ORIGINAL RESEARCH PAPER

Zoology

SCREENING OF ETHNOMEDICINAL PLANTS FOR HEPATOPROTECTIVE ACTIVITY IN RAISEN DISTRICT M.P.

KEY WORDS:
Ethnomedicine, Hepatoprotective Activity, Raisen (M.P)

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ABSTRACT

Socially, folk medicines, mainly based on plants, enjoy a respectable position today, especially in the developing countries, where modern health service is limited. Safe, effective and inexpensive indigenous remedies are gainind popularity among the people of both urban and rural society of rural society of India. A floristic survey of ethno medicinal plants occurring in the tribal area of raisen (M.P) was conducted from the month of OCT-2019 to April -2021 in Raisen district, more than 25 plants from different families have been identified for hepatoprotective activity.

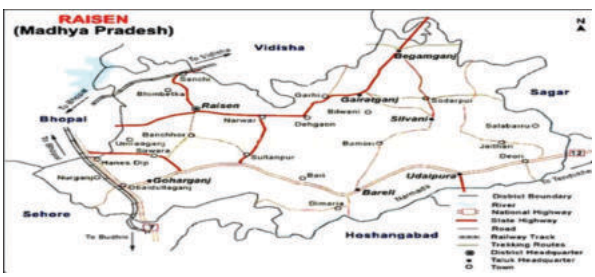
INTRODUCTION: -

India has rich diversity of medicinal plants distributed in different geographical and environmental condition. Tribal people in different parts of India, use their traditional ecological knowledge, received from their ancestors and contemporary society, in primary health care. Moreover, traditional ecological tradition of tribes is intimately linked with geography as well as ecological and cultural factors (Gesler 1992 & Wiley 2002). Plants play significant role not only in our economy but also used as traditional medicines. Almost 75% of the medicinally important plant species grow in wild conditions.

The liver is the largest glandular organ in the body,and has more functions than any other human organ. A person's entire blood supply passes through the liver several times a day. The liver performs many functions vital to the health of organisms. The liver transforms and excretes many drugs and toxins. These substances are frequently converted to inactive forms by relations that occur in hepatocytes. Liver diseases have become one of the major causes of morbidity and mortality in man and animals all over globe and hepatotoxicity due to drugs appears to be the most common contributing factor amongst many diseases that can affect the liver is "viral hepatitis", jaundice (pelia) etc. The use of natural remedies for the treatment of liver disorder has a long history and medicinal plants and their derivatives are still used all over the world in one form or the other for this purpose. A hepatotoxin might be defined as any chemical agent that can produce injury to the liver. A large number and variety of compounds have been identified as hepatotoxin of chemical or experimental relevance.

RAISEN DISTRICT: -

Raisen District lies in the central part of Madhya Pradesh. The district is situated between the latitude 22°47 and 23°33 north and the longitude 77°21 and 78°49 east. It is bounded east to south – In the East by Sagar district, In the West by Sehore district, In the North by Vidisha district and in the south by Hoshangabad and Sehore district. The total area of the district is 8, 395 sq. km. which contain the 1.93% of the state area. It is very rich in Biodiversity having a no. of Important medicinal plants which can cure a no. of disease in humans.



MATERIAL AND METHODS: -

The collection of plants was done based on frequently used as medicines by different tribes. The plants were collected from different regions of Raisen and its nearby places during February 2011. The identity of each plant has confirmed at botanical survey of India. An exploration of ethnobotanical data of medicinal utilization of Gond and bhil Tribes of Raisen through interview of experienced practitioners.

RESULTS AND DISCUSSION: -

In this study, we focussed mainly on plant species reported by the local people in and around the study area for their medicinal uses. In the present investigation 27 medicinal plants are used for the treatment of jaundice, snakebite and some other diseases related to liver. Folklore medicinal plants are arranged in Table which represent their botanical names followed by the family and vernacular name.

Table I:- Some ethnomedicinal plants of Raisen District for treatment of liver and some other diseases.

S.no.	Botanical Name	Family	Vernacular Name	Plant Part Used
1.	Aegle marmelas	Rutaceae	Bael	Fruit and Pulp.
2.	Annona squamosa	Annomaceae	Sita Phal	Fruit.
3.	Chamomile capitula	Asteraceae	Kamai	Flower.
4.	Coccina grandis	Cucurbitaceae	Ivy Gourd	Root and Leaves.
5.	Cassia fistula.L	Caesalpiniaceae	Kakkegide	Root, Bark,leaf ,Flower and Fruit Pulp.
6.	Ficus carica	Moraceae	Anjoora	Fruit.
7.	Flacaurtia indica	Flacaurtiaceae	Miradi	Fruit and Bark.
8.	Orthosiphon stamineus	Lamiaceae	Java Tree	Leaves.
9.	Prostechea michuacana	Orchidaceae	Orchid	Root, Flower and Leaves.
10.	Lepideum sativum	Brassicaceae	Alli beja	Root, Leaf, Flower and Seed.
11.	Salanum nigrum	Salanaceae	Makoi	Fruit and Leaf.
12.	Sargassum polycystum	Sargassaceae	Agar-Agar Kaepan	Whale Plant.
13.	WedeliaCalendulacea	Asteraceae	Pilabhamgara or Bhringraj	Leaves.
14.	Silybum marianum	Compositae	Bhat-Kataya or Milk Thistle	Seeds, Roots, Leaves, Whale Herb and Hull.
15.	Mimosa pudica	Fabaceae	Thattalvade	Roots.

16.	Hemidesmus indicus (snakebite)	Asclepidaceae	Nannari	Roots.
17.	Boerhavia diffusa	Nyctaginaccae	Mukaratai	Roots.
18.	Crataeva magina	Capparaceae	Mavalingan	Leaves.
19.	Phyllanthus amarus	Euphorbiaceae	Kilanelli	Leaves.
20.	Phyllanthus emblica	Euphorbiaceae	Nelli	Fruits.
21.	Andragraphi s paniculata	Acanthaceae	Nilavembee	Leaves.
22.	Gnetum ula	Gnetaceae	Anapendee	Stem.
23.	Evalvulus alsinaides	Convalvulaceae	Vishnukiranthi	Leaves.
24.	Strychnos nuxvomica	Laganiaceae	Etti	Seeds.
25.	Cuscuta reflexa	Convalvulaceae	Austharakadi	Stem.
26.	Tephrosia purpurea	Leguminosae	Kolukai-valai	Plants.
27.	Calotropis procera	Asclepiadiaceae	Earku	Bark and Leaves.
28.	Hygrophilia auriculata	Acanthaceae	Heine	Seeds.
29.	Beta vulgaris L	chenopodiaceae	Beet	Roots.
30.	Solanum nigrum	Solanaceae	Makoi	Fruits.

The tribal people of western Madhya Pradesh of India used a no. of plants for the treatment of liver related diseases such as jaundice (Samvatsar and Diwali, 2000). We have recorded that the aqueous paste and decoction obtained from the leaves of Andrographics paniculata are widely used for snakebites by indigenous people of southern India.

CONCLUSION: -

The study highlighted the central role of traditional herbal medicine for the treatment of Jaundice and Snakebite in M.P. Due to the growing importance of ethnobotanical studies, it is necessary to collect the information about the knowledge of falklore medicinal plants, prescribed in local communities of various parts of M.P. before it is permanently lost. Having the above facts in mind, an attempt was made to explore the medicinal plants used by the local people of M.P. for the treatment of different diseases. These ethnomedicinal data may provide a base to start the search of new componds related to phytochemistry, pharmacologyand pharma cognosy. This may provide new sources of herbal drugs and help to understand the molecular basis for their activities. Moreover, it may further be mentioned that over exploitation of these species in the name of medicine may lead some species ultimately to the disappearance in future. Therefore, attention should also be given to proper exploitation and utilization of these medicinal plants.

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