

Conference Abstract

# Do our Project Delimitations Display a Continued Legacy of Colonialism? Towards an independant Flora of Cambodia.

តើការកម្រិតព្រំដែននៃតំបន់ក្នុងការស្រាវជ្រាវរបស់យើង បញ្ជាក់ពីមតិក  
នៃសម័យអាណានិគមឬទេ ?

ឆ្ពោះទៅរកការរុករកដោយឯករាជនៃរុក្ខជាតិនានារបស់ប្រទេសកម្ពុជា

Visotheary Ung ‡

‡ UMR 7205 CNRS-MNHN-SU-EPHE-UA, PARIS, France

Corresponding author: Visotheary Ung ([visotheary.ung@mnhn.fr](mailto:visotheary.ung@mnhn.fr))

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## Abstract

Cambodia, located in continental Southeast Asia, is renowned for its rich and ancient architectural art. One of its most notable treasures is the archaeological site Angkor Wat, which holds the distinction of being a United Nations Educational, Scientific and Cultural Organization (UNESCO) [World Heritage Site](#). However, Cambodia is also a developing country and a biodiversity hotspot (Myers et al. 2000, Sodhi et al. 2010).

Regrettably, Cambodia's tragic and violent history has severely impacted the understanding of its biodiversity, particularly its plant life. This was depicted by Zizka et al. (2021), in one of their figures illustrating the significant decline in the number of recorded species occurrences in Cambodia between 1970 and 1992. This period includes the civil war from 1975 to 1979, which marked one of the most devastating genocides in human history.

France and Cambodia share a long history of relations and collaboration. The French presence in Cambodia dates back to 1863 when Cambodia became a French protectorate. It later became part of French Indochina in 1887, alongside other French colonies and protectorates, such as Laos, Tonkin, Annam, Cochinchina, and Guangzhouwan in China. This French presence not only facilitated the "rediscovery" of Angkor Wat and Angkor Thom by Henri Mouhot, a French naturalist, botanist, and entomologist, but also contributed to the collection of Cambodia's biodiversity. The protectorate status for Cambodia ended in 1949, and it declared its independence in 1953.

During the same period, the "*General Flora of Indo-China*" (Gagnepain et al. 1907) began its publication in 1907 and continued until 1951 by French editors. In 1960, this flora was reinitiated as the "*Flora of Cambodia, Laos, and Viêt-Nam*". Since 2013, it is jointly edited by the Museum National d'Histoire Naturelle in Paris and the Royal Botanic Garden of Edinburgh.

The Flora of Cambodia project arose from a simple question: why is the flora still managed jointly with Laos and Viêt-Nam? Since the three countries have been independent since 1954, their respective floras should be separate and published independently. The project's initial phase involves compiling an up-to-date understanding of Cambodia's plant life, including an inventory of collections housed at the Museum National d'Histoire Naturelle in Paris and accessible Cambodian floristic data online through the Global Biodiversity Information Facility ([GBIF](#)) and other sources (Joyce et al. 2020). The ultimate goal is to produce a comprehensive flora of Cambodia. In the short term, the project aims to provide an open and curated checklist of vascular plants of Cambodia, in multiple languages, including Khmer and freely available following Findable, Accessible, Interoperable, Reusable (FAIR) principles (Wilkinson et al. 2016). This endeavor seeks to empower both Khmer botanists and the broader local community, allowing them to reclaim and cherish their intrinsic knowledge of native plants.

Although still in its early stages, this project aims to further enhance the strong collaboration between France and Cambodia while being FAIR and Collective benefit, Authority to control, Responsibility, Ethics (CARE) (Carroll et al. 2020).

## Keywords

biodiversity, plant collections, vascular plants, curation, Khmer, open-data, FAIR, CARE

## Presenting author

Visotheary Ung

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## Conflicts of interest

The authors have declared that no competing interests exist.

## References

- Carroll SR, Garba I, Figueroa-Rodríguez O, Holbrook J, Lovett R, Materechera S, Parsons M, Raseroka K, Rodriguez-Lonebear D, Rowe R, Sara R, Walker J, Anderson J, Hudson M (2020) The CARE Principles for Indigenous Data Governance. *Data Science Journal* 19 <https://doi.org/10.5334/dsj-2020-043>
- Gagnepain F, Humbert H, Lecomte H (1907) *Flore générale de l'Indo-Chine* / publiée sous la direction de H. Lecomte ; rédacteur F. Gagnepain. Masson <https://doi.org/10.5962/bhl.title.44886>
- Joyce E, Thiele K, Slik F, Crayn D (2020) Checklist of the vascular flora of the Sunda-Sahul Convergence Zone. *Biodiversity Data Journal* 8 <https://doi.org/10.3897/bdj.8.e51094>
- Myers N, Mittermeier R, Mittermeier C, da Fonseca GB, Kent J (2000) Biodiversity hotspots for conservation priorities. *Nature* 403 (6772): 853-858. <https://doi.org/10.1038/35002501>
- Sodhi N, Posa M, Lee T, Bickford D, Koh L, Brook B (2010) The state and conservation of Southeast Asian biodiversity. *Biodiversity and Conservation* 19: 317-328 10 1007 978. <https://doi.org/10.1007/s10531-009-9607-5>
- Wilkinson M, Dumontier M, Aalbersberg IJ, Appleton G, Axton M, Baak A, Blomberg N, Boiten J, da Silva Santos LB, Bourne P, Bouwman J, Brookes A, Clark T, Crosas M, Dillo I, Dumon O, Edmunds S, Evelo C, Finkers R, Gonzalez-Beltran A, Gray AG, Groth P, Goble C, Grethe J, Heringa J, 't Hoen PC, Hooft R, Kuhn T, Kok R, Kok J, Lusher S, Martone M, Mons A, Packer A, Persson B, Rocca-Serra P, Roos M, van Schaik R, Sansone S, Schultes E, Sengstag T, Slater T, Strawn G, Swertz M, Thompson M, van der Lei J, van Mulligen E, Velterop J, Waagmeester A, Wittenburg P, Wolstencroft K, Zhao J, Mons B (2016) The FAIR Guiding Principles for scientific data management and stewardship. *Scientific Data* 3 (1). <https://doi.org/10.1038/sdata.2016.18>
- Zizka A, Ryden O, Edler D, Klein J, Perrigo A, Silvestro D, Jagers S, Lindberg S, Antonelli A (2021) Bio-Dem, a tool to explore the relationship between biodiversity data

availability and socio-political conditions in time and space. *Journal of Biogeography* 48: 2715-2726. <https://doi.org/10.1111/jbi.14256>