

**ETHNO-MEDICAL USASE OF *Drymoglossumpiloselloides* AND SCREENING
FOR CHEMICAL CONSTITUENTS**

MAKEWITAGE UTHPALA MADHURI PERERA

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DECLARATION

I do here by declare that the work reported in this project report /thesis was exclusively carried out by me under the supervision of Prof A.M. Abeysekera. It describes the result of my own independent research except where due reference has been made in the text. No part of this project report/thesis has been submitted earlier or concurrently for the same or any other degree.

Date... 30/07/2010


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Signature of the Candidate

Certified by:

1. Supervisor (Name):..... Date:.....

(Signature):.....

2. Co-Supervisor (Name):..... Date:.....

(Signature):.....

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ABSTRACT

Drymoglossum piloselloides or "Panam pethi" of the Polypodiaceae family is a small epiphytic fern having thick, simple and numerous leaves commonly seen on the trunk of older trees and is found throughout tropical Asia below an elevation of 2,000 feet. In Ceylon *Drymoglossum piloselloides* is used for the treatment of bones fraction, arresting capillary heamorrhages and skin diseases.

Drymoglossum piloselloides were collected in the Kurunegala district in Sri Lanka and identified. A voucher specimen has been deposited at the Herbarium of University of Sri Jayawardenepura. Leaves of *Drymoglossum piloselloides* were washed & dried for about one month under normal environmental conditions. Dried leaves were grounded into a paste form and extracted with methanol using soxhlet apparatus around 50-70° temperature for 1½ hrs. The solvent was concentrated under vacuum using a rotary evaporator. The yield was 4.706%. Then 50ml of the above basic solution was extracted with hexane. The yield was 0.012 %.

Phytochemical screening test for alkaloids, unsaturated sterols, flavanoids, polyphenolic compounds was done. Preliminary phytochemical investigation by thin layer chromatography (TLC) using authentic standards and UV Spectrometry led to the detection of unsaturated sterols, polyphenolic compounds, flavonoids.

To gather scattered & hidden ethno-medical knowledge about *Drymoglossum piloselloides*, field survey was carried out in Kurunegala, Gampaha and Colombo districts of Sri Lanka with randomly selected 50 indigenous practitioners using semi-structured questionnaire.

The results obtained from the phytochemical analysis of the *Drymoglossum piloselloides* L showed the presence of flavonoids, triterpenoids, steroids, and the absence of alkaloids. The survey revealed that *Drymoglossum piloselloides* has maximum effect for fraction healing, reduce pungent feeling activities, rectal prolepses, Hemorrhoids, Anemia, Hemorrhagic condition, wound healing and reduce swelling. And it considers that *Drymoglossum piloselloides* may have to a certain extent act for curing Dengue fever. So it implies the importance of carrying out further studies on the chemical constituents in *Drymoglossum piloselloides* and bio assay.
