# ACANTHUS ILICIFOLIUS LINN. – TRADITIONAL IMPORTANCE OF LESS KNOWN MEDICINAL PLANTS

Satnam Singh\*, Sunil Thakral and Ashish Chabbra Gurukul College of Pharmacy, Suratgarh

\* Corresponding Author

## **ABSTRACT**

Herbs are vital source of drugs from the ancient time holding the scenario of the Indian system of medicine. *Acanthus ilicifolius* Linn. (Acanthaceae) is relatively lesser-known, yet important medicinal plant of Herbal Materia Medica. The plant is used in traditional systems of medicine, including Traditional Indian Medicine. In traditional medicine, the plant is used in the treatment of diseases ranging from snake bite to skin diseases. The present paper enumerates the medicinal, traditional value and folk remedies of this herb, which may help the researchers to set their minds for approaching the utility, efficacy and potency of *Acanthus ilicifolius*.

Keywords: Acanthus ilicifolius, traditional medicine, folk uses

#### INTRODUCTION

Acanthus ilicifolius occurs in tropical Asia and Africa, through Malaya to Polynesia. It is a viny shrub or tall herb, upto 1.5 m high, scarcely woody, bushy, with very dense growth. Shallow tap roots, but occasionally stilt roots are conspicuous. Leaf simple, opposite, decussate, cauline, exstipulate, petiole short, flattened, glabrous, pulvinous to sheathing base. Flower bisexual, typically zygomorphic, complete, erect, sessile, hypogynous. Fruit 1 cm green and 2.5 - 2.0 cm long, kidney shaped 4 seed drupe, Seed 0.5 - 1.0 cm long (Xie *et al* 2005).

## TRADITIONAL MEDICINAL USES (Mastaller, 1997)

In Ayurveda, the plant is known as Sahachara. According to Nadkarni the drug is astringent and makes a good nervine tonic, expectorant, and stimulant. The root is expectorant, and is used in coughs and asthma. The root, boiled in milk, is largely used in leucorrhoea and general debility. The roots to be cordial and attenuant, and useful in paralysis and asthma. The tender shoots and leaves are used in India for bite. In Goa, the leaves, which abound in mucilage, are used as an emollient fomentation in rheumatism and neuralgia. Water extracted from the bark is used to treat colds and dermatitis. Ground fresh bark is used as an antiseptic. Tea brewed from the leaves relieves pain and purifies the blood. The leaves of *A. ilicifolius* are used to treat rheumatism, neuralgia and poison arrow wounds. It is widely believed among mangrove dwellers that chewing the leaves will protect against snake bite. The pounded seeds of *A. ilicifolius* and *A. ebracteatus* are used to treat boils, and the juice of leaves to prevent alopecia. Both species are also used to treat urolithiasis.

### **PHYTOCHEMISTRY**

Cyclolignan glycosides, (+)-lyoniresinol 3a-O- $\beta$ -D-galactopyranosyl-(1  $\rightarrow$  6)- $\beta$ -D-glucopyranoside and (+)-lyoniresinol 2a-O- $\beta$ -D-galactopyranosyl-3a-O- $\beta$ -D-glucopyranoside have been reported . A phenylethanoid glycoside (ilicifolioside A) and an aliphatic alcohol glycoside (ilicifolioside B) have been isolated. Two lignan glucosides, (+)-lyoniresinol 3a-[2-(3, 5-dimethoxy-4-hydroxy)-benzoyl]-O-beta-glucopyranoside, and

dihydroxymethyl-bis (3, 5-dimethoxy-4-hydroxyphenyl) tetrahydrofuran-9(or 9')-O-beta-glucopyranoside have been isolated from the aerial parts. A new coumaric acid derivative acancifoliuside, acteoside, isoacteoside, acanthaminoside, (+)-lyoniresinol 3a-O-beta-glucopyranoside, (-)-lyoniresinol, and alpha-amyrin , have been isolated from the methanolic extract of the leaves of *A. ilicifolius* . (Huo *et al* 2008, Kanchanapoom *et al* 2002)

## **CONCLUSION**

Herbs are the natural drugs used to regain the alterations made in normal physiological system by foreign organisms or by any malfunctioning of the body. The WHO has already recognized the contribution of traditional health care in tribal communities. It is very essential to have a proper documentation of medicinal plants and to know their potential for the improvement of health and hygiene through an eco friendly system. Thus importance should be given to the potentiality of studies as these can provide a very effective strategy for the discovery of useful medicinally active identity. A detailed and systematic study is required for identification, cataloguing and documentation of plants, which may provide a meaningful way for the promotion of the traditional knowledge of the herbal medicinal plants. The present review reveals that *Acanthus ilicifolius* Linn. is used in treating various ailments. It elicits on all the aspects of the herb and throws the attention to set the mind of the researchers to carry out the work for developing its various formulations, which can ultimately be beneficial for the human beings as well as animals.

## REFERENCES

- 1. Xie, LS., Liao, Y.K., Huang, Q.F., Huang, M.C., 2005. Pharmacognostic studies on mangrove *Acanthus ilicifolius*. *Zhongguo Zhong Yao Za Zhi*, 30:1501-3.
- 2. Mastaller, M., 1997. *Mangroves: The Forgotten Forest between Land and Sea.* Tropical Press, 1997 (p. 97: medicinal uses).
- 3. New International Encyclopedia
- 4. Domestication of plants in the Old World (3 ed.). Oxford University Press. 2000.

- 5. Dwivedi S *et. al.*, Relivance of medicinal herbs used in traditional system of medicine, Farmavita. Net, 2007.
- 6. Khare, C.P. "Encyclopedia of Indian Medicinal Plants", Springes-Verlag Berlin Heidelberg, New York, (2004).
- 7. Huo, C., Liang, H., Tu, G., Zhao, Y., Lin, W.A., 2008. New 5, 11-epoxymegastigmane glucoside from *Acanthus ilicifolius*. *Nat. Prod. Res.*, 22: 896 900.
- 8. Kanchanapoom, T., Kasai, R., Yamasaki, K., 2002. Flavonoid Glycosides from *Acanthus ilicifolius* L. *Nat. Med.*, 56:122.
- 9. Dwivedi, Sumeet; Kaul, Shefali; Pandey, Deepak; Shrivastava, Satyaendra & Dwivedi, S.N. "Satus and conservation strategies of endangered and vulnerable medicinal plants", Planta Indica, (2007), 3(2): 13-15.
- 10. www.botanical.com/botanical



Acanthus ilicifolius : Infloresence



Acanthus ilicifolius : Leaves