

## **Professor Dr. Suchada Sukrong**

Faculty of Pharmaceutical Sciences, Chulalongkorn University,  
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### **Affiliation**

Faculty of Pharmaceutical Sciences

Associate Dean for Student Success

Head of the Research Unit (RU) of DNA Barcoding of Medicinal Plants

### **Specialty & Interest**

Medicinal plant authentication by DNA technology

Phytochemistry and bioactive of natural products

Anticancer from natural products

### **Research Area**

Health

Anti-pollution

### **Biography**

Prof. Suchada Sukrong, Ph.D. is currently working at the Department of Pharmacognosy and Pharmaceutical Botany, Chulalongkorn University, Thailand. She completed her Ph.D. in Plant Molecular Biology from the University of Kentucky, USA. Her interests are focused on herbs, either phytochemistry/bioactivities of natural compounds and authentication of medicinal plants by DNA. In recent years, she has focused on the application of herbal standardized extracts for health. She is also interested to use integrative technologies to combat atmospheric particulate matter (PM), PM2.5. She and her students are forming a start-up business company "Herb Guardian" related to anti-pollution.

### **Education**

Bachelor of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand

Master of Sciences (Pharmacognosy), Chulalongkorn University, Bangkok, Thailand

Ph.D. in Plant physiology/Biochemistry/Molecular Biology, the University of Kentucky, USA

### **Awards and Honors**

2008 Cerebos Award (Thailand)

2018 Erasmus+ Programme

2020 Leaders in Innovation Fellowships (LIF) Programme, The Royal Academy of Engineering, Newton Fund

## Major grants awarded

Grant from The National Research Council Thailand

Grant from BIOTEC, NSTDA, Thailand

Grant from Thai Traditional Medicine, Ministry of Health

Grant from The Thai Research Fund

Grant from Erasmus+

Grant from Newton Fund

## Publications

- [1] C. Tungphatthong, S.K.J. Urumarudappa, S. Awachai, T. Sooksawate, S. Sukrong, Differentiation of *Mitragyna speciosa*, a narcotic plant, from allied *Mitragyna* species using DNA barcoding-high-resolution melting (Bar-HRM) analysis, *Sci. Rep.* 11 (2021). <https://doi.org/10.1038/s41598-021-86228-9>.
- [2] S. Pisitpaibool, S. Sukrong, K. Kanjanaparakul, M. Phisalaphong, Effects of preharvest methyl jasmonate elicitation and electrical stimulation on camptothecin production by in vitro plants of *ophiorrhiza ridleyana craib*, *Appl. Sci.* 11 (2021). <https://doi.org/10.3390/app11104555>.
- [3] S. Tungsukruthai, O. Reamtong, S. Roytrakul, S. Sukrong, C. Vinayanwattikun, P. Chanvorachote, Targeting akt/mtor and bcl-2 for autophagic and apoptosis cell death in lung cancer: Novel activity of a polyphenol compound, *Antioxidants.* 10 (2021). <https://doi.org/10.3390/antiox10040534>.
- [4] C. Huangteerakul, H.M. Aung, T. Thosapornvichai, M. Duangkaew, A.N. Jensen, S. Sukrong, K. Ingkaninan, L.T. Jensen, Chemical-genetic interactions of *Bacopa monnieri* constituents in cells deficient for the DNA repair endonuclease RAD1 appear linked to vacuolar disruption, *Molecules.* 26 (2021). <https://doi.org/10.3390/molecules26051207>.
- [5] Q. Liu, S. Zhu, S. Hayashi, O. Iida, A. Takano, K. Miyake, S. Sukrong, M. Agil, I. Balachandran, N. Nakamura, N. Kawahara, K. Komatsu, Discrimination of *Curcuma* species from Asia using intron length polymorphism markers in genes encoding diketide-CoA synthase and curcumin synthase, *J. Nat. Med.* (2021). <https://doi.org/10.1007/s11418-021-01558-2>.
- [6] S.K.J. Urumarudappa, C. Tungphatthong, P. Prombutara, S. Sukrong, DNA metabarcoding to unravel plant species composition in selected herbal medicines on the National List of Essential Medicines (NLEM) of Thailand, *Sci. Rep.* 10 (2020). <https://doi.org/10.1038/s41598-020-75305-0>.
- [7] K. Thongkhao, V. Pongkittiphan, T. Phadungcharoen, C. Tungphatthong, S.K.J. Urumarudappa, T. Pengsuparp, N. Sutanthavibul, W. Wiwatcharakornkul, S. Kengtong, S. Sukrong, Differentiation of *Cyanthillium cinereum*, a smoking cessation herb, from its adulterant *Emilia sonchifolia* using macroscopic and microscopic examination, HPTLC profiles and DNA barcodes, *Sci. Rep.* 10 (2020). <https://doi.org/10.1038/s41598-020-71702-7>.
- [8] K. Thongkhao, P. Prombutara, T. Phadungcharoen, W. Wiwatcharakornkul, C. Tungphatthong, M. Sukrong, S. Sukrong, Integrative approaches for unmasking hidden species in herbal dietary supplement products: What is in the capsule?, *J. Food Compos. Anal.* 93 (2020). <https://doi.org/10.1016/j.jfca.2020.103616>.
- [9] P. Yingyuen, S. Sukrong, M. Phisalaphong, Isolation, separation and purification of rutin from Banana leaves (*Musa balbisiana*), *Ind. Crops Prod.* 149 (2020). <https://doi.org/10.1016/j.indcrop.2020.112307>.

- [10] K. Thongkhao, C. Tungphatthong, T. Phadungcharoen, S. Sukrong, The use of plant DNA barcoding coupled with HRM analysis to differentiate edible vegetables from poisonous plants for food safety, *Food Control*. 109 (2020). <https://doi.org/10.1016/j.foodcont.2019.106896>.
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