

Curriculum Vitae

Dr.rer.nat Chatchawal Wongchai (Assistance to the President)

Address: Botany and Plant Physiology LAB

Division Biology, School of Science,

University of Phayao, Phayao, 56000 Thailand

Tel. 091 883 4709, 054 466 666 ต่อ 1713

Fax. 054 466 6664

E-mail wongchaimee2110@gmail.com, Chatchawal.wo@up.ac.th

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. Our working group supports and concerns community empowerment under SDGs, especially the goal number 1, 2, 3, 6, 7, 13, 14 and 15. We are working on Plant and Environmental Stress, Biodiversity and Conservation, Organic Farming, Renewable Energy, Pharmacognosy and Medicine, Green and Clean University and Sustainable University. Our students will be graduated with research topic which related to SDGs. The facilities of our working group are plant growth and plant eco-physiology LAB, Plant cell and tissue culture Unit, Herbarium and Green house, Microscopic LAB, Molecular Biology LAB and Green Peafowl Learning Center. Our co-operation partners are in Thailand, Austria, Slovenia and Germany. Since 2013 to 2020, our students produce about 65 research topics and more than 120 students from our LAB are finished their research with high level skill in natural science and biostatistics. Our students are experienced with international conferences at Germany, Austria and Japan. For future, we are expecting to make the co-operation with various expert Universities and Max Planck Institute in Germany.

1. Education

2000: Bachelor of Science (Botany), Chulalongkorn University, Thailand

2005: Master of Science (Botany), Chulalongkorn University, Thailand
2013: Doctor of Natural Science (Plant Physiology-Cell Biology) – University of Salzburg, Austria

2014: Postdoc- Natural Science (Plant Physiology-Cell Biology) – University of Salzburg, Austria

2. Research out come

Parasitol Res (2016) 115:225–239

Singing in the Tube” —audiovisual assay of plant oil repellent activity against mosquitoes (*Culex pipiens*)

Temitope F. Adams¹ & **Chatchawal Wongchai**² & Anchalee Chaidee³ & Wolfgang Pfeiffer¹

Arthropod-Plant Interactions (2013) 7:69–82

Enhancement and quantification of repellent activity in *Chenopodium* cells

Chatchawal Wongchai • Anchalee Chaidee • Wolfgang Pfeiffer

Plant Biology 14 (2012) 129–141

Multivariate analyses of salt stress and metabolite sensing in auto- and heterotroph *Chenopodium* cell suspensions

C. Wongchai¹, A. Chaidee² & W. Pfeiffer¹

Journal of Plant Physiology. 2008. 165(1655-1666)

Chaidee A., **Wongchai C.** and Pfeiffer W. Extracellular alkaline phosphatase is a sensitive marker for cellular stimulation and exocytosis in heterotroph cell culture of *Chenopodium rubrum*.

3. Grants

- Austrian Federal Ministry of Science and Research (Ernst Mach-Grants – ASEA-UNINET), Austria

- National Science and Technology Development Agency, Thailand

- Science Classrooms in University-Affiliated School Project (MHESI), Thailand 2014-2020

-Thailand Children University-Chevron Thailand 2017-2020

- The Office of Strategy Management (Uppper North 2), Thailand
- Cannabis Catalysts, Austria 2020
- Apinya Medical CO. LTD, Thailand 2020
- MHESI- Reinventing University 2020

4. Conferences

- International student congress 8th -2020, Medical University of Graz, Austria 21-23 May 2020 (2 oral presentation)
- International student congress 7th -2019, Medical University of Graz, Austria 30 May – 2 June 2019 (3 oral presentation and 2 poster presentation)
- International Conference on Biodiversity (IBD 2019), Bangkok, Thailand
“Biodiversity for Sustainable Bioeconomy” 22-24 May 2019 (7 poster presentation)
- Botanikertagung 2017 ‘Plant Research in a Changing World’ 17-21 September in Kiel, Germany. (5 poster presentation)
- The 11th International Symposium in Science and Technology at Kansai University 2016; July 26-28, 2016, Japan (1 oral presentation)
- The 10th Science Research conference 25-26 May 2018, Thailand
(15 Oral presentation-English)
- The 9th Science Research conference 25-26 May 2017, Thailand
(8 poster presentation)
- The 9th Botanical Conference of Thailand ‘Stepping Toward Global Forum’ 3-5 June 2015, Bangkok, THAILAND (9 Poster presentation)

5. Cooperation of Research

- Department of Botany, Faculty of Science, Chulalongkorn University, Bangkok, Thailand
- Department of Biology, Faculty of Science, Prince of Songkla University, Thailand
- Fachbereich Biowissenschaften, Universität Salzburg, Salzburg, Austria/Europe
- Medical University of Graz, Graz, Austria/Europe
- Alma Mater Europaea – ECM, Slovenia
- International Institute for cannabinoids, Slovenia

6. Research of Interest	<ul style="list-style-type: none"> -Plant and Environmental Stress -Organic Farming -Green and Clean University -Biodiversity and Conservation -Pharmacognosy and medicine -Sustainable University -Renewable Energy 										
7. Team	<table> <tr> <td>2013-2020 Graduated student (BC. Of Biology)</td><td>110 persons / 50 Topics</td></tr> <tr> <td>2014-2020 Graduated student (High school-SCIUS)</td><td>18 persons /14 Topics</td></tr> <tr> <td>2018-2020 (High school/SCIUS)</td><td>20 persons / 17 Topics</td></tr> <tr> <td>2018-2020 (BC-PhD candidate)</td><td>2 persons / 2 Topics</td></tr> <tr> <td>2020 (BC-MS candidate)</td><td>2 persons / 2 Topics</td></tr> </table>	2013-2020 Graduated student (BC. Of Biology)	110 persons / 50 Topics	2014-2020 Graduated student (High school-SCIUS)	18 persons /14 Topics	2018-2020 (High school/SCIUS)	20 persons / 17 Topics	2018-2020 (BC-PhD candidate)	2 persons / 2 Topics	2020 (BC-MS candidate)	2 persons / 2 Topics
2013-2020 Graduated student (BC. Of Biology)	110 persons / 50 Topics										
2014-2020 Graduated student (High school-SCIUS)	18 persons /14 Topics										
2018-2020 (High school/SCIUS)	20 persons / 17 Topics										
2018-2020 (BC-PhD candidate)	2 persons / 2 Topics										
2020 (BC-MS candidate)	2 persons / 2 Topics										
8.Incoming contact for collaboration in academic and research	<ul style="list-style-type: none"> -Department of Biology, Faculty of Science, University of Tübingen, Stuttgart -Universität Hamburg, Germany -Technical University of Munich (TUM), Germany -Christian-Albrechts-Universität zu Kiel, Kiel University, Kiel, Germany -University of Bonn, Germany -University Hohenheim, Stuttgart, Germany -Leipzig university, Leipzig, Germany -Max Planck Institute for Molecular Genetics, Berlin, Germany -Friedrich Miescher Laboratory of the Max Planck Society, Tübingen -Max Planck Institute for Developmental Biology Tübingen 										
9.Community empowerment project	<ul style="list-style-type: none"> - Organic farming (Phayao, Thailand) - Green peafowl conservation and agricultural area management (Phayao, Thailand) - Thailand Children University (Phayao, Thailand) - Surveillance, prevention and control of fire in the forest and buffer zone (Phayao, Thailand) 										
10.Social service	<ul style="list-style-type: none"> - Building and facilities service (University of Phayao) - COVID-19, Aerosol Box for Hospital (Phayao) - Public relationship and news (University of Phayao) - National strategic capital author of Northern region-2018 (Ministry of Education)/ integrated project. 										