

## Poster

### **Pali Texts: A Hidden Source of Information on Medicinal Plants**

Bethany G. Elkington<sup>a</sup>, Bounhong Southavong<sup>b</sup>, Kongmany Sydara<sup>b</sup>, Somsanith Bouamanivong<sup>b</sup>, Onevilay Souliya<sup>b</sup>, Bountham Panyachit<sup>b</sup>, Bounleuth Tammachak<sup>c</sup>, Mary Riley<sup>a</sup>, D. Doel Soejarto<sup>a</sup>

<sup>a</sup>Department of Medicinal Chemistry and Pharmacognosy, College of Pharmacy, University of Illinois at Chicago, 833 S. Wood St., Chicago, IL 60612; <sup>b</sup>Traditional Medicine Research Center, Ministry of Health, Vientiane, Lao PDR; <sup>c</sup>National Library of the Lao PDR, Vientiane, Lao PDR

**Introduction.** Old documents in the Lao PDR, written on palm leaves and mulberry tree paper, were recorded by Buddhist monks as far back as the 15<sup>th</sup> century. Some of these scripts contain information on medicinal plant uses. In this study, selected scripts were translated for indications of disease treatment, specifically malaria, as an attempt to find leads for drug discovery. Malaria has been documented in Asia for thousands of years, but no indication has been found that there was one single name for 'malaria' in the scripts. Therefore, this study has focused on finding indications of malaria by one of its most indicative symptoms, fever.

**Objectives.** The objectives of this study were to identify anti-malarial plants in the Pali texts, correlating their use with contemporary traditional medical practice, and, eventually, performing laboratory experiments to find scientific support of the traditional anti-malarial use.

**Methods.** 5 documents from 3 different regions of the country (Champassak, Vientiane, and Luang Prabang) were selected and perused to search for plants used in therapy against fever. The plant names used in the texts were recorded for taxonomical identification, while samples were extracted for submission to anti-malarial assays.

**Results.** Translations of the 5 documents yielded a list of 63 plants used to treat fever, 6 of which were found multiple times. An interview with a traditional healer confirmed the contemporary use of 4 of these plants to treat malaria. 15 plants were collected to be identified taxonomically, and samples from 3 plants were extracted for submission to a biological assay against malaria.

**Conclusion.** There is a vast amount of ethnomedical information contained in old traditional medical texts in the Lao PDR. Since little information in these texts is known in regards to the use of medicinal plants, a concerted effort to translate these texts, followed by medicinal plant interviews with contemporary healers and the general population is expected to provide interesting, perhaps novel, leads in the discovery of new compounds as candidates for drug development, affirming the intellectual property of the people of Laos.

**Keywords:** palm-leaf, ethnomedicine, malaria, Laos, Buddhism

#### **Selected references:**

1. Abhakorn, R. 2000. "Towards a collective memory of mainland Southeast Asia: Field preservation of traditional manuscripts in Thailand, Laos and Myanmar." In *A reader in preservation and conservation*, edited by R.W. Manning and V. Kremp. München: Sauer, 86-91.
2. Libman, A. et al. 2005. "The Influence of Cultural Tradition and Geographic Location on the Level of Medicinal Plant Knowledge Held by Various Cultural Groups in Laos." Paper presented at the First International Conference on Lao Studies May 20-22, 2005.

**Presenting author:** Bethany G. Elkington; [belkin3@uic.edu](mailto:belkin3@uic.edu).