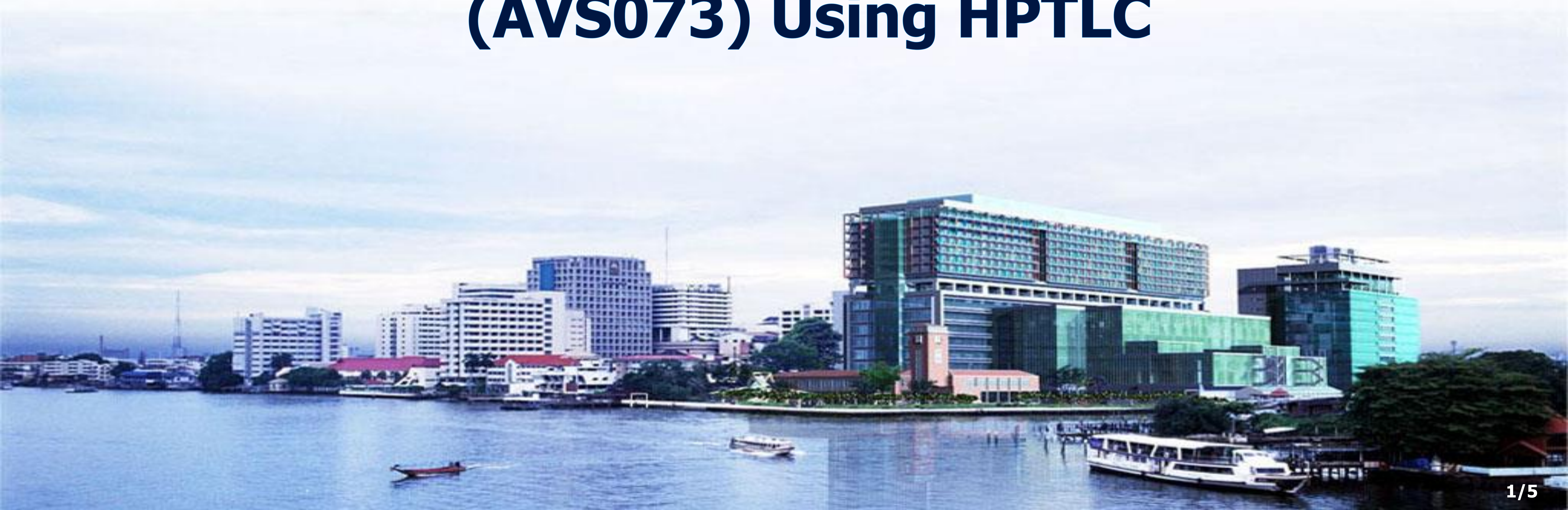




Quantitative Analysis of Some Phenolic Compounds in Ayurveded Siriraj Wattana (AVS073) Using HPTLC



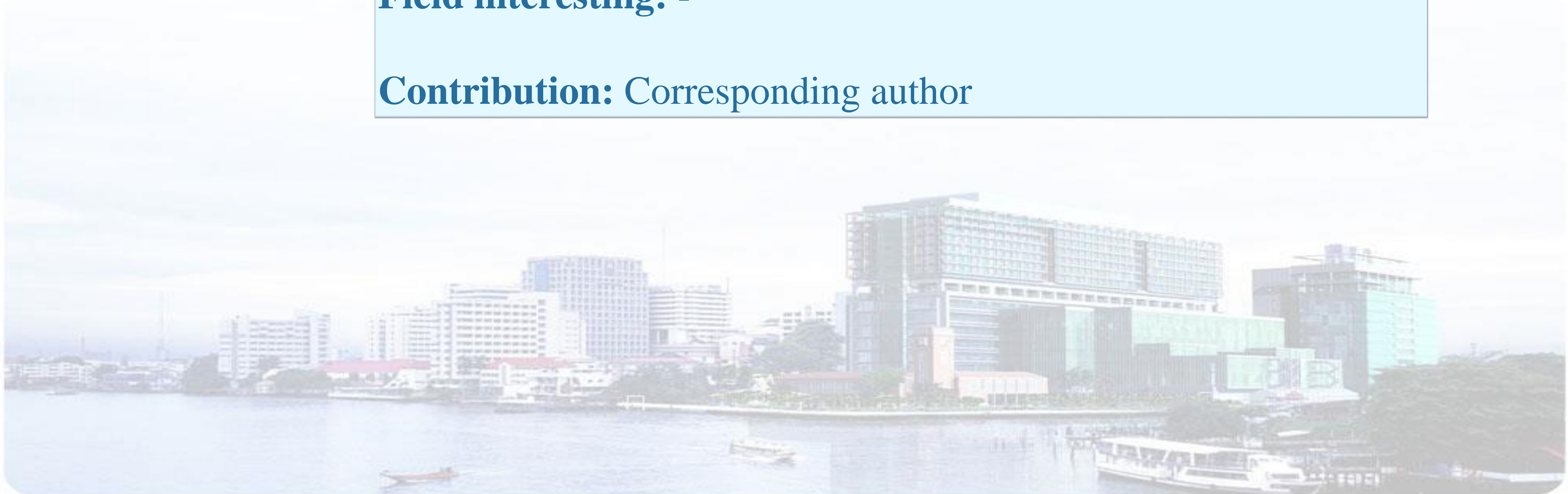


Prof. Pa-thai Yenchitsomanus, Ph.D.

Department: Office for Research and Development

Field interesting: -

Contribution: Corresponding author





Quantitative Analysis of Some Phenolic Compounds in Ayurved Siriraj Wattana (AVS073) Using HPTLC

Rattana Phadungrakwittaya, M.Sc.*, Pravit Akarasereenont, M.D., Ph.D.*,**, Sirikul Chotewuttakorn, M.Sc.*,

Ariyawan Lumlerdkij, M.S.**, Onusa Thamsermsang, B.Sc.**, Tawee Laohapand, M.D.**

*Department of Pharmacology. **Center of Applied Thai Traditional Medicine. Faculty of Medicine Siriraj Hospital. Mahidol University. Bangkok 10700, Thailand.

ABSTRACT

Ayurved Siriraj Wattana Recipe (AVS073) has long been used for healing in Thai traditional medicine treatment for health promotion, appetite inducement and retardation of health degeneration. The formula comprises 18 herbal components. Phenolic compounds are commonly found in different kinds of plants and show considerable pharmacological activities. Therefore, AVS073 and its 18 components were assessed for some presence of phenolic compounds. High performance thin layer chromatography (HPTLC) technique was used with the developing solvent mixture (hexane : ethyl acetate : acetic acid, 31:14:5). A mixture of caffeic acid, ferulic acid, gallic acid, kojic acid, p-coumaric acid and vanillic acid was used as a reference marker to identify the presence of individual phenolic compounds. By this method, caffeic acid and gallic acid were detected in AVS073 in the range of 0.0022-0.0065 and 0.0051-0.0058 % w/w, respectively. Of the 18 components of AVS073, the most commonly found phenolic acid was caffeic acid (0.0021 - 0.0695 % w/w). Gallic acid was detected in the highest amount in *Ferula assa-foetida*. However, ferulic acid, kojic acid and p-coumaric acid were found in some components, but not in AVS073. The chromatogram fingerprints of caffeic acid and gallic acid might be useful for the quality assessment of AVS073 production.

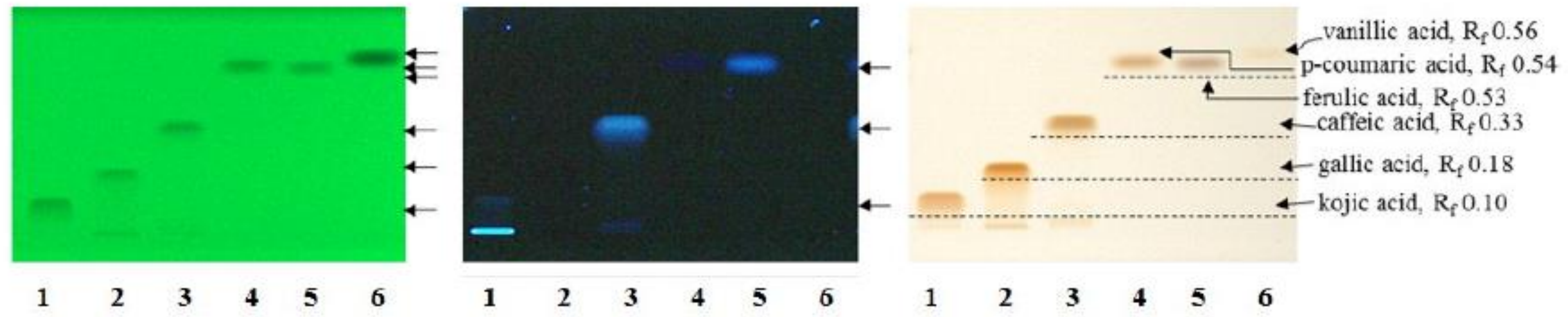
Keywords: High performance thin layer chromatography (HPTLC), fingerprint analysis, quantitative analysis, chromatographic fingerprinting

Siriraj Med J 2015;67:72-78

E-journal: <http://www.sirirajmedj.com>



Quantitative Analysis of Some Phenolic Compounds in Ayurved Siriraj Wattana (AVS073) Using HPTLC





Quantitative Analysis of Some Phenolic Compounds in Ayurved Siriraj Wattana (AVS073) Using HPTLC