DOI : 10.31357/fapsmph.2013.00591

A Pharmacognostic evaluation of different species of Sariva *Hemidesmus indicus* (L.) R. Br., *Cryptolepis buchananii* Roem. Schult. and *Ichnocarpus frutescens* (L.) R. Br.

By

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Thesis submitted to the University of Sri Jayewardenepura for the award of Degree of Master of Philosophy in Botany 30th December 2013

I/we certify that by the candidate has incorporated all corrections, additions and amendments recommended by the examiners.

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Date: 18 · 03 · 2015

Declaration

The work described in the thesis was carried out by me under the supervision of Dr. (Mrs) P. L. Hettiarchchi (Department of Botany, University of Rajarata), Prof. A. M. Abeysekera (Department of Chemistry, University of Sri Jayawardenepura) and Ms. Sudeepa Sugathadasa (Bandarakaike Memorial Ayurvedic Research Institute) and a report on this has not been submitted in whole or in part to any University or any other Institution for other Degree/ Diploma.

J. M. Pushpalatha

18.03.2015

Date

We certify that the above statement made by the candidate is true and this thesis is suitable for submission to the University of Sri Jayawardenapura for the purpose of evaluation.

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Date: 18.03.2015

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TABLE OF CONTENTS

PAGE

LIST OF PLATES

LIST OF TABLES

LIST OF MAPS

LIST OF FIGURES

ACKNOWLEDGEMENT

I express my sincere gratitude and appreciation to my supervisor Dr P. L. Hettiarachchi, Senior Lecturer of the Department of Botany University of Rajarata for her valuable guidance, keen supervision, advice extended towards the successful completion of the thesis through many hardships.

I am grateful to Prof. A. M. Abeysekera, Professor, Department of Chemistry, University of Sri Jayawardenepura, his keen supervision, encouragement, help and critical comments for the completion of the thesis.

My sincere gratitude is also extended to Ms. Sudeepa Sugathadasa, Scientist (Pharmacognocy), BMARI for her encouragement, supervision, comments and valuable guidance throughout the research work.

I must thankful to Prof. K. K. D. S. Ranaweera, Director of BMARI for providing a chance for me to carry out this research work at BMARI and my thanks are also extended to Mr. P. S. K. R. Weerakoon, Commissioner of Ayurveda, for providing financial assistance for the research.

I take this opportunity to express my gratitude to Prof. Nazeera Saleem, the Head and all the academic, technical and non academic staff of the Department of Botany, University of Sri Jayawardenapura

I would like to express my sincere thanks to the Department of Chemistry, for providing facilities for the chemical analysis.

I also take my pleasure in thanking Ms. Achala de Silva, Research officer at BMARI, Nawinna, for her encouragement, invaluable support given to me throughout my research work.

I am grateful to research students in the post graduate laboratory in the department of Chemistry, University of Sri Jayawardenapura for their support given to me in numerous ways.

I extend my special thanks to all the staff members of the Botany Division, BMARI for their encouragement and support in completion of this work.

Finally, I offer my true and cordial gratitude to my father, mother and my husband for their encouragement, understanding and kindness extended to me in various ways to achieve my goal successfully.

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J. M. Pushpalatha

ABSTRACT

Hemidesmus indicus or true Sariva as it is known in ayurveda is the true medicinal plant supposed to be used in nearly 50 different ayurveda drug preparations. Further this has become one of the ingredients in many other herbal products such as Sherbet and flavoring agents. The plant is neither cultivated in Sri Lanka nor India (from where the raw material is imported to Sri Lanka). Therefore, the entire demand is met with the plant material collected from the wild. Consequently there is a greater chance of the real material been adulterated or substituted by similar looking, cheaper material. Therefore, the present study was launched to carry out a complete pharmacognostic evaluation of *H. indicus* and its possible adulterants / substitutes available in Sri Lanka. *Cryptolepis Buchananii* and *Ichnocarpus frutescens* which are collectively known as " Sariva" in ayurveda with the view of establish key diagnostic characters that would be used to screen crude drug material at the point of purchasing. Twenty five root samples per species selected form five district and fifty five market sample purchased from six districts were used for the study. Authentic voucher herbarium specimens were prepared and deposited in the institutional herbarium. Macroscopic evaluation of martial were carried out at following WHO