

SPRINGER BRIEFS IN PLANT SCIENCE

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Ethnobotany of Tuberculosis in Laos

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Preface

Because the majority of the population of Laos lives in rural areas with limited access to biomedical healthcare, traditional herbal remedies are frequently used. Old Buddhist palm leaf manuscripts provide an invaluable record of these treatments through history, many of which are still used by contemporary traditional healers. This research has explored these herbal medicines of Laos to treat symptoms of tuberculosis, a disease that is currently ravaging the Asian continent. Plant samples were collected for 77 species of plants, which were submitted to various biological assays. This document should help to increase awareness of Laos' rich diversity of medicinal plants and provides incentive for the preservation of the undeveloped forested areas that remain, which still hold a wealth of medical information for future discoveries. This research touched on many aspects of traditional medicine use in Laos and serves as justification and a starting point for further research.

Acknowledgments

First and foremost, we would like to acknowledge the contributions of the participating people of Laos. We have been able to witness firsthand how the use of traditional medicines is a vital part of healthcare in this country. The government of Laos was most kind to grant the necessary permits to conduct interviews, to collect plant samples, and to transport them to the University of Illinois at Chicago (UIC) for analysis.

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Somsanith Bouamanivong, previously at the Institute of Traditional Medicine (ITM) in Vientiane and now at the Conservation and Botanical Research Center and National Herbarium of Laos, was very helpful in setting up the project. She also helped with taxonomic identification, interviews, and translations. Mr. Bountham Panyachit, previously at the ITM and now at Pharmaceutical Factory No. 2 in Vientiane, proved to be invaluable for his skills in translating Tham-Lao and Tham-Lue, as well as traditional medicine preparation and his ability to find medicinal plants in the wild. The International Union for Conservation of Nature (IUCN) and Dr. Phaivanh Phiapalath paved the way to learn more about plant conservation and

the livelihoods of the people in rural Laos through their Livelihoods and Landscapes (LLS) initiative. Mr. Vongtakoune Somsamouth and Dr. Nichole I. Goodsmith also helped tremendously with the LLS field research and many of the medicinal plant photographs featured in this book. The IUCN library in Vientiane also provided important reference resources.

Other experts at the ITM were extremely kind in providing space for our work in Vientiane, in making available their herbarium and numerous literature sources for our use, as well as in generously providing hours and hours of their time and expertise. A huge *khop jai, lai lai* to the former director of the ITM, Professor Bounhong Southavong, along with Ms. Thongeune Keohavong, Mr. Ounneua Keokongten, Mr. Khamphong Phommavong, Dr. Khamchanh Phonlavong, Mr. Vongtakoune Somsamouth, Mr. Onevilay Souliya, Mr. Khamphanh Thepkaysone, Mr. Manoluck Vanthanouvong, and Dr. Somphao Neunphonsavath at the TMS in Champasak. Sincere thanks to all of the others who have provided help in the process of our research.

We thank the National Library of Laos for allowing us access to and trusting in the use of many Palm Leaf Manuscripts, along with the digital images of the medical manuscripts. Ajan Bounleuth Tammachak and Ajan Thongseui Outhoumphone spent many hours translating entries from the manuscripts into the modern Lao language and script, which were then typed and formatted by Khammack Vongsackda and Khanthamaly Yangnouvong. David Wharton kindly offered help with the digitized manuscript collection. Professor Harald Hundius and Kongdeuane Nettavong also provided invaluable insights into the project.

The Field Museum of Natural History in Chicago allowed access to its herbarium and libraries for use in plant identification, and for curating the plant specimens that were deposited in the John G. Searle Herbarium (F). Dr. James Graham gave helpful advice about many aspects of this research. Darlene Dowdy-Pritchett beautifully mounted all of the plant specimens. We are also indebted to the many plant taxonomists who helped to identify the plant species collected for this research. In particular, the staff at the ITM; Dr. James G. Graham and Dr. Richard H. Ree at the Field Museum Herbarium (F); Dr. Jacinto Regalado at the Missouri Botanical Garden (MBG); Professor Richard M. K. Saunders and Dr. Bine Xue at the University of Hong Kong (HKU); and Professor P.J.A. Kessler at the Nationaal Herbarium Nederlands, Leiden (L).

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