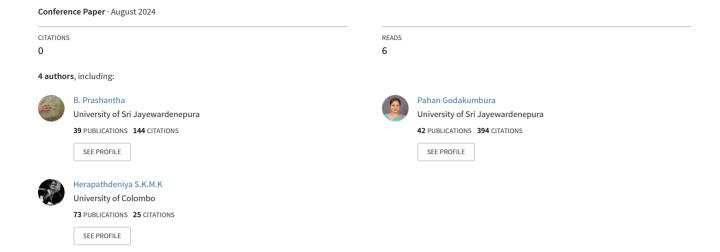
A STUDY OF THE CHEMICAL PROPERTIES OF PASPANGUWA DECOCTION AND THE RAW MATERIALS COLLECTED FROM SELECTED AREAS











PROCEEDINGS

10th International Conference on Ayurveda, Unani, Siddha and Traditional Medicine (*i*CAUST 2024) and

1st International Research Symposium on De Aa Sukhi Dakshina 2024

"One health approach for health tourism"

09TH - 10TH AUGUST 2024



ORGANIZED BY

Faculty of Indigenous Medicine University of Colombo Sri Lanka

Department of Ayurveda Southern Province Ministry of Health, Sri Lanka

Web: https://fim.cmb.ac.lk/icaust/2024/ Email: icaust@fim.cmb.ac.lk

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10th INTERNATIONAL CONFERENCE ON
AYURVEDA, UNANI, SIDDHA AND
TRADITIONAL MEDICINE - 2024
iCAUST - 2024
AND 1st INTERNATIONAL RESEARCH
SYMPOSIUM ON "DE AA SUKHI DAKSHINA"
EXHIBITION AND TRADE FAIR 2024

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Editor in Chief: Prof. K.R. Weerasekera

ISBN 978-624-5518-04-3

Published By

Faculty of Indigenous Medicine
University of Colombo
Rajagiriya
Sri Lanka.

10th iCAUST & 1st IRS on "De Aa Sukhi Dakshina" 2024 Abstracts - Undergraduate Research Forum

A STUDY OF THE CHEMICAL PROPERTIES OF PASPANGUWA DECOCTION AND THE RAW MATERIALS COLLECTED FROM SELECTED AREAS

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"Paspanguwa" is a combination of five ingredients including Zingiber officinale, Solanum xanthocarpum, Coriandrum sativum, Coscinium fenestratum and Hedyotis corymbosa. In this study selected chemical and physical parameter of ingredients and "Paspanguwa" decoction were analyzed. Here, Zingiber officinale was collected from Gampaha, Kurunegala, Kegalle, Matale and Rathnapura districts. Coscinium fenestratum were collected from Gampaha, Kurunegala, Kalutara and Rathnapura districts while Solanum xanthocarpum were collected from Kurunegala and Kilinochchi districts. Indian samples of Solanum xanthocarpum, Coriandrum sativum and Hedyotis corymbosa were used for the analysis. The moisture content and the ash contents of ingredients as per AOAC methods, ranged from 10.94 ± 0.63% to 28.04 ± 0.43% and $1.49 \pm 0.20\%$ to $12.67 \pm 0.74\%$ respectively. The mineral contents of ingredients and "Paspanguwa" decoction were analyzed using FAAS. The alkaloid contents of ingredients as per Harborne method, ranged from 2.94 ± 0.60% to 0.93 ± 0.05%. The phenolic contents of ingredients and "Paspanguwa" decoction were analyzed using Folin-Ciocalteu colorimetric method. IC50 value for the DPPH radical scavenging assay of the "Paspanguwa" decoction was obtained as 0.002 ± 0.001 mg/mL and the ingredients ranged from 0.157 mg/mL to 1.929 mg/mL. According to this study, all the analyzed chemical parameters of the same raw material collected from different areas do not comparable indicating they possess different qualities based on the area where they were grown. The pH of the "Paspanguwa" decoction indicates that it is slightly acidic, and conductivity of "Paspanguwa" decoction indicates that it contains a considerably lower number of soluble ions.

Keywords: Paspanguwa, Alkaloid content, Total phenolic content, Antioxidant activity, Metal