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Kusuma Wati, R.

Citation

Kusuma Wati, R. (2021, March 25). *Systematics, epidermal defense and bioprospecting of wild orchids*. Retrieved from <https://hdl.handle.net/1887/3157143>

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Author: Kusuma Wati, R.

Title: Systematics, epidermal defense and bioprospecting of wild orchids

Issue Date: 2021-03-25

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Acknowledgements

I am incredibly thankful to Esmée de Graaf for the help and joy in the lab while obtaining DNA sequences of *Glomera* species, and to her family for the warm and hearty Dutch dinner. I greatly thank Diego Bogarín for his endless help and patience to teach me phylogenetics and R. For the beautiful illustrations of *Glomera*, I thank Esmée Winkel. I am deeply thankful to the Indonesian sisterhood full of food, laughter, and cries of Mega Atria, Andika Sidar, Dewi Pramanik, Aninda R. U. Wibowo, Astri Kusumawardhani, Eka Iskandar, Rumaisha A. Milhan, and Shadrina F. Ramadhani. To all my colleagues in Herbarium Bogoriense and Bogor Botanic Gardens especially Sofi Mursidawati and Lina Juswara for supporting my work in Indonesia. From Naturalis Biodiversity Center, I thank Dominique van der Sterren and Johan Mols for their assistance with regulations, Roxali Bijmoer for allowing me access to the herbarium, and Marcel Eurlings, Roland Butôt, Elza Duijm, Frank Stokvis, Bertie-Joan van Heuven and Rob Langelaan for their training and assistance in the laboratory. From the Hortus botanicus Leiden, I am immensely thankful to Paul Kessler, Gerda van Uffelen, Rogier van Vugt and Jaco Kruizinga for giving me access to the living orchid collections. I thank Ivo Horn from Hogeschool Leiden for always supporting and helping me. I am grateful to all my fellow PhD colleagues, Deyi Wang, Le Qin Choo, Ajaree Thonglim, Sofia Gomes, Larissa Chacon Dória, Mohd. Zacaery bin Khalik, Isolde van Riemsdijk, Anita Dirks, Abdulrokhman Kartonegoro, Marcel Polling, Kevin Beentjes, Andrés Rivera Quiroz, Renyong Yu, Roderick Bouman, Mehrdad Jahanbanifard, and Ozan Ciftci for the great moments during my stay in the past four years in Leiden. I thank Marlies and Jacques Kleynen, and Marijke and Jean Claessens for their hospitality and help with fieldwork in the Netherlands. I thank Rob Poot for his help with transporting orchid and snail samples. I thank to Janneke Brinkman for allowing me to use her beautiful drawing. I am deeply grateful to my parents M. Tohir and S. Zulaicha and my sister Umi Z. for always supporting me and mentioning my name in their prayers. I am forever thankful to my husband, Izu A Fijridiyanto, for his prayers, company, patience, sacrifice, and motivation during all the steps of this PhD project. Last but not least, I thank my sons M. Rayyan Mishary and I. Aidan Hameem, this PhD thesis is for both of you. Never stop challenging yourself and life is work-in-progress.

Curriculum Vitae

Richa Kusuma Wati was born on August 17th, 1984, in Malang, Indonesia, and grew up in East Java Province. Her passion for chemistry in high school led her to study Food Technology at Brawijaya University, Indonesia, where she obtained her bachelor's degree in 2006. Just before graduation, she was granted a double-degree scholarship from KEMDIKBUD. She completed her M.Sc in 2009 from Brawijaya University, Indonesia, and Mae Fah Luang University, Thailand, with publishing three papers about the purification of trypsin inhibitor from legumes to preserve fish products. After her graduation, she was accepted in Bogor Botanic Gardens-LIPI as a researcher. For her first task she was involved with orchid collections in the gardens. She met her mentor, Sofi Mursidawati, and worked together to manage the orchid collections. In 2015, they published an orchid catalog of the garden, fifteen years after the publication of the first catalog. During this time, she became interested in orchids and this led her to study orchids for her PhD project. Since November 2015, after receiving a scholarship from LPDP, she started her PhD research at Naturalis Biodiversity Center and Leiden University under the supervision of Prof. Barbara Gravendeel and Prof. Erik Smets. She will continue to work as an orchid researcher in Bogor Botanic Gardens. Her main future research projects will be focused on orchid ex-situ conservation, saving the endangered orchid species of Indonesia by applying genomics, taxonomy, systematics, and bio-prospecting. Richa is also interested in understanding orchid-pollinator-herbivore interactions.

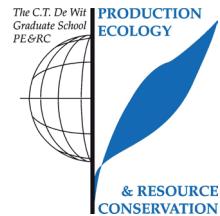


List of Publications

- Wati, R.K.**, de Graaf, E., Bogarin, D., Heijungs, R., van Vugt, R.R., Smets, E.F. & B.Gravendeel. 2021. Antimicrobial activity of necklace orchids is phylogenetically clustered and can be predicted with a biological response method. *Frontiers in Pharmacology*, section Ethnopharmacology (in press).
- Wati, R.K.**, van Vugt, R.R. & B. Gravendeel. 2018. A Linnaeus NG interactive key to the species of *Glomera* (Orchidaceae, Coelogyninae) from Southeast Asia. *Phytokeys* 110:9
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PE&RC Training and Education Statement

With the training and education activities listed below the PhD candidate has complied with the requirements set by the C.T. de Wit Graduate School for Production Ecology and Resource Conservation (PE&RC) which comprises of a minimum total of 32 ECTS (= 22 weeks of activities)



Review of literature (4.5 ECTS)

- Phylogenetic prospecting of Indonesian Coelogyninae (Orchidaceae) used as traditional antimicrobials

Post-graduate courses (7.8 ECTS)

- Metabolomics; IBL (2016)
- Phylogenetics; Wageningen University (2018)
- Introduction to ArcGIS; Leiden University & Naturalis (2018)

Laboratory training and working visits (0.3 ECTS)

- GGO Training for ML2 lab; Leiden University (2016)

Competence strengthening / skills courses (1.5 ECTS)

- Time management, self- management; Leiden University (2017)
- Effective communication; Leiden University (2017)
- Communication in science; Leiden University (2017)

Scientific integrity / ethics in science activity (0.3 ECTS)

- On being a scientist; Leiden University (2016)

Discussion groups / local seminars / other scientific meetings (6.6 ECTS)

- Learning from nature, learning from our ancestors, from tradition to evidence-based medicines (2016)
- Endless forms (2016-2019)

International symposia, workshops and conferences (5.1 ECTS)

- 18th European orchid council conference and exhibition; Paris (2018)
- 2nd Conference of the Netherlands Society for Evolutionary Biology (NLSEB); Wageningen (2019)
- 7th International orchid conservation congress; Royal Botanic Garden Kew (2019)

Societally relevant exposure (1 ECTS)

- Presentation; WEO (Werkgroep Europese Orchideeën), Maarn (2019)

Lecturing / supervision of practicals / tutorials (0.6 ECTS)

- Biology of Orchids

BSc thesis supervision (12 ECTS)

- Medicinal properties of Indonesian Coelogynine
- Antimicrobial properties of Indonesian Coelogyninae on antibiotic-resistant bacteria
- Bioprospection of Indonesian medicinal orchids (Coelogyninae) seems promising for finding potential new species for alternative drug discovery
- The epicuticular properties of orchids and their effect for snail herbivory activity