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Balsaminaceae in Southeast Asia: systematics, evolution, and pollination biology

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CURRICULUM VITAE

Saroj Ruchisansakun was born in Bangkok, Thailand, on November 3, 1987 (B.E. 2530), and grew up in Nong Khai province. Since 2003, he has been receiving scholarships from the Institute for the Promotion of Teaching Science and Technology (IPST), Thailand. He completed his secondary education from the Mahidol Wittayanusorn School in 2006. Thereafter, he started pursuing biology at the Department of Plant Science, Mahidol University, Bangkok, and earned his Bachelor of Science degree in 2010 and Master of Science degree in 2013 from the same University. During his bachelor's degree, he was interested in the various topics regarding Zingiberaceae. He conducted research on the colchicine-induced chromosome doubling, the Agrobacterium-mediated transformation of *Globba*, and also the diversity of Zingiberaceae used for the festival of floral offerings in Thailand. In that period, he also participated as a research assistant in the taxonomic study, genetic diversity and conservation of plants in Sri Nagarindra-Dam plant conservation area, Kanchanaburi, a project which inspired him to work in the field of taxonomy. In his master's degree, he started working on the molecular phylogeny of Balsaminaceae in Thailand. In 2013, he moved to the Netherlands to start his PhD at the Naturalis Biodiversity Center. He continued his work on the same plant family, but on a broader scale under the supervision of Dr. Timotheüs van der Niet, Dr. Steven Janssens and Prof. dr. Erik Smets. During his PhD, his interest also included pollination biology and the evolution of the flower morphology, which is reflected in the present thesis. In 2014, he performed fieldwork for his pollination studies in Doi Chiang Dao, Thailand; during two months he observed *Impatiens* species, most of the time in forests. In 2015, he travelled for four months across Myanmar and collected samples of Balsaminaceae species. For his taxonomic work, he visited the following herbaria: AAU, BK, BKF, BR, K, L, MAND, QBG, RAF, RANG, and SING. Furthermore, he attended conferences in China, England, Scotland, and South Africa.

LIST OF PUBLICATIONS

SCI publications:

Ruchisansakun S, Triboun P, Jenjittikul T. 2014. A new species of *Impatiens* (Balsaminaceae) from southwestern Thailand. *Phytotaxa* 174 (4): 237--241. <http://dx.doi.org/10.11646/phytotaxa.174.4.5>

Ruchisansakun S, Van der Niet T, Janssens SB, Triboun P, Techaprasan J, Jenjittikul T, Suksathan P. 2015. Phylogenetic analyses of molecular data and reconstruction of morphological character evolution in Asian *Impatiens* section *Semeiocardium* (Balsaminaceae). *Systematic Botany* 40: 1063--1074. <http://dx.doi.org/10.1600/036364415X690102>

Ruchisansakun S, Tangtorwongsakul P, Cozien RJ, Smets EF, Van Der Niet T. 2016. Floral specialization for different pollinators and divergent use of the same pollinator among co-occurring *Impatiens* species (Balsaminaceae) from Southeast Asia. *Botanical Journal of the Linnean Society* 181: 651--666. <http://dx.doi.org/10.1111/boj.12427>

Ruchisansakun S, Suksathsan P, Van Der Niet T, Saw-Lwin, Janssens SB. 2017. *Impatiens tanintharyiensis* (Balsaminaceae), a new species from southern Myanmar. *Phytotaxa* 296 (2): 171--179. <http://dx.doi.org/10.11646/phytotaxa.296.2.6>

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Ruchisansakun S, Suksathsan P, Van Der Niet T, Smets EF, Saw-Lwin, Janssens SB. 2018. Balsaminaceae of Myanmar. *Blumea*, in press.

Non-SCI publications, peer-reviewed:

Ruchisansakun S, Leethaweep W, Saetiew K, Chuenboonngarm N. 2010. Agrobacterium-mediated transformation of *Globba substrigosa*. *Thai Journal of Botany* 2: 155-162 (Thai).

LIST OF PUBLICATIONS

Abstracts:

Ruchisansakun S, Janssens SB, Smets EF, Van Der Niet T. 2017. Pollinator-driven floral evolution with and without pollinator shifts in *Impatiens* (Balsaminaceae). *The 19th Botanical Congress*, Shenzhen, China, July 2017. (oral presentation)

Ruchisansakun S, Suksathan P, Van der Niet T, Smets EF, Saw-Lwin, Janssens SB. 2015. Oral presentation in the topic “A revision of Balsaminaceae in Myanmar. *The 10th Flora Malesiana Meeting*, Edinburgh, Scotland, July 2016. (oral presentation)

Ruchisansakun S, Janssens SB, Smets EF, Van Der Niet T. 2014. Are transitions in life history strategies driven by moisture gradients in mesic environments? A case study from the *Semeiocardium* clade (*Impatiens*). *The 16th Flora of Thailand meeting*, London, England, September 2014. (Oral presentation)

Ruchisansakun S, Janssens SB, Van Der Niet T. 2014. *Impatiens* of Africa and SE Asia: Comparison of frequencies of pollination syndromes and evolutionary shifts between them”. *The 20th Congress of AETFAT*, Stellenbosch, South Africa, January 2014 (poster presentation)

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