

# WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.074

Volume 7, Issue 5, 230-234.

**Review Article** 

ISSN 2277-7105

## ETHNOBOTANICAL VALUES OF THE ABUTILON INDICUM

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Article Received on 03 Jan. 2018.

Revised on 24 Jan. 2018, Accepted on 14 Feb. 2018,

DOI: 10.20959/wjpr20185-11004

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### **ABSTRACT**

Traditional plants are always been the subjects of the great interest, from the many centuries the civilization are using the plants for the several beneficiation purposes. In India as well in the other part of the world in the siddha and Uanani and in the ayuervedic cultures the medical plants are utilised for the treatment of the various diseases. In china the traditional medicines, medicines plants are the subject of the treatments of the various diseases. WHO forms the strategy for the saving and the conservation of the medicinal plants for the utilization of the plants for the treatment of the many diseases. In this review

articles we are presenting some of the aspects of the weed entitled as the Abutlion indicum. The weed is the member of the family Malvaceae. The plants is used in the Siddha, Ayuervedic and the uanani meidicines for the treatment of the various disorders. Several peoples in the world have worked on the different aspects of the phytochemistry and pharmacology of the plants and found several result of medical significances. WHO forms the strategy for the conservation of the plant.

**KEYWORDS:** Traditional plants, diseases, phytochesmitry, ayuervedic, Uanni and siddha medicines.

### INTRODUCTION

Traditional medicines comprises the medical aspects of the traditional knowledge of the plants world which has developed over various generation due to the continuous experiences of the generations over the centuries,. They are much better than the chemical medicines (several side effects and the high cost of production). WHO defines the traditional medicine as the sum total of the knowledge of the indigenous knowledge, there practise, beliefs and there uses of the plants for the treatment of the various diseases.

In the Asia and in the African, south east countries the various population (up to 80 percent) has depend on the traditional medicines for the treatment of the many disorders. The traditional medicines practices involves the following practices, theses practices involves the ayvuervdeic medicines, Siddha medicines, ancient medicines, Iranian medicines, Chinese traditional medicines.

In this review article we are presenting some of the aspects of the weed entitled as the *Abutilon indicum*, the plant is very valuable from the ethbotany point of view. From the several centuries the plants has been utilised for the treatment of the many disorders. Some of the communities are utilising the weed for the treatment of the **diahheroa**, asthma and the ant insecticidal properties.

### **Botanical descriptions**

The *Abutilon indicum* is the member of the Malvaceae family, the plant is in the form of the weed, it is commonly known as the kanghi plant, the plant is perennial herb, the appearances of the plant is tomantoes, the height of the plant is about the 3m, the herb is widely distributed and they are found in the malasia, Asia and the Africa, and in some, the some tropical part of the world(Kritikar et al.,1994).

The leaves are ovate, toothed, nearly trilobite, the colour of the flower is yellow.

The plant parts have the various utility, roots of the herbs are utilized for the purposes of the diuretic, chest infection, urthritis. The infusion of the roots are utilised for the treatment of the many fever and leprosy.

The leaves are found to be very useful in the treatment of the many ulcers.

The bark is used as the febrifuge, antihelmithic, and astringent, diuretic. The seeds are used in the piles, laxative, expectorant, in chronic systis, gleets, and gonorrhoea.

## Pharmacognostical values of the plant

The detailed features of the pharmacognostic of the roots includes the following features, the roots are cylindrical, smooth, the surface are yellow, the taste of the roots are saltish.

T.S. of the roots includes the following features the bark is undulate, the thickness of the bark has the 10-15micron thickness, secondary cortex 3-4 layers vessals 25-30 micron in length,.

Similar features of the stem of the *Abutilon indicum* has been reported, the cross section of the leaves of the *Abutilon* shows the two kinds of the tissues in the leaves, theses are the palisade and the spongy tissue. The vessels and the other parts of the vascular tissue have the typical dicotyledonous structures (Dhanalakshi et al., 19900, Sharma Sk et al., 2009).

### **Phytochemistry**

The phytochemistry of the plats has been worked out but hr many workers in the world by the differ peoples. The overall all parts have the assemblage of the many kinds of the metabolites, theses is enlisted as, the plant contains the many kinds of the mucilaginous substances, theses are enlisted as the asparagines, saponins, falvenoids, alkaloids, alkanes, some of the other metabolites includes the Beta sitosterol, vanillin, pera coumarin, caffeic acid, in addition to that several other metabolites also have been reported (Kuo Pk et al. 2008, Gvind et al., 1976, Jain PK et al., 1982, Mehta BK et al., 1998, Rajurkar R et al., 2009).

Roots contains the many kinds of the metabolites, theses includes, many kinds of the non-drying oils, such as volatiles oils, oleic acids, Linoloeic acids, lauric acids, Myristic acids, caprice and many unusual fatty acids, sitosterol and the amyrin. (Rajkumar et al., 2009).

The leaves contains the many other kinds of the metabolites of the medical significance, these includes as the steroids, sapogenins, carbohydrates, falvenoids, Terpenes, Amino acids.

Aldehyde, Hydrocarbon, Ketone, Fatty acids and esters were reported for the first time form the ethanolic leaf extract of the *Abutlon indicum* by the process of the gas chromatography and the mass spectroscopy (Rajput et al., 2012).

### **Flower**

In the flower several kinds of the flavenoids metabolites have been reported, these includes as luteolin, chrysoerol, luteolin, 1 beta glucophyronesdie, 7 beta glucopyrenoicides, Apigenin, 3 beta glucopyrenesides, in addition to that two new sesquterpenes have also been reported.( Sharma PV et al., 1989).

Some of the pharmacological work of the *Abutilon indicum* is enlisted as:

Antimicrobial role (varia vasundrum et al., 2008, Prabhakar A, 2009), Antioxidant properties (Chakaravarty G. S., 2009). Antidiabetic activity (Krisananm et al., 2009), Antiulcer activity(Malgi et al, 2009), Lipid lower activity (Rahuman et al., 2008), Analgesic activity (Ahmed et al, 2000). Wound healing activity (Roshan et al., m 2008).

### **CONCLUSION**

Overall this is the plant of the great medicinal values, from the ethno botany point of view the plant has been worked out extensively. The whole plant part whether it is the root, stem, leaves or the bark are of the extensively medicinal uses. However still further pharmacological work can be done on the *Abutilon indium* and the work on the plant can open the new pathways of the research and its uses

#### REFERENCES

- 1. Jain PK, Sharma TC, Bokadia MM, Chemical Investigation of Essential oil of Abutilon indicum, Acta Ciencia Indica, 1982; 8c(3): 136-139.
- 2. Kuo PC, Yang ML, Pei Lin Wu, Shih HN, Thang TD, Dung NX, Wu TS, Chemical constituents from Abutilon indicum Journal of Asian Natural Products Research, 2008; 10: 68.
- 3. Rajurkar R, Jain R, Matake N, Aswar P, Khadbadi SS, Anti- inflammatory Action of Abutilon indicum (L.) Sweet Leaves by HRBC Membrane Stabilization. Research Journal of pharmacy and Technology, 2009; 2(2): 415-416.
- 4. Lakshmayya, Nelluri NR, Kumar P, Agarwal NK, Gouda TS, and SR, Phytochemical and pharmacological evaluation of leaves of Abutilon indicum. Indian Journal of Traditional Knowledge, 2003; 2(1): 79-83.
- 5. Matławska I, Sikorska M, Flavonoid compounds in the flowers of Abutilon indicum (L.) Sweet (Malvaceae). Acia Drug Research, 2002; 59: 227-229.
- 6. Gurumurthy H, Ramacha ndra YL, and Padmalatha RS, In Vitro Antibacterial Study on Leaf Extracts of Abutilon Indicum Linn, Electronic Jounal of Environment, Agricultural and Food Chemistry, 2011; 10(2): 1892-1896.
- 7. Chakraborthy GS, Antioxidant Activity of Abutilon indicum Leaves International Journal Pharm tech Research, 2009; 1(4): 1314-1316.
- 8. Chakraborthy GS, Ghorpade PM, Free Radical Scavenging Activity Of Abutilon Indicum (Linn) Sweet Stem Extracts, International Journal of Chem Tech Research, 2009; 2(1): 526-531.
- 9. Kaushik P, Kaushik D, and Khokra SL, In vivo antioxidant activity of plant Abutilon indicum, Journal Pharm Education Research, 2011; 2(1): 136-138.
- 10. Rahuman AA, Gopalakrishnan G, Venkatesan P, Kannappan G, Isolation and identification of mosquito larvicidal compound from Abutilon indicum (Linn.) Sweet Para sitology Research, 2008; 102: 981.

- 11. Krisanapun C, Peungvicha P, Temsiririrkkul R, Wongkrajang Y, Aqueous extract of Abutilon indicum Sweet inhibits glucose absorption and stimulates insulin secretion in rodents, Nutrition Research, 2009; 29(8): 579-587.
- 12. Malgi RA, Hullatti KK, Kuppast IJ, Singh SK, Antiulcer activity of Abutilon indicum(L.), sweet, leaf extract using different experimental models, International Journal of Chemical Sciences, 2009; 7(2): 1011-1018.
- 13. Ahmed M, Amin S, Islam M, Takahas hi M, Okuyama E, Hossain CF, Analgesic principle of butilon indicum, pharmazie, 2000; 55(4): 314-316.
- 14. Goyal N, Singh S, Sharma SK, Analgesic effects of various extracts of the root of Abutilon indicum Linn, Journal of Pharmaxy and Bio Allied Science, 2009; 1(1): 43.
- 15. Roshan S, Ali S, Khan A, Tazneem B, Purohit MG, Wound healing activity of Abutilon indicum Pharmacognosy magazine, 2008; 4(15): 85-88.
- 16. Golwala DK, Patel LD, Vaidya SK, Bothara SB, Mani M, Patel P, Anticonvulsant activity of Abutilon indicum leaf International Journal of Pharmacy Pharma Science, 2010; 2(1): 66-71.
- 17. Anonymous, The Wealth of India: A dictionary of Indian Raw Materials, Vol. I, CSIR, New Delhi, 1985; 20 -23.
- Dhanalakshmi S, Lakshmanan KK, Subramanian MS, Pharmacognostical and phytochemical studies of Abutilon Journal of Research and Education in Indian Medicine, 1990; 21 -25.
- 19. Sharma SK, Goyal N, Preliminary Phytochemical and Pharmacognostic Profile of Abutilon indicum Linn. Root Der Pharmacia Lettre, 2010; (5): 308-315.
- 20. Chakraborthy GS, Ghorpade PM, Pharmacognostical and Phytochemical Evaluation of stem of Abutilon indicum (Linn.), International Journal of Pharmaceutical Sciences and Drug Research, 2009; 1(3): 188-190.
- 21. Das C, Dash S, Sahoo DC, Mohanty A, and Rout A, Pharmacognostical characterization and standardization of Abutilon indicum bark, Linn, Asian Journal of Plant Science and Research, 2012; 2(2): 143.150.
- 22. Kirtikar KR., Basu BD, Indian Medicinal Plants, Edn 2, Vol. I, Dehrad un, 1994; 314-317.