

PROCEEDINGS

2nd International Conference on Ayurveda, Unani, Siddha & Traditional Medicine

Institute of Indigenous Medicine
University of Colombo
Rajagiriya
Sri Lanka

16th - 18th December 2014

Abstract ID: 0060

ijorlum

ob-

rya,

egu-

was

lave

and irya

nts.

ous

m a

ess.

etti

HIGH POTENTIAL PHYTOCHEMICAL AND IN VIVO ANTI-INFLAMMATORY ACTIVITY OF WEEDY PLANTS IN SRI-LANKA: A REVIEW

<u>Farzana M.U.Z.N.</u>^{1*}, Manuha M.I.¹, Nazeem M.H.M.¹, Paranagama P.A.²

¹Institute of Indigenous Medicine, University of Colombo, Rajagiriya ²Department of Chemistry, University of Kelaniya, Kelaniya *muznfarzana@gmail.com

Anti-inflammatory agent means a substance that counteracts inflammation. Then, a number of weedy plants were employed in the treatment of inflammatory disorders by our ancient physicians. Identify these herbs in order to promote the reuse of these herbs for inflammatory disorders. Google Scholar, PubMed, and Web of Science databases were searched. The search terms were "HRBC stabilizing" or "anti-inflammatory and weedy herbs or "traditional medicine" without narrowing or limiting search elements. Total 78 results were identified and reviewed and 21 studies were included. Carrageenan-induced paw edema method (acute inflammatory model) was used in 52.3% and cotton pellet granuloma test (chronic inflammatory model) method was used in 4.1%. HRBC stabilizing assay was used as the assay method in 33.3%. Combine methods were used in 10.3% studies. Some of these plants include Justicia betonica (Linn), Scoparia dulcis, Lantana camara, Albizia lebbeck, Cassia tora, Achyranthes aspera(root) etc. The potency of these plants is attributed to several active principles present in them, which may act at any of the multiple targets in the inflammatory response pathway. In addition to anti-inflammatory activity, some of these plants also acquired properties like analgesic, antimicrobial, anticancer and antiulcer effects. Some active anti-inflammatory principles of these plants such as flavinoid, glycosides, and sesquiterpenes have been identified. Also, HRBC test was performed for plant extracts with comparing synthetic drugs (aspirin, diclofenac sodium, indomethacin etc) for its anti-inflammatory activity. In conclusion, herbs like Lantana camara, Albizia lebbeck, Achyranthes aspera (root) were found to be more effective in reducing inflammation. Attention to these herbs would open a new approach for novel therapeutic and more effective anti-inflammatory agents.

Keywords: HRBC, anti-inflammatory plants, weeds, herbs