

**INVESTIGATION OF ETHNO-MEDICINAL PLANTS USED IN THE TREATMENT OF
VARIOUS HUMAN DISEASES WITH REFERENCE TO LEGUMINOSAE IN
DHARAMPUR TALUKA, GUJARAT, INDIA**

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ABSTRACT

The present research work on medicinal plants of family Leguminosae was investigated and collected information from Dharampur area, Gujarat state, during January 2019-Dec 2019. It deals with the ethnomedicinal plants used by the inhabitant people of Dharampur, Gujarat. Among 38 medicinal plants species, 26 genera were utilised by the local health healers for curing of various ailments. The traditional medicinal plants were frequently used for various diseases such as abscess, asthma, cough & cold, dysentery, different skin diseases, ulcers and leprosy. The regional people use diverse plants and plant parts for food, medicine, fodder, fuel, festivals, ceremonies and in several other purposes. The local people have vast knowledge about the uses of plants and its parts for the medicinal purposes. The objective of the present study was to record the observation of ethno-medicinal plants species belonging to Leguminosae families, used by the inhabitant. The local people of Dharampur used the medicinal plants as a medicine and which are arranged alphabetically followed by BN, vernacular name, part used and medicinal us.

KEYWORDS: Leguminosae, Dharampur, Gujarat, & Medicinal plants.**INTRODUCTION**

Since time immemorial, Man has been using various plant species for curing various diseases which have been mentioned in ancient literature such as Rig-Veda, Bible and Quran. The world's population has been predictable in using plant species as a traditional medicine for their health care. In maintaining life system on the earth, plants play an important role as a source of economically important products.

Thus "Ethnobotany" was a branch of science which deals with the utilisation of plants by the indigenous people in recent past years due to the considerable importance of ethnomedicine plants for its safe and so side effects as compared to synthetic drugs. Over the world wide, traditional medicine is the pillar of medicinal plants which are present in our vicinity leads to the conservation and protection of plant species.

The present survey studied for the documenting different plant species belonging to the family Leguminosae of Angiosperms used by the local inhabitants to cure various ailments. Leguminosae is a family of diverse distribution due to its universal richness species. It considered as a third largest families which includes herbs, shrubs, perennial or annuals, fruit (legume) and

stipulated compound leaves. Leguminosae includes of three subfamilies such as Fabaceae, Caesalpiniaceae and Mimosae. This paper is an effort to document the ethnomedicine plants from the Dharampur area with special reference to the family Leguminosae.

MATERIALS AND METHODS

The survey was carried out in the different areas of Dharampur taluka (Gujarat state) from January 2019 to December 2019. In the study area continuous field visit were made during the period and information regarding the ailments was gathered from the inhabitant of all age groups. The Leguminosae family plants were recognized with the help of local names provided by individuals and traditional healers. The plants were identified with the help of "Flora of Gujarat state" by Shah and was confirmed by the locals for their vernacular name. It includes the Scientific information of plants regarding its Botanical name, family, plant part and uses along with its photographed.

RESULT AND DISCUSSION

The present investigation deals with the medicinal plants and its multiple uses by the local people of the area. Among overall of 38 medicinal plants species belonging to 26 genera were utilised by this people (Table 1.)

Among the Leguminosae family, Fabaceae is the most prominent sub-family among Caesalpiniaceae and Mimosaceae. From this investigation, it has shown that

these reside inhabitants of Dharampur area still depend on medicinal plants for curing the different ailments.

Table 1: Studies on ethnomedicinal plants used in the treatment of various diseases of human in Dharampur, Gujarat, India.

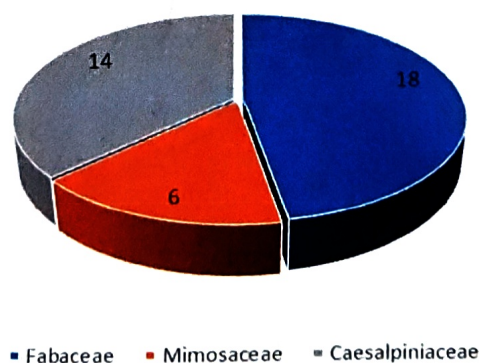
Sr.No	Botanical Name	Sub-Family	Local Name	Uses
1.	<i>Abrus precatorius</i> Linn.	Fabaceae	Chanothi	It is used in treating joint pains and act as a nerve stimulant. Fresh leaves paste is used to cure mouth ulcers. A paste of seeds is used in treating skin diseases.
2.	<i>Acacia catechu</i> (L.F.)	Mimosaceae	Wild Khair	The fresh leaves are crushed and apply over the wounds. In dental diseases, rub bark powder on gums and teeth. A pinch of catechu in one glass luke warm water for seven days reduces the obesity.
3.	<i>Acacia leucophloea</i> Willd.	Mimosaceae	Harmo, Ranjiyo	The reddish-brown stain obtained from inner bark is used to manufacture dyes and tannins. The fibers from bark are used to prepare fish nets and rough rope. Roots are tide on waist and legs to cure diarrhea in children.
4.	<i>Acacia nilotica</i> (L.)	Mimosaceae	Wild Baval	Young twigs are used as toothbrush by children. Tender leaves infusion used in curing diarrhea & dysentery. The gum is useful in diabetes.
5.	<i>Albizia leebek</i> Benth.	Fabaceae		Grind seeds and apply at affected area. Tender leaves mixed with honey to cure urinary problems. Soaked bark overnight and drink next morning to remove toxins from the body.
6.	<i>Alhagi psedalhagi</i> L.	Fabaceae	Javaso	It is an excellent laxative for children due to its sweet nature. Young twig decoction is used for cough. Oil extracted from leaves is used for rheumatism.
7.	<i>Alysicarpus bupleurifolius</i> (L.) DC	Fabaceae	Khadsamervo	For blood purification, leaves are taken orally twice a day.
8.	<i>Bauhinia racemosa</i> Lam.	Caesalpiniaceae	Rakta Kanchnar	For easy delivery, one cup of cucumis pulp and stem bark of Bauhinia is mixed & taken orally. Leaf is crushed and its paste is used to cure dysentery.
9.	<i>Bauhinia variegata</i> Linn.	Fabaceae		Leaves extract is used in curing jaundice. Bark powder is used for treating diarrhea Flowers powder is used to get rid of physical weakness.
10.	<i>Butea monosperma</i> (Lamk) taub.	Fabaceae	Khakharo, Palash	Flowers decoction is used as cooling agent in urinary problems. Bark juice is given orally on empty

				stomach to relieve from intestinal worm infestation. In the morning, seed paste with fresh cow milk is taken to cure asthma.
11.	<i>Caesalpinia auriculata</i> L.	Caesalpinaceae	Aval	The leaf paste was used in joint pain and inflammation. Dried powder of flowers helps to reduce body heat caused by diabetes. The root juice is swallowed to cure abdominal complaints.
12.	<i>Caesalpinia bonducella</i> (L.) Roxb.	Caesalpinaceae	Kankacha	Tender leaves juice is used in cough and asthma. Seed is used in skin diseases. Root decoction is used in sexual weakness.
13.	<i>Caesalpinia crista</i> Linn.	Caesalpinaceae	Kanski	The seeds powder with goat milk is helps to treat diarrhea, Leaves juice to control worm infestations. Oil extracted from leaves is term as nerve tonic.
14.	<i>Caesalpinia pulcherrima</i> (L.) Sw	Caesalpinaceae	Galtaro	Root is useful in the treating diarrhea. The leaves extract is used in abortion.
15.	<i>Cajanus cajan</i> (L.) Millsp.	Fabaceae	Tuver	To induce lactation, leaf paste is applied as poultice over the breast, Leaf paste is used in curing oral ulcers. Roots are chewed in treating toothache.
16.	<i>Cassia alata</i> Linn.	Caesalpinaceae	Dadmurdan	Leaves are used in skin disorders. Dried leaves decoction is used as an abortifacient. Root infusion is used in the treatment of diarrhoea.
17.	<i>Cassia fistula</i> Linn.	Caesalpinaceae	Garmalo	To cure fever, root infusion is taken. Seed powder is benefited in curing diabetes. In screaming cough, ash of fruit along with honey is preferable.
18.	<i>Cassia occidentalis</i> Linn.	Caesalpinaceae	Sundro	The paste of leaves cure wounds, itches and skin diseases. For alleviating cough, the leaves extract is mixed with honey gives better effect. Its bark juice is used to cure diabetes.
19.	<i>Cassia tora</i> Linn.	Caesalpinaceae	Kuvadiyo	In skin diseases, leaf paste is applied. For curing blemishes, the massed leaves along with lemon juice is used. The intake of seeds gives relief in constipation.
20.	<i>Clitoria ternatea</i> Linn.	Fabaceae	Chanoti	It is a natural tonic for the blood purification. The root extract is used as diuretic and purgative. The flowers extract with water is used to treat eye problems.
21.	<i>Dalbergia latifolia</i> Roxb.	Fabaceae	Sisam	Leaf juice is taken to cure dysentery. Bark is used in body pain. Stem is used in making agricultural implements.

22.	<i>Dalbergia sisso</i> Roxb.	Fabaceae	Moto sisam	Roots is used as anti- inflammatory. Leaf juice is used in eye problems. Wood is useful in curing stomach problems.
23.	<i>Delonix elata</i> (L.) Gamble	Caesalpiniaceae	Sandesaro	In curing bone fracture, stem bark juice is taken orally. Root decoction is useful in abdominal pains. Young twigs are chewed and swallowed for curing mouth ulcers.
24.	<i>Delonix regia</i> (Boj.ex Hook) Raf.	Caesalpiniaceae	Gulmohor	The gum obtained from the dried seeds is used as a binding agent in the manufacture of tablets. The leaves have been used to treat constipation, inflammation and arthritis. Root extract is used in abdominal pain.
25.	<i>Desmodium gangeticum</i> (L.) DC. Var. gangeticum	Fabaceae	Salparni	The plant is used in female disorder problems & 'Salampak' is used as tonic. The roots are applied on gums to treat toothache as well as in kidney problems.
26.	<i>Desmodium trifolium</i> Linn.	Fabaceae		Leaves are crushed and its poultice is applied to heal wounds and for skin problems. The fresh juice of plant is given to the children for cough and asthma. Plant extract is used in curing bone fracture.
27.	<i>Derris indica</i> (Lam.) Bennet	Fabaceae	Karanj	Seed extracts can be used to heal scar tissue tumors, high blood pressure. Leaf juice is used in treatment of leprosy, cough and colds. Root is used as a toothbrush for oral hygiene.
28.	<i>Dichrostachys cinerea</i> (L.) W.&A.	Mimosaceae	Madhit	the root juice has taken by women as a prophylactic measures. Bark is used in the treatment of dysentery, headache and toothache. Tender shoots are used to treat inflammatory condition.
29.	<i>Indigofera cordifolia</i> Heyne ex Roth	Fabaceae	Gali	Leaves are chewed to cure mouth ulcers.
30.	<i>Erythrina variegata</i> Linn.	Fabaceae	Pangaro	It is used as a nervous system. A decoction of the bark is used to treat dysentery. The leaves decoction is used to kill the intestinal worms.
31.	<i>Mimosa pudica</i> Linn.	Mimosaceae	Lajamani	To reduce toothache , the decoction of root with water is used. The roots are used for healing cuts and wounds. Leaf decoction can treat Toe infection by washing legs in it.
32.	<i>Mucuna pruriens</i> (L) DC.	Fabaceae	Khajkhujali	Seeds is extracted and prepared a "Kaucha- pak" which is used to improve sexual desires. Leaves paste is used in bone fracture. Root is used in curing constipation.

33.	<i>Prosopis julifera</i> (Sw.) DC	Mimosaceae	Gando baval	Tea made from boiled leaves is used in curing digestive disturbances. The leaves are powdered and mixed in water, this liquid is used in treating irritations conjunctivitis, etc. A syrup made up of pods is given to children showing weight deficiency.
34.	<i>Saraca asoca</i> (Roxb.) de Wilde	Caesalpiniaceae	Ashok	The flowers juice is useful in hemorrhagic dysentery. The flowers are useful in the treatment of skin diseases. The bark is used in regularized menstrual cycles in female.
35.	<i>Senna italica</i> Miller	Caesalpiniaceae	Bhony Aval, Pataval	Leaves decoction is used in treating constipation and stomach cramps. Fresh leaves are used externally as a dressing for skin problems. Leaves are used as a hair conditioner to make hair glossy.
36.	<i>Sesbania grandiflora</i> (L.) Poir.	Fabaceae	Agathiyo	Leaf juice is been used as nasal drops to relieve headache. The juice of flower been made to cure with the vision problems like night blindness. Leaves act as best dietary way to promote bone health and immunity.
37.	<i>Tamarindus indica</i> L.	Caesalpiniaceae	Khathi ambli	A juice of the flower buds' juice is used as a medicine for children having bed-wetting habit. Ripe fruit juice is used to keep the digestive organs in good condition. Seeds powder is recommended to cure dysentery.
38.	<i>Tephrosia purpurea</i> (L.) Pers.	Fabaceae	Sarpankho	The fruit decoction is used against intestinal worms. Leaves extract is used in healing of skin. The herb helps to relief in the indigestion.

Pie-chart showing Leguminosae's sub-family



CONCLUSION

Plants play an important role as food and /or medicine in every aspect of our lives. In various diseases and ailments, the utilization of local plants from Dharampur area has been reported. In the nearby future, the traditional knowledge among young generation has started degrading due to the lack of interest among them. Therefore, it is important to conserve and guard the ethnomedicinal plants for the useful of local residents. It is crucial to document and identify the plant species which can be further studied for their pharmacological activity and its compound. The study relays the current the effectiveness of Leguminosae species as a medicinal plant.

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