

Curriculum Vitae

Name: Mr.Thanapoom Maneeboon
Position: Researcher
Tel: 029-428-740 ext. 408, 410
E-mail: rditpm@ku.ac.th

EDUCATION

2023 Ph.D. (Agricultural Biotechnology Kasetsart University, Thailand)
2008 M.S. (Microbiology) Kasetsart University, Thailand
2005 B.S. (Microbiology) First Class Honors, Ubonratchathani University, Thailand

PROFESSIONAL EXPERIENCE

2009 - present Scientific Equipment and Research Division, Kasetsart University, Thailand

AREA OF EXPERTISE

- Mycotoxins : mycotoxin-producing fungi and mycotoxin determination
- Fermentation
- Thin layer chromatography-densitometry

RESEARCH GRANTS

As Director of Research Program:

2018 Assessment of mycotoxins and mycotoxins-producing fungi in major ingredients for Thai dishes: glutinous rice and dried chili., Kasetsart University Grant

As Head of Project:

2022 Development of QuEChERS sample preparation for the determination of mycotoxin in medicinal herbs by HPLC and health risk assessment of mycotoxin via consumption of medicinal herbs, Kasetsart University Grant
2018 Distribution of aflatoxin and ochratoxin A producing fungi in dried chili and factors influence on mycotoxins production, Kasetsart University Grant
2018 Isolation of aflatoxin-degrading microorganism for biological control of aflatoxin contamination, Kasetsart University Grant
2017 Biodegradation of DDT in soil by *Fusarium solani* P114, Kasetsart University Grant
2015-2016 Efficiency of wood vinegar produced from different raw materials and collected under various temperatures against plant pest, Kasetsart University Grant,
2014-2015 Biodegradation of some organochlorine pesticide contaminated in environment by soil fungi: Isolation and optimization, Kasetsart University Grant

- 2013-2104 Effect of climate change on distribution of aflatoxin and zearalenone producing fungi from rice of Thailand, Kasetsart University Grant
- 2010 Development of maize-reference material prototype for zearalenone detection in shrimp feed, Kasetsart University Grant
- 2009 Collaborative study to validate the efficiency of rapid immunochromatographic strip for the detection of zearalenone contamination, Kasetsart University Grant

As Co-Researcher

- 2023 The improvement of utilization from pigmented rice for health food: Risk assessment and stable bioactive compounds production, Kasetsart University Grant
- 2018 Risk assessment of mycotoxins and distribution of mycotoxins producing fungi in Thai glutinous paddy rice and drain rice, Kasetsart University Grant
- 2017-2018 Biosynthesis of ZnO nanoparticles by herbal extract and Its application in product for control fungi causing postharvest decay of fruit, Kasetsart University Grant
- 2017 Searching of taxol producing gene and diversity of endophytic fungi from mangrove plant, Kasetsart University Grant
- 2016-2017 Production of cholesterol-lowering agents and high antioxidance capacities using purple corn cob KPSC 903 as substrate, Kasetsart University Grant
- 2015 Increasing efficiency for indole-3-acetic acid (IAA) production by *Bacillus* spp. isolated from alkaline soil, Kasetsart University Grant
- 2015 Production and Improved stability of anthocynin from *Carissa carandas* Linn. and its application in healthcare and cosmetic Products, Kasetsart University Grant
- 2015 Evaluation of nutritional value and efficiency on bacterial leaf blight disease and brown planthopper control in rice of Tham-mang extract (*Litsea petiolata* Hook f.), Kasetsart University Grant
- 2014-2015 Potential for phytoremediation of organochlorine in environment with *Aeschynomene* spp., Kasetsart University Grant
- 2014 Potential assessment of haloalkaliphilic bacteria isolated from alkaline soil in Kanchanaburi research station in plant growth promoting bacteria, Kasetsart University Grant
- 2012-2013 Enhancement of the efficiency of zearalenone test kit and aflatoxin immunoaffinity column for commercial manufacturing, Agricultural Research Development Agency (ARDA) Grant
- 2012 Risk profile of aflatoxin producing fungi contaminated in husked and color rice in thailand: impact from climate change, S&T Postgraduate Education and Research Development Office (PERDO) Grant
- 2011-2012 Aflatoxin reduction using modified atmosphere in peanut (*Arachis hypogaea* L.), Kasetsart University Grant

- 2011 Employ crude glycerol from palm oil-biodiesel production as an alternative substrate for single cell oil production by oleaginous microorganisms, Kasetsart University Grant
- 2009-2010 Development of affinity column for reduce costing of aflatoxin determination, National Research Council of Thailand (NRCT) Grant
- 2009 Incidence of mycotoxins contamination in shrimp feed and raw materials, Kasetsart University Grant
- 2009 Biological technique in detection of toxin-producing *Fusarium* strains in shrimp feed, Kasetsart University Grant
- 2009 Toxicological effects of zearalenone to immunological and histological changes of Vannamei shrimp, Kasetsart University Grant, Kasetsart University Grant

PUBLICATIONS

1. Maneeboon T, S. Sangchote, R. Hongprayoon, C. Chuaysrinule and W. Mahakarnchanakul. 2023. Modeling the Thermal Inactivation of Ascospores from Heat-Resistant Molds in Pineapple Juice and Evaluating Disinfection Efficiency of Sodium Hypochlorite and Chlorine Dioxide. *Beverages*. 9(4):96.
2. Maneeboon, T., S. Sangchote, R. Hongprayoon, C. Chuaysrinule and W. Mahakarnchanakul. 2023. Occurrence of Heat-Resistant Mold Ascospores in Pineapple and Sugarcane Field Soils in Thailand. *International Journal of Microbiology*. 2023, 8347560.
3. Maneeboon, T., C. Chuaysrinule and W. Mahakarnchanakul. 2023. Optimization and Validation of Dispersive Liquid–Liquid Microextraction for Simultaneous Determination of Aflatoxins B1, B2, G1, and G2 in Senna Leaves and Pods Using HPLC-FLD with Pre-Column Derivatization. *Toxins*. 15, 277.
4. Chuaysrinule, C., T. Maneeboon and W. Mahakarnchanakul. 2023. Mutual effects on mycotoxin production during co-culture of ochratoxigenic and aflatoxigenic *Aspergillus* strains. *Mycotoxin Research*. 39, 57–66.
5. Joshi, P.; C. Chauysrinule, W. Mahakarnchanakul and T. Maneeboon. 2022. Multi-Mycotoxin Contamination, Mold Incidence and Risk Assessment of Aflatoxin in Maize Kernels Originating from Nepal. *Microbiology Research*. 2022, 13, 258-277.
6. Dwipa, R.P.U., T. Maneeboon, C. Chuaysrinule, and W. Mahakarnchanakul. 2022. Interactive Inhibition of Aflatoxigenic *Aspergillus flavus* and Ochratoxigenic *Aspergillus carbonarius* by *Aspergillus oryzae* under Fluctuating Temperatures. *Microbiology Research*. 13 (1): 114-127.
7. Chuaysrinule, C., T. Maneeboon, C. Roopkham, W. Mahakarnchanakul. 2020. Occurrence of aflatoxin- and ochratoxin A-producing *Aspergillus* species in Thai dried chilli. *Journal of Agriculture and Food Research*. 2: 100054
8. Chuaysrinule, C., W. Mahakarnchanakul and T. Maneeboon. 2020. Comparative study on the effect of temperature and water activity on *Aspergillus flavus* and *Aspergillus carbonarius* isolates

- growth and mycotoxin production on a chili powder medium. *Cogent Food and Agriculture*. 6: 1782097
9. Petchpoung, K., S. Soiklom, W. Siri-Anusornsak, N. Khlangsap, A. Tara and T. Maneeboon. 2020. Predicting antioxidant activity of wood vinegar using color and spectrophotometric parameters. *MethodsX* 7:100783.
 10. Suravanichnirachorn, W., V. Haruthaithanasan, S. Suwonsichon, U. Sukatta, T. Maneeboon and W. Chantrapornchai. 2018. Effect of carrier type and concentration on the properties, anthocyanins and antioxidant activity of freeze-dried mao [*Antidesma bunius* (L.) Spreng] powders. *Agriculture and Natural Resources* 52 (4): 354-360.
 11. Choochuay, S., J. Phakam, P. Jala, T. Maneeboon and N. Tansakul. 2018. Determination of aflatoxin B1 in feedstuffs without clean-Up step by high-performance liquid chromatography. *International Journal of Analytical Chemistry* (2) (2018): 1-8.
 12. Kooprasertying, P., T. Maneeboon, P. Iamtaweejaroen, R. Hongprayoon and W. Mahakarnchanakul. 2017. Optimization and efficiency improvement of in-house immunoaffinity column KU-AF02 For aflatoxin detection. *Biotropia* 24 (2): 114-126.
 13. Kooprasertying, P., T. Maneeboon, R. Hongprayoon and W. Mahakarnchanakul. 2016. Exposure assessment of aflatoxins in Thai peanut consumption. *Cogent Food and Agriculture* 2(1): 1204683.
 14. Iamtaweejaroen, P., P. Kooprasertying, T. Maneeboon, N. Anukul and W. Mahakarnchanakul. 2016. Exposure to aflatoxin B1 in Thailand by consumption of brown and color rice. *Mycotoxin Research* 32 (1): 19-25.
 15. Nampeung, A., T. Maneeboon, C. Roopkham, C. Chuaysrinule and W. Mahakarnchanakul. 2014. Fumonisin and T-2 toxin production of *Fusarium* spp. isolated from complete feed and individual agricultural commodities used in shrimp farming. *Mycotoxin Research* 30 (1): 9-16.
 16. Maneeboon, T., W. Vanichsiratana, C. Pomchaitaward and V. Kitpreechavanich. 2010. Optimization of Lactic Acid Production by Pellet-Form *Rhizopus oryzae* in 3-L Airlift Bioreactor Using Response Surface Methodology. *Appl. Biochem. Biotechnol.* 161 (1-8), 137-146.
 17. Kitpreechavanich, V., T. Maneeboon, Y. Kayano and K. Sakai. 2008. Comparative Characterization of L-Lactic Acid-producing Thermotolerant *Rhizopus* Fungi. *J. Biosci. Bioeng.* 106 (6), 541-546.

CONFERENCE PRESENTATIONS

1. Maneeboon, T., C. Chuaysrinule and W. Mahakarnchanakul. 2023. Mycological analysis and incidence of aflatoxin and ochratoxin A-producing fungi in selected medicinal herbs. p 169. In the 5th International Conference of Mycotoxicology and Food Security, 2023 (ICM 2023) "Global mycotoxins challenges in 2023" 6-7 September 2023, Bangkok, Thailand
2. Chuaysrinule, C., C. Roopkham, W. Mahakarnchanakul and T. Maneeboon. 2023. Fungal contamination of pigmented rice grains: identification and presence of potentially citrinin-producing species. p

170. In the 5th International Conference of Mycotoxicology and Food Security, 2023 (ICM 2023) “Global mycotoxins challenges in 2023” 6-7 September 2023, Bangkok, Thailand.
3. Chananya Chuaysrinule, Warapa Mahakarnchanakul and Thanapoom Maneeboon. 2022. Optimization of a modified QuEChERS method for simultaneous analysis of AFB1, AFB2, AFG1, AFG2 and OTA in senna leaf powder by HPLC-FLD, International Symposium of Mycotoxicology 2022 & International Conference of Mycotoxicology and Food Security 2022 (ISMYCO 2022 & ICM 2022), 6 - 9 September 2022, Thailand
 4. Chananya Chuaysrinule, Chanram Roopkham, Krittaya Petchpoung and Thanapoom Maneeboon. 2022. Aflatoxin B1 degradation by a newly isolated endophytic fungus *Aspergillus aculeatus*, International Symposium of Mycotoxicology 2022 & International Conference of Mycotoxicology and Food Security 2022 (ISMYCO 2022 & ICM 2022), 6 - 9 September 2022, Thailand
 5. Warapa Mahakarnchanakul, Retty Putri Utami Dwipa, Chananya Chuaysrinule and Thanapoom Maneeboon. 2020. Mycotoxigenic fungi and mycotoxins in selected cereals in Thailand and their exposure assessment, p. 39. *In* The 6th International Union of Microbiological Societies (IUMS) Outreach Programme on Food Safety and Microbial Toxins, 20-21 February 2020. Universitas Gadjah Mada, Yogyakarta, Indonesia
 6. Chananya Chuaysrinule, Warapa Mahakarnchanakul and Thanapoom Maneeboon. 2020. Influence of temperature and water activity on growth and production of aflatoxin B1 by *Aspergillus flavus* and ochratoxin A by *A. carbonarius* isolated from dried chili, p. 94. *In* The 6th International Union of Microbiological Societies (IUMS) Outreach Programme on Food Safety and Microbial Toxins, 20-21 February 2020. Universitas Gadjah Mada, Yogyakarta, Indonesia.
 7. Lalita Khacharat, Warapa Mahakarnchanakul, Prapassorn Rugthaworn, Udomlak Sukatta, Ketsaree Klinsukhon and Thanapoom Maneeboon. 2020. Effect of Banana Peel Powder on Citrinin Production by *Monascus purpureus*, p. 79. *In* The 6th International Union of Microbiological Societies (IUMS) Outreach Programme on Food Safety and Microbial Toxins, 20-21 February 2020. Universitas Gadjah Mada, Yogyakarta, Indonesia
 8. Retty Putri Utami Dwipa, Thanapoom Maneeboon, Chananya Chuaysrinule and Warapa Mahakarnchanakul. 2020. Competition of toxigenic isolates of *Aspergillus flavus* and *Aspergillus carbonarius* under shifting temperature, p. 90. *In* The 6th International Union of Microbiological Societies (IUMS) Outreach Programme on Food Safety and Microbial Toxins, 20-21 February 2020. Universitas Gadjah Mada, Yogyakarta, Indonesia.
 9. Warapa Mahakarnchanakul and Thanapoom Maneeboon. 2020. Regulations Relating to Mycotoxins in Food and Feed in Thailand, p 39. *In* WMFmeetsASIA – the 12th Conference of the World Mycotoxin Forum, 13-15 January 2020. Bangkok, Thailand.
 10. Thanapoom Maneeboon, Chananya Chuaysrinule, Retty Putri Utami Dwipa and Warapa Mahakarnchanakul. 2020. Mycobiota and Mycotoxins contamination in sesame seeds, lotus seeds and Job’s tears seeds from Thailand, p 119. *In* WMFmeetsASIA – the 12th Conference of the World Mycotoxin Forum, 13-15 January 2020. Bangkok, Thailand.
 11. Udomlak Sukatta, Prapassorn Rugthaworn, Ketsaree Klinsukhon, Lalita Khacharat and Thanapoom Maneeboon. 2019. Bioactive compounds from young persimmon fruit and its potential use as

- cosmetic active ingredients. *In* The International Halal Science and Technology Conference (ISHATEC); the 12th Halal Science Industry and Business (HASIB), Bangkok, Thailand.
12. Prapassorn Rugthaworn, Lalita Khacharat, Ketsaree Klinsukhon, Thanapoom Maneeboon and Udomlak Sukatta. 2018. Lovastatin biosynthesis by *Monascus purpureus* using purple corn cob (*Zea mays* L.) under solid state fermentation. *In* The Proceeding of the International Conference on Agriculture and Natural Resources 2018 (ANRES 2018), 26 - 28 April 2018, Bangkok, Thailand.
 13. Udomlak Sukatta, Prapassorn Rugthaworn, Ketsaree Klinsukhon, Lalita Khacharat and Thanapoom Maneeboon. 2018. Biological activity and chemical composition evaluations of tiger orchid (*Grammatophyllum speciosum*) extract. *In* The Proceeding of the International Conference on Agriculture and Natural Resources 2018 (ANRES 2018), 26 - 28 April 2018, Bangkok, Thailand.
 14. Prapassorn Rugthaworn, Lalita Khacharat, Ketsaree Klinsukhon, Thanapoom Maneeboon and Udomlak Sukatta. 2017. Lovastatin Production by *Monascus purpureus* using Lignocellulosic Residues under Solid State Fermentation. *In* The 19th Food Innovation Asia Conference 2017 (FIAC 2017) Innovative Food Science and Technology for Mankind: Empowering Research for Health and Aging Society, 15-17 June 2017, Thailand.
 15. Chananya Chuaysrinule, Kullanart Tongkhao, Kanithaporn Vangnai and Warapa Mahakarnchanakul and Thanapoom Maneeboon. 2017. Occurrence of Aflatoxin and Ochratoxin A Producing Fungi in Chili of Thailand. *In* The Proceeding of the 5th IUMS Outreach Programme: Advances in Food Safety and Mycotoxins, 19-20 January 2017, Yogyakarta, Indonesia.
 16. Parawee Pukkasorn, Wannasawat Ratphitagsanti, Vichai Haruthaithanasan, Thanapoom Maneeboon, Chananya Chuaysrinule, "Consumer Survey on Aflatoxin Contaminated Peanut and Ultra Superheated Steam Technology Usage", The 18th Food Innovation Asia Conference 2016 (FIAC 2016)
 17. Wetanee Suravanichnirachorn, Ketsaree Klinsukhon, Lalita Khacharat, Thanapoom Maneeboon, "Effects of Extraction Conditions on quality and antioxidant activity of Purple Corn Cob KPSC 903 extracts.", 12th Asian Congress of Nutrition (ACN2015)
 18. Sudarut Kaokaeng, Warapa Mahakarnchanakul, Thanapoom Maneeboon and Chananya Chuaysrinule. 2014. The Optimized Condition of Ochratoxin A Production for Reference Material Production, p 87. *In* The Proceeding of the 2nd AFSA Conference on Food Safety and Security. 15 – 18 August 2014. Bien Hoa City, Vietnam.
 19. Thanapoom Maneeboon, Chananya Chuaysrinule, Nampeung Anukul, Panrapee Iamtaweejaloen and Warapa Mahakarnchanakul. 2014. Isolation of *Aspergillus* Section *Flavi* form Rice in Thailand and their Aflatoxins Producing Ability, p 900. *In* Proceeding of the 10th International Mycological Congress. 3-8 August 2014. Bangkok, Thailand.
 20. Chananya Chuaysrinule, Siriwan Soiklom, Krittaya Petchpoung, Warapa Mahakarnchanakul, Khamjut Ruenreungdee and Thanapoom Maneeboon. 2014. Detection of aflatoxins producing *Aspergillus* spp. from fish meal, soybean meal and shrimp feed in Thailand. p 901. *In* Proceeding of the 10th International Mycological Congress. 3-8 August 2014. Bangkok, Thailand.
 21. Mahakarnchanakul, W., N. Anukul, P. Iamtaweejaloen, K. Vangnai, K. Thongkhao, A. Sankhom, P. Kooprasertying and T. Maneeboon. 2014. Assessment of mycotoxins in food and feed in

- Thailand, p77. *In* Proceeding of the International Mycotoxin conference 2014, 19-23 May 2014. Beijing, China.
22. Warapa Mahakarnchanakul, Panrapee Iamtaweelaoen, Nampeung Anukul, Thanapoom Maneeboon, Amnart Poapolathep. 2013. Aflatoxin contamination of husked rice and color rice in relation to climate in Central and Northeast region of Thailand, p173. *In* Proceeding of Impact of Climate change on Food Security, Safety and Nutrition in Our Future. 29 May 2013. Seoul, Korea.
 23. Thanapoom Maneeboon, Chananya Chuaysrinule, Nampeung Anukul, Chanram Roopkham and Warapa Mahakarnchanakul. 2013. A preliminary investigation on the presence of zearalenone producing *Fusarium* from corn in Thailand. p72. *In* Proceeding of International Conference on Mycological Aspects for Food and Feed Safety, 27-28 June 2013. Yogyakarta, Indonesia.
 24. Kooprasertying Phakpoom, Maneeboon Thanapoom, Chuaysrinule Chananya, Insawake Kittisa, Hongprayoon Ratchanee and Mahakarnchanakul Warapa. 2013. In-house Immuno Affinity Column Development for Aflatoxin B1 Detection. p 64. *In* Proceeding of International Conference on Mycological Aspects for Food and Feed Safety, 27-28 June 2013. Yogyakarta, Indonesia.
 25. Ratchanee Hongprayoon, Kittisak Insawake, Warapa Mahakarnchanakul, Thanapoom Maneeboon, and Suwanna Kladpan. 2012. Zearalenone-specific immuno- chromatographic strip for on-site screening. *In* Proceeding of the XIth International Conference on AgriFood Antibodies (ICAFA). 3-5 November 2012. Vienna, Austria.
 26. Nampeung Anukul, Siriwan Soiklom, Krittaya Petchpoung, Thanapoom Maneeboon, Warapa Mahakarnchanakul. 2012. Risk incidence of mycotoxins and development of rapid detection methods in shrimp feed. *In* The Proceeding of Seminar and workshop in Establishment of an Asian Research Center of Excellence in Healthy and Safe Marine Food Resource, 2nd Symposium of TUMSAT Healthy and Safe Marine Food Resources Project. 5 - 7 November 2012. Bangkok, Thailand.
 27. Thanapoom Maneeboon, Chananya Chuaysrinule, Suwanna Kladpan, Warapa Mahakarnchanakul and Teeranud Romphopak. 2012. Determination of Aflatoxins in Peanut and Potential of Aflatoxins Production by *Aspergillus* Strains. *In* The 6th Thai Mycological Conference. 6 March 2012. Bangkok, Thailand.
 28. Thanapoom Maneeboon, Wirat Vanichsiratana, Chaiyaporn Pomchaitaward and Vichien Kitpreechavanich. 2012. Factors Affecting Pellet Formation of *Rhizopus oryzae* and Its Relation on Lactic Acid Production in Airlift Fermenter. *In* The 6th Thai Mycological Conference. 6 March 2012. Bangkok, Thailand.
 29. Thanapoom Maneeboon, Suwanna Kladpan, Punyaporn Oudcomethiang and Warapa Mahakarnchanakul. 2012. Validation of Method for Determination of Fumonisin B 1 in Cereal and Cereal Products by HPLC-FLD with Immunoaffinity Column Clean-up, pp. 175-182. *In* The Proceedings of the 50th Kasetsart University Annual Conference (Agro-Industry section). 31 January - 2 February 2012. Bangkok, Thailand.
 30. Ratchanee Hongprayoon, Suwanna Kladpan, Warapa Mahakarnchanakul, Thanapoom Maneeboon, Kittisak Insawake, Pattarpong Yangyuen, Srihunsu Malichan, Punyaporn Oudcomethian, Lakkanok Sinprasopchai and Phanom Saijit. 2011. Development of immunodiagnostic test kits and

- immunoaffinity columns for zearalenone and aflatoxin. pp 120-129. *In* The Proceeding of FFTC-KU 2011: International Seminar on Risk Assessment and Risk Management of Mycotoxins for Food Safety in Asia. 5-9 September 2011. Pattaya, Thailand.
31. Thanapoom Maneeboon, Ancharida Akaracharanya, Teerapatr Srinorakura and Vichien Kitpreechvanich. 2009. Simultaneous saccharification and fermentation of cassava pulp to ethanol by co-culture of *Rhizopus oryzae* and *Saccharomyces cerevisiae* in solid state culture. pp 106-113. *In* The Proceeding of 47th Kasetsart University Annual Conference (Science). Kasetsart University. Bangkok, Thailand.
 32. Prapuek Tangmunkong, Suwanna Kladpan, Prakorn Jala, Thanapoom Maneeboon and Warapa Mahakarnchanakul. 2011. A survey of mycotoxins in maize in Thailand. *In* The 5th Thai Mycological Conference. 7 December 2010. Bangkok, Thailand.
 33. Maneeboon, T., W. Vanichsiratana, C. Pomchaitaward and V. Kitpreechavanich. 2008. Optimization of lactic acid fermentation by *Rhizopus oryzae* KPS 106 in 3-l airlift bioreactor using response surface methodology, pp 112-119. *In* The Proceeding of 46th Kasetsart University Annual Conference (Science). Kasetsart University. Bangkok.
 34. Maneeboon, T., B. Wanitchaploy, Y. Kayano, K. Sakai and V. Kitpreechavanich. 2007. Physiological characteristics of thermotolerant L-lactic acid and glucoamylase producing fungi, *Rhizopus* isolated from Thailand. *In* JSPS-NRCT Concluding Joint Seminar on Development of Thermotolerant Microbial Resources and Their Applications. 18-20 October 2007. Walailak University, Nakhon Sri Thammarat, Thailand.
 35. Maneeboon, T., B. Wanitchaploy, Y. Kayano, K. Sakai and V. Kitpreechavanich. 2006. Identification and physiological characteristics of mesophilic and thermotolerant *Rhizopus* isolated from Thailand. *In* The 5th JSPS-NRCT Joint Seminar on Development of Thermotolerant Microbial Resources and Their Applications. 7-10 November 2006. Pattaya, Thailand.
 36. Kitpreechavanich, V., T. Maneeboon, S. Kalyanamitra, S. Praneetrattananon, Y. Shirai, K. Sasaki and B. Yongsmith. 2006. Strain improvement and production of L (+) -lactic acid by polyurethane immobilized *Rhizopus oryzae* in Airlift Bioreactor. *In* Inno Bioplast 2006. , 21-24 September 2006. Siam Paragon, Bangkok, Thailand.

AWARDS

1. KU-AF2: clean-up column for aflatoxins analysis (Co-inventor)

- Bronze Medal Award from the 10th Taipei International Invention Show & Technomart (INST 2014)
- Special prize Leading Innovation Award from the International Intellectual Property Network (IIPNF) in INST 2014
- Special prize TIIIA Outstanding Diploma from Taiwan Invention & Innovation Industry Association in INST 2014

- Third Award of 2013 NRCT invention award (section Agriculture and Biology) from National Research Council of Thailand (NRCT)

2. Super Healthy Powder (Co-inventor)

- Second Award from KU Innovation Award 2013, section: Science and Agricultural Technology, Kasetsart University, Thailand

3. 1st Winner Poste (First author) from the International Conference on Mycological Aspects of Food and Feed Safety (IC-MAFFS), Faculty of Agricultural Technology, Universitas Gadjah Mada, Yogyakarta, Indonesia (27-28 June 2013)

4. Zearalenone Reference Material (First-inventor)

- First Award from KU Innovation Award 2012, section: Science and Agricultural Technology, Kasetsart University, Thailand

5. Production Technology of Aflatoxin in Peanut Reference Materials (Co-inventor)

- Third Award from KU Innovation Award 2009, section: Agro-Industry, Kasetsart University, Thailand