

### **Ethnopharmacology of plants used in therapy in Champasak Province, Laos**

(Oral Presentation)

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#### **Introduction**

An ethnopharmacological field study was undertaken in Champasak Province, Laos as a component of the International Collaborative Biodiversity Group project between the University of Illinois at Chicago and the Traditional Medicine Research Center of Vientiane, Laos.

#### **Objectives**

To investigate the medicinal plants used in Champasak Province to determine if any overlap exists with uses recorded in the literature, and whether or not they possess activity in an anti-malarial bioassay.

#### **Methods**

Semi-structured interviews were conducted with several healers within the province of Champasak, from which medicinal plants were collected in the form of plant samples documented by voucher herbarium specimens, for purposes of extraction and biological evaluation. Literature review and small-scale extractions and anti-malarial bioassay were performed.

#### **Results**

Fifty plants used medicinally were collected in Champasak Province. These plants were represented by 34 different families and 47 genera. Seven species showed notable activity against *Plasmodium falciparum*-infected erythrocytes at extract concentrations of 10 µg/ml, two of which *Gongronema napalense* (Wall.) Decne. (Asclepiadaceae) and *Aporusa* aff. *tetrapleura* Hance. (Euphorbiaceae) also had low enough cytotoxicity measurements to warrant further research of their active chemical constituents.

#### **Conclusion**

Results of interviews and literature review indicate that the use of medicinal plants still represent an important asset to the health care in communities in Laos, specifically, Champasak Province. Bioassay results also show that there is a scientific rationale for the use of some of the plants in Champasak Province, and potential exists for the discovery of new therapeutic agents.

**Keywords:** Semi-structured interviews; bioassay, Laos

#### **Selected References**

1. Soejarto, D.D., et al. 2002. An International Collaborative Program to Discover New Drugs from Tropical Biodiversity of Vietnam and Laos. *Natural Product Sciences* 8(1), 1-15.

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