



BOGOR AGRICULTURAL UNIVERSITY

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BIOGRAPHY

[I Komang Gede Wiryawan, Ph.D., Professor]



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Professor Komang Wiryawan completed his Ph. D. at the University of Adelaide, Australia in the area of Animal Sciences. He is the permanent faculty member at the Faculty of Animal Science, Bogor Agricultural University since 1987.

He was awarded a professor at Bogor Agricultural University in 2009, and currently serves as editors of several societies including Journal of Nutrition and Feed Technology, Journal of Sub-optimal Land, Animal Bioscience (Asian-Australasian Journal of Animal Science), and Science Editing. He currently serves as an Editor-in-Chief of Tropical Animal Science Journal. He is also actively involved in the national journal accreditation as national assessor. He is also a national reviewer for competitive research grants under the Ministry of Research and Technology, Republic of Indonesia.



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For scientific and research approaches, he and his team have focused on the isolation and application of probiotics and prebiotics to replace the use of antibiotics and to improve animal production.

POST-SECONDARY EDUCATION:

1989-1994, Ph. D.; Animal Science, Department of Animal Science, University of Adelaide, Australia [**Thesis title:** Alleviation of lactic acidosis in grain fed sheep].

1981-1985, B. Sc.; Animal Nutrition, Faculty of Animal Science, Bogor Agricultural University, Bogor, Indonesia [**Thesis title:** Effects of rice straw and native grass level in the ration on the performance and digestibility of Brahman Cross, Ongole Grade, and Madura cattle].

CAREER AFTER POST-SECONDARY EDUCATION:

2009 - Current: Bogor Agricultural University as a Full Professor.

2005 - 2009: Bogor Agricultural University as Associate Professor.

1987 - 2005: Bogor Agricultural University as Assistant Professor.

2005 - 2016: Secretary of Research Center for Natural Resources and Biotechnology, Bogor Agricultural University

2003 - 2005: Director of Research Center for Life Sciences, Bogor Agricultural University

2000 - 2002: Head of Study Program of Nutrition and Feed Technology, Department of Animal Nutrition and Feed Technology, Faculty of Animal Science, Bogor Agricultural University.

2005 - Current: National Research Grants Reviewer, Ministry of Research and Technology, Republic of Indonesia

2015 - Current: National Assesor for Journal Accreditation, Ministry of Research and Technology, Republic of Indonesia



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2000: Visiting Researcher at Science and Technology for Agriculture, Forestry, and Fisheries Institute, Tsukuba, Japan.

EDITORIAL APPOINTMENTS:

2012 - Current: Editor-in-Chief of the Tropical Animal Science Journal

(<http://journal.ipb.ac.id/index.php/tasj/>)

2015 - Current: International Adviser of the Asian-Australasian Journal of Animal Sciences (<http://www.ajas.info>)

2012 - 2015: Editorial Board of the Asian-Australasian Journal of Animal Sciences (<http://www.ajas.info>)

2015 - Current: Editorial Board of the Science Editing (<https://www.escienceediting.org>)

2017 - Current: Editorial Board of the Journal of Nutrition and Feed Technology (<http://journal.ipb.ac.id/index.php/jurnalintp>)

2000 - 2011: Editorial Board of the Media Peternakan/Journal of Animal Science and Technology (<http://journal.ipb.ac.id/index.php/mediapeternakan>)

2020 - Current: Editorial Board of the Journal of Sub-optimal Land (<http://www.jlsuboptimal.unsri.ac.id/index.php/jlso>)

2014: Editor of the Proceeding of the 16th Asian-Australasian Animal Production Congress. Yogyakarta, Indonesia

ROLES AT ACADEMIC SOCIETIES:

2020 - Current: Member of the Indonesian Academy of Sciences (<http://aipi.or.id>)

2018 - Current: President of the Indonesian Association of Scientific Journal Editors (<https://www.indonesianeditor.org>).

2020 - 2022: Vice President of the Council of Asian Science Editors (www.asianeditor.org)



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2016 – 2020: Chair of Publication Committee of the Council of Asian Science Editors
(www.asianeditor.org)

2019 - 2023: Advisory Board Member of the Indonesian Association of Animal Husbandry Scientists (www.hilpi.org).

2019 - Current: Scientific Committee Member of the Indonesian Society of Animal Science (<https://pb-ispi.org>).

2010 - Current: Scientific Committee of the Indonesian Biotechnology Consortium.

2011 - 2012: Chief of the Scientific and Publication Committee of the Indonesian Association of Animal Nutrition and Feed

2012: Chairperson of the Second International Seminar on Animal Industry, Indonesia

2018: Local Chair of the Joint Convention of the Asia Pacific Association of Medical Journal Editors and the 5th Asian Science Editors' Conference and Workshop, Bogor, 17-19 July 2018

PEER-REVIEWED PAPER PUBLICATIONS (SELECTED SINCE 2014):

1. Nisa Nurmilati Barkah, Komang Gede Wiryawan, Yuli Retnani, WayanTeguh Wibawan, and Elizabeth Wina. 2021. Physicochemical properties of products and waste of black seed produced by cold press method. **IOP Conf. Series: Earth and Environmental Science** **756** (2021) 012025. doi:10.1088/1755-1315/756/1/012025
2. Nugroho P, **Wiryawan KG**, Astuti DA, Manalu W (2021) Stimulation of follicle growth and development during estrus in Ettawa Grade does fed a flushing supplement of different polyunsaturated fatty acids, **Veterinary World**, 14(1): 11-22.
3. Saenab A, **Wiryawan KG**, Retnani Y, Wina E. 2020. Synergistic effect of biofat and biochar of cashew nutshell to mitigate methane in the rumen. **JITV** 25(3): 139-146. DOI: <http://dx.doi.org/10.14334/jitv.v24i3.2475>



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4. Prasetyo Nugroho, **Komang G. Wiryawan**, Wasmen Manalu, and Dewi A. Astuti. 2020. Blood hematology profile at postpartum in Ettawa grade does fed with different fatty acid flushing diets during the late gestation period and different litter sizes. **E3S Web of Conferences** 151, 01002 (2020): 1-3
5. Ali Bain, **Komang G Wiryawan**, DewiApri Astuti, Sri Suharti, Chairussyuhur Arman, and Firman Nasiu. 2020. Characteristics of In Vitro Fermentation and Nutrient Digestibility of Ration Supplemented with Different Level of Soybean Oil Calcium Soap. **IOP Conf. Series: Earth and Environmental Science** 465 (2020) 012021: 1-10
6. Hidayah N, R Lubis, **KG Wiryawan**, S Suharti, W Rita, Nurhaita. 2020. Effect of Native Grass Substitution with Jengkol (*Archidendron jiringa*) Peel on Sheep Performance. **IOP Conf. Series: Earth and Environmental Science** 465 (2020) 012021: 1-4
7. Zainuddin, Arif Darmawan, Sumiati, **Komang Gede Wiryawan**, Nahrowi. 2020. Effects of dietary *Bacillus coagulans* D3372 supplementation as probiotics on broiler performance, ileal microflora, meat quality, nutrient retention, and metabolizable energy. **Advances in Animal and Veterinary Sciences**, 8 (1): 115-123
8. Teguh Wahyono, Dewi Apri Astuti, **I Komang Gede Wiryawan**, Irawan Sugoro, and Anuraga Jayanegara. 2019. Fourier transform mid infrared (FTIR) spectroscopy to identify tannin compounds in the panicle of sorghum mutant lines. 2019. **IOP Conf. Series Materials Science and Engineering**, 546 (2019) 042045
9. Nur Hidayah, Rukiah Lubis, **Komang G. Wiryawan**, Sri Suharti. 2019. Phenotypic identification, nutrients content, bioactive compounds of two jengkol (*Archidendron jiringa*) varieties from Bengkulu, Indonesia and their potentials as ruminant feed. **Biodiversitas**. 20 (6): 1671-1680.
10. **Wiryawan, KG**. 2019. Establishment of the Indonesian Association of Scientific Journal Editors. **Science Editing**, 6 (2): 148-150



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11. Retnani, **Komang G. Wiryawan**, Lilis Khotijah, Nisa Nurmilati Barkah, Ryza Agung Gustian and Idham Rachmat Dermawan. 2019. Growth performance, blood metabolites, and nitrogen utilization of lambs fed with *Nigella sativa* meal. **Pak. J. Nutr.** 18: 247-253
12. Audina Putri, **Komang Gede Wiryawan**, Toto Toharmat, Sri Suharti. 2019. Potential of lactic acid bacteria from asam durian as a probiotic candidate for chicken. **IOP Conf. Series: Materials Science and Engineering** 546 (2019) 062019 doi:10.1088/1757-899X/546/6/062019
13. Min Yu Piao, Hyun Jung Lee, Hae In Yong, Seok-Hyeon Beak, Hyun Jin Kim, Cheorun Jo, Komang Gede Wiryawan, and Myunggi Baik. 2019. Comparison of reducing sugar content, sensory traits, and fatty acids and volatile compound profiles of the longissimus thoracis among Korean cattle, Holsteins, and Angus steers. *Asian-Australas J Anim Sci* 32 (1):126-136.
14. Ridwan R, Rusmana I, Widyastuti Y, Wiryawan KG, Prasetya B, Sakamoto M, Ohkuma M. 2019. Bacteria and methanogen community in the rumen fed different levels of grass-legume silages. *Biodiversitas* 20: 1055-1062.
15. M. Sobri, K.G. Wiryawan, P.D.M.H. Karti and W. T. Wibawan, 2019. Effect of Fiber Feed on Rabbits during the Postweaning Period. *Pak. J. Nutr.*, 18: 101-108.
16. Yuli Retnani, Komang G. Wiryawan, Lilis Khotijah, Nisa Nurmilati Barkah, Ryza Agung Gustian and Idham Rachmat Dermawan, 2019. Growth Performance, Blood Metabolites and Nitrogen Utilization of Lambs Fed with *Nigella sativa* Meal. *Pak. J. Nutr.*, 18: 247-253.
17. Viera Wardhani, Sam Mathew, Jeong-Wook Seo, Komang G. Wiryawan, Vivi Setiawaty, Burmaajav Badrakh. 2018. Why and how we keep editing local medical journals in an era of information overload?. *Sci. Ed.*, 5 (2): 150-154.
18. W.D. Astuti, Y. Widyastuti, E. Wina, S. Suharti, R. Ridwan, and K. G. Wiryawan. 2018. Survival of *Lactobacillus plantarum* U40 as on the in vitro rumen fermentation quantified with real-time PCR. *JITAA*, 43 (2): 184-192.

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19. Sri Suharti, Fransiscus Xaverius Shila Kurnia, Bagus Pambudi, and **Komang G. Wiryawan**. 2018. Fate of mimosine, concentration of blood metabolites, and thyroid hormones of sheep fed with leucaena and glyricidia leaf meal. **Pak. J. Nutr**, 17 (6): 268-273.
20. Wulansih D. Astuti, **Komang G. Wiryawan**, Elizabeth Wina, Yantyati Widyastuti, Sri Suharti and Roni Ridwan. 2018. Effects of selected *Lactobacillus plantarum* as probiotic on in vitro ruminal fermentation and microbial population. **Pak. J. Nutr**, 17 (3): 131-139.
21. Suharti, S., Nasution, A.R. and **Wiryawan K.G.** 2017. In vitro rumen fermentation characteristics and fatty acids profiles added with calcium soap of canola/flaxseed oil. **Media Peternakan**, 40 (3): 171-177.
22. A. Bain, **I K. G. Wiryawan**, D.A. Astuti, C. Arman and S. Suharti. 2017. Fermentability and nutrient digestibility of ration supplemented with soybean oil calcium soap and cashew fruit flour. **Pak. J. Nutr**, 16 (12): 945-953.
23. Jola J.M.R. Londok, Wasmen Manalu, **Komang G. Wiryawan** and Sumiati. 2017. Growth performance, carcass characteristics, and fatty acids profile of broiler supplemented with lauric acid natural antioxidant from *Areca vestiaria* Giseke. **Pak. J. Nutr**, 16 (9): 719-730.
24. A. Saenab, **K.G. Wiryawan**, Y. Retnani, E. Wina. 2017. Anarcandic acid Isolated from Cashew Nut Shell (*Anacardium occidentale*) Affects Methane and Other Products in the Rumen Fermentation. **Media Peternakan**, 40 (2): 94-100.
25. A. Jayanegara, M. Ridla, D.A. Astuti, **K.G. Wiryawan**, E.B. Laconi, Nahrowi. 2017. Determination Energy and Protein Requirement of Sheep in Indonesia using a Meta-analytical Approach. **Media Peternakan**, 40 (2): 118-127.
26. R. Priyanto, A.M. Fuah, **I K.G. Wiryawan**, S. Suharti, M. Ismail and D. Firmansyah. 2017. Growth performance and carrying capacity of soybean by-products for Ongole Crossbred (PO) cattle. **Pak. J. Nutr**, 16 (9): 690-695.

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27. Sri Suharti, Lilis Khotijah, Afdola Riski Nasution, Dewi Ayu Warmadewi, I Gusti Lanang Oka Cakra, Chairussyuhur Arman, **Komang G. Wiryawan**. 2017. Productive and Reproductive Performance and Blood Profile of Bali Cows Supplemented with Calcium Soap-soybean oil. **Pak. J. Nutr**, 16 (11): 882-887.
28. Telleng M., **Wiryawan K.G.**, Karti P.D.M.H., Permana I.G., L. Abdulah. 2017. Silage quality of rations based on in situ sorghum-indigofera. **Pak. J. Nutr**. 16 (3): 168-174.
29. Khotijah, L., E.I. Pandiangan, D.A. Astuti, and **K.G. Wiryawan**. 2017. Effect of sunflower oil supplementation as unsaturated fatty acid source on fermentability and performance of lactating garut ewes. **JITAA**, 42 (3): 185-193.
30. Telleng M., **Wiryawan K.G.**, Karti P.D.M.H., Permana I.G., L. Abdulah. 2016. Forage production and nutrient composition of different sorghum varieties cultivated with indigofera in intercropping system. **Media Peternakan**, 39 (3): 203-209.
31. Pantaya D., Morgavi D.P., Silberberg M., Chaucheyras-Durand F., Martin C., Suryahadi, **Wiryawan K.G.**, Boudra H. 2016. Bioavailability of aflatoxin B₁ and ochratoxin A, but not fumonisin B₁ or deoxynivalenol, is increased in starch-induced low ruminal pH in nonlactating dairy cows. **J. Dairy Sci.**, 99 (12): 9759-9767.
32. Fuah, A.S., R. Priyanto, S. Suhari, **K.G. Wiryawan**, M. Ismail. 2016. Productivity and meat quality of local cattle fed soybean by-products. **Pak. J. Nutr**, 15 (4): 364-369.
33. Prayuwidayati M., Sunarti T.C., Sumardi, Subeti. **K.G. Wiryawan**. 2016. Use of lignin formacell of empty bunch palm fiber as feed supplement and prebiotics candidate in ruminant. **Pak. J. Nutr**. 15 (1): 58-65.
34. Sumiati, A. Darmawan and **K.G. Wiryawan**. 2016. Egg Quality and Blood Haematology of Magelang Laying Ducks fed with diet containing different ratio of Omega 3 and omega 6 Fatty Acids and Organic Zn. **Int. J. Poult. Sci.**, 15 (11): 448-453.

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35. Bain A., Astuti D.A., Suharti S., Arman C., **Wiryawan K.G.** 2016. Performance, nutrient digestibility, and meat quality of Bali cattle fed a ration supplemented with soybean oil calcium soap and cashew fruit flour. **Media Peternakan**, 39 (3): 180-188.
36. Martaguri I., P.D.M.H. Karti, **K.G. Wiryawan**, R. Dianita and L. Abdullah. 2016. Dynamic of Carbon, Nitrogen Content and Biomass Production of *Axonopus compressus* on Modified Shade Conditions of Oil Palm Plantation, **Pak. J. Nutr.**, 15 (10): 905-912.
37. Ardiansyah, **K. G. Wiryawan**, & P. D. M. H. Karti. 2016. Silage Quality of Sorghum Harvested at Different Times and Its Combination with Mixed Legumes or Concentrate Evaluated *in Vitro*. **Media Peternakan**, 39 (1): 53 – 60.
38. Khairani, Sumiati, & **K. G. Wiryawan**. 2016. Egg Production and Quality of Quails Fed Diets with Varying Levels of Methionine and Choline Chloride. **Media Peternakan**. 39 (1): 34 – 39.
39. Siti Nur Jannah, Achmad Dinoto, **Komang Gede Wiryawan** and Iman Rusmana 2016. Molecular diversity pattern of intestinal lactic acid bacteria in Cemani chicken, Indonesian native chicken, as revealed by terminal restriction fragment length Polymorphisms. **Malaysian Journal of Microbiology**. 12 (1): 102-111.
40. Imana Martaguri, Panca Dewi MH Karti, **Komang G. Wiryawan**, Luki Abdullah. 2016. Carbon storage and nutrient capacity of forage native grasses growing in oil palm plantation at commercial and transformation forest ecosystem in Jambi, Indonesia. **International Journal of Sciences: Basic and Applied Research**, 25 (2): 297-308.
41. R.K. Rusli, **K.G. Wiryawan**, T. Toharmat, Jakaria, & R. Mutia. 2015. Supplementation of mangosteen pericarp meal and vitamin E on egg quality and blood profile of laying hens. **Media Peternakan**, 38 (3): 198-203.
42. F. Hamida, **K.G. Wiryawan** & A. Meryandini. 2015. Selection of lactic acid bacteria as probiotic candidate for chicken. **Media Peternakan**, 38 (2): 138-144.

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43. R. Ridwan, I. Rusmana, Y. Widyastuti, **K.G. Wiryawan**, B. Prasetya, M. Sakamoto, & M. Ohkuma. 2014. Methane mitigation and microbial diversity of silage diets containing *Calliandra calothyrsus* in a rumen in vitro fermentation system. **Media Peternakan**, 37 (2) : 121-128.
44. N. Hidayah, S. Suharti, **K.G. Wiryawan**. 2014. In vitro rumen fermentation of ration supplemented with protected vegetable oils. **Media Peternakan**, 37 (2) : 129-135.
45. E. Sulistyowati, A. Sudarman, **K.G. Wiryawan**, T. Toharmat. 2014. In vitro goat fermentation of PUFA-diet supplemented with yeast and *Curcuma xanthorrhiza* Roxb. **Media Peternakan**, 37 (3) : 175-181.
46. S.N. Jannah, A. Dinoto, **K.G. Wiryawan** & I. Rusmana. 2014. Characteristics of lactic acid bacteria isolated from gastrointestinal tract of Cemani chicken and their potential use as probiotics. **Media Peternakan**, 37 (3) : 182-189.
47. T. Rostini, L. Abdullah, **K.G. Wiryawan**, P.D.M.H. Karti. 2014. Utilization of swamp forages from south Kalimantan on local goat performances. **Media Peternakan**, 37 (1) 50-56.
48. R.K. Rusli, **K.G. Wiryawan**, T. Toharmat, Jakaria, R. Mutia. 2015. Effect of Mangosteen Pericarp Meal and Vitamin E Supplements on the Performance, Blood Profiles, Antioxidant Enzyme and HSP 70 Gene Expression of Laying Hens in Tropical Environment. **Int. J. Poult. Sci.**, 14 (10): 570-576
49. M. Prayuwidayati, T.C. Sunarti, Sumardi, Subeki & **K.G. Wiryawan**. 2015. Bioactive compounds isolated from lignin of empty bunch palm fiber and their effects on in vitro rumen fermentation. **Media Peternakan**, 38 (3): 183-191.
50. Lilis Khotijah, **Komang Gede Wiryawan**, M. Agus Setiadi, and Dewi Apri Astuti. 2015. Reproductive performance, cholesterol and progesterone status of Garut Ewes fed ration containing different levels of sun flower oil. **Pak. J. Nutr**, 14 (7): 388-391.
51. Roni Ridwan, Iman Rusmana, Yantyati Widyastuti, **Komang G. Wiryawan**, Bambang Prasetya, Mitsuo Sakamoto, and Moriya Ohkuma. 2015. Fermentation



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- Characteristics and Microbial Diversity of Tropical Grass-legumes Silages. **Asian Australas. J. Anim. Sci.**, 28 (4): 511-518.
52. Antonius, **Komang G. Wiryawan**, Amlius Thalib and Anuraga Jayanegara. 2015. Digestibility and Methane Emission of Ration Based on Oil Palm By Products Supplemented with Probiotics and Banana Stem: An *In vitro* Study. **Pak. J. Nutr** 14 (1): 37-43.
53. Dadik Pantaya, Diego P Morgavi, Mathieu Silberberg, Cécile Martin, Suryahadi, **Komang G Wiryawan** and Hamid Boudra. 2014. Low pH Enhances Rumen Absorption of Aflatoxin B1 and Ochratoxin A in Sheep. **Global Veterinaria** 13 (2): 227-232.
54. Rostini, T., Abdulah L., **Wiryawan KG**, Karti PDMH. 2014. Production and Nutrition potency of local swamp forage in South Kalimantan as ruminant feed. **Global Journal of Animal Science, Livestock Production and Animal Breeding**, 2 (2): 107-113.
55. A. Darmawan, **K.G. Wiryawan**, Sumiati. 2013. Egg production and quality of Magelang duck fed diets containing different ratio of omega 3: omega 6 and organic Zn. **Media Peternakan**, 36 (3): 192-196.
56. W. Utami, A. Meryandini, **K.G. Wiryawan**. 2013. Characterization of bacterial mannanase for hydrolyzing palm kernel cake to produce manno-oligosaccharides prebiotics. **Media Peternakan**, 36 (3): 192-196.
57. A. Imsya, E.B. Laconi, **K.G. Wiryawan**, Y. Widyastuti. 2013. In vitro digestibility of rations containing different level of palm oil frond fermented with *Phanerochaete chrysosporium*. **Media Peternakan**, 36 (2): 131-136.
58. Ali Bain, D.A. Astuti, S. Suharti, C. Arman, **K.G. Wiryawan**. 2014. The effect of protected vegetable oils on in vitro fermentation characteristics and nutrient digestibility of Bali cattle rumen fluid. **Proceedings of the 16th AAAP Animal Science Congress**, 10-14 November 2014, Gadjah Mada University, Yogyakarta, Indonesia,



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59. S. Suharti, N. Hidayah, **K.G. Wiryawan**. 2014. Effects of protected unsaturated fatty acids addition on in vitro digestibility and rumen microbes. **Proceedings of the 16th AAAP Animal Science Congress**, 10-14 November 2014, Gadjah Mada University, Yogyakarta, Indonesia,
60. L. Khotijah, **K.G. Wiryawan**, M.A. Setiadi, and D.A. Astuti. 2014. Reproductive performances of Garut sheep fed rations containing sunflower oil as a source of linoleic acid. **Proceedings of the 16th AAAP Animal Science Congress**, 10-14 November 2014, Gadjah Mada University, Yogyakarta, Indonesia.