

Name : Assoc. Prof. Dr. Aikkarach Kettawan รองศาสตราจารย์ ดร.เอกราช เกตวัลห์

Email Address :aikkarach.ket@mahidol.ac.thCurrent positions :Associate ProfessorDeputy Director of COSHEM, Mahidol University

## Education

- 2007 Ph.D. (Pharmaceutical Sciences), Kobe Gakuin University, Japan
- 1999 M.Sc. (Food and Nutrition for Development), Mahidol University, Thailand
- 1990 Certificate (Medical Sciences), Siriraj Hospital, Mahidol University, Thailand

#### **Honors and Awards**

2023-present Mahidol University Council Committee

- 2022 President of Rotary Club, Bangkok, Thailand
- 2020 Outstanding Dedication Award for community by Rotary Club, Thailand
- 2019 Good Person of INMU Award by Faculty Council of INMU
- 2017 Good Person of INMU Award by Faculty Council of INMU
- 2016 Outstanding Teacher Award, Faculty Council, Institute of Nutrition, Mahidol University
- 2015 Gold Class Award (Excellence) for "Administration of Green Office" of Institute of Nutrition, Mahidol University by The Ministry of Natural Resources and Environment
- 2014 Outstanding University Officer Award, Institute of Nutrition, Mahidol University, Thailand
- 2014 Honor Award for Petty Patent Receiver, Mahidol University, Thailand
- 2013 Outstanding University Officer Award, Institute of Nutrition, Mahidol University, Thailand
- 2013 Outstanding Performance and Dedication Award of Assessor for Testing Laboratories According to ISO/IEC 17025 : 2005, Department of Medical Sciences, Ministry of Public Health, Thailand
- 2009 -2013 President of Faculty Council, INMU
- 2012 Outstanding Researcher Award, Osaka University, Japan
- 2012 Honor Pin, Mahidol University, Thailand (Defending Mahidol University from the Flood)
- 2012 Outstanding Performance and Dedication Award of Assessor for Testing Laboratories According to ISO/IEC 17025 : 2005, Department of Medical Sciences, Ministry of Public Health, Thailand
- 2012 Best Poster Presentation Award of The 35th Annual Conference of the Anatomy Association of Thailand (AAT 35)
- 2007 Best Oral Presentation Award of The 2nd Academic Meeting, Osaka, Japan
- 2007 Well-behaved Award, Royal Thai Consulate-General, Japan
- 2006 Best Presentation Award of TJSE 2006 (The 1st Thai-Japanese Students' Scientific Exchange Meeting), Osaka University, Osaka, Japan
- 2006 President of Thai Student Association in Japan Kansai, under Royal Patronage
- 2005 President of Thai Student Association in Kobe, Japan
- 2004 2006 Japanese Government (Monbukagakusho : MEXT) Scholarship for Ph.D. Study
- 2003 2005 Teaching Assistance Scholarship, Kobe Gakuin University, Japan 2000 Outstanding Poster Presentation Award, 120th Annual Meeting of the
- Pharmaceutical Society of Japan, Chubu, Gifu, Japan
- 1999 2000 Recipient of Visiting Research Fellowship Award, Kobe Gakuin University, Japan
- 1992 Outstanding Government Officer Award, Institute of Nutrition, Mahidol University, Thailand

#### **Research Interest and Expertise**

- 1. Food fortification, absorption, bioavailability and antioxidant capacity
- 2. Food composition analysis, antioxidant content analysis
- 3. Researches on Coenzyme Q10 in health and diseases prevention & treatment
- 4. Hypotensive, Hypocholesterolemic and Hypoglycemic effects of antioxidant and bioactive compounds such as CoQ10, Polyphenol, Flavonoids etc.



### National and International Committee

- 2015 Present National and International Assessor for the Laboratory Quality Standards Accreditation (ISO/IEC 17025:2005)
- 2012 Present The committee of Medical Sciences Association of OJSAT
- 2009 Present Technical Assessor Committee of Department of Medical Sciences, Ministry of Public Health of Thailand for the Laboratory Quality Standards Accreditation (ISO/IEC 17025:2005)
- 2008 Present The committee of Japanese Government Scholarship Alumni
- 2007 Present Senior Expert of Food and Drug Administration of Thailand (Thai FDA)

#### **National and International Consultancy Positions**

2007 – Present Consultancy on dietary supplement and bioactive compounds of Food and Drug Administration, Ministry of Public Health, Thailand

#### Publications : National Level

- Vasanachitt K, Kettawan A. Cholesterol content in foods and food products in Thailand. Thai Journal of Cardio-Thoracic Nursing 2014; 25(2): 105-119.
  - Kettawan A. Functional nutrient. Functional Food. 2009; 8(9): 20-2.
  - 3. Kettawan A. Answer about chlorophyll. Herb for Health, 2009; 9(98).
  - 4. Okamoto T. Kettawan A. Takahashi K. and Kishi T. Metabolism of Coenzyme Q10 in Human Body. New Food Industry, 2003; 45(7):11-18.
  - 5. Kettawan A. CoQ10 and health. Food. 2001; 31(2):135-42.
  - 6. Kettawan A. What is CoQ10? Gourmet & Cuisine. 2001:36-7.
  - Okamoto T, Kettawan A, Takahashi T, Kishi T. Breakthrough of biofactors 'study : ubiquinone, (4) pharmacological and clinical effects of ubiqunone. Journal of Vitamin (Japan). 2001; 75(5-6): 283-90.
  - 8. Chitchumroonchokchai C, Judprasong K, Kettawan A. Comparative nutrient profile of western and Thai fast foods. Mahidol Journal. 2000; 7(2):91-5.(in English)
  - 9. Judprasong K, Kettawan A, Vasanachitt K, Nakngamanong Y, Puwastien P. Macro-Element content in commonly consumed fish. Food. 1999; 29(2):116-25.
  - 10. Chitchumroonchokchai C, Judprasong K, Kettawan A. Nutritive values of fast food : main nutrients. Food. 1992; 22:31-6.

#### International Level

- 1. Kettawan A, Ruangklai S, Rungruang T, Thongam J, Kettawan AK, Nirmal N, Srisuma S. Rice Bran Oil Improves Emphysema in Cigarette Smoke Extract-Induced Mice through Anti-Inflammatory and Antioxidative Effects. Nutrients. 2024; 16(3):433. https://doi.org/10.3390/nu16030433
- Kamble MT, Gallardo W, Salin KR, Pumpuang S, Chavan BR, Bhujel RC, Medhe SV, Kettawan A, Thompson KD, and Pirarat N. Effect of Moringa oleifera Leaf Extract on the Growth performance, Hematology, Innate immunity, and Disease Resistance of Nile tilapia (Oreochromis niloticus) against Streptococcus agalactiae Biotype 2. Animals. 2024, 14, 953. https://doi.org/10.3390/ani14060953
- Kamble MT, Chaiyapechara S, Salin KR, Bunphimpapha P, Chavan BR, Bhujel RC, Medhe SV, Kettawan A, Thiyajai P, Thompson KD, Pirarat N. Guava and Star gooseberry leaf extracts improve growth performance, innate immunity, intestinal microbial community, and disease resistance in Nile tilapia (Oreochromis niloticus) against Aeromonas hydrophila, Aquaculture Reports, Volume 35, 2024, 101947, https://doi.org/10.1016/j.agrep.2024.101947
- Medhe SV, Kettawan AK, Kamble MT, Monboonpitak N, Thompson KD, Kettawan A, Pirarat N. Modification of Physiochemical and Techno-Functional Properties of Stink Bean (*Parkia speciosa*) by Germination and Hydrothermal Cooking Treatment. Foods. 2023 Dec 14;12(24):4480. doi: 10.3390/foods12244480. PMID: 38137284; PMCID: PMC10743050.



- 5. Tajasuwan L, Kettawan A, Rungruang T, Wunjuntuk K, Prombutara P. Role of Dietary Defatted Rice Bran in the Modulation of Gut Microbiota in AOM/DSS-Induced Colitis-Associated Colorectal Cancer Rat Model. Nutrients 2023; 15, 1528. https://doi.org/10.3390/nu15061528.
- 6. On-Nom N, Khaengamkham K, Kettawan A, Rungruang T, Suttisansanee U, Temviriyanukul P, Prangthip P, Chupeerach C. Parboiled Germinated Brown Rice Improves Cardiac Structure and Gene Expression in Hypertensive Rats. Foods 2023; 12, 9. <u>https://doi.org/10.3390/foods12010009</u>.
- Subedi S, Suttisansanee U, Kettawan A, Chupeerach C, Khemthong, C Thangsiri S, On-nom N. Food Fortification of Instant Pulse Porridge Powder with Improved Iron and Zinc Bioaccessibility Using Roselle Calyx. Nutrients 2022; 14, 4070. <u>https://doi.org/10.3390/nu14194070</u>.
- Tajasuwan L, Kettawan A, Rungruang T, Wunjuntuk K, Prombutara P, Muangnoi C, Kettawan AK. Inhibitory Effect of Dietary Defatted Rice Bran in an AOM/DSS-Induced Colitis-Associated Colorectal Cancer Experimental Animal Model. Foods. 2022 Nov 2;11(21):3488. doi: 10.3390/foods11213488. PMID: 36360101; PMCID: PMC9654186.
- Medhe SV, Kamble MT, Kettawan AK, Monboonpitak N, Kettawan A. Effect of Hydrothermal Cooking and Germination Treatment on Functional and Physicochemical Properties of *Parkia timoriana* Bean Flours: An Underexplored Legume Species of *Parkia* Genera. Foods 2022; 11, 1822. <u>https://doi.org/10.3390/foods11131822</u>.
- 10. Kettawan A, Wunjuntuk K. Quantitation, Absorption and Tissue Distribution of Coenzyme Q10 from Pak-wanban (Sauropus androgynus L. Merr.) Leaf and Its Antioxidant Activities. Walailak J Sci & Tech 2021; 18(1): 6774.
- 11. Buranaamnuay K, Kettawan A, Changsangfa C, Aiemongkot S. Effect of chicken bone extract powder on epididymal sperm quality of male Wistar rats. JITV 2021; 26(2): 74-81.
- 12. Wunjuntuk K, Kettawan A. Parboiled Germinated Brown Rice Decrease Inflammatory Cytokines Levels in Various Regions of Brain in Rats Induced by Carbon Tetrachloride. Chiangmai University Journal of Natural Sciences. 2020; 19(2): 102-116.
- 13. Sinlapa K, Phurttikul W, Vanichchakornpong L, Kettawan A, Ridtitid T, Rungruang T. Germinated Brown Rice (GBR): An Alternative Food for Protecting the Liver from CCl4-Induced Injury in Rats. Siriraj Medical Journal. 2019;71:s190-s195.
- 14. Mingyai S, Srikaeo K, Kettawan A, Singanusong R, Nakagawa K, Kimura F and Ito J, Effects of Extraction Methods on Phytochemicals of Rice Bran Oils Produced from Colored Rice. Journal of Oleo Science, doi: J Oleo Sci. 2018 Feb 1;67(2):135-142. doi: 10.5650/jos.ess17122.
- 15. Mingyai S, Kettawan A, Srikaeo K, Singanusong R. Physicochemical and Antioxidant Properties of Rice Bran Oils Produced from Colored Rice Using Different Extraction Methods. J Oleo Sci. 2017 June 1;66(6):565-572. doi: 10.5650/jos.ess17014.
- 16. Mosikanon K, Arthan D, Kettawan A, Tungtrongjitr R, Prangthip P. Yeast β–glucan modulates inflammation and waist circumference in overweight and obese subjects. J Diet Suppl 2017; 14(2): 173-185.; DOI: 10.1080/19390211.2016.1207005.
- 17. Wunjuntuk K, Kettawan A, Rungruang T, Charoenkiatkul S. Anti-fibrotic and antiinflammatory effects of Parboiled germinated brown rice (Oryza Sativa 'KDML 105') in rats with induced liver fibrosis. Journal of Functional Food 2016; 26: 363-372.
- 18. Prangthip P, Kettawan A, Posuwan J, Okuno M & Okamoto T. An Improvement of Oxidative Stress in Diabetic Rats by Ubiquinone-10 and Ubiquinol-10 and Bioavailability after Short and Long-Term Coenzyme Q10 Supplementation. Journal of Dietary Supplements 2016; 13(6): 647-59.
- 19. Wunjuntuk K, Kettawan A, Charoenkiatkul S, Rungruang T. Parboiled Germinated Brown Rice Protects Against CCl4-induced Oxidative Stress and Liver Injury in Rats. Journal of Medicinal Food 2016; 19 (1): 15-23.
- 20. Chompoopong S, Jarungjitaree S, Punbanlaem T, Rungruang T, Chomgthammakun S, Kettawan A, Taechowisan T. Neuroprotective Effects of Germinated Brown Rice in Rotenone induced Parkinson's like Disease Rats. NeuroMolecular Medicine 2016; 18: 334-346.



- 21. Janwitthayanuchit K, Kupradinun P, Rungsipipat A, Kettawan A, Butryee C. A 24-weeks toxicity study of Eryngium foetidum Linn. leaves in mice. Toxicol. Res. 2016; 32(3):1-7.
- 22. Thiyajai P, Saetang P, Kettawan A, Charoenkiatkul S, Srichamnong W. Promising industrial flour processing and household applications of parboiled germinated brown rice (Khao dok mali 105). Food Science and Technology 2016; 73: 406-411.
- 23 Tonglim J, Kittibunchakul S, Kriengsinyos W, Kettawan A and Suttisansanee U. Comparative Study on Anti-hypertension Potential of Thai Herbal Tea and Conventional Tea (Camellia sinensis). Agricultural Sci J 2015; 46(3) (Suppl): 13-16.
- 24. Kettawan A, Rattanajak B, Chompoopong S, Rungruang T. Germinated Brown Rice Affects on Carbon Tetrachloride Induced Cardiotoxicity in Heart of Experimental Rats. Journal of Microscopy Society of Thailand 2014; 28 (1): 5-8.
- 25. Varinthra P, Kettawan A, Rungruang T, Chompoopong S. Neuronal Apoptosis caused by Carbon Tetrachloride in Rats. Journal of Microscopy Society of Thailand 2014; 28 (1): 47-50.
- 26. Sunan R, Kettawan A, Taechowisan T, Rungruang T, Chompoopong S. Serum Tumor Necrosis Factor-alpha and Neuronal Cell Death decreased by Germinated Brown Rice in Rats. Journal of Microscopy Society of Thailand 2014; 28 (1): 51-55.
- 27. Rungruang T, Phisutseranee P, Kettawan A, Chompoopong S. Germinated Brown Rice is potentially a Candidate for Treatment of Nephrotoxicity Induced by Carbon Tetrachloride in Experimental Rats. Journal of Microscopy Society of Thailand 2014; 28 (1): 17-20.
- 28. Kringkasemsee A, Sukakul T, Kettawan A and Rungruang T. Topical application of Dimocarpus longan peel extract reduces skin inflammation in croton oil-induced dermatitis in mouse model. Siriraj Med J 2014; 66(6): S130-134.
- 29. Rungruang T, Sukakul T, Kettawan A and Kringkasemsee A. Topical application of Ramnutan (Nephelium lappaceum) rind extract reduces skin inflammation in croton oilinduced dermatitis in mouse model. Siriraj Med J 2014; 66(6): S135-139.
- 30. Sukakul T, Kettawan A, Chompoopong S and Rungruang T. Topical application of Terminalia chebula extract helps croton oil-induced dermatitis in mice. Int Food Res J 2013; 20(5): 2269-2272.
- Rungruang T, Kaewkongkwan Y, Sukakul T, Kettawan A, Chompoopong S and Boonmars T. The effect of Vitamin C on morphology and histology of liver and spleen of Plasmodiuminfected mice. Int Food Res J 2013; 20(4): 1639-1643.
- 32. Kongkachuichai, R., Prangthip, P., Surasiang, R., Posuwan, J., Charoensiri, R., Kettawan, A. and Vanavichit, A. Effect of Riceberry oil (deep purple oil; Oryza sativa Indica supplementation on hyperglycemia and change in lipid profile in Streptozotocin (STZ)-induced diabetic rats fed a high fat diet. International Food Research Journal 2013; 20(2): 873-882.
- 33. Prangthip P, Charoenkiatkul S, Kettawan A, Okuno M, Okamoto T. Thai red curry paste lowers glucose, oxidative stress and insulin levels in type II diabetic rats. International Food Research Journal 2012; 19(2): 623-627
- 34. Kettawan A, Charoenkiatkul S, Rungruang T, Tancharoen. Bioactive compounds of Thai red Hot Chili Dip (Nam Prik Ta Dang) and effects on antioxidant activities and lipid peroxidation in rats (*in vitro* and *in vivo* models). Siriraj Med J 2012; 64: S82-85.
- 35. Kettawan A, Wongsansri K, Chompoopong S, Rungruang T, Antioxidant and antiplasmodial activities of Curcuma Longa and Aegle Marmelos on malaria infected mice (in vitro and in vivo). Siriraj Med J 2012; 64: S78-81.
- 36. Asano N, Obatake-Ikeda K, Higashi Y, Kaji A, Kato A, Adachi I, Kettawan, A, Okamoto T et al. Protective effect of the *Sasa* extract against endothelial dysfunction by hyperglycemia-induced oxidative stress. J Trad Med 2012; 29(3): 124-136.
- 37. Kettawan A, Chanlekha K, Kongkachuichai R and Charoensiri R. The effect of cooking on antioxidant activities and polyphenol content of edible mushrooms commonly consumed in Thailand. Pak J Nutr 2011; 10 (11): 1094-1103.
- 38. Chaweeborisuit P, Rungruang T, Kettawan A and Boonmars T. Long term dexamethasone administration affects morphological and histological changes of plasmodium yoelii-infected ICR-mice livers. Siriraj Med J 2009; 61: 1-4.



- Nukui K, Yamagishi T, Miyawaki H, Kettawan A, Okamoto T, Belardinelli R, Tiano L, Littarru GP, Sato K. Blood CoQ10 levels and safety profile after single-dose or chronic administration of PureSorb-Q40: animal and human studies. Biofactors. 2008; 32 (1-4):209-19.
- 40. Minami Y, Kuriyama C, Ikeda K, Kato A, Takebayashi K, Adachi I, Fleet G, Kettawan A, Okamoto T, and Asano N. Effect of five-membered sugar mimics on mammalian glycogendegrading enzymes and various glucosidases. Bioorg Med Chem. 2008, 16:2734-2740.
- 41. Kettawan A, Chitsopa K, Takahashi T, Kishi T, Chikazawa J, Sakata Y, Yano E, Watabe K, Yamamoto Y, and Okamoto T. The Quality Control Assessment of Commercially Available Coenzyme Q10- Containing Dietary and Health Supplements. J Clin Biochem Nutr. 2007; 41(2):124-131.
- 42. Kettawan A, Takahashi T, Kongkachuichai R, Charoenkiatkul S, Kishi T, and Okamoto T. Protective effects of coenzyme Q10 on decreased oxidative stress resistance induced by Simvastatin. Journal of Clinical Biochemistry and Nutrition. 2007, 40(2):194-202.
- 43. Nukui K, Yamagishi T, Miyawaki H, Kettawan A, Okamoto T and Sato K. Comparision of uptake between puresorb-QTM40 and regular hydrophobic coenzyme Q10 in rats and humans after single oral intake. J Nutrl Sci Vitaminol. 2007, 53: 187-90.
- 44. Asano N, Yamauchi T, Kagamifuchi K, Shimizu N, Takahashi S, Takatsuka H, Ikeda K, Kizu H, Chuakul W, Kettawan A, Okamoto T. Iminosugar-producing Thai medicinal plants. J Nat Prod 2005; 68(8): 1238-42.
- 45. Okamoto T. and Kettawan A. Effectiveness of Coenzyme Q10 on Medicinal and Health Sciences. Fragrance Journal. 2005; 8: 28-34.
- 46. Puwastien P, Judprasong K, Kettawan A, Vasanachitt K, Nakngamanong Y, Bhattacharjee L. Proximate composition of raw and cooked Thai freshwater and marine fish. J Food Compost Anal. 1999; 12(1): 9-16.

## **Oral presentation**

- 1. Effect of Geldanamycin Derivatives on Anti-parasitic in Erythrocytic Stage in Malarial Mouse Model. Proceeding of The 11th SCT Conference 2021. Southern College of Technology, Thailand, 2021
- 2. The Effect of High Dose Defatted Rice Bran on Lipid Peroxidation in Liver of Rats. Proceeding of The 12th National and International Conference "Global Goals, Local Actions: Looking Back and Moving Forward". Graduate School, SSRU Bangkok, 2021.
- 3. Effect of Rice Bran Flour Intake on Health Benefits". The 2021 National RGJ and RRI Conferences.
- 4. Anti-inflammatory effect of rice bran oil on cigarette smoke extract-induced emphysema in mice. THE 50th PST Annual Metting (2021) "BCG Models and Physiologists in the Disruptive Era" 14-16 July 2021 Faculty of Medicine, Siriraj Hospital.
- 5. Effects of Defatted Rice Bran on Lipid Profiles in Experimental Rats", The 50th National Graduate Research Conference. 2020; 537-44.
- 6. Wangsoh W, Kettawan A, Rungruang T, Chaikomin R. Measurement of antioxidant capacity of Momordica charantia L. fruit and crude ethanolic extract by using Oxygen radical absorbance capacity assay, Graduate Research Forum, 2018.
- 7. Kumlungkeng K, Rungruang T, Kettawan A, Chaikomin R. Investigation of antioxidant capacity of fresh leaves and ethanolic extract of Polygonum Odoratum Lour., Graduate Research Forum, 2018.
- 8. Mosikanon K, Arthan D, Kettawan A, Tangtrongjitr R and Prangthip P. Yeast  $\beta$  glucan supplementation decrease waist circumference and ameliorate hyperlipidemia in overweight subjects. 4th International Conference and Exhibition on Obesity and Weight Management December 07-09, 2015 at Atlanta, USA.
- 9. Punbanlaem T, Kettawan A, Rungruang T, Chompoopong S. Rotenone Causes Neurodegenertaion in the Striatum and Substantia Nigra in Rats. Proceeding in 38<sup>th</sup> the Anatomy Association of Thailand (AAT Annual Conference) June 24-26, 2015 at Royal Cruise Hotel, Pattaya, Chonburi, Thailand.

- Sunan R, Varinthra P, Kettawan A, Taecchowisan T, Rungruang T and Chompoopong S. The effect of germinated brown rice on serum tumor necrosis factor-alpha (TNF-alpha) and neuronal cell death in rats". The 31st Annual Conference of the Microscopy Society of Thailand (MST31), January 29-31, 2014 at The Greenery Resort, Khao Yai, Nakhonratchasima province, Thailand (Proceeding).
- 11. Kettawan A. Reduced coenzyme Q10 prevents several kinds of chronic diseases. Invited speaker in Workshop on Asian Seminar. December 7, 2013, Nakamura Gakuen University, Fukuoka, Japan.
- 12. Kettawan A. The health benefits of Thai foods. Invited speaker in 6<sup>th</sup> Thailand-Japan International Academic Conference. November 9, 2013. Osaka, Japan.
- 13. Kettawan A. Natural antioxidant from Thai food: The protective effects of "Nam Prik Ta Dang" (red hot chili dip) in oxidative stress resistance and anti-inflammation (in vivo). Invited speaker in Food Ingredients Asia Conference 2013 : Meeting the global challenges on development of functional food ingredients. September 12-13, 2013, BITEC, Bangkok, Thailand
- 14. Kettawan A. The importance and research on QH (reduced form of Q10) in health, diseases and anti-aging. Invited speaker in the seminar of Ubiquinol (QH), a Reduced Form of Coenzyme Q10: Valuable Food Supplement. August 5, 2013, Chemico Inter, Bangkok, Thailand.
- 15. Kettawan A. The process of calcium extraction from chicken bone and its application in foods. Mahidol University Research Expo 2012: Mahidol University Research Toward ASEAN Community. October 31– November 1, 2012, Mahidol Learning Center, Mahidol University, Nakhon Patom, Thailand.
- 16. Kettawan A. The significance and health benefits of antioxidant Coenzyme Q10. The 2nd International Conference of Life Sciences, Brawijaya University 2012, "Prospective and Contribution of Life Sciences for Better Life". July 14 16, 2012, Panderman Convention Hall, Royal Orchids Garden Hotel, Malang, East Java, Indonesia.
- 17. Promsuban C, Kettawan A, Chompoopong S, Sukakul T, Taechowisan T, Rungruang T. The effects of Terminalia chebula Retz. on parasite infection and histology of malaria infected mice livers. The 35th Annual Conference of the Anatomy Association of Thailand (AAT 35), May 2-4, 2012, River City Hotel, Mukdahan, Thailand.
- 18. Charoenkiatkul S, Judprasong K, Thiyajai P, Sukprasansap M, Kettawan A. Nutrients, phytochemical contents and antioxidant activities of young shoot with leaves, flowers and fruits of Melientha suavis Pierre. The 5th Plant Genetic Conservation Project initiated by Her Royal Highness Princess Maha Chakri Sirindhorn, November 3-5, 2011, Rajamangala University of Technology Isan, Nakhon Ratchasima, Thailand.
- 19. Kuewdum K, Kettawan A, Kongkachuichai R, Charoensiri R, Okamoto T. The content of coenzyme Q10 in selected Thai food; meat products, vegetables, fruits, seeds, legumes, and spices. The 8th Food Database Conference (8-IFDC), October 1-3, 2009, Asia Hotel, Bangkok, Thailand.
- 20. Kettawan A. UV-B irradiation induced skin fibroblast cell injuries and protective effect of exogenous coenzyme Q10. The International Symposium on Health Innovations, 3- 4 November 2008. BITEC, Bangkok, Thailand.
- Kettawan A, Chitsopa K, Okuno M, Takahashi T, Kongkachuichai R, Sungpuag P, Kishi T, Okamoto T. Protective effects of coenzyme Q10 against oxidative stress induced by aerobic exercise. The 5th Conference of the International Coenzyme Q10 Association, 9-12 November 2007 (Invited Speaker), Portopia Hotel, Kobe, Japan.
- 22. Kettawan A. Effects of coenzyme Q10 administration on oxidative damages resistance of human skin cell induced by UV-B irradiation. The 2nd Thai-Japanese Academic Exchange Meeting, November 2-3, 2007, Osaka University, Osaka, Japan.
- 23. Okamoto T, Kettawan A, Chitsopa K, Okuno M. Distribution of reduced form of coenzyme Q homologues in dietary foods and health supplements. The 5th Conference of the International Coenzyme Q10 Association, November 9-12, 2007, Portopia Hotel, Kobe, Japan.



- 24. Nukui K, Yamagishi T, Miyawaki H, Kettawan A, Okamoto T, Sato K. Comparison of uptake between puresorb-Q40 and regular hydrophobic coenzyme Q10 in rats and humans. The 5th Conference of the International Coenzyme Q10 Association, November 9-12, 2007, Portopia Hotel, Kobe, Japan.
- 25. Kettawan A, Takahashi T, Okamoto T, Kishi T. Quality control of coenzyme Q10 containing nutritional supplements. The 4th Conference of the International Coenzyme Q10 Association, April 14-17, 2005, The Beverly Hilton Hotel, Beverly Hills, Los Angeles, USA.
- Okamoto T, Kettawan A. Effectiveness of Coenzyme Q10 on Medicinal and Health Sciences. The 3rd Conference of the International Coenzyme Q10 Association, November 22-24, 2002, London, UK.
- 27. Kettawan A, Okamoto T, Takayuki T and Kishi T. The coenzyme Q10 administration on oxidative stress rats induced by a cholesterol lowering drug. The 2rd Conference of the International Coenzyme Q10 Association, December 1-3, 2000, Frankfurt, Germany.
- 28. Kettawan A, Okamoto T, Takayuki T and Kishi T. Coenzyme Q10 supplementation on impaired cardiac myocytes prevention induced by HMG- CoA reductase inhibitor. 120th Annual Research Meeting of the Pharmaceutical Society of Japan, March 29-31, 2000, Chubu, Gifu, Japan.

# Poster & Proceeding

- 1. Netbut K, Taechowisan T, Kettawan A. et al. Effect of Geldanamycin Derivatives on Antiparasitic in Erythrocytic Stage in Malarial Mouse Model. Proceeding of The 11th SCT Conference 2021. Southern College of Technology, Thailand, 2021
- Chaisri A, Wunjuntuk K, Kettawan A. et al. The Effect of High Dose Defatted Rice Bran on Lipid Peroxidation in Liver of Rats. Proceeding of The 12th National and International Conference "Global Goals, Local Actions: Looking Back and Moving Forward". Graduate School, SSRU Bangkok, 2021
- 3. Jiamjunyasiri A, Rungruang T, Kettawan A, Chaikomin R. Effect of Coriander (Coriandrum sativum L.) extract on histology of liver in malaria mouse model. Proceedings of the 35th MST International Conference, 30st January 2nd February 2018, Chiang Mai, Thailand.
- 4. Khakhunmalee R, Rungruang T, Kettawan A, Chaikomin R. Measurement of antioxidant capacity of Origanum Vulgare L. (Oregano) leaves and crude water extract by using Oxygen radical absorbance capacity assay.Effects of Origanum valgare L. extract on spleen histology of murine malaria. Proceedings of the 35th MST International Conference, 30st January 2nd February 2018, Chiang Mai, Thailand.
- 5. Khaengamkham K, Chupeerach C, On-nom N, Suttisansanee U, Kettawan A, Prangthip P, Tungtrongchitr R. Effect of Parboiled Germinated Brown Rice on Heart of L-NAME-induced Hypertensive Rats. Proceeding on the National and International Graduate Research Conference. March 10, 2017. Pote Sarasin Building, Khon Kaen University.
- 6. Phetthai T, Chupeerach C, On-nom N, Suttisansanee U, Kettawan A, Prangthip P, Tungtrongchitr R. Parboiled Germinated Brown Rice Ameliorates Kidney Inflammatory Genes Expression in L-NAME Hypertensive Rats. Proceeding on the National and International Graduate Research Conference. March 10, 2017. Pote Sarasin Building, Khon Kaen University.
- 7. Thanwisate T, Rungruang T, Chompoopong S, Kettawan A. The effects of Maqui berry (Aristotelia chilensis) on liver morphology of parasitized mice. The 11th Asia-Pacific Microscopy Conference in conjunction with the 33th Annual Conference of the Microscopy Society of Thailand and the 39th Annual Conference of the Anatomy Association of Thailand, May 23-27, 2016, Phuket Graceland Resort and Spa, Thailand.
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