiro, V. M., Pascoal, A. C., Castro, E. de S., Moulin, M. A. F., Medeiros Júnior, J. L., & Azeredo, V. B. de. (2016). The “protein diet” reduces glomerular diameter and volume density in rats. *Demetra: Food, Nutrition & Health*, 11(2), 493–505. <https://doi.org/10.12957/demetra.2016.18380>
- Ridwanto, M., Saleh, A. J., & Adiputra, F. B. (2024). HUBUNGAN ASUPAN PROTEIN TERHADAP KADAR GLUKOSA DARAH 2 JAM PASCA PUASA PADA PASIEN DIABETES MELITUS TIPE 2. In *Jurnal Medika Indonesia* (Vol. 5, Number 1).
- Rismayani, D. (2026). *Formula pakan buatan berbahan Black Soldier Fly larvae (Hermetia illucens) dan pengaruhnya terhadap pertumbuhan, profil hematologi, tingkah laku, dan kualitas sperma mencit* [Tesis, Universitas Andalas].
- Rumondor, G., Maaruf, K., Tulung, Y. R. L., & Wolayan, F. R. (2015). Pengaruh Penggantian Tepung Ikan dengan Tepung Maggot Black Soldier (*Hermetia illucens*) dalam Ransum Terhadap Persentase Karkas dan Lemak Abdomen Broiler. *Zootec*, 35(2), 131.
- Sa'diyah, H., Hadi, A. F., & Ilminnafik, N. (2016). Pengembangan Usaha Tepung Ikan Di Desa Nelayan Puger Wetan. *AJIE-Asian Journal of Innovation and Entrepreneurship*, 01(01): 39-47.
- Samsudin, R. R., & Widyastuti, R. (2021). Nur Vita P. 2021. Pemantauan Pasien Dengan Diagnosa Gagal Ginjal Kronik Di RSUD Sumber Rejo Bojonegoro. *Surabaya : The Journal of Muhammadiyah Medical Laboratory Technologist*, 2(4), 148–156.
- Santoso, P., Maliza, R., Rahayu, R., Astrina, Y., Syukri, F., & Maharani, S. (2022). Extracted Yam Bean (*Pachyrhizus erosus* (L.) Urb.) Fiber Counteracts Adiposity, Insulin Resistance, and Inflammation While Modulating Gut Microbiota Composition In Mice Fed With A High-Fat Diet. *Research in Pharmaceutical Sciences*, 17(5), 558–571.
- Schiavone, A., Dabbou, S., De Marco, M., Cullere, M., Biasato, I., Biasibetti, E., Capucchio, M. T., Bergagna, S., Dezzutto, D., Meneguz, M., Gai, F., Dalle Zotte, A., & Gasco, L. (2018). Black soldier fly larva fat inclusion in finisher

- broiler chicken diet as an alternative fat source. *Animal*, 12(10), 2032–2039. <https://doi.org/10.1017/S1751731117003743>
- Schutz, Y. (2011). Protein Turnover, Ureagenesis and Gluconeogenesis. *International Journal for Vitamin and Nutrition Research*, 81(23), pp. 101–107.
- Seely, J. C., & Brix, A. (2014). *Kidney, renal tubule – degeneration*. National Toxicology Program Nonneoplastic Lesion Atlas, U.S. Department of Health and Human Services. (ntp.niehs.nih.gov)
- Sellers, R. S., Morton, D., Michael, B., Roome, N., Johnson, J. K., Yano, B. L., Perry, R., & Schafer, K. (2007). Society of Toxicologic Pathology position paper: Organ weight recommendations for toxicology studies. *Toxicologic Pathology*, 35(5), 751–755. <https://doi.org/10.1080/01926230701595300>
- Singal, Y. F. (2022). *Efek Lokasi Terhadap Hasil Budidaya Maggot Hermetia illucens (Lalat Tentara Hitam) Pada Areal Budidaya Tanaman di Pulau Tarakan*. <https://repository.ubt.ac.id/repository/UBT29-06-2022-104117.pdf>
- Suprayitno, E. & Sulistiyati, T. D. (2017). *Metabolisme Protein*. Malang: UB Press.
- Suryati, S., Dillasamola, D., & Rahadian, F. (2016). Pengaruh Ekstrak Etanol Daun *Vernonia amygdalina*, Del Terhadap Kadar Kreatinin Serum Mencit Putih Jantan. *JSFK (Jurnal Sains Farmasi & Klinis)*, 3(1): 79-83.
- Suzuki, H., Suzuki, K., & Yamada, G. (2015). Systematic Analyses of Murine Masculinization Processes Based on Genital Sex Differentiation Parameters. *Dev Growth Diff*, 57(9):639–47.
- Tam, L.M., Corke, H., Tan, W. T., Li, J., & Collado, L. S. (2004). Production of Bihon-Type Noodles from Maize Starch Differing in Amylose Content. *American Association of Cereal Chemists, Inc.*
- Tanaka, S., Wakui, H., Azushima, K., Tsukamoto, S., Yamaji, T., Urate, S., Suzuki, T., Abe, E., Taguchi, S., Yamada, T., Kobayashi, R., Kanaoka, T., Kamimura, D., Kinguchi, S., Takiguchi, M., Funakoshi, K., Yamashita, A., Ishigami, T., & Tamura, K. (2023). Effects of a high-protein diet on kidney injury under conditions of non-CKD or CKD in mice. *International Journal of Molecular Sciences*, 24(9), 7778. <https://doi.org/10.3390/ijms24097778>
- Tolistiawaty, I. (2014). Gambaran Kesehatan pada Mencit (*Mus musculus*) di Instalasi Hewan Coba. *Medicine, Agricultural and Food Sciences*.
- Triana, L., Salim, M., Analis, J., Poltekkes, K., & Pontianak, K. (2017). PERBEDAAN KADAR GLUKOSA DARAH 2 JAM POST PRANDIAL. *JLK*, 1(1).

- Trisnawati, L., & Setiawan, D. (2022). Sistem Monitoring Kegiatan Kemahasiswaan Menggunakan Metode Agile Development. *JOISIE Journal Of Information System And Informatics Engineering*, 6(1), 49–57.
- Tykałowski, B., Koncicki, A., Kowalczyk, J., Śmiałek, M., Bakula, T., Murawska, D., Sobotka, W., & Stenzel, T. (2023). The impact of full-fat *Hermetia illucens* larvae meal on the health and immune system function of broiler chickens. *Journal of Veterinary Research*, 67(2), 197–207. <https://doi.org/10.2478/jvetres-2023-0022>
- Umidayati, U., Aulia, D., Mahsya, R. M., Indrayati, A., & Sabariyah, N. (2024). *Maggot: Teknik budidaya & pemanfaatannya*. Arjuna Indonesia Mendunia.
- Van, H. A. (2013). Potential of Insects As Food And Feed in Assuring Food Security. *Annu Rev Entomol*, 58:563-583.
- Vukovic, V., Eichenseer, B., Egger, A., Tura, A., Kantner-Rumplmair, W., Sendlhofer, G., Nairz, M., Tilg, H., Grander, W., Eller, K., Putzer, G., Marschang, P., Vittorio, O., Bella, E. D., Adami, G., & Pichler, M. (2022). Associations between dietary protein intake and kidney function in a general population sample: The CHRIS study. *Journal of Nephrology*, 35, 1825–1835.
- Wang, Y.-S., & Shelomi, M. (2017). Review of black soldier fly (*Hermetia illucens*) as animal feed and human food. *Foods*, 6(10), 91. <https://doi.org/10.3390/foods6100091>
- Whary, M. T., Baumgarth, N., Fox, J. G., & Barthold, S. W. (2015). Chapter 3—Biology and Diseases of Mice. In J. G. Fox, L. C. Anderson, G. M. Otto, K. R. Pritchett Corning, & M. T. Whary (Eds.), *Laboratory Animal Medicine (Third Edition)* (pp. 43 149). Academic Press.
- Whidyastuti, D., Nurbaeti, S. N., & Kurniawan, H. (2019). Pengaruh pemberian minyak cicalok terhadap bobot badan dan indeks organ hati, jantung, ginjal, paru-paru, dan limpa tikus putih galur Wistar. *Jurnal Mahasiswa Farmasi Fakultas Kedokteran UNTAN*, 4(1), 1–8.
- Widianingrum, D. C., Krismaputri, M. E., & Purnamasari, L. (2021). Potensi Tepung Magot *Black Soldier Fly (Hermetia illucens)* sebagai Agen Antibakteri dan Immunomodulator Pakan Ternak Unggas secara In vitro. *Jurnal Sain Veteriner*, 39(2), 112–120. <https://doi.org/10.22146/JSV.53347>
- Widiartini, W. (2013). *Pengembangan Usaha Produksi Tikus Putih Tersertifikasi Dalam Upaya Memenuhi Kebutuhan Hewan Laboratorium*. Universitas Diponegoro.

- Yanagisawa, Y. (2023). How dietary amino acids and high protein diets influence insulin secretion. *Physiological Reports*, 11(2), e15577. <https://doi.org/10.14814/phy2.15577>
- Yusuf, M., Al-Gizar, M. R., Rorrong, Y. Y. A., Badaring, D. R., Aswanti, H., Ayu, S. M., Nurazizah, N., Dzalsabila, A., Ahyar, M., Wulan, W., Putri, M. J., Arisma, W. F. (2022). *Teknik Manajemen Dan Pengelolaan Hewan Percobaan: Memahami Perawatan Dan Kesejahteraan Hewan Percobaan*. Jurusan Biologi FMIPA UNM.
- Zheng, X., Bi, W., Yang, G., Zhao, J., Wang, J., Li, X., & Zhou, X. (2018). Hyperglycemia induced by chronic restraint stress in mice is associated with nucleus tractus solitarius injury and not just the direct effect of glucocorticoids. *Frontiers in Neuroscience*, 12, Article 983. <https://doi.org/10.3389/fnins.2018.00983>
- Zulkifli, N. F. N. M., Seok-Kian, A. Y., Seng, L. L., Mustafa, S., Kim, Y.-S., & Shapawi, R. (2022). Nutritional value of *black soldier fly* (*Hermetia illucens*) larvae processed by different methods. *PLOS ONE*, 17(2), e0263924. <https://doi.org/10.1371/journal.pone.0263924>

