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SRI LANKA AS A HUB IN ASIA: THE WAY FORWARD

Abstracts

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Phytochemical Study on Medicinal Plant— *Sida cordifolia* Linn

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Abstract— Medicinal plants form the major source of drugs in all the traditional systems of medicine practiced in Sri Lanka, India viz., Siddha, Ayurveda, Unani and Homeopathy. There is a growing importance in medicinal plants and traditional health systems providing health care for a wider population across the globe, especially, in the developing countries. The World Health Organisation (WHO) currently encourages, recommends and promotes traditional remedies in health care programmes as they are easily available at low cost, comparatively safe and are culturally acceptable.

Further, the WHO in a number of resolutions had emphasised the need to ensure quality of traditional drugs. The purpose of standardising traditional drugs is obviously to ensure therapeutic efficacy and safety. Standardisation and maintaining of quality should start from the correct identification and botanical authentication of plant material.

Sida cordifolia Linn belongs to the family Malvaceae. Text states that the *Sida cordifolia* has analgesic antispasmodic anti-inflammatory, hypoglycemic and hepatoprotective activities. This species is found in tropical and subtropical regions of Sri Lanka and India. The aim of this study is to determine the phytochemical constituents of *Sida cordifolia*. Phytochemistry helps in standardising the herbal preparations and possibly relate the constituents to their medicinal/ pharmacological uses.

The matured areal parts of *Sida cordifolia* were collected during the month of July-August 2012 from Jaffna, Sri Lanka. The plants were washed thoroughly with tap water and dried under shade for ten days. Dried material was grounded to coarse powder and stored in airtight container. It was then extracted with ethanol. The dry powder of sample was observed under U.V. light to evaluate the fluorescence. Chemical tests were performed on ethanol extract. It helps to find out organic compounds like carbohydrates, proteins, glycosides, alkaloids, steroids, tannins and phenolic compounds, fats and oils etc. Phytochemical constituents were qualitatively and quantitatively analyzed. *Sida cordifolia* showed the presence of alkaloids, glycosides, phytosterol, flavonoids, lignins, protein and saponins. The quantitative studies revealed that *Sida cordifolia* possessed alkaloids (1.99mg/kg), flavonoids (0.92mg/kg), lignin (0.08mg/kg), glycosides (0.19mg/kg), saponins (0.17mg/kg), phytosterols (0.02mg/kg), fixed oils (0.18 µg/lit). Phytochemicals act in numerous ways to assist the human body in combating disease and health problems. The preliminary phytochemical screening tests may be useful in the detection of the bioactive principles and subsequently may lead to the drug discovery and development. The *Sida cordifolia* studied here can be seen as a potential source of useful drug. It is also justify the traditional medical uses and the claims about the therapeutic values of this plant as curative agent. Further to this the isolation, identification, characterisation and elucidation of the structure of the bioactive compounds of *Sida cordifolia* would be obtained with a view to obtaining useful chemotherapeutic agent.

Keywords: Phytochemical, *Sida cordifolia*, medicinal plants