



Pimonrat Tiansawat, Ph.D. | Assistant Professor | Biology

Work Address

Department of Biology
Chiang Mai University
239 Huay Kaew Rd., Suthep,
Muang, Chiang Mai 50200



Home Address

200/106 Baan Rim Nam M. 9
San Phi Suea, Muang Chiang Mai

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Education



Ph.D. University of Illinois at Urbana-Champaign, Illinois, USA
Department of Plant Biology
Supervisor Prof. Dr. James W. Dalling

2009-2013



M.S. University of Illinois at Urbana-Champaign, Illinois, USA
Department of Plant Biology
Supervisor Prof. Dr. James W. Dalling

2006-2009

B.S. Chiang Mai University, Chiang Mai, Thailand
Department of Biology (First Class Honor)
Supervisor Dr. Stephen Elliott

2001-2004

Teaching



- Plant Ecology 202474
- Ecology 202371
- Data Analysis for Environmental Studies 213708
- Statistics for bioscience research 202833
- Environmental Science in Today's World 201114
- General Biology (Laboratory) 202103, 104, 184, 142
- Critical thinking, problem solving and science communication 201190

Since 2013

Research Interests



- Seed ecology of tropical plant species and the importance in promoting species diversity
- Forest restoration and conservation
- Evolution of reproductive traits in tropical plants
- Species distribution of native tree species
- Plant-animal interaction
- Plant phenology

Publications

(* Corresponding author)

Elliott, S.D, Tucker, N., Shannon, D. P., **Tiansawat*, P.** 2022. The framework species method—harnessing natural regeneration to restore tropical forest ecosystems. Philosophical Transactions of the Royal Society B. DOI: 10.1098/rstb.2021.0073. (In press)



2022

Tiansawat, P., Elliott*, S.D., Wangpakapattanawong, P. 2022. Climatic niche modelling for mapping potential distribution of four framework tree species: implications for planning forest restoration in tropical and subtropical Asia. Forests 13(7) 993. DOI: 10.3390/f1307993.

2022

Changsalak, P., **Tiansawat*, P.** 2022. Comparison of seedling detection and height measurement using 3D point cloud models from three software tools: applications in forest restoration. EnvironmentAsia 15. 100-105. DOI: 10.14456/ea.2022.26.

2022

**Publications
(continued)**

- Gaisberger*, H. e  (73 authors). 2021. Tropical and subtropical Asia's valued tree species under threat. Conservation Biology. Conservation Biology: e13873. DOI: 10.1111/cobi.13873 2021
- Rungrojtrakool, P., **Tiansawat, P.**, Jampeetong, A., Shannon, D. P., Chairuangsi, S*. 2021. Soil seed banks of tree species from natural forests, restoration sites, and abandoned areas in Chiang Mai, Thailand. Forest and Society 5(1): 167-180. DOI:10.24259/fs.v5i1.11612. 2021
- Sansupa, C., Purahong, W., Wubet, T., **Tiansawat, P.**, Pathom-Aree, W., Teaumroong, N., Chantawannakul, P., Buscot, F., Elliott, S., Disayathanoowat, T*. 2021. Soil bacterial communities and their associated functions for forest restoration on a limestone mine in northern Thailand. PLoS ONE 16(4): e0248806. DOI: 10.1371/journal.pone.0248806. 2021
- Punchay, K., Inta, A., **Tiansawat, P.**, Balslev, H., Wangpakapattanawong, P*. 2020. Nutrient and Mineral Compositions of Wild Leafy Vegetables of the Karen and Lawa Communities in Thailand. Foods. 9(12) 1748. <https://doi.org/10.3390/foods9121748>. 2020
- Punchay, K., Inta, A., **Tiansawat, P.**, Balslev, H., Wangpakapattanawong, P*. 2020. Traditional knowledge of wild food plants of Thai Karen and Lawa (Thailand). Genetic Resources and Crop Evolution. <https://doi.org/10.1007/s10722-020-00910-x>. 2020
- Waiboonya*, P., Elliott, S., **Tiansawat, P.** 2019. Seed storage behaviour of native forest tree species of northern Thailand. EnvironmentAsia 12(3) 104-111. DOI 10.14456/ea.2019.50. 2019
- Chaiklang*, P., Chairuangsi, S., **Tiansawat, P.** 2019. Quality and production cost of some framework tree species seedlings grown with different root pruning techniques. Proceedings of the 5th Environment Asia International Conference. 213-225. 2019
- Khamyong, N., Wangpakapattanawong, P., Chairuangsi, S., Inta, A., and **Tiansawat*, P.** 2018. Tree species composition and height-diameter allometry across three forest types in Northern Thailand. Chiang Mai University Journal of Natural Science 17(4). DOI: 10.12982/CMUJNS.2018.0021 2018
- Tiansawat*, P.**, Nippanon, P., Shannon, D. P. and Elliott, S. 2018. Effects of weeds on survival and growth of planted seedlings of native forest tree species during forest restoration in Northern Thailand. KKU Journal of Science 46(4): 751-760. (Article in Thai) 2018
- Tiansawat*, P.**, Beckman, N.G., Dalling, J. 2017. Pre-dispersal seed predators and fungi differ in their effect on *Luehea seemannii* capsule development, seed germination, and dormancy across two Panamanian forests. Biotropica DOI: 10.1111/btp.12473. 2017
- Suang, S., Manaboon*, M., Singtripop, T., Hiruma, K., Kaneko, Y., **Tiansawat, P.**, Neumann, P., Chantawannakul*, P. 2017. Larval diapause termination in the bamboo borer, *Omphisa fuscidentalis*. PLoS ONE 12(4): 2017

Publications (continued)	Sanjai, P., Tiansawat*, P. 2016. Tree species composition and aboveground carbon sequestration in trees of abandoned jungle tea plantations of Mae On District, Chiang Mai Province. Proceedings of The 3rd National Meeting on Biodiversity Management in Thailand. 96-102. (in Thai)	2016
	Naruangsri, N*. Tiansawat, P. 2016. Potential seed predators in an abandoned agricultural area in northern Thailand. Proceedings of The 3rd National Meeting on Biodiversity Management in Thailand. 124-133.	2016
	Wangpakapattanawong*, P., Tiansawat P. , and Sharp, A. 2016. Forest restoration at the landscape level in Thailand. Page 149-166. In FAO/RECOFTC. 2016. Forest landscape restoration in Asia-Pacific forests, by Appanah, S. (ed.). Bangkok, Thailand.	2016
	Tiansawat*, P. , Davis, A.S., Berhow, M.A., Zalamea, P.C., and Dalling, J.W. 2014. Investment in seed physical defence is associated with species' light requirement for regeneration and seed persistence: evidence from <i>Macaranga</i> species in Borneo. PLoS ONE 9(6): e99691. doi:10.1371/journal.pone.0099691.	2014
	Khuankaew, S., Srithi, K., Tiansawat, P. Jampeetong, A., Inta, A. Wangpakapattanawong*, P. 2014 Ethnobotanical study of medicinal plants used by Tai Yai in Northern Thailand. Journal of Ethnopharmacology 151: 829-838.	2014
	Tiansawat*, P. and Dalling, J. W. 2013. Seed germination response to the ratio of red: far red reflects different selective pressures between tropical and temperate species. Plant Ecology 214: 751-764.	2013
Funding	Office of Research Administration, Chiang Mai University (1-year grant) Title: <i>Seed bank for conserving genetics of northern native tree species</i> (Principal investigator)	2022
	ERAMUS+ (3-year grant) Title: Forests, climate change mitigation and adaptation: Higher Education Cooperation in Mekong region (FRAME) (Co-researcher)	2021
	Office of Research Administration, Chiang Mai University (1-year grant) Title: <i>Seed bank for conserving genetics of northern native tree species: phase I seed storage behavior and phase II seed banking</i> (Principal investigator)	2021
	Office of Research Administration, Chiang Mai University (Short-term grant) Title: <i>Seed bank for conserving genetics of northern native tree species: phase I seed storage behavior</i> (Co-principal investigator)	2020
	Researcher Support Grant, Faculty of Science, Chiang Mai University (1-year grant) Title: <i>Beta diversity and community assembly mechanisms in a human-dominated landscape of Thailand</i> (Principal investigator)	2018

Funding (continued)	Research Fund for DPST Graduate with First Placement (2-year grant) Title: <i>Increase capacity of tropical forest restoration through modeling tree species distribution</i> (Principal investigator)	2016
	Thailand Research Fund for New Scholars (2-year grant) Title: <i>Seed and seedling predation of five native tree species of Northern Thailand: an implication to direct seeding for forest restoration</i> (Principal investigator)	2016
	Researcher Support Grant for research studies on climate change mitigation, Chiang Mai University (1-year grant) Title: <i>Biomass distribution and carbon concentration in tree seedlings and mitigating climate change by forest restoration</i> (Co-researcher)	2015
	Researcher Support Grant, Faculty of Science, Chiang Mai University (1-year grant) Title: <i>Seed Storage of Framework Species for Forest Restoration in Northern Thailand</i> (Principal investigator)	2015
	Research Links Travel Grants, British Council (Short-term grant) Title: <i>Using herbarium specimen information to assess historical distribution of framework tree species for forest restoration, The Kew Herbarium, UK</i> (Principal investigator)	2014
	Young Researcher Support Grant, Chiang Mai University (1-year grant) Title: <i>Seedling performance of framework tree species under two different weed communities in forest restored sites of Mont Jam, Chiang Mai</i> (Principal investigator)	2014
Additional skills	<ul style="list-style-type: none"> - Field work: trekking, seed collecting and handling - Proficient with MS Word, Excel, and PowerPoint - Programming: R programming language - Language skill: Thai (native), English (read rite, speak) 	
Academic services	Science ambassador, Faculty of Science, Chiang Mai University	Since 2018
	Assistant Head of Doi Suthep Nature Center, Chiang Mai University Role: management and workshop organizer	Since 2018
	Trainer in R workshop, Faculty of Environment, Kasetsart  niversity, 29-31 July 2019	2019
	Trainer in R basic workshop, Department of Biology Chiang Mai University, 18-19 July 2017	2017
	Member of Forest  toration Research Unit Role: research advisor and workshop organizer	Since 2013
	 Peer reviewer of academic journals (e.g. Biotropica, PLoS ONE, Journal of Tropical Forest Science)	Since 2013

Graduate student

Khuanpirom Naruangsri (Ph.D student)	Current
Topic: Seed ecology and applications in ecological restoration	
Punnat Changsaluk (MS student)	Current
Topic: Using drones for seedling monitoring	
Nattanit Yiamthaisong	Current
Topic: Seed dispersal and <i>ex situ</i> seed bank of native tree species	

Former student

Kittiyut Punchay (Doctoral degree: co-advised)	2020
Topic: Diversity of wild food plants of Thai Karen and Lawa	
Preeyaphat Chaiklang (Master degree: co-advised)	2020
Topic: Root pruning techniques and seedling growth	
Khuanpirom Naruangsri (Master degree)	2019
Topic: Seed removal of native tree species in degraded areas	
Laksika Rodpotong (Bachelor degree)	2018
Topic: Preventing seed removal in direct sowing for forest restoration	
Poramat Sangseesod (Bachelor degree)	2018
Topic: Diversity of ants in Ob Khan National Park	
Panee Konmun (Bachelor degree)	2018
Topic: Seed germination of <i>Garcinia</i> sp.	
Patipan Sanjai (Bachelor degree)	2014
Topic: Carbon sequestration in tea plantation	
Tanapon Tanasan (Bachelor degree)	2014
Topic: Soil seed bank of a mining site	
Warangkana Suk-rit (Bachelor degree)	2014
Topic: Population structure of <i>Castanopsis calathiformis</i> in forest restored plots	

References

- Dr. James W. Dalling, Professor, Department of Plant Biology, University of Illinois (dallingj@life.illinois.edu)
- Dr. Carol Augspurger, Professor, Department of Plant Biology, University of Illinois (carolaug@life.illinois.edu)
- Dr. Stephen Elliott, Department of Biology, Chiang Mai University, Thailand (stephen_elliott1@yahoo.com)