



RESEARCH ARTICLE

ETHNO-MEDICINAL PLANTS USED BY THE KORKU TRIBES FROM SOUTHERN MELGHAT, BULDANA DISTRICT, MAHARASHTRA, INDIA IN THE TREATMENT OF HEPATIC DISORDERS

¹Patil, U. S. and ²Kutemate, O. G.

¹Associate Professor and Head, Department of Botany, Bharatiya Mahavidyalaya, Amravati

²Research student, Department of Botany, Bharatiya Mahavidyalaya, Amravati

ARTICLE INFO

Article History:

Received 14th July, 2017

Received in revised form

08th August, 2017

Accepted 19th September, 2017

Published online 31st October, 2017

Key words:

South Melghat,
Buldana district, Maharashtra, India,
Korku, Ethno-Medicine,
Hepatic Disorders.

ABSTRACT

The present paper reports such medicinal plants which are usually practiced by the Korku tribe from the southern Melghat of Buldana district in the treatment of hepatic disorders. The tribal communities inhabiting in southern Melghat of Buldana district rely mostly on the ethno-medicinal plants for curing common as well as chronic diseases. Now a days, the medicinal plants offers genuine plant materials for using it in the formulation of drugs and also alternative for traditional medicines. It is necessary to document the information blocked with local practitioners with correct identification of plant species.

Copyright©2017, Patil and Kutemate. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Patil, U. S. and Kutemate, O. G. 2017. "Ethno-medicinal Plants used by the Korku tribes from southern Melghat, Buldana district, Maharashtra, India in the treatment of hepatic disorders", *International Journal of Current Research*, 9, (10), 59082-59084.

INTRODUCTION

Nature has healing properties. Man is dependent on nature to fulfill his day to day requirement. He also needs medicine to cure his ailments. Since ages man has been using herbal remedies to cure his ailments. This traditional knowledge of herbal remedies has been transferred from one generation to another orally. Traditional medicine is plant based material. Mostly in rural and tribal villages of India plants are used in local health problems by tradition. Real medicinal values of many plants are either little known or unknown to mainstream population (Pandey Govind, 2011). Many drugs presently prescribed by physicians are directly isolated from plants or are artificially modified versions of natural products (Wang *et al.*, 2007). On the basis of traditional uses drug development and discovery of newer drug molecules are possible. Liver, the largest chemical laboratory is a vital organ of human body. It has a pivotal role in regulation of physiological processes. Almost all the drugs, foods, and water constituents are metabolized and detoxified in the liver. So it is often exposed to diseases resulting in number of clinical syndromes. Now a day's life style is completely changed.

We are exposing our liver to many chemicals, drugs and toxic food which can causes liver diseases such as jaundice, hepatitis, cirrhosis etc. Ninety percent of acute hepatitis is caused due to viruses. Hepatitis B infection leads to primary liver cancer. Thus liver dysfunctioning is one of the serious health problems. But we do not have satisfactory allopathic drugs. Numbers of plants are traditionally used against the treatment of jaundice. Which show antioxidant and anti-hepatotoxic status which have many scientific proofs.

MATERIALS AND METHODS

Several ethno-medicinal surveys were carried out during 2015 - 2016 with the help of local herbal practitioner of southern Melghat, Buldana district, Maharashtra. Based on total forest cover and tribal populations (Jadhav, 2006), the study area can be considered as ethno-botanical hotspots of Buldana region.

Field survey and data collection

Field exploration was undertaken to collect information about tribes regarding their history, life style, culture, socio-economic background, food habits, major role in conserving medicinal plants, local languages they used and traditional medicinal practices associated with them.

*Corresponding author: Patil, U. S.,
Associate Professor and Head, Department of Botany, Bharatiya Mahavidyalaya, Amravati.

Table 1. Plants used in the treatment of hepatic disorders

Botanical name	Local name	Family	Plant parts used
<i>Acacia catechu</i> (L.)Willd.	Khair	Mimosaceae	Stem bark is given to treat jaundice
<i>Adiantum sp.</i>	Bhuitkhal	Pteridaceae	Leaf powder is given to cure jaundice
<i>Alangium salvifolium</i> (L.f.)Wangerin	Ankol	Alangiaceae	Root powder is given in chronic liver cirrhosis and liver cancer at the preliminary stage Leaf juice is given to treat jaundice
<i>Andrographis paniculata</i> (Brum. f.)Wal. Ex. Nes.	Kirayata, Bhuinimb	Acanthaceae	Leaf juice is given to treat jaundice
<i>Argemone maxicana</i> L.	Satyanasi	Papaveraceae	1-2 drops exacted from root is given to treat jaundice
<i>Asparagus racemosus</i> Willd.	Shatawari	Liliaceae	Root powder is given in liver weakness
<i>Bacopa monnieri</i> (L.) Wetst	Nirbramhi	Scrophulariaceae	Leaf powder or juice is given to cure jaundice
<i>Boerhaavia repens</i> L.	Punarnava	Nyctaginaceae	Root powder is given to treat jaundice
<i>Cassia sophera</i> L.	Devtarota	Caesalpiniaceae	Leaf powder is used to cure jaundice
<i>Chlorophytum borivilianum</i> L.	Safed musali	Liliaceae	Root powder is given to treat chronic liver cirrhosis
<i>Cleome viscosa</i> L.	Chipakaniyo, Tilwan	Cleomaceae	Root powder is given to cure jaundice
<i>Clitoria ternatea</i> L.	Supadi Gokarna	Papilionaceae	Leaf or Seed powder is mixed with honey and given to treat jaundice
<i>Curculigo orchioides</i> Gaertn.	Kali musali	Hypoxidaceae	Rhizome decoction is given to treat liver ailments
<i>Cuscuta reflexa</i> Roxb.	Amarvel	Cuscutaceae	Stem juice is given to cure jaundice
<i>Echinops echinatus</i> Roxb.	Ootkanta	Asteraceae	Root powder is given to treat jaundice
<i>Embelia ribes</i> Burm. f.	Vavding	Primulaceae	Leaf juice is given to cure jaundice
<i>Entcostema axillare</i> (Lam.) A.Raynal.	Nai	Gentianaceae	Dried leaf powder or root is given early in the morning to treat various liver ailments
<i>Ficus hispida</i> Linn.	Bhui umbar	Moraceae	Fruits are boiled in goat milk and given to cure jaundice
<i>Hemidesmus indicus</i> (L.) R.Br	Anant mul	Asclepidaceae	Root paste is given to treat various liver ailments
<i>Hygrophila spinosa</i> T. Anderson	Talimkhana	Acanthaceae	Leaf powder is given twice a day to cure jaundice
<i>Leea macrophylla</i> Roxb. ex. Hornem.	Hatikarn	Leeaceae	Root paste or powder is given to cure jaundice
<i>Laucas aspara</i> Spr.	Dronpushpi	Lamiaceae	Leaf juice with curd is given to cure jaundice
<i>Oroxylum indicum</i> Vent.	Tetu, Talwar seng	Bignoniaceae	Stem bark powder is given to treat jaundice
<i>Plumbago zeylanica</i> L.	Chitrak	Plumbaginaceae	Root powder is given to cure various liver ailments
<i>Solanum nigrum</i> L.	Makoi	Solanaceae	Leaf decoction or juice is given to cure jaundice
<i>Solanum xanthocarpum</i> L.	Bhuiringani	Solanaceae	Root powder is given to cure jaundice
<i>Tinospora cordifolia</i> (W) Mier. Ex Hook.	Gulvel	Menispermaceae	Stem juice or powder extracted (satwa) from stem is given to cure jaundice
<i>Taraxacum officinalis</i> (L.)Weber.ex F.H. Wigg	Dandelion	Asteraceae	Leaf juice is given to treat jaundice
<i>Trianthema portulacastrum</i> L.	Khaparkhundi	Aizoaceae	Leaf, stem and root are given to treat jaundice
<i>Trichosanthes cucumerina</i> L.	Kanduri	Cucurbitaceae	Rhizome powder is given to cure various liver ailments
<i>Trichosanthes tricuspidata</i> Lour.	Lal Indrayan	Cucurbitaceae	Seed powder is given to treat jaundice
<i>Uraria picta</i> (Jacq.) Devs. ex. DC	Dubra, Pitawan	Papilionaceae	Root decoction is given to treat jaundice
<i>Urginea indica</i> (Roxb.)Kunth.	Jangli kanda	Liliaceae	Bulb juice is given to treat jaundice
<i>Vitex negundo</i> L.	Nirgundi	Verbenaceae	Leaf juice is given to cure jaundice

The medicinal utilities of the plant species along with the mode of administration is procured from the tribal medicine men and well known experienced herbal healers in the region who practiced the crude drugs to cure various disorders. The data regarding medicinal uses were also collected by filling questionnaire (Jain, 1991). Herbariums were prepared and plant species were identified with the help of floras and authenticated by the taxonomist. The information procured from the herbal healers of the region is authenticated through the literature survey. Scientific name of the plant species with local name, family, parts used to cure hepatic disorders is given in the table no.1

DISCUSSION AND CONCLUSION

The information on 34 plant species belonging to 20 families have been given which are used by the herbal healers to cure various hepatic ailments.

Liver ailments are still dangerous and becoming worldwide health problem. The synthetic drugs used in the treatment of liver ailments may cause serious side effects. But herbal drugs are very effective to cure hepatic ailments without any side effects and mostly preferred by the local inhabitant. The plant species used by the herbal healers must contain some bioactive compounds which have property to cure a specific ailment. Therefore further chemical analytical work of such plant species will definitely helpful to design a particular drugs. Some medicinal plants in the region are vanishing due to over exploitation and because of anthropological activities. Some plant species like *Alangium salvifolium*(L.F.) Wangerin, *Oroxylum indicum* (Kurz), *Leea macrophylla* Roxb. ex. Hornem. are critically endangered and *Uraria picta* (Jacq), *Chlorophytum borivilianum* L., *Plumbago zylanica* L., *Urginea indica* (Roxb) Kunth. are endangered. These plants are need to be conserve.

Acknowledgement

Authors are grateful to the traditional healers of Southern Melghat, district Buldana for their co-operation during the course of study. Immense thanks are also extended to the chief conservator of Melghat forest and forest official of different forest division of the district for their kind help during field survey. Authors feel deeply obliged to Dr. S. M. Bhuskute Principal, Bhavbhuti Mahavidyalaya, Amgaon, district Gondia, M.S. for his kind help in identification of plants specimens.

REFERENCES

Jadhav, D. 2006. Ethnomedicinal plants used by Bhil tribe of Bibdod, Madhya Pradesh, *Indians J Tradit Knowle*, 5 (2): 263-267.

Jain, S.K. and Goel A. K. 1991. Dictionary of Indian folk Medicine and Ethnobotany, edited by Jain S.K. (Scientific Publisher, Jodhpur).

Moideen, K., S. Haja Sherief, Sengottuvelu S.,T. and Sivakumar 2011. Hepatoprotective and antioxidant activity of *Coccinia grandis* root extract against Paracetamol induced Hepatic Oxidative stress in wistar albino rats, *International Journal of Research in Ayurveda & Pharmacy*, 2 (3) : 858-863.

Pandy, Govind 2011. Medicinal plants against liver diseases *IRJP* 2 (5) 115-121.

Wang M. W., Hao X. and Chom, K. 2007. Biological screening of natural products and drug innovation in China, *Phil. Trans. R. Soc. B.*, 362: 1093-1105.
