International Journal of Engineering Science Invention
ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726
www.ijesi.org ||Volume 6 Issue 11|| November 2017 || PP. 56-57

A short review on Traditional wound healer- *Hemigraphiscolorata*

Sharannya Mohan[1], Josna George[1], Kannika Parameswari[1], Dinesh M.D[2],
[1]*Department of Biochemistry, Dr NGP college of Arts and Science College, Coimbatore, South India*
[2]*Department of Microbiology, Pazhassiraja College, Pulpally, Wayanad, Kerala, South India*

Abstract: *Knowledge about Wound healing properties of medicinal plants focused new era in the herbal research. Traditionally large group of plants are wound healer, Hemigraphiscolorata is known traditional wound healer. The plant nearby titled as 'murikooti' in God'sown country, Kerala. Traditionally theleafs are pulverised in to paste or liquid form and applied on first hand wounded part. The reviewis attentive to précis the description, distribution, and medicinal application of Hemigraphiscolorata.*

Key words:*Hemigraphiscolorata, Description, Distribution.*

Date of Submission: 17-11-2017 Date of acceptance: 28-11-2017

I. Introduction

*Hemigraphiscolorata*is a tropical perennial herb chiefly grown as an ornamental indoor and outdoor plant, because of its attractive and vivid foliage. In folk medicine, the leaves are ground into a paste and applied on fresh cut wounds to promote wound healing and used to treat anaemia. Traditional knowledge regarding the usage of this plant differs but the scientific study available to support this knowledge is much limited. Hemigraphis means 'half writing' because the filament of the outer stamen bear brushes. The plant is known by several name such as Aluminium plant, cemetery plant, metal leaf, red flame ivy, waffle plant, java ivy etc [(1)].

II. Description

The plant *Hemigraphiscolorata* (Blume) is a versatile tropical low creeping Perennial herb that reaches a height of 15 to 30 cm, which is the native of tropical Malaysia.It is a prostrates and spread s with rooting stems when grown on ground, and on hanging baskets it cascades over beautifully is a prostrate growing plant with spreading , rooting stems. The tiny white flowers grow intermittently throughout the year[(2 &3)].The leaves are opposite, ovate to chordate, serrate – crenate about 2 to 8cm long and 4 to 6cm wide, bearing well- defined veins and are slender, lance shaped with toothed, scalloped orlobed margins. They are greyish green stained with red purple above and darker purple beneath [(4)]. It blooms irregularly throughout the year in the tropics. Flowers are small (1- 1.5 cm diameter), five lobed, bell shaped with imbricate bracts. These are white in colour with faint purple marks within and appear in terminal 2 to 10cm long spike. Capsules are small, slender, oval, linear and light green in colour [(3)].

III. Distribution

Inborn of attractive medicinal plant stays Malaysia and South East Asia. The plant remainedcommonly located in India specifically in South India. The thoroughfares of Kerala are rich in lasting herb.

IV. Phytochemical compounds

Phytochemicals have been used as drugs, dyes, and food supplements from time immemorial. The phytochemicals are variety of secondary metabolites, with contributively curative property.The phytoconstituents present in *H. colorata*are phenols, saponins, flavonoids, terpenoids[(5)], coumarins, carbohydrates, carboxylic acid, xanthoproteins, tannins, proteins, alkaloids, steroidsandsterol [(6)]**.** The leaves of the plant contain flavonoids, polyphenols, tannins along with high potassium and low sodium levels; stem contains saponins and tannins, while roots contain flavonoids and polyphenols. These phytochemicals provide curative properties.

V. Medicinal Uses

The leaves are ground in to paste and applied on fresh cut wounds. Used to promote urination, cheakhemorrhage, stop dysentery, and treat venereal diseases and to heal hemorroids. The plant has the immense power to pacify vitiated pitta, fresh wound, cuts, ulcers, inflammations and skin complaints. In folklore, leaf juice applied directly on open wound stop bleeding[(7)].In folk medicines, it used internally to cure anaemia[(8)]. Traditionally, the leaves are consumed to mend gallstones. The whole plant of*H. colorata* is ground in to a paste with water and used for diabetes mellitus (Anonymous Dictionary of Indian medicinal plants 1992).

The presence of phenolic compounds contributes anti-bacterial and anti-diabetic activity in benzene extract. Phenolic compounds are effective hydrogen donor which makes them a good antioxidant. The phenolic acids such as chlorogenate, cinnamate, coumarate, gallate and ferulate present in the plant acts as pro-oxidants and exhibits free radical scavenging activity [(9)].

The report [(6)] concerning wound healing properties of *Hemigraphiscolorata* by *in vivo* methodsand results encouraged the use of *Hemigraphiscolorata* for the topical management of wound and in depth study about the active constituents is necessary. Effect of *Hemigraphis colorata* on wound healing and inflammation studies in mice, the application of paste when applied on the wound effectively wound the wounds but the oral administration of extract was ineffective. The wound contraction and epithelialisation was faster in the leaf paste applied on mice. The leaf suspension or paste was devoid of anti-inflammatory activity [(10)].

VI. Conclusion

From the ancient time plants have been a model source of medicine before the invention of Antibiotics. In Ayurveda literatures indicated that herbals used various treatments of human sickness. The village peoples in India habit traditional medicines without the scientific validation. WHO also endorses the use of herbs it come to be cost effective and without adverse effect. Number of studies proved *Hemigraphiscolorata* play vital role in the epithelisation. Parish peoples use these plants when become injured. The leafs of *Hemigraphiscolorata* handpicked crushed directly in hands palm and the extracts applied in the hurt area and band aid. This type of outmoded knowledge they gained from their ancestors via orally without the scientific knowledge.

References

[1] Devi Priya M. Review on pharmacological activity of *Hemigraphiscolorata* (Blume). International Journal of Herbal Medicine 2013; 1 (3): 120-121.
[2] Gledhill D. The Names of Plants. Edn 4, Cambridge University Press,n New York, 2008, 195.
[3] Gamble JS. Flora of the Presidency of Madras. The Authority of the secretary of state of Indian council, India 1921; 2:1344.
[4] Graf. A. B. Exotica International. Rochers company publishers. 1982:2.
[5] Sheu J, Jayakumar T, Chang C, ChenY, Priya S, Ong E, Chiou H, Elizebeth AR. Pharmacological actions of an ethanolic extracts of the leaves *Hemigraphiscolorata* and Clerodendronphlomoides. ClinMol Med 2012; 3:1-3.
[6] Saravanan J, Shariff WR, Narasimhachar HJ, Varatharajan R, JoshinVG, Asif AK. Preliminary photochemical studies of laves of *Hemigraphiscolorata*. Res J PharmacogPhytochem 2010; 2:15-17.
[7] Silja VP, Varma KS, Mohanan KV. Ethnomedicinal plant knowledge of the MulluKuruma tribe of Wayanad district, Kerala. Ind J TraditKnowl 2008; 7:604-612.
[8] Gayathri V, Lekshmi P, Padmanabhan RN. Anti-Diabetes and Hypoglycaemic properties of *Hemigraphiscolorata* in Rats. IntJn Pharm PharmSci 2012; 4:224- 328.
[9] Deepak RP, Renjima V, Murugan K. Antioxidant Potential of Hemigraphiscolorata (Blume) H.G.Hallier and Rhinacanthusnasutus(Linn). Kurz. – A Search. In Proceedings of the 2007 Kerala Science Congress (03-40), Kannur, Kerala, 2007, 1-4.
[10] Subramoniam, D.A Evans, S. Rajasekharan,G. Sreekandan Nair. Effect of **HemigraphisColorata** (Blume) H . G Hallier leaf on wound healing and inflammation in mice. Indian Journal of Pharmacology 2001; 33: 283-285.

International Journal of Engineering Science Invention(IJESI) is UGC approved Journal with Sl. No. 3822, Journal no. 43302.

Sharanya Mohan "A short review on Traditional wound healer- Hemigraphiscolorata." International Journal of Engineering Science Invention(IJESI), vol. 6, no. 11, 2017, pp. 56-57.