



STUDY ON SOME MEDICINAL PLANTS USED BY THE TRIBAL AND RURAL PEOPLE OF CHITRAKOOT, SATNA DISTRICT, MADHYA PRADESH, INDIA

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Abstract: *Chitrakoot is also well known for its beautiful hill ranges, historical caves, perennial streams and varied flora and fauna. In the present study, totally 84 species of plants belonging to 39 used as an ethno medicine on different diseases (pyretics, skin, diabetes, ulcer, gastrointestinal, diarrhoea and dysentery) by the tribal and rural peoples of study area. This paper deals with an information's about such plants with respect to their local name, botanical name, parts used and name of diseases on which they are practiced.*

Key words: *Medicinal plants, Chitrakoot, diseases*

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INTRODUCTION

Medicinal plants play an important role in human life to combat diseases since time immemorial. Plants provide us food, clothes and other necessities and amenities for comfortable and safe living. Herbal drugs are comparatively safer and modern drugs can produce serious side effects. In India, the sacred and Vedas dating back between 3500 B.C. and 800 B.C. give many references of medicinal plants.

The study of ethnobotany showed that plants used by aboriginal people for their different purpose (Harshberger, 1996). Ethnobotany is the interrelationship between the primitive men and plants (Jones, 1941). A good number of plant species are being used by tribal and rural people for the treatment of diarrhoea and dysentery (Sikarwar et al., 2008).

WHO (1985) recommended the search for beneficial use of medicinal plants for the treatment of diabetes mellitus. More than 1200 plants are used around the world in the control of diabetes mellitus. Present time, hundreds of millions of people, in developing countries, derive a major part of their subsistence needs and income from collected medicinal plants and their products (Walter, 2001).

The present study was performed with the aim of producing an inventory of the herbal plants used by tribal and rural peoples of chitrakoot for treating pyretics, skin, ulcer, gastrointestinal, diabetes, diarrhoea and dysentery diseases.

MATERIALS AND METHODS

Chitrakoot is situated in the northern region of satna district of M.P. and surrounded on North, Northwest and Northeast by Karwi (Chitrakoot) district of U.P. and west by Panna district of M.P. It lies between 80° 52' to 80° 73'N latitude, covering an area of 1,584 sq km. Several tribal communities like Kol, Gond, Mawasi, etc. reside in Chitrakoot forest area of Majhgawan block of Satna District, Madhya Pradesh.

An ethnobotanical survey in different remote areas of chitrakoot District, Satna Madhya Pradesh was made from 2013-2014. Data are based on personal contact and observation and interview with local traditional healers and villagers of different localities of the study area. The plant identified by published literature.

RESULT AND DISCUSSION

Medicinal plant study was carried out in the chitrakoot region (M.P.) with several traditional healers and local tribal people. The different plants species were known to be effectively



used for treating pyretics, skin , ulcer, gastrointestinal, diabetes, diarrhoea and dysentery diseases by the tribal and rural peoples of chitrakoot.

Use for Antipyretics

The extract prepared from the *Azadirachta indica* (leaves), *Ocimum sanctum* (leaves), *Embllica officinalis* (Fruits), *Vitex negundo* (roots, flower, fruits and bark) etc. reported to have antipyretic activity. The Table-1 recorded that name of plants used as Antipyretics activity.

Totally 17 species of plants belonging to 14 families were known to reported to have antipyretic activity (fig.1).

Table -1. Medicinal plants used for antipyretics activity.

S.No.	Common name	Botanical name	Part used	Family	Uses
1	Neem	<i>Azadirachta indica</i>	Leaves	Meliaceae	Antipyretic
2	Bhindi	<i>Abelmoschus esculentus</i>	Seed	Malvaceae	Antipyretic
3	Australian fever tree	<i>Eucalyptus globules</i>	Dried leaves; Gum; Oil	Myrtaceae	Antipyretic
4	Tulsi	<i>Ocimum sanctum</i>	Leaves	Labiatae	Antipyretic; Antitussive
5	Satavari	<i>Asparagus adscendens</i>	Tuberous Roots	Liliaceae	Antipyretic; Demulscent; Nutritve Tonic
6	Lahusan	<i>Allium sativum</i>	Bulb; oil	Liliaceae	Antipyretic; Antiseptic
7	Brahmi	<i>Centella asiatica</i>	Whole Plant	Umbelliferae	Antipyretic; Blood purifier
8	Dhaniya	<i>Coriandrum sativum</i>	Leaves;Seeds	Umbelliferae	Antipyretic; Carminative
9	Amla	<i>Embllica officinalis</i>	Fruits	Euphorbiaceae	Antipyretic
10	Biiter gourd	<i>Momordica charantia</i>	Fruit; Leaves; Seeds	Cucurbitaceae	Antipyretic;
11	Palwal	<i>Trichosanthes dioica</i>	Fruits	Cucurbitaceae	Antipyretic;
12	Bahera	<i>Terminalia belerica</i>	Fruit	Combretaceae	Antipyretic;
13	Imli	<i>Tamarindus indica</i>	Fruits	Caesalpiniaceae	Antipyretic



14	Ganja	<i>Cannibis sativa</i>	Leaves; Dried Flourerscence	Cannabaceae	Antipyretic; Analgesic
15	Nirgandi	<i>Vitex negundo</i>	Roots; Flower Fruits; Bark	Verbenaceae	Antipyretic; Astringent
16	Wild mint	<i>Lantana involucrate</i>	Whole Herb	Verbenaceae	Antipyretic
17	Bambo	<i>Bambusa vulgaris</i>	Shoot; Seeds; Roots; Leaves	Graminae	Antipyretic; Diuret ic

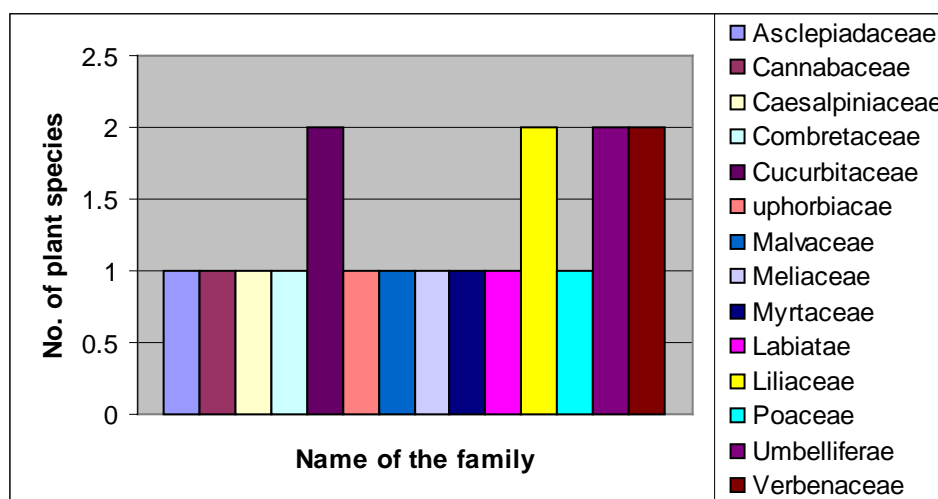


Fig. 1. plants family (species) used as Antipyretics activity.

Use for the treatment of gastrointestinal diseases (anti ulcer activity , diarrhoea and dysentery)

Gastrointestinal disorders include the condition caused by eating indigestible, excessive or irregular foods, imbalanced and spicy diet, adulteration in food and contamination of drinking water, resulting the symptoms like abdominal pain, acidity, constipation, dyspepsia, indigestion, flatulence,etc. Diarrhoea, dysentery, colic and colitis also occur due to digestive complaints. Peptic ulcer dieses encompassing gastric and duodenal ulcer is the most prevalent gastrointestinal disorder. The leaves of *Lantana camara* used to treat gastrointestinal diseases (Mishra and Singh, 2009: Mishra, 2014). The *Parthenium hysterophorus* has many ethnomedicinal properties (Mishra and Singh, 2009).

Totally 30 medicinal plants species such as *Ficus benghalensis*, *Abutilon indicum*, *Syzygium cumin*, *Acacia leucophloea*, *Asparagus racemosus* etc belonging to 26 families have been a valuable source of therapeutic agents to treat various disorders including Antiulcer diseases etc (Table-2, Fig-2).



Table- 2 Medicinal plants used for the treatment of gastrointestinal diseases.

S.No.	Common name	Botanical name	Part used	Family	Uses
1	Neem	<i>Azadirachta indica</i>	dried bark extract	Meliaceae	Gastrointestinal diseases, Antiulcer,
2	Bargad	<i>Ficus benghalensis</i>	Bark, buds	Moraceae	Diarrhoea
3	Kanghi	<i>Abutilon indicum</i>	leaves	Malvaceae	Diarrhoea
4	Reunjha	<i>Acacia leucophloea</i>	Bark	Mimosaceae	Diarrhoea
5	Jamun	<i>Syzygium cumin</i>	Leaves	Myrtaceae	Dysentery, Diarrhoea
6	Tulsi	<i>Ocimum sanctum</i>	All parts	Labiatae	Antiulcer, Antibacterial,
7	Satavari	<i>Asparagus racemosus</i>	Extract of fresh root	Liliaceae	Anti-diarrhoeal, Antibacterial, Antiulcer
8	Jangali piyaz	<i>Urginea indica</i>	Bulb	Liliaceae	Diarrhoea
9	Indian Sarsaparilla	<i>Hemidesmus indicus</i>	Extract	Asclepiadaceae	Antidiarrhoeal, mucoprotective, Antiulcer
10	Kutaja	<i>Holarrhena pubescens</i>	Leaves	Apocynaceae	Diarrhoea
11	Achar	<i>Buchanania lanzan</i>	Gum	Anacardiaceae	Diarrhoea
12	Aamla	<i>Emblica officinalis</i>	Fruit Extract	Euphorbiaceae	Antiulcer
13	Punarnaba	<i>Boerhavia diffusa</i>	root	Nyctaginaceae	Gastrointestinal diseases
14	Marorphan	<i>Helicteres isora</i>	Fruit	Sterculiaceae	Gastrointestinal diseases
15	Brahmi	<i>Bacopa monniera</i>	Fresh Juice	Scrophulariaceae	Antiulcer
16	Kamraj	<i>Selaginella bryopteris</i>	Whole plant	Selaginellaceae	Dysentery, Diarrhoea
17	Bel	<i>Aegle marmelos</i>	Fruit	Rutaceae	Dysentery
18	Ghumaiya	<i>Argemone maxicana</i>	Root	Papaveraceae	Dysentery
19	Doob	<i>Cynodon dactylon</i>	Whole plant	Poaceae	Dysentery, Diarrhoea
20	Arjun	<i>Terminalia arjuna</i>	leaves	Combretaceae	Diarrhoea



21	Dhawa	<i>Anogeissus latifolia</i>	Bark	Combretaceae	Diarrhoea
22	Papeeta	<i>Carica papaya</i>	Seeds	Caricaceae	Anti-helmintic, antiamebic, Antiulce
23	Kachnar	<i>Bauhinia variegata</i>	leaves	Caesalpiaceae	Diarrhoea
24	Sal	<i>Shorea robusta</i>	Stem bark, seed	Dipterocarpaceae	Dysentery, Diarrhoea
25	Bijahra	<i>Pterocarpus marsupium</i>	Gum	Fabaceae	Dysentery, Diarrhoea
26	Dhak, Palas	<i>Butea monosperma</i>	Stem bark	Fabaceae	Dysentery, Diarrhoea
27	Amaltas	<i>Cassia fistula</i>	Fruit pulp	Fabaceae	Gastrointestinal dieses
28	Chilla	<i>Casearia elliptica</i>	Root	Flacourtiaceae	Dysentery
29	Carrot grass	<i>Parthenium hysterophorus</i>	Root	Composite	Dysentery
30	Gandheriya	<i>Lantana camara</i>	Leaves	Verbenace	Gastrointestinal dieses

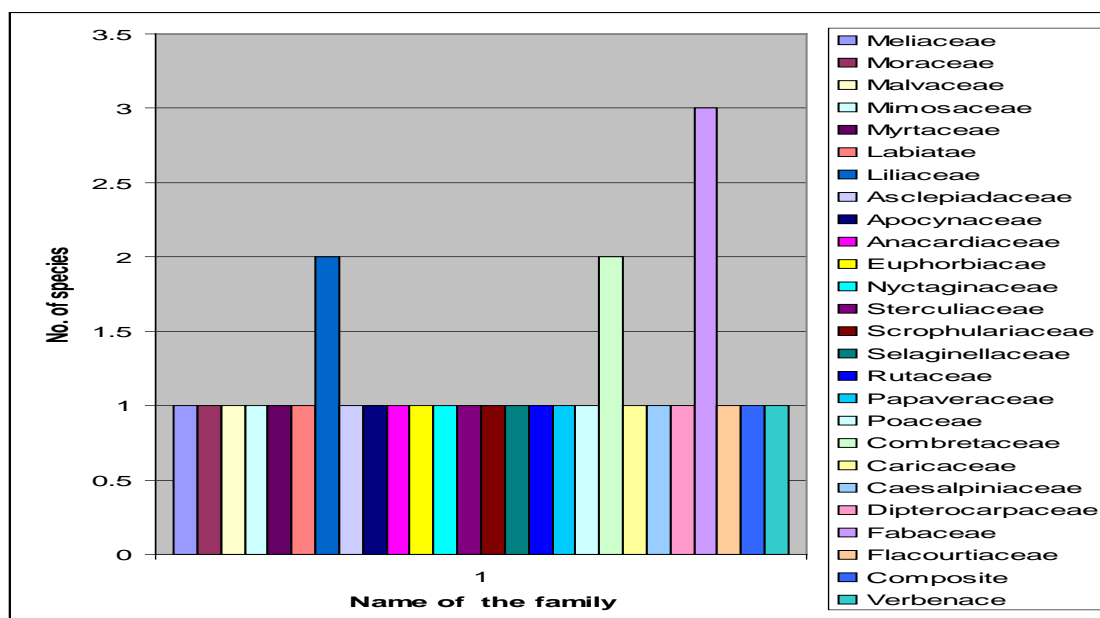


Fig. 2. plants family (species) used as Anti gastrointestinal diseases activity

Use for Antidiabetic activity

Diabetes mellitus is the most common disorder in human beings and is caused by inherited or acquired deficiency in production of insulin by the pancreas, which results in an increased concentration of sugar in blood.



Plant materials which are being used as traditional medicine for the treatment of diabetes are considered one of the good sources for a new drug or a lead to make a new drug.

Totally 22 species of plants belonging to 17 families were known to reported to have antipyretic activity (Table- 3, fig.3).

Table-3 Medicinal plants used for antidiabetic activity.

S.No.	Common name	Botanical name	Part used	Family	Uses
1	Holy Basil	<i>Ocimum sanctum</i>	leaf extract	Lamiaceae	Antidiabetic
2	Onion	<i>Allium cepa</i>	bulb	Liliaceae	Antidiabetic
3	Satavari	<i>Asparagus racemosus</i>	Extract of fresh root	Liliaceae	Antidiabetic
4	Rice	<i>Oriza sativum</i>	Root	Poaceae	Antidiabetic
5	Ginger	<i>Zingiber officinale</i>	rhizome	Zingiberaceae	Antidiabetic
6	Gudmar	<i>Gymnema sylvestrae</i>	Leaves	Asclepiadaceae	Antidiabetic
7	Mango	<i>Mangifera indica</i>	leaf extract	Anacardiaceae	Antidiabetic
8	Aloe	<i>Aloe vera</i>	Leaf pulp extract	Aloaceae	Antidiabetic
9	Wrightia tinctoria	<i>Safed korea</i>	seed	Apocynaceae	Antidiabetic
10	Garlic	<i>Allium sativum</i>	bulb	Alliaceae	Antidiabetic
11	Amla	<i>Emblica officinalis</i>	Fruit Extract	Euphorbiaceae	Antidiabetic
12	Binbi	<i>Coccinia grandis</i>	Root	Cucurbitaceae	Antidiabetic
13	Karela	<i>Momordica charantia</i>	Fruit	Cucurbitaceae	Antidiabetic
14	Guduchi	<i>Tinospora cordifolia</i>	Leaf, Stem & Whole plant	Menispermaceae	Antidiabetic
15	Jamun	<i>Syzygium cumin</i>	Leaves	Myrtaceae	Antidiabetic
16	Neem	<i>Azadirachta indica</i>	plant extract	Meliaceae	Antidiabetic
17	Bargad	<i>Ficus benghalensis</i>	Bark, buds	Moraceae	Antidiabetic
18	Dhaniya	<i>Coriandrum sativum</i>	Leaves;Seeds	Umbelliferae	Antidiabetic
19	Aparajita	<i>Clitoria ternatea</i>	Flower	Fabaceae	Antidiabetic
20	Indian Gum	<i>Acacia arabica</i>	seeds	Fabaceae	Antidiabetic



21	Amaltas	<i>Cassia fistula</i>	Fruit	Fabaceae	Antidiabetic
22	Mahua	<i>Madhuca longifolia</i>	Flower and bark	Sapotaceae	Antidiabetic

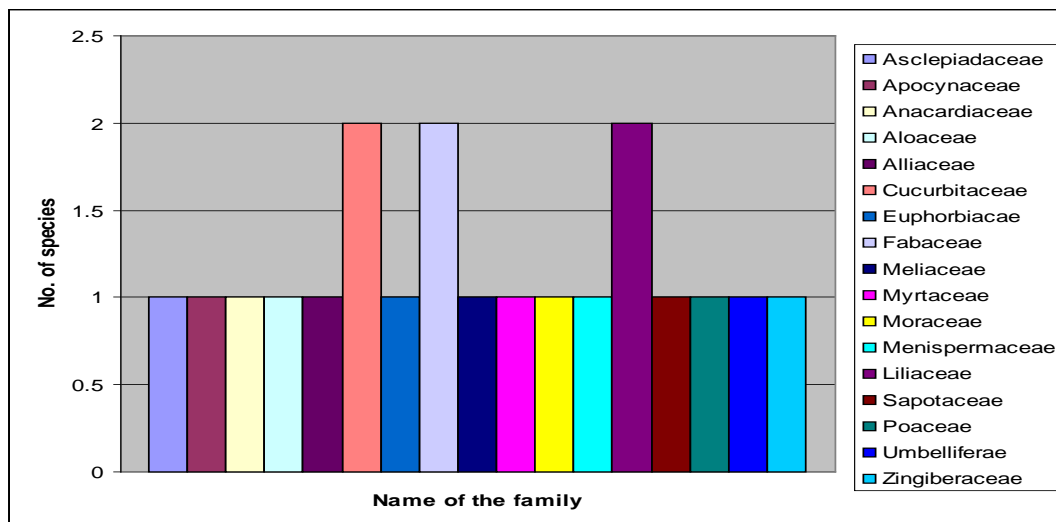


Fig. 3. plants family (species) used as antidiabetic activity

Uses as skin diseases activity

Eczema is mostly formed in children and infants and is seldom seen among adults. Also called dermatitis, eczema is a non contagious disease. Totally 17 species of plants belonging to 13 families were known to reported to have antipyretic activity (Table- 4, fig.4).

Table-4 Medicinal plants used for the treatment of skin diseases.

S.No.	Common name	Botanical name	Part used	Family	Uses
1	Latjira	<i>Achyranthes aspera</i>	Plant	Amaranthaceae	Eczema
2	Cholai	<i>Amaranthus spinosus</i>	Root, leaves	Amaranthaceae	Eczema
3	Aloe	<i>Aloe vera</i>	Leaf pulp extract	Aloaceae	Eczema
4	Anantamul	<i>Hemidesmus indicus</i>	root	Asclepiadaceae	Eczema
5	Mandara	<i>Calotropis gigantea</i>	Latex	Asclepiadaceae	Eczema
6	Ashok	<i>Polyalthia longifolia</i>	Flower	Annonaceae	Eczema
7	Bakus	<i>Justicia ocumbens</i>	Leaves	Acanthaceae	Eczema
8	Amaltas	<i>Cassia fistula</i>	Bark	Fabaceae	Eczema
9	Dhak, Palas	<i>Butea</i>	Flower	Fabaceae	Eczema,



		<i>monosperma</i>			worm ring,
10	Khaksi	<i>Crotalaria medicaginea</i>	Flower	Fabaceae	Eczema
11	Karanja	<i>Pongamia pinnata</i>	Seed	<i>Fabaceae</i>	Eczema
12	Tulsi	<i>Ocimum basilicum</i>	Leaves	Labiatae	Eczema
13	Neem	<i>Azadirachta indica</i>	leaves	Meliaceae	Eczema
14	Guduchi	<i>Tinospora cordifolia</i>	Stem	Menispermaceae	Eczema
15	Kaya	<i>Lxora coccinia</i>	Flower	Rubiaceae	Eczema
16		<i>Evolvulus alsinoides</i>	Whole plants	Convolvulaceae	Eczema
17	Doob	<i>Cynodon dactylon</i>	Whole plant	Poaceae	Skin disorder

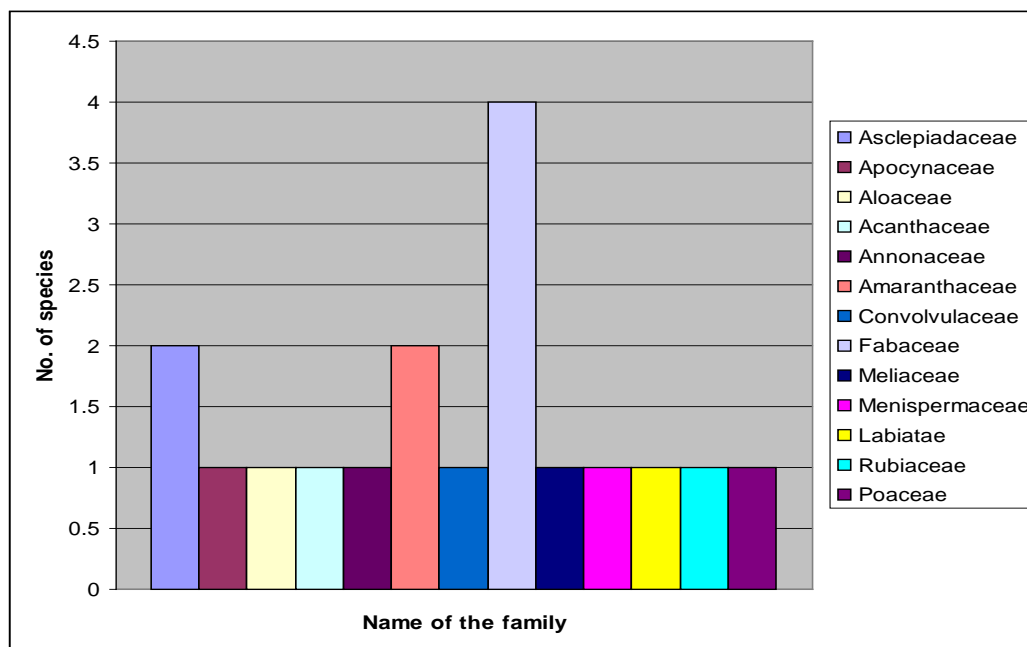


Fig. 4 plants family (species) used as antieczematic activity

CONCLUSION

Medicinal plants contain so many chemical compounds which are the major source of therapeutic agents to cure human diseases. The plants species were known to be effectively used for treating pyretics (17 species, 14 family), gastrointestinal (30 species, 26 family), skin (17 species, 13 family), diabetes (22 species, 17 family) diseases by the tribal and rural peoples of chitrakoot region(M.P.)



The traditional knowledge on the properties of plants and the medicinal plants uses a vital role against various diseases. Various medicinal plants and plants extracts uses to fever, antiulcer, antipyretic, anti diabetic and anti skin activity.

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