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## **REVIEW ARTICLE**

# USES OF MEDICINAL PLANTS IN EXORCISM IN UDHAMPUR DISTRICT, JAMMU AND KASHMIR

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#### **ABSTRACT**

Udhampur district, Jammu and Kashmir local inhabitants conventionally used medicinal plants to cure exorcismsince ancient times. The field data were carried out during the last two years. All theinformation was gathered from local knower inhabitants. The frequency Index is used to measure the number of times particular botanical species are mentioned by informants to cure exorcism. 43 medicinal plant species from 37 different Genera and 27 different Families were used for exorcism. Out of these 43species of plants includes 22 were herbs, 08 were shrubs, and 13 belonged to trees. The usable part of the plant isthe whole plant, stem, twig, leaves, fruit, flower, seed, bud, wood, bark, etc. used in exorcism and sorcery practices.

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# INTRODUCTION

Medicinal plants are being used in healthcare practicessince ancient times. The Rigveda 1500-400 BC, Atharvaveda 1500 BC, and Upanishads 1000-600 BC, collectively mention the primitive medicinal plants observed during this period. (Chauhan, 1999). Around the world, 80% of people believed in traditional medicines, especially those drugs derived from plants (Kala et al., 2006). Most incredible conventional systems of medicineare used to treat the diseases of human beings since the ancestralperiod. Exorcism is defined as the process of expelling evil spirits from a body of living beings utilizing spiritual methods. Exorcism has been practiced in India from the beginning of time to drive away evil spirits by activating medicinal plants. Some specific work related to psychomedicinal practices in India is mentioned as the peculiar medicinal plants are used for psychomedicinal practices associated with specific hymns (Mantras: the methods in psychomedicine activate the plant) and exorcism (Tantras) studied by (Tiwari et al., 2010). Religious deities, evil spirits, ghost elements, and supernatural energies are some psychological demurs that are common in hills and have been associated with a number of psychological diseases suggested by (Chauhan and Dhingra: 2021).

Udhampur district is one of the most important geographical areas in India because of its historic records of cultivating conventional medicinal plants. Surrounding of the district and many rural areas of the villages are surrounded and deprivedof modern healthcare/medical facilities, and they are being used medicinal plants from the ancestral period. It is situated n the lap of the western Himalayas and is mostly comprised of mountainous terrain ranging from 600m to 3200m above sea level. Due to the socioeconomic conditions and the remoteness of the area, the native inhabitant's medicinal plants are still frequently used to cure various diseases. Even though numerous studies on ethnomedicine in Jammu and Kashmir have been carried out by Aggarwal and Kotwal (2009), Bhellum and Singh (2012), Rashid (2013), Bhardwaj et al. (2019), Pant and Wani (2020), etc., but less concern has been paid on the plant used in exorcism. Different religious beliefs, sorcery practices, and ritual rites all make use of psychomedicinal and ethnomedicinalplants explored by (Dangwal et al., 2021a; 2021b and 2022). The present investigations record the conventional practices ofmedicinal plants by the local inhabitants, along with their scientific names, vernacular names, usable parts of the plant, and remedies prepared by their ancestors to get rid of such type of exorcism diseases caused due to the effect of evil energies.

The hilly areas of the Udhampur district suffer badly from psychological disorders, which causes most of the inhabitants to rely on superstition. Fortunately, they also benefited from this kind of treatment. The major goal of this study is to shed light on both traditional therapies and allopathic medical therapy for treating psychological problems.

*Investigated Area:* Udhampur districtis situatedunderthe Shivalik ranges of the Northwestern Mountainregion of the Himalaya, at 32.93 N 75.13E. The rural land and forest cover are a major part of the study area that comes under this district. The area is hilly and mountainous and the weather is moist and temperate.

The altitude varies from 600m to 3200m above sea level. The Nomadic and semi-nomadic ethnic communities such as Gujjar, Sippi, Gaddi, and Bakkarwal are residing in the study area (https:// udhampur.nic.in/map-of-district). The villages were chosen for inside and outside the study area i.e., Ramnagar, Basantgarh, Surni, Ghordi, Kutwalt, Dalsar, Barmeen, Marta, Chowki Jandrore, Udhampur.

# MATERIALS AND METHODS

The data was collected by conducting an intensive and extensive field survey during the past two years. The authors collected several fascinating plants utilized by local inhabitants for exorcism practices. Informants are nomadic, semi-nomadic, tribes and inhabitants of 10 representative villages namely Ramnagar, Basantgarh, udhampur, Ghordi, Barmen, Surni, Chowki Jandrore, Kutwalt, Dalsar, and Marta were selected to collect variousinformation of exorcism practices. The information was gathered from the local villagers, with the help of discussion in groups, personalmeetings, semi-structured interviews, questionnaire methods, and observation with participants.

A total of 30 knowledgeable persons were selected randomly as key informants from the 10 representative villages. The caliber of each participant's explanation during an interview was taken into consideration while choosing the important participants. The traditional methods for gathering data were used to record the local community's traditional knowledge of exorcism. The mathematical representation of the Frequency Index was calculated on the basis of its frequency mentionedin a particular species considered by local informants.

The Frequency Index was calculated using the formula shown below:

## $FI = FC/N \times 100$

These reported plant species are discussed under proper scientific patterns, and all the information is related to them. The North West Where N is the total number of informants (N = 30) and FC is the use of species mentioned by the number of informants. When numerous informants described a specific plant, the Frequency Index was maximum; When there were few reports, it was low (Sarver and Nigam, 2020).

Flora consulted by the authors, especially Hooker (1875-97), Sharma and Kachroo (1981), Swami and Gupta (1998), Gaur (1999), and Singh *et al.*, (2002). Detailed information on documented medicinal plants is describedbelow.

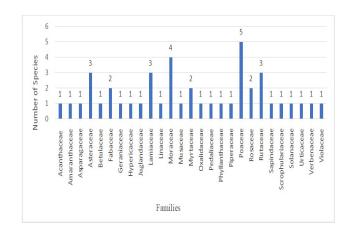


Fig: Graph showing the number of species versus thenumber of different families used for exorcism practices

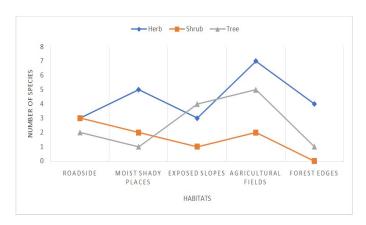


Fig: Life forms recorded in different habitats

# RESULTS AND DISCUSSION

The present communicationdocumented 43 species of plants from 37 different Genera and 27 different Families. It includes 22 herbs, 8 shrubs, and 13 trees and its percentage was 51, 19, and 30 respectively. The most dominant family found was Poaceae having 5 plant species, Moraceae having 4 plant species, Asteraceae, Lamiaceae, and Rutaceae, each having 3 plant species, Fabaceae, Myrtaceae, and Rosaceae, each having 2 plant species.

The least dominant plant families were found in Acanthaceae, Amaranthaceae, Asparagaceae, Betulaceae, Geraniaceae, Hypericaceae, Juglandaceae, Linaceae, Musaceae, Oxalidaceae, Pedaliaceae, Phyllanthaceae, Piperaceae, Sapindaceae, Scrophulariaceae, and Violaceae, each having one (1) plant species.

The high utilization demand of particular medicinal plants species, *Aesculus indica* (Wall. ex. Camb.) Hook., *Betula utilis* D. Don., *Geranium wallichianum* D.Don ex Sweet., *Juglans regia* L., *Sesamum orientale* L., and *Viola odorata* L. these numbers are declining in populationdue to overexploitation, overgrazing, deforestation, changing climatic conditions, anthropogenic activities, and natural calamities.

All these medicinal plants were used in exorcism to heal the person from negative energies and most plant parts used are the whole plant, stem, twig, leaves, fruits, flowers, seeds, bud, wood, and bark.

Table 1. Mathematically Calculations of the Frequency Index and a List of Medicinal Plant Species Used in Exorcism

S.No.	Scientific Names	Family	Vernacular Names (English and Dogri)	Habit	Part used	Uses	Frequency Index FI = FC/N ×100
1	Achyranthes aspera L.	Amaranthaceae	Devil Horsewhip, Parkanda	Herb	Whole Plant	The entire plant is used in exorcism.	13.33
2.	Adhatoda vasica L.	Acanthaceae	Malabar Nut, Bharankar	Shrub	Leaves	Leave is used in exorcism.	23.33
3.	Aesculus indica (Wall, ex Camb.) Hook.	Sapindaceae	Horse Chestnut, Goon	Tree	Seeds	Seeds are used in exorcism.	6.66
ł.	Ajuga bracteosa Wall. ex. Benth.	Lamiaceae	Bugleweed, Neel Kanthi	Herb	Leaves	Leaves are used in exorcism.	73.33
i.	Arachis hypogaea L.	Fabaceae	Groundnut	Herb	Seeds	Seeds are used in exorcism.	40
). ).	Artemisia maritima L.	Asteraceae	Sea Wormwood	Shrub	Leaves	Leaves are used in exorcism.	83.33
'.	Artemisia maritima L.  Artemisia nilagirica (C.B. Clarke) Pamp.	Asteraceae	Indian Wormwood	Shrub	Leaves	Leaves are used in exorcism.  Leaves are used in exorcism.	76.66
	Ü \ / 1			_	Whole plant	The complete plant is used in exorcism.	56.66
	Asparagus racemosus Willd.	Asparagaceae	Wild Asparagus	Herb		1 1	
	Bambusa arundinacea (Retz.) Willd.	Poaceae	Thorny Bamboo	Herb	Stem	The stem is used in exorcism.	90
).	Betula utilis D.Don.	Betulaceae	Indian Birch	Tree	Bark	The bark is used in exorcism.	46.66
1.	Citrus aurantifolia (Christm.) Swingle.	Rutaceae	Lime	Shrub	Fruit	Fruit is used in exorcism.	73.33
2.	Citrus limon (L.) Burm. F.	Rutaceae	Lemon	Shrub	Fruit	Fruit is used in exorcism.	50
3.	Colebrookia oppositifolia Smith Exot. Bot.	Lamiaceae	Indian Squirrel Tail	Shrub	Leaves	Leaves is used in exorcism.	76.66
1.	Cynodon dactylon (L.) Persoon	Poaceae	Scutch Grass	Herb	Leaves	Leaves are used in exorcism.	93.33
5.	Ficus benghalensis L.	Moraceae	Banyan Tree	Tree	Whole plant	The entire plant bind by the thread and used in exorcism.	100
<b>5</b> .	Ficus carica L.	Moraceae	Common Fig	Tree	Fruit	Fruit is used in exorcism	90
<i>'</i> .	Ficus palmata subsp.Virgata	Moraceae	Punjab Fig	Tree	Leaves	Leaves are used in exorcism.	80
i.	Ficus religiosa L.	Moraceae	Peepal	Tree	Whole plant	The entire plant bind by the thread and used in exorcism.	100
).	Geranium wallichianum D.Don ex Sweet.	Geraniaceae	Robert Geranium	Herb	Roots	Roots are used in exorcism	70
).	Hordeum vulgare L.	Poaceae	Barley, Jau	Herb	Seeds	Seeds are used in exorcism.	100
	Hypericum oblongifolium Choisy, Prodr. Monogr.	Hypericaceae	Pendant St. John's Wort	Shrub	Stem	Stem is used in exorcism.	6.66
2.	Juglans regia L.	Juglandaceae	Walnut	Tree	Fruit	Fruit is used in exorcism.	30
3.	Leucas aspera (Willd.) Link.	Lamiaceae	Common Leucas	Herb	Leaves	Leaves are used in exorcism.	43.33
ļ	Musa paradisiaca L.	Musaceae	Banana	Herb	Leaves	Leaves are used in exorcism.	100
5.	Nicotiana tabacum L.	Solanaceae	Wild Tobacco	Herb	Leaves	Leaves are used in exorcism.	86.66
).	Orvza sativa L.	Poaceae	Paddy	Herb	Seeds	Seeds are used in exorcism.	76.66
7.	Oxalis corniculata L.	Oxalidaceae	Creeping Oxalis	Herb	Leaves	Leaves are used in exorcism.	40
<del>.</del> 3.	Phyllanthus emblica L.	Phyllanthaceae	Indian Gooseberry	Tree	Twig	Twigs are used in exorcism.	83.33
).	Piper nigrum L.	Piperaceae	Black Pepper	Herb	Fruit	Fruit is used in exorcism.	53.33
).	Prunus cerasoides BuchHam. Ex D. Don.	Rosaceae	Himalayan Wild Cherry	Tree	Bark	The bark is used in exorcism.	76.66
	Pyrus pashia BuchHam. Ex D. Don.	Rosaceae	Wild Pear	Tree	Leaves	Leaves are used in exorcism.	43.33
2.	Reinwardtia indica Dumort.	Linaceae	Golden Girl	Herb	Flower	A flower is used in exorcism.	20
3.	Sesamum orientale L.	Pedaliaceae	Sesame, Til	Herb	Seeds	Seeds are used in exorcism.	90
, <u>.                                    </u>	Syzygium cumini (L.) Skeels.	Myrtaceae	Black Plum	Tree	Fruits	Fruits are used in exorcism.	23.33
5.	Syzygium aromaticum (L.) Merr.	Myrtaceae	Clove, Laung	Tree	Flower bud	The aromatic flower bud is Used in exorcism.	43.33
5.	Tagetes erecta L.	Asteraceae	Marigold	Herb	Flowers	Flowers are used in exorcism.	83.33
<u>'.                                    </u>	Triticum aestivum L.	Poaceae	Wheat	Herb	Seeds	Seeds are used in exorcism.	96.66
<u> </u>	Urtica dioica L.	Urticaceae	Stinging Nettle	Herb	Leaves	Leaves are used in exorcism.	73.33
).	Verbascum thapsus L.	Scrophulariaceae	Common Mullein	Herb	Leaves	Leaves are used in exorcism.	50
		Fabaceae	Black Gram	Herb	Seeds	Seeds are used in exorcism.	86.66
).	Vigna mungo (L.) Hepper.  Vitex negundo L.	Verbenaceae	Chinese Chaste Tree	Shrub		Leaves are used in exorcism.	10
l				_	Leaves		
2.	Viola odorata L.	Violaceae	Sweet Violet	Herb	Flower	Flowers are used in exorcism.	30
3.	Zanthoxylum armatum DC., Prodr.	Rutaceae	Winged Prickly Ash	Tree	Wood	Wood is used in exorcism.	90

# **CONCLUSION**

The conventionally used ethnomedicinal plants in an investigated areaacquirea rich vegetational diversification of medicinal plants. Almost the populace in the study site is incorporated of Nomadic and Semi-Nomadic tribes like Gujjar, Bakerwal, Gaddi, Sippi, and besides other local communities. Since prehistoric times, the indigenous people have regularly used medicinal plants for exorcism practices. The current communication demonstrates 43 species of plants from 37 different Genera and 27 Families of medicinal plants. The medicinal plants described in this communication might also be utilized to produce synthetic medicine for commercial aims. The production of such economically prosperous medicinal plants will begin to open new opportunities and provide employment. The authors also recommend further exploration into these medicinal plants from the perspective of pharmacological and ethnomedicinal research. Ethnic tribes are completely dependentupon the traditional use of ethnomedicinal plants, as a result of the scarcity of modern medicinal facilities. Additionally, there is an essential requirement to control the decreasing diversity of some of the listed plant species i.e., Aesculus indica (Wall. ex. Camb.) Hook., Betula utilis D. Don., Geranium wallichianum D.Don ex Sweet., Juglans regia L., Sesamum orientale L., and Viola odorata L. which is a result of overexploitation, overgrazing, deforestation, changing climatic conditions, anthropogenic activities, and natural calamities. The study indicates that the ethnic communities in the investigated area still acquire a rich conventional knowledge of using medicinal plants. The High-Frequency Index of some medicinal plant species such as Ficus benghalensis L., Ficus religiosa L., Hordeum vulgare L., and Musa paradisiaca L., shows that the people of all groups in the survey area are much aware of the traditional practices. Therefore, there is an urgent need to take action and create awareness among the locals about the conservation of local flora as well as traditional knowledge of their utilization. It is believed that the study will deliver insightful knowledge on the conservation and sustainable usage of the region's natural resources. The result recommends additional research needs to be done on the described medicinal plant species, pharmacological studies, benefits, and conservational studies. It is essential to protect and maintain the diversification of plants used only for the production of remedies. By studying the knowledge gap between various generations and age groups, it will be possible to conduct additional research studieson the scarcity of conventional knowledge of significant medicinal plants and their remedies preparations in an investigated area.

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