

Pharmaceutical Chemistry & Natural Product (PC)

**PC-P-1 Organoleptic and phytochemical analyses of different extracts of
Andrographis paniculata (Burm. f.) Wall. ex Nees whole plant of Cambodia**

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INTRODUCTION

Andrographis paniculata (Burm. f.) Wall. ex Nees (Family: Acanthaceae) (Local name: *Smau Phtuhs* or *Smau Prammat Mnuhs*) has been traditionally used for the treatment of various ailments including cancer, diabetes, bronchitis, dermatitis, influenza, dysentery, dyspepsia and malaria for centuries.

OBJECTIVES

This research aims at analyzing the organoleptic features and phytochemicals of *Andrographis paniculata* (Burm. f.) Wall. ex Nees native to Cambodia.

MATERIALS AND METHODS

Dried whole plant of *Andrographis paniculata* (Burm. f.) Wall. ex Nees was obtained from the local plant drugstore and authenticated by University of Puthisastra (UP)-Herbarium (UPFPH-120012). The organoleptic features were evaluated by means of the sense organs (color, odour, taste and texture parameters). The dried plants were extracted with methanol, ethanol and chloroform. Ultrasonication-Assisted Extraction (UAE) was used as the extraction method. The extracting yields were subjected to the analysis of phytochemicals including alkaloids, saponins, phenolic compounds, tannins, flavonoids, terpenoids, resins and essential oils.

RESULTS

The organoleptic features of the dried whole plant of *Andrographis paniculata* (Burm. f.) Wall. ex Nees revealed that the flowers were violet streak and tubular-shaped, stem and leaves were dark green; the odour was characteristic; the taste was strongly bitter; and the texture of stem was slightly coarse. The extracting yields accounted for 10.23% (methanol extract), 1.21% (ethanol extract) and 3.30% (chloroform extract). The phytochemical analysis demonstrated the positive tests of alkaloids, saponins, terpenoids and phenolic compounds in methanol extract; of terpenoids in ethanol extract; and of alkaloids, flavonoids, terpenoids, phenolic compounds and essential oils in chloroform extract.

CONCLUSION

The expression of various phytochemicals and the organoleptic feature of *Andrographis paniculata* (Burm. f.) Wall. ex Nees whole plant native to Cambodia provide its profiling standardization, which is beneficial for identification and authentication of plant materials, as well as making a monograph of the plant.

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