

## Translation of Lanna Medicinal-Plant Recipes for Research and Development of Modern Pharmaceuticals and the Understanding of the Lanna Thai Cultures/Histories

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### ABSTRACT

*The objectives of this study were to screen and translate Lanna medicinal-plant recipes for research and development of modern pharmaceuticals and the understanding of the Lanna Thai cultures and histories. A number of 292 copies of the old Lanna medicinal-plant recipes was surveyed and collected from 8 provinces of the Lanna region (Chiang Mai, Chiang Rai, Lamphun, Lamphun, Payao, Phrae, Nan and Mae Hong Son), Thailand. These recipes were written in Lanna script on dried palm leaves, mulberry-pulp paper or Streblus asper books. The 3 most reliable and complete recipes from each province were selected and translated into Thai. The translation comprised of 2 steps, first, Lanna to Thai (Lanna meaning) and second, Thai to the common understandable Thai. From the selected 21 copies from 8 provinces, 10,974 formulae, 2,786 Lanna plants and diseases were found. The medicinal plants appeared in the recipes and the chemical constituents were collected, prepared and arranged as scientific monographs. Therapeutic indications appeared in Lanna recipes were also included. For example, a recipe from Chiang Mai province contained 1,344 formulae. The medicinal plant which appeared in high frequency of 103 formulae was Oi Dang (*Saccharum officinarum* Linn.), family GRAMINEAE. Oi Dang was one of the ingredients in the recipes for the treatment of malaria, vertigo, chest pain and chronic fever. A recipe for ringworm diseases using Cadelabra bush (*Cassia alata* Linn.), family LEGUMINOSAE, was found with high frequency. *Cassia alata* Linn. leaf contains rhein, emodol, 4,5-dihydroxy methyl anthrone, 4,5-dihydroxy-2-hydroxy methylantraquinone which have antifungal activity. The information on medicinal plants and therapeutic indications obtained from this study will be important data which can be applied for the research and development of Lanna medicinal plants to modern medicines. Also, the Lanna folk wisdom will be beneficial to the conservation of the wisdom and the understanding of the historical communities and cultures of the ethnic group in the region of Lanna in the Thai Kingdom as well.*

**Key words:** Lanna Medical Textbook, Recipe, Translation, Modern Pharmaceuticals