

PC-P-49

Organoleptic and phytochemical evaluation of different extracts of *Orthosiphon aristatus* (Blume) Miq. whole plant of Cambodia

Huykhim Ung, Voleak Nov, Voleak Yin, Sokunvary Oeung, Koemlin Roum, Sin Chea, Samell Keo *

Department of Pharmacy, Faculty of Health Sciences, University of Puthisastra, Phnom Penh, Cambodia

*Corresponding author: ksamell@puthisastra.edu.kh; H/P: (855) 12 552 681

KEYWORDS:

Orthosiphon aristatus (Blume) Miq., Phytochemical, Organoleptic feature

INTRODUCTION

Orthosiphon aristatus (Blume) Miq. (Local name: *Puk Muort Chhmar*) also known as cat's whiskers or java tea is a branched herbaceous plant that belongs to Lamiaceae family. It possesses an anti-inflammatory, anti-hypertensive, anti-microbial properties and enhances the urine flow.

OBJECTIVES

This study was conducted to evaluate the organoleptic features and phytoconstituents of *Orthosiphon aristatus* (Blume) Miq. native to Cambodia.

MATERIALS AND METHODS

Dried whole plant of *Orthosiphon aristatus* (Blume) Miq. was collected from the local plant drugstore and authenticated by University of Puthisastra (UP)-Herbarium (UPFPH-050015). The organoleptic feature was evaluated by means of sense organs such as colour, odour, taste and texture parameters. The dried plant was extracted with three solvents including methanol, ethanol and chloroform. Each plant was extracted for 30 minutes at room temperature by Ultrasonication-Assisted Extraction (UAE) method. The extracting yields were subjected to the analysis of phytochemicals comprised of alkaloids, saponins, flavonoids, terpenoids, tannins, phenolic compounds, resins and essential oils.

RESULTS

The organoleptic features of the dried *Orthosiphon aristatus* (Blume) Miq. revealed that the leaves were greenish; the flowers were whitish; the odour was pleasant; and the texture was characteristic. The extracting yields of *Orthosiphon aristatus* (Blume) Miq. whole plant accounted for 4.15% (chloroform extract), 0.71% (ethanol extract) and 9.54% (methanol extract). The phytochemical evaluation of these three solvent extracts gave the positive tests of flavonoids, essential oils, alkaloids, phenolic compounds and tannins.

CONCLUSION

This study profiles the scientific information for the proper organoleptic features and phytoconstituents of Cambodian *Orthosiphon aristatus* (Blume) Miq. based on which the plant identity and purity can be authenticated.

THE 2ND INTERNATIONAL CONFERENCE ON PHARMACY EDUCATION AND RESEARCH
NETWORK OF ASEAN (ASEAN PharmNET 2017)

21 & 22 November 2017
GRAND SEASON HOTEL, KUALA LUMPUR

Theme:
Advancing Multidimensional Roles of Pharmacy Education and Research

Organised by:
Faculty of Pharmacy, Universiti Kebangsaan Malaysia, Malaysia

Co-organised by:
Faculty of Pharmacy, Universiti Teknologi Mara, Malaysia
School of Pharmacy, Taylor's University, Malaysia

ASEAN PharmNET members
Faculty of Pharmacy, Universiti Kebangsaan Malaysia, Malaysia
Faculty of Pharmacy, Universiti Teknologi Mara, Malaysia
School of Pharmacy, Taylor's University, Malaysia
Faculty of Pharmacy, University of Medicine & Pharmacy at Ho Chi Minh City, Vietnam
Hanoi University of Pharmacy, Vietnam
Faculty of Pharmacy, Mahidol University, Thailand
Faculty of Pharmacy, GadjahMada University, Indonesia
Faculty of Pharmacy, University of Health Science, Laos PDR
Faculty of Pharmacy, University of the Philippines Manila, the Philippines
Faculty of Pharmacy, University of Surabaya, Indonesia
International University, Cambodia
School of Pharmacy, Bandung Institute of Technology, Indonesia
University of Pharmacy, Yangon, Myanmar

Website: <http://www.aseanpharmnet2017.net/>



SCIENTIFIC COMMITTEE

**The 2nd International Conference on Pharmacy Education and Research Network of Asean
(ASEAN PharmNET 2017)
21 & 22 November 2017
Grand Seasons Hotel, Kuala Lumpur**

Head of Scientific Committee:

Assoc. Prof. Dr. Ng Shiow Fern
Universiti Kebangsaan Malaysia (UKM)

Members:

UKM

Assoc. Prof. Dr. Juriyati Jalil
Assoc. Prof. Dr. Haliza Katas
Assoc. Prof. Dr. Endang Kumolosasi
Dr. Adyani Md Redzuan
Dr. Noraida Mohamed Shah
Dr. Lam Kok Wai
Dr. Ernieda Md. Hatah
Dr. Chong Wei Wen
Dr. Mohd Kaisan Mahadi
Dr. Shamin Mohd Saffian
Ms. Nasibatul Husna Adzmi

Taylor's University

Dr. Naveen Kumar Hawala Shivashekaregowda
Dr. Renukha Sellappans
Ms. Hoo Yoon Fong
Dr. Rajinikanth Siddalingam