

## OUTPUT

Our findings have been summarized in terms of 17 published international papers (with two during submission and one to be submitted), one book, one patent, 19 presentations at international congress, and 15 presentations at national congress as outlined below:

### International Papers (List according to ISI):

1. Sirirak T., and **Voravuthikunchai S.P.** 2011. Inhibition of adhesion and invasion of *Campylobacter* to Caco-2 cell by *Eleutherine americana*. **FOODBORNE PATHOGEN AND DISEASE: (To be submitted). JIF = 1.896**
2. Chusri S., Na-Phattalung P., **Voravuthikunchai S.P.** 2011 Anti-methicillin-resistant *Staphylococcus aureus* biofilm efficacy of *Quercus infectoria* G. Olivier. **JOURNAL OF APPLIED MICROBIOLOGY: JAM-2011-0680 (Submitted). JIF = 2.098**
3. **Voravuthikunchai S.P.**, Suwalak S., Mitranun W. 2010. Ellagitannin from *Quercus infectoria* eradicates intestinal colonization and prevents renal injuries in mice infected with *Escherichia coli* O157:H7. **MICROBIAL PATHOGENESIS: YMPAT-D-10-0016 (Submitted).. JIF = 2.324**
4. Chusri S., **Voravuthikunchai S.P.** 2011. Damage of staphylococcal cytoplasmic membrane by *Quercus infectoria* G. Olivier and its components. **LETTERS IN APPLIED MICROBIOLOGY 52: 565-572. JIF = 1.64**
5. Sirirak T., and **Voravuthikunchai S.P.** 2011. *Eleutherine americana*: A candidate for the control of *Campylobacter* spp. **POULTRY SCIENCE 90: 791-796. JIF =1.673**
6. Sianglum W., Srimanote P., Wonglumsom W., Kittiniyom K., **Voravuthikunchai S.P.** 2011. A Proteomic study of methicillin-resistant *Staphylococcus aureus* treated with rhodomyrone, a novel challenging antibiotic candidate. **PLoS ONE 6: e16628. JIF = 4.351**
7. Ifesan BOT, Darah Ibrahim, **Voravuthikunchai SP.** 2010. Antimicrobial activity of crude extract from *Eleutherine americana*. **JOURNAL OF FOOD, AGRICULTURE AND ENVIRONMENT 8: 132-135. JIF =0.349**

8. **Voravuthikunchai SP**, Suhaila D, Charernjiratrakul, W. 2010. Control of *Bacillus cereus* in foods by *Rhodomyrtus tomentosa* (Ait.) Hassk. leaf extract and its purified compound. JOURNAL OF FOOD PROTECTION 73: 1907-1912. **JIF = 1.96**
9. **Voravuthikunchai SP**, Kanchanapoom T, Sawangjaroen N, Hutadilok-Towatana N. 2010. Antioxidant, antibacterial and anti-giardial activities of *Walsura robusta* Roxb. NATURAL PRODUCT RESEARCH 24: 813-824. **JIF = 0.81**
10. Ifesan BOT, Joycharat N, **Voravuthikunchai SP**. 2009. The mode of anti-staphylococcal action of *Eleutherine americana*. FEMS IMMUNOLOGY AND MEDICAL MICROBIOLOGY 57: 193-201. **JIF = 2.335**
11. Suwalak S, **Voravuthikunchai SP**. 2009. Morphological and ultrastructural changes in the cell structure of enterohaemorrhagic *Escherichia coli* O157:H7 following treatment with *Quercus infectoria* nut galls. JOURNAL OF ELECTRON MICROSCOPY 58: 315-320. **JIF = 1.047**
12. Limsuwan S, **Voravuthikunchai SP**. 2009. Medicinal plants with significant activity against important pathogenic bacteria. PHARMACEUTICAL BIOLOGY 47: 683-689. **JIF = 0.683**
13. Ifesan BOT, Siripongvutikorn S, Hutadilok-Towatana N, **Voravuthikunchai SP**. 2009. Evaluation of the ability of *Eleutherine americana* crude extract as natural food additive in cooked pork. JOURNAL OF FOOD SCIENCE 74: M352-M357. **JIF = 1.601**
14. **Voravuthikunchai SP**, Suwalak S. 2009. Changes in cell surface properties of shiga toxin-producing *Escherichia coli* by *Quercus infectoria* G. Olivier. JOURNAL OF FOOD PROTECTION 72: 1699-1704. **JIF = 1.96**
15. Ifesan BOT, **Voravuthikunchai SP**. 2009. Effect of *Eleutherine americana* Merr. extract on enzymatic activity and enterotoxin production of *Staphylococcus aureus* in broth and cooked pork. FOODBORNE PATHOGENS AND DISEASE 6: 699-704. **JIF = 1.896**

16. Limsuwan S, Trip EN, Kouwen TRHM, Piersma S, Hiranrat A, Mahabusarakam W, **Voravuthikunchai SP**. 2009. Rhodomyrtone: A new candidate as natural antibacterial drug from *Rhodomyrtus tomentosa*. PHYTOMEDICINE 16: 645-651. **JIF = 2.174**
17. Ifesan BOT, Siripongvutikorn S., **Voravuthikunchai SP**. 2008. Application of *Eleutherine americana* crude extract in home made salad dressing. JOURNAL OF FOOD PROTECTION 72: 650-655. **JIF = 1.96**
18. Ifesan BOT, Mahabusarakam W, Hamtasin C, **Voravuthikunchai SP**. 2009. Assessment of antistaphylococcal activity of partially-purified fractions and pure compounds from *Eleutherine americana*. JOURNAL OF FOOD PROTECTION 71: 354-359. **JIF = 1.96**
19. Ifesan BOT, **Voravuthikunchai SP**. 2009. Inhibitory effect of *Eleutherine americana* Merr. extract on *Staphylococcus aureus* isolated from food. JOURNAL OF FOOD SCIENCE 74: M31-M36. **JIF = 1.489**
20. Saising J, Hiranrat A, Mahabusarakam W, Ongsakul M, **Voravuthikunchai SP**. 2008. Rhodomyrtone from *Rhodomyrtus tomentosa* (Aiton) Hassk. as a natural antibiotic for staphylococcal cutaneous infections. JOURNAL OF HEALTH SCIENCE 54: 589-595. **JIF = 0.683**

**Patent:**

**Voravuthikunchai SP**, Siripongvutikorn S. 2008. Food additive with antibacterial activity from *Eleutherine americana* Merr. and its application in food preservation. Thai Patent. Application No. 0801004660 (11/09/2008).

**International Meetings:**

1. **Voravuthikunchai SP.** 2011. Rhodomyrtonone from *Rhodomyrthus tomentosa* (Aiton) Hassk.: A potential natural antibacterial drug against methicillin-resistant *Staphylococcus aureus*. 2nd ASM Conference on Methicillin-resistant Staphylococci, September 8-10, 2011 at Washington D.C., USA.
2. Voravuthikunchai SP. 2011. Studies on medicinal plants as an alternative treatment for antibiotic-resistant pathogenic bacteria. August 12, 2011 at University of Zurich, Switzerland.
3. Chusri S, **Voravuthikunchai SP.** 2011. Antimicrobial efficacy of novobiocin in combination with Thai medicinal plants against multidrug-resistant *Acinetobacter baumannii*. 1<sup>st</sup> International Conference on Natural Products, 24-27 May, 2011 at Castres, France.
4. Limsuwan S, **Voravuthikunchai SP.** 2011. Anti-quorum sensing activity of Thai medicinal plants. 1<sup>st</sup> International Conference on Natural Products, 24-27 May, 2011 at Castres, France.
5. Voravuthikunchai SP. 2011. Wine from *Eleuterine americana*. Thailand Food Conference 2011/Health Food and Ingredient Thailand 2011/Integrated Food Tech EXPO 2011, 3-6 March 2011 at Bangkok, Thailand. **Invited author.**
6. **Voravuthikunchai SP.** 2010. Plant-derived drugs with antimicrobial activity. 2 December, 2010 at Microbial Genetics, University Tuebingen, Germany. **Invited Speaker.**
7. Chusri S, **Voravuthikunchai SP.** 2010. Resistance modifying agents from Thai medicinal plants. The 7<sup>th</sup> IMT-GT UNINET and the 3<sup>rd</sup> Joint International PSU-UNS Conferences, 7-8 October, 2010 at Hat Yai, Thailand.
8. Limsuwan S, Kayser O, **Voravuthikunchai SP.** 2010. Proteomic study on the role of rhodomyrtonone on *Streptococcus pyogenes*. The 7<sup>th</sup> IMT-GT UNINET and the 3<sup>rd</sup> Joint International PSU-UNS Conferences, 7-8 October, 2010 at Hat Yai, Thailand.

9. **Voravuthikunchai SP.** 2010. *Rhodomyrtus tomentosa*: a high potential plant species as a new antibacterial agent. 1<sup>st</sup> Annual World Congress of Immunodiseases and Therapy, 15-17 May, 2010 at Beijing, China. Invited Speaker.
10. **Voravuthikunchai SP.** 2009. Selected studies on high potential medicinal plant species. 6<sup>th</sup> Joint Seminar on Biomedical Sciences among Prince of Songkla University, Chiang Mai University, Kunming Medical University and Toho University, 12-13 October, 2009 at Tokyo, Japan. Invited Speaker.
11. Chusri S, Villanueva I, Davies J, **Voravuthikunchai SP.** 2009. Enhancing antibiotic activity: a strategy to control Acinetobacter infections. LSI-GSA Research Day, 13 March 2009 at Vancouver, Canada.
12. Leejae S, Yingyongnarongkul B, **Voravuthikunchai SP.** 2008. Study on antibacterial mechanism of rhodomyrtone using fluorescein-labelling technique. Programme and Abstracts, The 2<sup>nd</sup> International Conference on Natural Products for Health and Beauty, 17-19 December, 2008 at Phayao, Thailand.
13. Limsuwan S, **Voravuthikunchai SP,** Kayser O. 2008. Antibacterial property and action of *Boesenbergia pandurata*, *Eleutherine americana*, and *Rhodomyrtus tomentosa* extracts on clinical isolates of *Streptococcus pyogenes*. Programme and Abstracts, The 2<sup>nd</sup> International Conference on Natural Products for Health and Beauty, 17-19 December, 2008 at Phayao, Thailand.
14. Saising J, Ongsakul M, **Voravuthikunchai SP.** 2008. Antibacterial effect of the ethanolic extract of *Rhodomyrtus tomentosa* (Aiton) Hassk. against acne-inducing bacteria. Programme and Abstracts, The 2<sup>nd</sup> International Conference on Natural Products for Health and Beauty, 17-19 December, 2008 at Phayao, Thailand.
15. Sianglum W, Srimanote P, Wonglumsom W, Kittiniyom K, **Voravuthikunchai SP.** 2008. Study on the effect of *Rhodomyrtus tomentosa* (Aiton) Hassk. leaf on methicillin-resistant *Staphylococcus aureus* cell. Programme and Abstracts, The 2<sup>nd</sup> International Conference on Natural Products for Health and Beauty, 17-19 December, 2008 at Phayao, Thailand.

16. Sirirak T, Wisessombat S, **Voravuthikunchai SP**. 2008. Antibacterial activity of Thai medicinal plants against *Campylobacter* spp. isolated from chickens. Programme and Abstracts, The 2<sup>nd</sup> International Conference on Natural Products for Health and Beauty, 17-19 December, 2008 at Phayao, Thailand.
17. Visutthi M, Srimanote P, **Voravuthikunchai SP**. 2008. Effect of the ethanolic extract and purified compound of *Rhodomyrtus tomentosa* (Aiton) Hassk. leaves on meticillin-resistant *Staphylococcus aureus* secretome. Programme and Abstracts, The 2<sup>nd</sup> International Conference on Natural Products for Health and Beauty, 17-19 December, 2008 at Phayao, Thailand.
18. **Voravuthikunchai SP**, Srimanote P, Wonglumsom W, Kittiniyom K. 2008. Strategies of natural products research: Detailed studies on antibacterial activities of high potential plant species. 2<sup>nd</sup> International Conference on Natural Products for Health and Beauty, 17-19 December, 2008 at Phayao, Thailand. Invited speaker.
19. **Voravuthikunchai SP**. 2008. Applications of natural products in our daily lives. 2<sup>nd</sup> International Trade Exhibition and Conference for Biotechnology, 25-27 November, 2008 at Bangkok, Thailand. Invited speaker.

#### **National Meetings:**

1. Sianglum W., **Voravuthikunchai SP**. 2011. A combined proteomics and transcriptomics studies on rhodomyrtone as a new antibiotic against methicillin-resistant *Staphylococcus aureus*. RGJ-Ph.D. Congress XII, 1-3 April, 2011 at Pattaya, Chonburi, Thailand.
2. Leejae S, **Voravuthikunchai SP**. 2011. Effect of rhodomyrtone on tolerance to multiple stresses in *Staphylococcus aureus*. RGJ-Ph.D. Congress XII, 1-3 April, 2011 at Pattaya, Chonburi, Thailand.
3. **Voravuthikunchai SP**, Srimanote, P, Wonglumsom W, Kittiniyom K. 2010. Strategies of natural product research. II. Detailed studies on antibacterial mechanisms. The Thailand Research Fund Meeting, 14-16 October, 2010 at Cha-Am, Thailand.

4. **Voravuthikunchai SP.** 2010. Natural products. NRCT-CPS Conference V. Drug Discovery: Development of Drug Design-Based Pharmaceuticals, 2-5 September, 2010 at Rayong, Thailand.
5. Chusri S, **Voravuthikunchai SP.** 2010. Effect of *Quercus infectoria* on methicillin-resistant *Staphylococcus aureus* cell surface hydrophobicity. RGJ-Ph.D. Congress XI, 1-3 April, 2010 at Pattaya, Chonburi, Thailand.
6. Limsuwan S, **Voravuthikunchai SP.** 2010. Inhibition effect of *Rhodomyrtus tomentosa* leaf extract and rhodomyrtone on microbial adhesion to plastic surface. RGJ-Ph.D. Congress XI, 1-3 April, 2010 at Pattaya, Chonburi, Thailand.
7. Voravuthikunchai S.P., Srimanote, P., Wonglumsom, W., Kittiniyom, K.. 2009. Strategies of Natural Product Research. II. Detailed studies on antibacterial mechanisms. The Thailand Research Fund Meeting, 15-17 October, 2009 at Cha-Am, Thailand.
8. Chusri S., Ivan Villanueva, Voravuthikunchai S.P., and Julian D. 2009. Recycling of existing antibiotics: an alternative strategy to control *Acinetobacter baumannii* infection. RGJ Seminar Series XLV: Innovation of Agricultural Resources, 4 September, 2009 at Prince of Songkla University, Thailand.
9. Leejae S., Yingyongnarongkul B., Voravuthikunchai S.P. 2009. Synthesis and structure-activity relationship study of rhodomyrtone against pathogenic bacteria. RGJ Seminar Series XLV: Innovation of Agricultural Resources, 4 September, 2009 at Prince of Songkla University, Thailand.
10. Limsuwan S. and Voravuthikunchai S.P. 2009. Detailed studies on anti-*Streptococcus pyogenes* activity of potential Thai medicinal plants: *Boesenbergia pandurata*, *Eleutherine americana*, and *Rhodomyrtus tomentosa*. RGJ Seminar Series XLV: Innovation of Agricultural Resources, 4 September, 2009 at Prince of Songkla University, Thailand.

11. Sianglum W., Srimanote P., Wonglumsom W., Kittiniyom K., Voravuthikunchai S.P. 2009. Ultrastructural effects of rhodomyrtone on methicillin-resistant *Staphylococcus aureus*. RGJ Seminar Series XLV: Innovation of Agricultural Resources, 4 September, 2009 at Prince of Songkla University, Thailand.
12. Sianglum W, Srimanote P, Wonglumsom W, Kittiniyom K, **Voravuthikunchai SP**. 2009. Proteomic studies on the effects of rhodomyrtone on methicillin-resistant *Staphylococcus aureus*. Programme and Abstracts, RGJ-Ph.D. Congress X, 3-5 April, 2009 at Pattaya, Chonburi, Thailand.
13. Limsuwan S, Hiranrat A, Mahabusarakam W, **Voravuthikunchai SP**, O. Kayser. 2009. Detailed Studies on antibacterial Activities of *Rhodomyrtus tomentosa* (Aiton) Hassk. against *Streptococcus pyogenes*. Programme and Abstracts, RGJ-Ph.D. Congress X, 3-5 April, 2009 at Pattaya, Chonburi, Thailand.
14. **Voravuthikunchai SP**. Detailed studies on antibacterial mechanisms of high potential plant species. Application of microorganisms in research work & Microbial transformation, 28-29 March, 2009 at Bangkok, Thailand. Invited speaker.
15. Suwalak S, Winyou Mitranun, **Voravuthikunchai SP**. 2009. Suppression effect of semi-purified Qi4 fraction of *Quercus infectoria* on enterohaemorrhagic *Escherichia coli* O157:H7 infection in mice. Proceedings of Microscopy Society of Thailand 2009, p. 81-82. 26<sup>th</sup> MST Annual Conference, 28-30 January, 2009 at Chiang Mai, Thailand.