

Phyto Diversity at Sakaerat Environmental Research

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ABSTRACT

Sakaerat Environmental Research station in 300 kms. Far from Bangkok at Wang Nam Kheo district, Nakornrajsima, Thailand. Sakaerat is a unique forest of both dry Evergreen and dry Dipterocarps at the same time. It has an area of 78.8 square km. With its perfect and complete condition suitable for both national and international research. This research project of phytodiversity has its research grant from National Research Council of Thailand. The project activities are to make two phytodiversity experimental plots on the areas of Evergreen and dry Dipterocarp forests. Each plot shall be 100 x 100 m² and 100 species and identified herbs shall be selected to be extracted, the extractions shall be phyto chemical tested to unfold their alkaloid, glucoside, flavonoid, anthraquinone, steroid, triterpenoid and phenolic compounds. The alkaloid and flavonoid system of the extract shall be finger printed by TLC and then disc diffusion method shall be applied to find its antimicrobial activities with *Escherichia coli* TISTR 117, *Staphylococcus aureus* TISTR 118, *Salmonella typhimurium* TISTR 292 and *Aspergillus niger* ATCC 6275.

The phyto chemical model yielded shall undoubtedly confer great benefits to the coming biological diversity studies and ecological concerns.