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## ETHNOMEDICINAL EXPLORATION OF ORNAMENTAL FLORA OF ARAVALLI HILL RANGES OF REWARI DISTRICT OF HARYANA, INDIA

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### **Keywords:**

Ethnomedicine, Ornamental plants, Home gardens, Aravalli Hills

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**ABSTRACT:** Ornamental plants (OPs) are used for intensifying, glorifying surroundings, adding a positive attitude towards life, enhancing estate value, and developing a feeling of well-being and happiness. This research aimed to record the ornamental plants and ethnomedicinal document usage of the plants by the local people of the Rewari district of Haryana State. The data was collected through field surveys and in-depth interviews organized with 219 local informants from the region during 2019-21. A total of 80 different locations were visited during the study. 91 OPs belonging to 83 genera and 42 families were identified and documented from the Rewari district. The documented plants showed a diversity of habit ranging from herbs (43.96%), trees (24.18%), shrubs (24.18%), twines (3.30%), and climbers (3.30%) and creepers (1.10%). The majority of ornamental plants were utilized as garden plants (25.50%) followed by pot (25.19%), bouquet/ cut flower/ cut foliose (11.41%), avenue (9.44%) road dividers (7.87%), religious and cultural (7.87%). Families Leguminosae (11.95%) and Asteraceae (7.60%) were the dominant families. Maximum no. of ethnomedicinal uses were reported for skin disease (17) followed by wound, boils (13), constipation (12), piles, cough and cold (10), jaundice, asthma (09), swelling, pimples, and intestinal worms (07) respectively out of documented 135 routine maladies. It was concluded that the locals use a blend of wild and cultivated ornamental plants for various aesthetic, recreational, and ethnomedicinal purposes.

**INTRODUCTION:** Human beings have always been fascinated by the diversity of natural surroundings. Their fascination has led to the exploration of plants for food, fuel, shelter, medicine, floriculture, aesthetic, recreational, and ceremonial purposes.



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They have explored the endless possibilities of their utilization in numerous ways. Over the decade's fast-paced lifestyles, growing urbanization and industries in our surroundings have led the masses to revisit the utilitarian purposes of plants and forced them to connect with nature to maintain their well-being.

For ages, plants have been used for their showy flowers, attractive foliage, medicinal, culinary, fruits, aesthetics, and various other purposes. Plants are also used to intensify and glorify our surroundings, add a positive attitude towards life,

enhance estate value, and develop a feeling of wellbeing and happiness; such plants are termed Ornamental plants (OPs) <sup>1</sup>. OPs are primarily grown in our homes, kitchen, offices, educational institutes, hospitals, homesteads, public, private institutional gardens for beautification, recreation, and enlightenment <sup>2</sup>. These plants not only intensify and glorify our surroundings but also add a positive attitude towards life, enhance estate value, and develop well-being and happiness. These are termed Ornamental plants (OPs) <sup>1</sup>. A large number of herbs, shrubs, avenue plants, hedges, ground covers, cacti, succulents, bonsai, palms, bulbs, cones, hanging plants, epiphytes, decorative foliage, showy floral plants, sweetscented and grasses are grown as OPs across the countries <sup>3,4,5</sup>.

Plants suitable for indoor or outdoor beautification and decorations are known as ornamentals <sup>6</sup>. These OPs play an important role in climate change adaptation by being an integral part of urban green packages. They are often used to beautify our gardens, private and public parks, buildings, homes, cities, towns, highways, shopping malls, factories, hospitals and educational institutions <sup>7</sup>. Indoor OPs are also utilized to maintain freshness and a positive environment inside homes, classrooms, hospitals, *etc*. It has been noticed that patients having plants inside their wards recuperate quicker <sup>8</sup>. Indoor air toxins are miniature particles that are difficult to mitigate; however, indoor plants can do this dreary occupation proficiently <sup>9</sup>.

The expanding interest in OPs has led to the opening of new avenues for OPs utilization. Ethnomedicinal utilization of OPs is one of the emerging domains which is gaining popularity worldwide. Ethnomedicine refers to practices incorporating plant, mineral, and animal sources to treat illnesses or maintain well-being <sup>10</sup>. It is estimated that around 80% of economically distressed people of the world depend on different conventional medical services 11, 12. traditional and home remedies have exponentially increased and have been praised in developing and developed countries, particularly after the SARS COVID-19 <sup>13</sup>. The majority of OPs grown in our surroundings also have medicinal properties and have been utilized for curing various routine ailments for ages.

Some of them are also developed for their therapeutic use in modern herbal medicine as they synthesize numerous bioactive compounds, like phenolic accumulates, carotenoids, flavonoids, alkaloids, terpenoids, cancer preventive agents, essential oils, and other auxiliary metabolites <sup>14</sup>. OPs like Basil, Ixora, Aloe, Agave, Rose, Hibiscus, Sunflower, Marigold, Polianthes, Calendula etc., normally grown in homes for multipurpose applications 15, 16. Some of such multipurpose plants have also been documented in different traditional systems of medicine like Ayurveda, Siddha, and Unani, besides their uses by various vaidyas and folk healers of India <sup>10</sup>. OPs are used in the form of garlands, beverages, decoction, infusion, juices, flavorings, paste, etc., by different sections of the society <sup>17, 18</sup>.

Their traditional preparations are used to cure numerous ailments like skin disease, wounds, boils, constipation, piles, cough, jaundice, asthma, swelling, pimples, etc. In developing countries like India, much of the family income is spent on medicines and essential medical services <sup>19</sup>. The appropriate use of conventional and ethnomedicinal information about such plants can be a useful advance toward further developing family wellbeing and strengthening the nation. In this context, the current research was organized in two parts; the first part of the study included documentation of ornamental plants and their uses, while the second part of the study included documentation of ethnomedicinal uses of ornamental plants in the Rewari district of Haryana state, which has been ignored from this perspective in the state. Further, an attempt was also made to provide vernacular, scientific names, and ornamental purposes for the plants in the area. Efforts were also made to report the method of preparation, administration, dose, duration, and ailments treated.

### MATERIAL AND METHODS:

**Study site Description:** The present study on OPs and their ethnomedicinal uses was conducted in the Rewari district of Haryana state, India. It lies between 28.18°N latitude and 76.62°E longitude at an average elevation of 245 meters (803 feet). Rewari district came into existence on November 1, 1989, before that, it was part of the Mahendergarh district of Haryana. The district has a geographical area of 1594 Sq. Km and it shares a boundary with

Jhajjar in North, Mahendergarh district in the West, Gurugram in east and north-east directions, further it shares state boundary with Rajasthan state in the south-east. It is a part of NCR (National Capital Region) and is situated at a distance of 84 KM from the National Capital, New Delhi, and 332 Km from

the state capital Chandigarh. The district is divided into three sub-divisions, Bawal, Kosli, Rewari, and five community development blocks *viz*. Rewari, Jatusana, Khol, Bawal, Nahar **Fig. 1**. It consists of 412 villages with a population of 900332 and an average literacy rate of 80.99%.

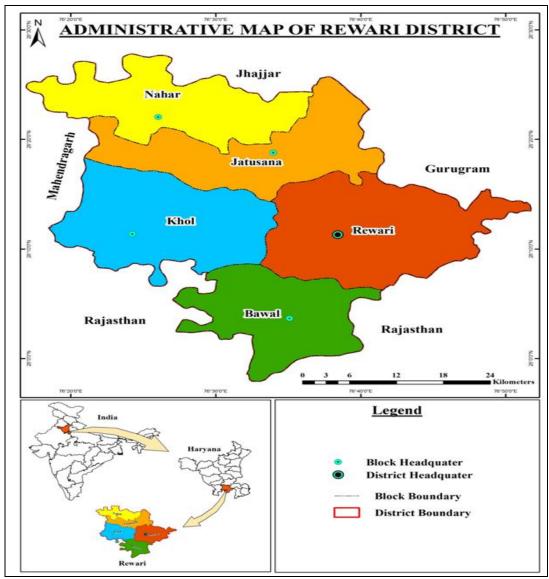


FIG. 1: STUDY SITE MAP

The region is dominated by serving and retired armed forces personnel. The district is also home to the traditional brass market. The region has faced a dynamic shift from the traditional brass market to multinational automobile and auto ancillary industries now being established in the region. The hilly terrains of Aravalli ranges represent the topography of the district. The district's landscape is peculiar with varied topography comprising valleys, undulating lands, sand dunes and alluvial plains. The Aravalli ranges, the oldest folded

mountain ranges of the world, are situated in the southern and western parts of the district. The region observes extreme temperature variations in summers and winters, where temperatures may reach upto 46°C and 0-2°C, respectively. The region also observes frequent dust storms in summers. The overall climate of the district is dry. The average rainfall ranges from 300-500mm, and July, August, and September are the months of heavy rainfall for the region. Aravalli ranges greatly influences the agro-climatic conditions and

constitute a unique blend of flora and fauna in the region. The area is predominated by xerophytic vegetation with prickly trees like Indian gum Arabic tree, Acacia, Janti, Ziziphus, Opuntia, Caper along with Margosa, Prosopis, Shami tree, Peepal and other species. The region also harbors a diversity of OPs owning to numerous industries, multinational companies, educational institutions, and Government and Private nurseries which try to blend and integrate native and exotic flora. Most of the area's rural population relies upon agribusiness and animal husbandry for primary income. Millet, cotton, sorghum is the major summer season crops, while wheat, mustard, and gram are the significant winter season crops grown in the district.

Data Collection and Organization: The study was divided into two parts, the first part of the study included documentation and uses of OPs, which was carried out by organizing field surveys and indepth interview schedules with nursery owners, gardeners, residents, temple priests and observations made during visits to schools, colleges, hospitals, research centers, factories, university campus, public parks, nurseries and

judicial complex of the district. The second part of the study included documentation and gathering of ethnomedicinal knowledge harbored by the local people of the region about OPs. Ethnomedicinal knowledge was collected by conducting in-depth interview schedules with local residents of villages, temple priests, gardeners, traditional medicine practitioners, and nursery owners from Bawal, Jatusana, Khol, Nahar, and Rewari blocks of the district. The entire study was designed and completed during 2019-2021.

The information concerning OPs was collected by visiting different socioeconomic and cultural fractions of the society. A total of 80 locations were visited for information collection which included Hospitals (2.5%), Nurseries (16.2%), shopping malls (1.2%), Industrial factories (2.5%), Schools (6.2%), Colleges (6.2%), University (1.2%), Research institute (1.2%), Judicial complex (1.2%), Temples (18.87%), Wild life century (1.2%), Villages (38.7%) and Public gardens (3.7%). Different locations and places visited during the study tenure have been tabulated in **Table 1**.

TABLE 1: LIST OF PLACES VISITED FOR DOCUMENTATION OF ORNAMENTAL PLANTS AND THEIR ETHNOMEDICINAL KNOWLEDGE

<b>Community Block</b>	Places visited	Place
	Gujar majri	Village
	Kanuka	Village
	Mohanpur	Village
	Nechana	Village
	CCS, HAU Regional Research center, Bawal	Research center
Bawal	Harley Davidson motorcycles	Factory
	Minda Furukawa electric Pvt. Ltd.	Factory
	Tankri	Village
	Rajgarh	Village
	Baba Devnarayan mandir, Gujar Majri	Temple
	Bala Ji Mandir, Rajgarh	Temple
	Ompal Garden Services, Bagthala, Banipur	Nursery
	Amit Vatika Nursery, JAI Singh Pura, Khera Bawal	Nursery
	Ramgarh	Village
	Thakur Ji Mandir, Lilodh	Temple
	Muradpuri	Village
	Majra Sheoraj	Village
	Vedanta hospitals	Hospital
	Canal Valley Public School, Berli Kalan	School
	Nursery Berli, Berli Kalan	Nursery
	Kakoria	Village
	Bikaner	Village
	Chillar	Village
	Shanti devi college of law and Management, Saharanwas	College
	Baba Udhodas mandir, Saharanwas	Temple
	Nai Wali Bagachi and mandir	Temple
	Naichana	Village

	Plants Nursery, Dharuhera	Nursery
	Sanatan park, Dharuhera	Public park
Rewari	M2K Country Park, Dharuhera	Public park
	Baba Bhairav Temple, Dehlawas	Temple
	Old Shiv Mandir, Bodia Kamalpur	Temple
	Old Saini Nursery, Kayasthwara Mohalla	Nursery
	Hanuman Mandir lake, Jadra Village	Temple
	Shri Gangaram Nursery, Jainabad	Nursery
	Shiv Temple, Asiaki Gorawas	Temple
	Hanuman Temple, Kundal	Temple
	Nursery Hut Shri Ganga Ram Nursery, Dahina, Zainabad	Nursery
	Saini Nursery, Kayasthwara Mohalla	Nursery
	Holy child public school, Madhu vihar	School
	Jain Public School	School
	Tagore Public School, Jadra	School
	<u> </u>	School
	Madhu Sudan public school, Mahavir nagar	
	KLP college	College
	Ahir college	College
	I G University, Meerpur	University
	District Court, Subash nagar	Judicial complex
	Pushpanjali hospital	Hospital
	Shri Shyam Nursery, Dahina	Nursery
	Lavishka Plants Nursery, Lisana	Nursery
	BMG Mall	Shopping mall
	Lula Ahir	Village
	Bhakli	Village
	Gudiani	Village
	Jhal	Village
	Lilodh	Village
Nahar	Lukhi	Village
	Jhal Nahar forest, Nahar	Wildlife century
	Mata Mandir, Nahar	Temple
	Government College, Kosli	College
	DAV Girls College, Kosli	College
	Shiv Mandir, Kosli	Temple
	Vandana Nursery, Bhakli, Kosli	Nursery
	We for nature Nursery, Palhawas	Nursery
	Baldhan Khurd	Village
Jatusana	Jatusana	Village
Jatasana	Mastapur	Village
	Bodia Kamalpur	Village
	Rajawas	Village
	Musepur	Village
	Khori	
		Village
	Manethi  Paka Caral Day mandin Nandha	Village
	Baba Gopal Das mandir, Nandha	Temple
171 1	Nandha Nandha	Village
Khol	Near Hanuman Mandir, Manethi	Temple
	Pali	Village
	Baba Nimriwala Temple, Pali	Temple
	Pali Herbal park, Pali	Public park
	Pithrawas	Village
	Kund	Village
	Sonam Nursery, Pithrawas	Nursery

A total of 219 informants were randomly selected and interviewed for information collected from the five community development blocks of the district. The informants were selected from different backgrounds to incorporate a diverse knowledge set, which included traditional practitioners (1.8%), gardeners (14.6%), residents (70.7%), nursery owners (5.3%), and temple priests (6.8%). In-depth

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interview schedules were with conducted informants, preferably elders and women of the region. Further, it was attempted to visit at least 5 villages from each community block and interview with at least 5 houses from each village. Moreover, the gardeners, nursery owners, and workers of the different locations visited were questioned and interviewed about different plants grown in the ornamental purposes region for ethnomedicinal uses, if any. The demographic information of the informants was also collected with their permission, including educational background, age, sex and profession. The details of demographic information have been tabulated in **Table 2.** It was attempted during the study's tenure to conduct interviews in local languages. The information tabulated collected was into ornamental purposes, vernacular names, plant Family, plant part used, method preparation/administration, dosage, and diseases treated. Further, Microsoft spread sheets were utilized to categorize the OPs into A (Avenue plants), B (Bouquet/ Cut flower/ Cut foliose), C

covers), G (Garden (Lawn plants), (Hedge/fencing), HP (Hanging pots), P (Pot plants), RC (Religious, cultural and ceremonial), R (Road divider) and plant habit was categorized into herbs, shrubs, trees, climbers, twiners and creepers. Plant parts used in ethnomedicine were categorized into leaves, root, bark, seed, fruits, flowers, bulb, gum, latex, petal, rhizome, stem, thorn, wood, and whole plant. The vast majority of the ornamental plant were identified in their natural surroundings. At the same time, uncertain specimens were brought to the Ecology Lab of the Department of Botany, Maharshi Dayanand University, Rohtak (Haryana), India for additional ID and affirmation from the accessible literature<sup>20</sup>. The voucher specimens of the documented plants were deposited in the Ecology and Biodiversity lab of Department of Botany, Maharshi Dayanand University, Rohtak. Botanical names and family were authenticated "The from the web source Plant List" (http://www.theplantlist.org/), plants of the world (http://www.plantsoftheworldonline.org), and renowned taxonomists of the region.

TABLE 2: DEMOGRAPHIC DATA OF THE INFORMANTS

Variables	Categories	No. of informants	Percentage (%)
Gender	Male	149	68.03
	Female	70	31.9
	Traditional practitioners	4	1.8
	Gardeners	32	14.6
Informant categories	Local residents	155	70.7
	Nursery owners	13	5.3
	Priests	15	6.8
	20-40	33	15
Age	40-60	149	68
	60-80	37	16.9
Educational Background	Illiterate	9	4.1
	Below metric	38	17.3
	Higher secondary	74	33.8
	Graduation and above	98	44.7
Occupation	Farming	78	35.6
	Animal husbandry	25	11.4
	Business	17	7.7
	Unemployed	14	6.3
	Government services	33	15
	Private services	52	23.7

**Informant Consensus Factor (ICF):** The homogeneity of the OPs ethnomedicinal knowledge was assessed by using the informant consensus factor (ICF).

ICF for each documented plant species was calculated using the formula Nur-Nt/(Nur-1), where Nur was the number of use reports in each category

and Nt was the number of species used for a particular category by all informants  $^{21}$ .

### **RESULTS:**

**Socioeconomic Status:** All of the 219 respondents interviewed were having diverse ethnomedicinal knowledge and belonged to different social backgrounds **Table 2.** 

The informants were randomly selected from different locations, including schools, shopping malls, public parks, factories, hospitals, judicial complexes, university, Temple, colleges, villages, wild life century, nurseries and factories. The majority of respondents interviewed were male (68.03%), and maximum participation observed from the age group of 40-60 (68%). The informant categories varied from traditional practitioners (1.8%), gardeners (14.6%), local residents (70.7%), nursery owners (5.3%) and priests (6.8%). Amongst the local residents, only those individuals were selected who had home gardens or few OPs were growing nearby their houses. It was observed educationally, the region is developed, and the majority of informants had graduate degrees and higher education (44.7%) only 4.1% of informants were illiterate and belonged to 60-80 age group. The region is farming (35.6%) individuals dominated by followed by employment in private sector (23.7%).

Diversity of Ornamental Plants: The study identified and documented 91 OPs belonging to 83 genera and 42 families **Table 3**. Dominant families of ornamental plants of the Rewari district are depicted in Fig. 2. Most commonly represented OPs families were Leguminosae (11.95%), Euphorbiaceae, Asteraceae (7.60%),Poaceae (6.53% each), Apocynaceae, Lamiaceae (4.34% Bignoniaceae, Convolvulaceae, each). Nyctaginaceae and Solanaceae (3.26% each). Furthermore,11 families contributed 2.17%; these were Acanthaceae, Amaryllidaceae, Asparagaceae, Capparaceae, Combretaceae, Crassulaceae, Liliaceae. Malvaceae. Mimosaceae. Phyllanthaceae, and Verbenaceae, while families contributed 1.08% and had one species each. The documented plants showed a diversity of habits ranging from herbs (43.96%), trees (24.18%), shrubs (24.18%), twines (3.30%), climbers (3.30%), and creepers (1.10%). Fig. 4 depicts the habit distribution of documented plants.

The OPs were categorized into A (9.44%), B (11.41%), L (2.36%), G (25.50%), H (5.51%), HP (4.72%), P (25.19%), RC (7.87%) and R (7.87%) based on observations and interviews with local respondents. Figure 3 provides an overview of the Ornamental utilization of documented plant species in the region.

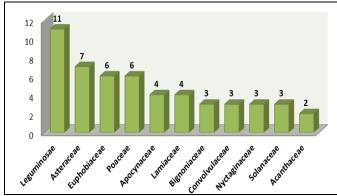


FIG. 2: FAMILY DISTRIBUTION OF ORNAMENTAL PLANTS FROM THE REGION

Ethnomedicinal Utilization of **Ornamental Plants:** The present study revealed utilization of 91 OPs as ethnomedicine for curing different kinds of routine maladies Table 3. Different ailments were categorized into 21 broad categories Table 4. The gastrointestinal, ailment categories were gynecological, neurological, bacterial, viral, aesthetic, ear nose throat (ENT), fungal, respiratory, urinogenital, dermatological, dental, arthrolical, poisoning, veterinary, calculus, hepatic, inflammation, cardiovascular, general and parasitic ailments. Maximum ailments were generally categorized by dermatological, urinogenital, gastrointestinal and gynecological Table 4.

Fever, diabetes, diarrhea, inflammation, arthritis, snake bite, dysentery, poisoning, dengue, heatstroke, agalactia, dysmenorrhea, epistaxis, cryptorchidism, nocturnal emission, anorexia, dental maladies, and kidney stones were the frequently encountered ailments. They were treated using various traditional home remedies.

TABLE 3: ETHNOMEDICINAL USES OF ORNAMENTAL PLANTS OF SOUTH HARYANA

S.	Botanical	Ornamental	Vernacular	Family	Habit	Part	Method of preparation/	Doses	Disease	I.C.
no.	name	Use	name			used	application			F.
1	Abrus	P, G, RC	Rati,	Leguminosae	Twiner	S	Massage oil is prepared	25-50 ml of	Psoriasis,	1.00
	precatorius		Chirmatti				by mustard oil and seed	oil is	Eczema	0.98
	L.						powder	massaged 3-4		
	VSN;							days a week		
	Bansal:308							till cure		
						R	Paste is applied	10-15 gms on	Skin diseases	0.86
							externally on affected	affected area		

						R	area Decoction taken orally	for 5-7 days 25 ml per day for 5 days	Cough, Cold	0.94
						S	Powdered seeds taken	3gms twice a	Nervous	1.00
2	Acacia leucophloe a (Roxb.) Willd. VSN; Bansal:139	A, H	Ronj, Shami	Mimosaceae	Tree	В	orally with water Bark boiled water and cloth dipped in this mixture is applied externally.	day till cure Once in a day for 7 to 10 days	disorder Boils	0.92
3	Aerva javanica (Burm.f.) Juss. ex Schult. VSN; Bansal:209	Р, В	Bui	Amaranthaceae	Herb	WP	Paste is prepared tied over the affected area externally	Paste applied for 5-7days	Inner injury	1.00
	Buisa20)					WP	Plant is boiled in water and cloth dipped in this mixture is applied externally over affected area.	Twice a day for 5-7 days	Swelling	0.86
4	Ageratum conyzoides (L.) L. VSN; Bansal:178	P, G, B	Jangli pudina,	Asteraceae	Herb	L	Fresh juice taken orally	50 ml twice a day for 5-7 days	Snake bite	0.85
						L	Decoction taken orally	50 ml twice a day for 2-3 weeks	Diarrhoea, Dysentery	0.88 0.90
						L	Seed are crushed with leaves and applied on affected area	2-3 gms per day for 5 days	Piles, wounds	0.83 0.74
5	Albizia lebbeck (L.) Benth. VSN; Bansal:149	A, RC	Siris	Mimosaceae	Tree	S	Powder seeds are taken orally with water.	08-10g twice a day till cures	Arthritis	0.99
	Dansar:149					L	Aloe vera gel is mixed with Leaf is used as eye drop.	2 drops twice a day for 3-5 days	Eye infection	0.97
						В	Paste of bark is applied on affected area	2-3 gms for 3 days or till cure	Insect bite, Scorpion bite	1.00 0.83
6	Aloe vera (L.) Burm.f. VSN; Bansal:131	P, G	Gwarpatha	Liliaceae	Herb	L	Leaf gel applied over the wound externally.	2-3 days	Wound	0.89
						L	Leaf gel is taken orally before breakfast.	10-15ml for a 1-2 week	Constipation	0.93
						L	Gel of leaf kept overnight and taken with milk in morning before breakfast.	1 glass for 3- 4 weeks	Menorrhagia	0.90
						L	Fresh leaf gel with turmeric is applied in breast externally	2gms twice a day for 8-10 days	Early breast swelling	1.00
7	Argemone mexicana L. VSN;	P, G	Satyanashi	Papaveraceae	Herb	ST	Latex of stem is used as eye drop.	1-2 drops for 3-4 days	Eye infection	0.96
	Bansal: 165					WP	Sits bath in water boiled	5 to 7 days	Muscular	0.96
							with whole plant. Crushed Seeds are mixed	·	pain	
						S	with desi khand (open pan sugar) and ghee and taken orally.	40-50g per day for a week	Menorrhagia	0.93
						S	Crushed Seeds paste is applied over the boils.	4-5 days	Boils	0.92
						WP	Fresh juice taken orally	2 tbs daily till cures	Jaundice	0.76
						L	Fresh leaf juice is	Twice a day	Wound	0.92

							applied over affected	for 5-7 days	healing	
8	Asparagus racemosus Willd.	P, B, G, HP	Satavar	Liliaceae	Herb	R	area externally Powdered roots taken orally with water	5-10 g per day	Agalactia	0.97
	VSN; Bansal:223					R	Powdered root is mixed with honey and taken orally	5 gms a day before breakfast for 2 months	Epilepsy	0.97
9	Barleria prionitis L. VSN;	P, H, R	Pila Bansa	Acanthaceae	Shrub	R	Root ash and leaf ash mixed with equal amount of honey and	5 gms for 5-7 days	Cough	0.94
	Bansal:163					L	taken orally Leaf paste is applied externally over feet	5-10 gms per day for 10 days	Cracking feet	1.00
						ST	Thin stem is used as tooth brush	6" stem for one month	Tooth problems	0.98
10	Bauhinia purpurea L. VSN;	A, G	Khairwal, Kachnar	Leguminosae	Tree	FL	Raw flowers are used to make curry	50 gms per day for 5 days	Constipation Interstitial worms	0.91 0.95
	Bansal:153					В	Decoction taken orally	25 ml twice a day for 1-2	Diarrhoea	0.95
						В	Decoction taken orally	weeks 20 ml a day till cures	Blood purifier, Skin disease	0.95 0.83
						L	Fresh juice applied directly on affected area	5-10 per day for one week	Skin disease	0.89
11	Boerhaavia diffusa L. VSN;	L, P, HP	White saati	Nyctaginaceae	Herb	R	Root juice taken orally	10ml juice for 5-7 days.	Jaundice	0.95
	Bansal:107					WP	Pills prepared from powdered plant is taken orally	2-3 pills twice a day for a month	Skin disease	0.95
						WP	Plant juice taken orally.	10-15ml per day for two week	Constipation	0.91
						WP	Decoction taken orally	10 ml per day for 3-4 months	Rejuvenating cells	1.00
						В	Fine powdered bark is taken orally with warm Luke water	5gms per day till cure	Respiratory diseases	0.96
12	Bombax cei ba L.	A	Kapok, SilkCotton	Malvaceae	Tree	В	Powdered bark paste applied externally over affected area	2-5 gms twice a day for till cures	Pimples, Boils	0.89 0.78
	VSN; Bansal:157					FL	Fresh flower juice taken orally	10 ml twice a day for 1-2 months	Blood purifier Leucorrhoea	0.71 0.75
						S	Powdered seeds taken orally	2-3 gms per day for 5-7 days	Small pox, Chicken pox	1.00 1.00
13	Bougainvill ea spectabilis Willd.	G, P, H, R, B	Bougainvillea	Nyctaginaceae	Shrub	L	Fresh extract given orally	50 ml per day for 1-2 months	Impotency in males and females	0.95
	VSN; Bansal:204					L	Paste applied externally over affected area	10 ml per day for 5-7 days	Inflammation Boils	0.84 0.78
14	Bryophyllu m daigremont	P, G	Patherchat	Crassulaceae	Herb	L	Fresh leaves chewed before breakfast.	3-4 leaves till cure	Kidney Stones	0.99
	ianum (Raym Hamet&Per rier) A. Berger VSN; Bansal:130									
						L	Gently warmed leaf with mustard oil tied over boils	Piece of leaf for 2-3 days	Boils	0.93
15	Butea monosperm	A, G, RC, B	Palash, Dhaak	Leguminosae	Tree	В	Powdered bark is soaked on water overnight and	25-50 gms of paste as per	Skin disease	0.81

	a (Lam.) Taub. VSN;						paste is applied externally	size of infected area for 2-3 weeks		
	Bansal:132					G	Plant gum is soaked in water overnight mixed with sugar	50 ml twice a day for a week	Diarrhoea	0.89
						FL	Hot floral extraction in water taken orally	10 ml twice a day for 1-2 week	Intestinal worms	0.82
						L	Leaves and flower paste applied over affected area	2-5 gms twice a day for 1-2 week	Pimples	0.93
						G	Dry roasted gum taken orally with milk	5-10gms twice a day till cure	Impotency	0.93
						L	Leaves genteelly warmed and tied externally over affected area	3-5 leaves till cures	Rheumatoid	0.91
						L	Fresh juice is applied externally over affected area	3-5 ml for one week	Ringworms	0.62
16	Caesalpinia bonduc (L.) Roxb	G, P	Kalimarak	Leguminosae	Climber	S	Decoction take orally	10ml thrice a day for 5 days	Malarial fever	0.95
	VSN; Bansal:202					S	Powdered seed taken with water before sleeping	5gms per day for one month	Joint pain	0.92
17	Calendula officinalis L.	P, G, B	Guldawadi	Asteraceae	Herb	FL	Floral extract applied externally to burnt skin	10-20 ml twice a day till cures	Skin burn	0.98
	VSN; Bansal:159					FL	Floral extract applied externally to wound, boils	5-10 ml twice a day for 7 day	Wound healing Boils	0.84
18	Canna indica L. VSN; Bansal:210	P, G, RC, B	Keli	Cannaceae	Herb	RH	Decoction of Rhizome and root is and taken orally	25 ml twice a day for 1-2 weeks	Gonorrhea Diuretic	0.87 1.00 0
19	Cascabela thevetia (L.) Lippold VSN;	A, G, R, H, P	Pili Kaner	Apocynaceae	Shrub	L	Fresh juice taken orally	10 ml twice a day for 5-7 days	Constipation Cough and cold Bronchitis	0.50 0.59 1.00
	Bansal:188					В	Stem bark with dry leaves decocted and taken orally before	20 ml per day for 2-3 months	Menstrual problems	0.80
						S	breakfast Powdered seeds taken orally by pregnant ladies	10gms per day for 3-5 days	Foeticidal	1.00
						L	Leaves chewed directly	2-3 leaves once	Induce vomiting	0.94
20	Cassia fistula L. VSN; Bansal:199	A, G, R, B	Amaltash	Leguminosae	Tree	F	Decoction from ripe fruit taken orally	10-15 ml twice a day for 1-2 weeks	Jaundice, upset Stomach	0.93 0.97
	Dansar.177					F	Decoction from ripe fruit taken orally	25 ml twice a day for 5-7 days	Cough Asthma	0.95 0.96
						F	Decoction from ripe fruit applied	2-3 gms for a week	Tooth ache	0.97
						S	Seeds eaten directly	5-10 seeds per day for one week	Constipation	0.94
						L	Leaves chewed directly	3-5 leaves for one week	Pus drying	1.00
						В	Decoction taken orally	25ml twice a day for one week	Leucoderma	1.00
21	Catharanth us roseus (L.) G.Don	P, G	Sadabahar Periwincle	Apocynaceae	Herb	L	Fresh juice taken orally	5-10 ml twice a day for till cures	Diabetes Menorrhagia	0.54 0.76
	VSN;					FL	Dried flowers mixed	2 gms twice a	Anti	0.99

	Bansal:114						with leaves and taken orally with water	day till cure	cancerous	
22	Cestrum nocturnum L. VSN; Bansal:214	P, G	Rat Ki Rani	Solanaceae	Shrub	FL	Floral extraction taken orally	5ml per day for one month	Immunity booster	1.00
						L	Fresh leaf juice applied on wounds externally	5-10 ml twice a day for 5 days a week	Wound healing	0.73
23	Chrysopog on	P, G	Vativeria, Khus-Khus	Poaceae	Herb	R	Oil is extracted from root and applied externally	3-5 ml per day for one	Ring worms, Skin disease	0.81
	zizanioides (L.) Roberty VSN; Bansal:267						over infected area	week		0.66
						R	Root extract is used in sweetened drinks 10 ml per litter of Sugar solution	300 ml Sharbat per day for 10-15 days	Cooling Effect	0.99
						S	Powdered seeds mixed with Almond, Black pepper powder and used to take with milk before sleeping	5 gms per day for 1-2 months	Eyesight improvement	0.99
24	Cirsium arvense (L.) Scop. VSN; Bansal:172	P, G, B	Barhmdandi	Asteraceae	Herb	WP	Whole plant powder is taken orally with water	2-3 gms daily for 2 months	Diabetes muscular pain	0.97 0.96
	Dansar.172					F	Fruit with roots of plant is used to make decoction	10 ml per day for 5-7 days	Intestinal worms	0.96
25	Cissus quadrangul aris L. VSN; Bansal:160	P, G, HP	Hadjod	Vitaceae	Shrub	ST	Stem fried in desi Ghee and power of this mixer with turmeric powder taken with milk	5gms twice a day for 1-2 weeks	Bone Fracture	1.00
						ST	Powdered stem taken orally	5 gms per day for one week	Piles, Skin disease	0.92 0.84
26	Cleome viscosa L. VSN;	P, G	Kukerbhungr a	Cappariceae	Herb	L	Leaves juice is used as eardrop.	2-3 drops twice a day till cure	Earache	0.98
	Bansal:106					L	Crushed leaves taken	15-20 leaves	Piles	0.95
						S	orally with water.  Powdered seeds taken  orally with water.	for a week 10g for 2-3 days	Diarrhea	0.94
27	Clerodendr um phlomidis L.f.	H, R, P	Arno	Lamiaceae	Shrub	L	Fresh leaves paste is applied over burnt skin externally	1-2 gms for 3-5 days	Burnt skin	0.97
	VSN; Bansal:356									
						L	Cotton cloth is soaked in the hot leaves extract and applied externally.	500ml of hot water mixture for 5-7 days	Muscular Pain	0.97
						R	Root powder, khand, ghee, and wheat flour is boiled and taken orally.	30-50 g for 2 weeks	Muscular pain	0.97
28	Clitoria ternatea L. VSN; Bansal:321	P, G, B, HP	Aparajita	Leguminosae	Twiner	L	Leaves paste applied over affected area	10 ml per day for 5-7 days	Swelling	0.90
						R	Decoction taken orally before sleeping	20 ml per day for 3-5 days	Stomach ache	0.99
29	Combretum indicum (L.)	P, G, B, HP	Rangoon ki bel	Combretaceae	Climber	S	Seed decoction taken orally	3-5 gms per day for a week	Intestinal worms	0.90
	Defilipps VSN; Bansal:327					L	Paste applied externally over affected area	3-5 gms per day for 3-5 days	Wound healing, Skin disease	0.84
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30	Crateva religiosa	A, G	Sacred Burna	Capparaceae	Tree	В	Dried root decoction taken orally	20 ml per day for 2-3	Rheumatic pain	0.96
	G.Forst. VSN; Bansal:231					В	Decoction taken orally	months 20ml twice a day for 2-3 weeks	Kidney stone, Gall bladder stone	0.95 0.95
31	Crinum asiaticum L. VSN; Bansal:108	P, G, B, RC	Sukhdarshan	Amaryllidaceae	Herb	L	Juice is used as ear drop	2 drops twice for 1-2 weeks	Ear-ache	0.98
	<b>Danisan</b> 100					BL	Bulb is roasted and crushed then mixed with mustered oil	3-5 drops of preperation per day till cure	Ear- ache	0.98
32	Croton bonplandia nus Baill. VSN; Bansal:227	P, G	Ban tulsi	Euphorbiaceae	Herb	S	Seed oil orally	3-5 ml for 3-5 days	Constipation Purgative	0.93 0.98
	Bullsui.227					L	Decoction applied in hairs	50 ml per day in interval of 5 days for one month	Dandruff	1.00
						L	Dry leaf powder mixed with Amla and Ritha soaked in water over night and used for hair wash in next morning	50 ml per day in interval of 5-7 days for one month	Hair growth, dandruff	1.00
33	C. citratus (DC.) Stapf	P, G	Lemon grass	Poaceae	Herb	L	Leaf juice is taken empty stomach	10 ml twice a day for 1-2 weeks	Digestive problems	1.00
	VSN; Bansal:136					L	Leaves with tea leaves boiled in water and then milk is added to it and taken orally	Half leaf in 300 ml water milk and tea mixture	Stress relief	1.00
34	Cynodon dactylon (L.) Pers. VSN; Bansal:410	L, RC	Dub	Poaceae	Herb	L	Leave juice, onion juice and khand are taken orally	20 ml twice a day for 3-4 days	Diarrhea	0.96
	<b>Danisan</b> (10					L	Leaves juice is used as nasal drops.	2 drops twice a day for 3-5 days	Nose bleeding	0.97
						R	Decoction is taken orally	Half cup for 10-15 days for a week	Urinary tract infection	1.00
						R	Root juice is taken with honey	50 ml per day for 10-15 days	Hiccup	1.00
						L	Leaves paste mixed with curd is applied externally	2-3 gms paste for 8-10 days	Piles	0.89
35	Datura metel L.	P, G, RC	Kala datura	Solanaceae	Herb	L	Leaf are roasted and mustard oil is applied over it and tied externally	2-3 leaves per day for 10-15 days	Enlarged testicles	1.00
	VSN; Bansal:124					S	Dry seed powder taken orally with water	5gms per day till cure	Skin disease, Piles	0.44 0.57
						S	Powdered seeds taken orally	2gms twice a day for 1-2	Asthma, Cough	0.75 0.69
						S	Oil from seeds is mixed with mustered oil and heated for 10 minutes on	weeks 2 drops twice a day for 2-3 days	Ear-ache	0.88
36	Delonix reg ia (Hook.) Raf. VSN;	A, B, G	Gulmohar	Leguminosae	Tree	L	mild flame 1-2 leaf decoction taken orally	25 ml per day for one month	Rheumatic pain	0.95
37	Bansal:230 Desmostac hya bipinnata (L.) Stapf. VSN;	R	Dabh	Poaceae	Herb	L	Ash made from leaves is applied over the burnt skin.	Twice a day till cure	Burnt skin	0.98

	Bansal:265					R	Decoction taken orally	50 ml daily for 10-15	Jaundice, Asthma	0.93 0.92
38	Echinops e chinatus Ro xb. VSN;	Р	Oontkanteli	Asteraceae	Herb	R	Powdered root is mixed with Acacia gum and applied on hairs	days 20 gms once a week for 1- 2 months	Hair lice	0.99
	Bansal:302					D	Doot mosts applied on	Same non day	Wound	0.01
						R	Root paste applied on affected area	5gms per day for 3-5 days	Wound healing	0.91
						R	Paste taken with honey and milk	5gms per day for 1-2 weeks	Male sexual tonic	1.00
39	Ehretia laevis Roxb.	A, G	Chhara	Boraginaceae	Tree	В	Decoction used to gargle	25-30 ml per day for 5-7 days	Throat infection	0.97
	VSN; Bansal:360					L	Leaf paste mixed with mustard oil and massaged over affected area	20 ml per day for 10-15 days	Joint pain	0.93
						L	Paste applied over affected area	5-10 gms twice a day for 5-7 days	Wound healing	0.89
40	Epipremnu m aureum (Linden& Andre) G.S.Buntin	P, G, HP, RC	Money Plant	Araceae	Herb	L	Paste applied on cotton bandage and tied over affected area	5 gms per day for one week	Skin disease	0.51
	VSN;									
41	Bansal:336 Euphorbia milii var. splendence (Bojer ex Hook.)	P, G, HP	Milli	Euphorbiaceae	Shrub	L	Paste applied externally on affected area	5-10 gms per day for 5-7 days	Warts, bolis	0.95 0.69
	Ursch&Lea ndri VSN;					WP	Plant ash taken orally with water	2gms per day for 15-20 days	Asthma	0.80
	Bansal:211					L	Leaves of the plant are boiled in luke warm water and applied directly to affected area	50-100 ml par day till cure	Swelling, Inflammation	0.90 0.92
42	Euphorbia neriifolia L. VSN;	P, G, H	Thor	Euphorbiaceae	Shrub	WP	Plant extraction is mixed with sugar and taken orally	10 ml twice a day for 5-7 days	Tooth ache, General Pain	0.96 0.98
	Bansal:232					WP	Plant ash taken orally	5gms per day for one month	Infertility	0.96
						WP	Fresh juice taken orally	10 ml twice a day for 10-15	Intestinal worms, Blood	0.82
43	Euphorbia	P, G, H	Danda Thor	Euphobiaceae	Shrub	LT	Latex from stem is	days 25 ml daily	purifier Skin diseases	0.89 0.65
	royleana Boiss. VSN;					Т	applied on affected area Thorn is inserted in tooth cavity pain relief	till cure One thorn in jaw for 5-7	Dental cavities	0.98
44	Bansal:186 Euphorbia	P, G	Barasinga	Euphorbiaceae	Shrub	ST	Latex in minute quantity	days 1gm per day	Purgative	0.95
	tirucalli L. VSN;					WP	taken orally with water Whole plant decoction	ofr 2-3 days 10 ml per	Jaundice,	0.63
	Bansal:403					,,,1	taken orally	days till cure	spleen enlargement,	1.00
						R	Poultice of root with	5 gms per day	leprosy Nose	0.75 0.96
							stem applied directly on affected area	for 3-5 days	bleeding, swelling, warts	0.90 0.96
45	Fernandoa adenophyll a (Wall. ex G.Don) Steenis	A, G	Marodphali	Bignoniaceae	Tree	R	Wood from root boiled with Mustard oil and massaged over affected area	20-30 ml per day for 3-5 days	Muscular pain, Joint pain	0.96 0.95 0.92
	VSN; Bansal:221									
46	Helianthus annuus L.	P, G, B	Sunflower, Suraj	Asteraceae	Herb	S	Oil extracted from seeds given to cattle orally	50 ml per day before	Easy delivery in cattle	1.00

	VSN; Bansal:308		mukhi					delivery for 10 days		
	Bansar.300					FL	Flower tea taken orally	100 ml tea per day for one month	Respiratory diseases	0.90
47	Hibiscus rosa- sinensis L. VSN; Bansal:206	P, G, H, R, RC, B	Gudhal, China rose	Malvaceae	Shrub	F	Powdered fruit taken with water orally	10 gms per day till cure	Menorrhagia fever	0.88 0.90
						FL	Dried powder taken orally	5gms per day till cure	Gall bladder stone	0.98
48	Ipomoea cairica (Linn.) Sweet VSN; Bansal:110	P, G, HP	Neeli bel	Convolvulaceae	Creeper	WP	Plant extract taken orally	25ml twice a day till cure	Tuberculosis Asthma	0.98 0.88
						WP	Decoction taken orally	50 ml a day for 15 days	Hepatitis B, Jaundice	1.00 0.74
49	Ipomoea carnea Jacq. VSN; Bansal:404	P, R	Vilyati Ak	Convolvulaceae	Shrub	WP	Decoction taken orally	25 ml twice a day for a week	Pain killer	0.99
						L	Fresh juice taken orally	25 ml twice a day till cures	Anti cancerous	0.97
						L	Leaves gently warmed with mustard oil and tied over affected area	3-5 leaves per day till cure	Skin disease	0.64
50	Ipomoea pes-tigridis L.	P, G	Bili keladoo	Convolvulaceae	Herb	WP	Decoction of plant applied on affected area	20-30 ml per day for one week	Swelling	0.88
	VSN; Bansal:170					L	Poultice of leaves is applied directly on affected area	5-10 gms per day till cure	Pimples, boils, carbuncles	0.90 0.84 1.00
						WP	Fresh juice taken orally	5-10 ml twice a day for 2 weeks	Rabies	1.00
						L	Paste prepared from leaves and seed is applied externally on effected region	5-10 gms per day till cure	Wound healing, snake bite	0.87 0.84
						L	Leaves are smoked before sleeping	3-5 leaver per day till cure	Bronchial	1.00
51	Jasminum sambac (L.) Aiton	P, G, B, RC	Motia	Oleaceae	Shrub	R	Root boiled in water and extract mixed with rice applied as facial powder	25 gms for 2- 3 days a week	spasm Pimples	0.96
	VSN; Bansal:150					L	Decoction from fresh leaves taken in empty stomach.	20 ml for 10- 15 days	Gall bladder stones	0.95
						FL	Powder made from dried flowers is taken after meal	5-10 gms for 7-10 days	Skin diseases Itching	0.75 0.98
52	Jatropha integerrima Jacq.	A, R		Euphorbiaceae	Tree	LT	Latex is applied externally over affected area	2-5ml per day for 5-7 days	Pimples	0.90
	VSN; Bansal:155					WP	Few drops of latex from the plant taken orally	2-3 drops per day till cure	Induce vomiting, mouth	0.98 1.00
53	Justicia ad hatoda L.	P, G	Safed bansa	Acanthaceae	Herb	FL	Floral powder taken orally with water	5gms twice a day for 10-15	infections Respiratory disease,	0.97
	VSN; Bansal:156					R	Fresh paste applied over affected area	days 25 gms par day in 3 day interval for	Tuberculosis Skin allergy, Scabies	0.97 1.00 0.96
						R	Root Powder taken orally with water	one month 5 gms twice a day for 2 weeks	Malarial fever	0.97
						L	Paste is applied on joints externally	20-25 gms per day till cure	Joint pain	0.96
						L	Fresh juice taken orally	10ml 3-4	Cough and	0.95

								times a day	Cold, Asthma	
54	Kalanchoe blossfeldian	G, P, H	Kalanchoe	Crassulaceae	Herb	L	5-7 leaves chewed directly with common	for 5-7 days 5-7 leaves per day for 2	Kidney stone	0.96 0.98
	a Poelln. VSN; Bansal:220					L	salt Fresh juice taken orally	months 25 ml per day for 5-7 days	Upset stomach	0.97
55	Kigelia africana (Lam.)	A	BalamKheera	Bignoniaceae	Tree	F	Dried and powdered fruit taken orally before breakfast	5 gms per day	Dysentery Malaria	0.97 0.95
	Benth. VSN; Bansal:138					F	Rubbing paste prepared from fresh fruit applied locally	20 gms twice a day till cure	Leprosy, Skin cancer	0.87 1.00 0
						F	Dried fruit is used as bathing sponge	Once a day during bathing till cure	Inflammation	0.95
56	Lantana camara L. VSN; Bansal:102	H, R, B, P, G	Lantana, Nilgiri, Saptrangi	Verbenaceae	Shrub	L	Leaf decoction is taken orally	50 ml a day for 2-3 months	Rheumatic pain	0.96
	Ballsai. 102					WP	Decoction taken orally	50ml per day till cure	Tetanus, Wound healing	1.00 0.81
						WP	Decoction of flowers, stem and root given	50ml 3-4 times a day	Snake bite	0.70
57	Launaea nudicaulis (L.) Hook.f. VSN;	P, G	Desigobhi	Asteraceae	Herb	WP	orally Plant juice mixed with 250 gms desi ghee taken orally	for 5-7 days 50ml daily for 5-7 days	Piles	0.94
	Bansal:208					L	Fresh juice taken orally	50 ml per day for 3-5 days	Constipation	0.88
58	Lawsonia inermis L.	H, RC, R, B	Mehandi	Lythraceae	Shrub	L	Dried powdered leaves are soaked in water for 3-5 hours and then applied on hands and feet	50 gms a day at interval of 5-7 days for one month	Burning sensation	1.00
	VSN; Bansal:217					L	Decoction of leaves and sugar syrup mixture given to children orally	5 ml thrice a day for one week	Jaundice	0.87
						R	Root bark decoction taken orally	20ml twice a day for 1-2 weeks	Leucorrhoea	0.94
59	Leucas cephalotes (Roth) Spreng.	P, G	Dadgal	Lamiaceae	Herb	WP	Decoction taken orally	50 ml twice a day for 3-5 days	Malaria	0.90
	VSN; Bansal:247					L	Freshly squeezed leaves juice taken orally.	20ml 5-7 times a day for a week	Snake bite	0.77
						WP	Fresh juice taken orally	20 ml per day for one week	Jaundice Fever	0.89 0.90
60	Melia azedarach	A, RC	Baikan	Meliaceae	Tree	S	Powdered seeds are taken orally with water	8-10 gms once for 7	Piles	0.94
	L. VSN; Bansal:137					L	before sleeping. Ear drops made from leaves boiled in mustard oil	days 1-2 drops twice a day for 2-3 weeks	Earache	0.98
						В	Decoction from stem bark is taken orally	50 ml twice a day for 2 weeks	Skin diseases	0.91
						В	Root bark Decoction is taken orally	20-30 ml per day for 7 days	Constipation	0.91
						L	Paste of leaf of and Custard apple is applied in hairs	50 ml a day in interval of 4-5 days for a month	Hair lice	0.99
61	Mimosa pudica L. VSN;	G, P, HP	Touch-me-not	Leguminosae	Climber	L	Fresh juice of leaves taken orally	20 ml per day till cure	Diabetes	0.88
	Bansal:324					L	Decoction taken orally before sleeping	20 ml per day for 2 months	Uric acid level	1.00

									normalization	
						WP	Decoction taken orally	20ml per day for 3 days	Painful menses	1.00
						L	Dried leaves with Mishri (Sugar crystals) taken with water	5 gms twice a day for one month	Sexual potency in male	1.00
						R	Root powder soaked in water for one week and extract taken orally	20ml twice a day of 3-5 days	Epilepsy	0.85
						WP	Fresh juice taken orally	10 ml twice a day for 2	Intestinal worms, Blood	0.80
62	Mimusops elengi L. VSN; Bansal:151	A, G	Bullet Tree	Sapotaceae	Tree	S	Dried seed powder soaked in water and paste applied on anus ring in children	weeks 2 ml per day for 5-7 days	purifier Anal infection	1.00
						В	Dried powder is mixed with mustard oil and paste applied over affected area	3-5 gms per day for one week	Ulcer, wound healing	0.88 0.65
63	Mitragyna parvifolia (Roxb.) Korth.	A, G, RC	Chota Kadam	Rubiaceae	Tree	В	Decoction taken orally	10ml a day for 5-7 days	Cough and cold	0.94
	VSN; Bansal:143					В	Decoction of bark mixed with sugar or honey	20 ml twice a day for 3-4 weeks	Gynaecologic al disorder	1.00
64	Morus alba L.	A, RC	Mulburry	Moraceae	Tree	L	Tender leaves are chewed before breakfast	5-7 leaves per day for one week	Dysentery	0.97
	VSN; Bansal:180					F	Ripened fruits are taken directly	100 mgs for 5-7 days	Throat infection	0.98
65	Nerium oleander L.	P, B, H, R, G	Lal Kaner	Apocynaceae	Shrub	R	Paste of fresh root applied over affected area	5 gms twice a day for 2 weeks	Ring worm, Ulcer	0.88 0.74
	VSN; Bansal:207					L	Leaves boiled in water and bathed in this water after cooling	8-10 gms of leaves per day till cure	Leprosy	0.78
						L	Paste applied on affected area externally	5gms per day till cure	Wound healing	0.74
						FL	Extract of flowers put in eyes	2 drops per day for 10-15 days	Eye Infection	0.85
66	Nyctanthes arbor- tristis L. VSN; Bansal:216	G, P, RC	Harsingaar, Night Jasmin	Nyctaginaceae	Shrub	L	Decoction of 2-3 leaves in 100 ml of water taken orally	25 ml per day for 1-2 months	Joint pain slip disc problem	0.97 1.00
	Dalisal.210					В	Decoction taken orally	10 ml twice a day for 1-2	Malarial fever	0.94
67	Opuntia dillenii (KerGawl.) Haw.	P, G	Nagfhani	Cactaceae	Shrub	ST	Turmeric powder meshed with leaves pulp tied over affected area.	weeks 2-3 times a week for a month	Arthritis	0.98
	VSN; Bansal:235					F	Baked fruit powder taken orally with lukewarm water	3gms twice a day for 5-7 days	Cough	0.97
						F	Baked fruit juice mixed with honey taken orally	50 ml per day for 2 weeks	Gonorrhoea	0.95
						ST	Latex applied directly around anus and rectum internally	5ml per day for 10-15 days	Fistula	1.00
68	Oxalis corniculata L.	P, G, L	Khatti butti	Oxalidaceae	Herb	L	Fresh leaf juice mixed with honey	50 ml twice a day for 5-7 days	Dysentery Diaorrhea	0.97 0.96
	VSN; Bansal:222					L	Fresh juice taken orally	50 ml per day for one week	Upset stomach,	0.97
						L	Fresh juice taken orally	50 ml twice	Fever Datura	0.96 1.00
						L	Leaves juice given to	for 3-5 days 3-5 ml twice	poisoning Unequal testis	1.00

							children orally	a day for 3-4 weeks		
69	Phyla nodiflora (L.) Greene	P, B	Jal Buti	Verbenaceae	Herb	WP	Fresh juice applied externally over affected area	50 ml per day for 2-3 weeks	Boils	0.85
	VSN;					WP	Fresh juice is massaged	10 ml per day	Bleeding	1.00
70	Bansal:195 Phyllanthus amarus Schumach. &Thonn. VSN;	Р	Bhumi amla	Phyllanthaceae	Herb	R	on gums Powdered root is boiled with rice boiled water and taken orally after cooling	till cure 50 ml per day for 3-4 months	gums Menstrual problems	0.95
71	Bansal:224 Phyllanthus emblica L.	A, G, RC	Amla	Phyllanthaceae	Tree	F	Powdered fruit is taken with water before	4-5 gms a day for 2 weeks	Constipation	0.94
	VSN; Bansal:123					F	sleeping Powdered fruit is mixed with Mishri (Crystal sugar) soaked overnight and taken in next morning	75-100 ml of mixture per day for 3-4 months	Eye sight improvement	0.99
						F	Mixture of fruit Juice with Sugar and lime taken orally	25 ml twice a day for 4-5 days	Dysentery	0.96
						L	Decoction taken orally	10 ml twice a day for 2-3 days	Mouth ulcer	1.00
72	Physalis angulata L. VSN; Bansal:181	P, G	Ground cherry,Pilpota n	Solanaceae	Herb	WP	Juice is extracted by crushing the plant	25 ml twice a day till cure	Diabetes	0.97
						F	Ripe fruits eaten directly	100 gms per day for a week	Upset stomach	0.98
						L	Decoction given to cattle orally	250 ml per day for 8-10 days	Foot and mouth disease	1.00
73	Pithecellobi um dulce (Roxb.) Benth.	A, R, RC, H	Jungle jalebi	Leguminosae	Tree	S	Seed pulp eaten directly	10-15 Fruit seeds per day for one week	Cooling effect	0.99
7.4	VSN; Bansal:128	D.C.		D	** 1	FL	Floral extraction taken orally	10 ml a day of 10-15 days	Leprosy	0.92
74	Plumbago zeylanica L.	P, G	Chitrak, Chita	Plumbaginaceae	Herb	R	Root extract/decoction taken orally	50 ml twice a day 4-5 days	Snake bite	0.92
	VSN; Bansal:117					R	Root extract applied externally over affected area	25-50 ml per day till cure	Inflammation	0.93
						R	Fresh paste applied over affected area	2-3 gms a day for 10-15 days	Piles	0.74
						R	Decoction taken orally	50ml thrice a day for 3-5 days	Abortion	1.00
						L	Mixture of leaf juice with coconut oil and little camphor is applied on affected area before sleeping	10-15 ml per day for 5 days	Itching	0.97
75	Polianthes tuberosa L.	P, G, B, RC, HP	Rajnigandha	Asparagaceae	Herb	BL	Mixture of bulb powder with turmeric and butter applied externally over affected area	2-3 gms per day till cure	Pimples, sores	0.73 1.00
	VSN; Bansal:352					BL	Infusion prepared from bulbs and tubers is applied externally on affected area	2-3 gms per day till cure	Inflammation in groin Acne	1.00
76	Portulaca oleracea L. VSN; Bansal:119	P, G, L, B, HP	Bichubuti, <b>Kulfa</b>	Portulacaceae	Herb	S	Seed powder with seeds of cumin, coriander mixed with common salt taken orally with water	5 gms per day for 15 days	Night Discharge	1.00
						S	Decoction of seeds taken orally	25ml twice for 40-50 days	Cardiovasc ular diseases	1.00
						L	Fresh juice taken orally	10 ml twice a	Blood purifier	0.95

								day for 2		
77	Putranjiva roxburghii	A, R, RC	Putranjeva	Putranjivaceae	Tree	S	Seeds given to one month pregnant lady to	weeks 3-5 seeds per day for one	Pregnancy determination	1.00
	Wall. VSN;					S	have male baby Powdered seeds taken	month 5 gms per day	Infertility	0.98
78	Bansal:121 Rosa indica L. VSN; Bansal:203	P, G, RC, B, H, R	Gulab	Rosaceae	Shrub	P	with water orally Petals are mixed with sugar syrup and allowed to kept airtight if 3-4 months and then given	for one month 250 gms per day for 4-5 days	Uterus cleaning in cows and buffalo	1.00
						P	orally Gulkand (Petals and sugar) given to lactating cattle	250 gms per day for 10-15 days	Increases lactation	1.00
						P	Extract of petals mixed with Aloe vera gel applied directly over skin before sleeping	3-5 ml per day for one month	Skin disease, Pimples	0.91 0.96
						P	Gulkand (Petals and sugar) are mixed with Withania somnifera powder taken with warm water	25-30 gms thrice a day for 3 months	Asthma	0.94
79	Saccharum bengalense Retz.	B, R	Jhunda, sarkanda	Poaceae	Herb	R	Roots boiled with milk and taken orally	7 days	Agalactia	0.99
	VSN; Bansal:115					R	Decoction of root taken orally.	50 ml daily for 3-5 days	Typhoid Leucorrhoea	0.99 0.98
80	Saccharum spontaneum L.	B, R	Kaans	Poaceae	Herb	R	Root decoction taken orally.	50ml twice a day for 5-7 days	Cough, Cold	0.95
	VSN; Bansal:112					R	Root with equal amount root of doob taken and decoction is orally	50 ml twice a day for 5-7 days	Heat stroke Nose Bleeding	1.00 0.97
81	Salvia splendence Sellow ex Schuil.	P, G, B		Lamiaceae	Herb	L	Leaves and stem decoction taken orally	10 ml twice a day for 1-2 months	Diabetes	0.88
	VSN; Bansal:154					L	Dried leaves warmed in mustard oil and applied locally	5-10 ml twice a day till cures	Wound healing	0.75
						L	Leaves are used by locals for dressing wounds in urgent cases to stop bleeding	5-10 leaves per day till cure	Wound healing, Skin disease	0.75 0.67
82	Sansevieria trifasciata Prain VSN; Bansal:361	P, G, B, R	Snake Plant	Asparagaceae	Herb	L	Sap from leaves is applied directly on affected area	10-20 ml twice a day till cure	Fungal infection, scabies, skin rashes	1.00 0.90 1.00
83	Senna occidentalis (L.) Link	P, G	Ritwa	Leguminosae	Shrub	L	Leaves paste is applied over affected area.	For 2 weeks	Vitiligo	1.00
	VSN; Bansal:184					L	Water boiled with leaves used for bathing.	Twice a day till cure	Boils	0.93
						L	Leaf Decoction oaken orally	100 ml per day for 1-2 months	Respiratory diseases	0.87
						L	Warn leaf is put over eyes	One leaf for 3-5 days	Conjunctivitis	1.00
						F	Freshly prepared paste is applied externally over affected area	2 gms for 3-5 days	Scorpion bite	0.85
84	Senna tora (L.) Roxb.	P	Pawad	Leguminosae	Shrub	R	Past applied over affected area	2-3 gms twice a day for 5 days	Snake bite, scorpion sting	0.86 0.94
	VSN; Bansal:134					R	Paste with equal amount of lime juice applied on affected area	2 gms per day for 10-15 days	Ring worms	0.88
						L	Dried powder taken orally with water before sleeping	5 gms per day for one week	Constipation	0.93
85	Tabernaem ontana divaricata	A, G, P, B, R	Chandani	Apocynaceae	Shrub	WP	Latex obtained from plant is applied directly on the affected region	5-10 gms per day till cure	Swelling, Inflammation	0.75 0.80

	(L.) R.Br. ex Roem.					L	Leaves infusion mixed with water and taken	5 ml twice a day for 3-5	Fever, cough, purgative	0.80 0.55
	&Schult. VSN;					R	orally Roots are chewed	days 2-3 cm long	Tooth ache	0.90 0.77
	Bansal:120					FL	Floral paste mixed with mustard oil and used as	till cure 2 drops per day till cure	Sore eyes	1.00
86	Tagetes erecta L. VSN;	P, G, B, RC	Gainda	Asteraceae	Herb	L	eye drops Extract from leaves applied on affected area	10-20 ml per day for 5-7 days	Piles, boils	0.87 0.87
	Bansal:118					FL	Fresh floral juice taken orally	25 ml per day for 5-7 days	Piles	0.87
						FL	Decoction of fresh flowers is prepared and	5ml twice a day for 5-7	Loss of appetite,	1.00
							given to children	days	Intestinal worms	0.87
						L	Leaf powder applied directly on affected area	5-10 gms per day till cure	Scores, ulcers	1.00 0.92
						L	Juice from fresh leaves is applied directly on affected region	10-20 ml per day till cure	Eczema	0.92
						FL	Powder prepared from	5 gms per day	Gastric	1.00
							dried flower and leaves is used (faki) with Luke warm water before bed	for one week	troubles constipation	0.73
87	Tecomella undulata (Sm.) Seem.	A, G, RC	Roheda	Bignoniaceae	Tree	W	Wood oil applied over affected area.	Twice a day till cures	Skin disease	0.90
	VSN; Bansal:408					ST	Decoction taken orally	20 ml per day for one week	Stomach ache	0.98
88	Tectona grandis L.f. VSN; Bansal:347	A, G	Sangwan	Lamiaceae	Tree	В	Bark powder mixed with Luke warm water to prepare paste and applied locally in morning	5gms per day for 10-15 days	Astringent	1.00
89	Terminalia arjuna (Roxb. ex DC.) Wight &Arn.	A	Arjun	Combretaceae	Tree	В	Decoction taken orally	10 ml per day till cure	Blood pressure control	1.00
	VSN; Bansal:200					L	Fresh leaves chewed directly	3-5 leaves per day for 3-5 months	Blood cholesterol	1.00
						L	Decoction taken orally	10 ml per day for 5-7 days	Abdominal pain	1.00
						В	Dried powdered paste mixed with papaya fruit taken orally	5gms powder with 100 gms of papaya thrice a day for 5 days	Jaundice	0.91
90	Tinospora sinensis (Lour.) Merr.	P, G	Ghiloye	Menispermacea e	Twiner	L	Leaves boiled in water and kept overnight, Extract taken in morning before meal.	150 ml for 5- 7 days	Fever, Dengue	0.98 1.00
	VSN; Bansal:104					L	Leaves decoction taken orally.	50ml twice a day till cure	Diabetes	0.97
						ST	Stem paste is applied externally over affected area	10 gms per day for one week	Boils	0.92
91	Trianthema portulacast rum L.	L, P, HP	Satta	Aizoaceae	Herb	WP	Juice taken orally.	20-30 ml twice a day for 1-2 weeks	Swelling	0.96
	VSN; Bansal:350					R	Decoction taken orally	25 ml twice a day for 1-2 weeks	Constipation Asthma	0.94 0.89
						L	Fresh juice taken orally	5ml twice a day for 5-7 days	Typhoid	0.98
						L	Fresh juice mixed with equal amount of honey and applied externally	10 ml twice a day for 2 weeks	Joint pain	0.88

**Ornamental Use:** A: Avenue plant, B: Bouquet/ Cut flower/ Cut foliose, C: Lawn covers, G: Garden plant, H: Hedge/fencing, HP: Hanging Pots, P: Pot plant, R: Road divider, RC: Religious, ceremonial and cultural **Part Used:** WP: Whole plant, S: Seed, L: Leaf, F: Fruit, B: Bark, G: Gum, FL: Flower, R: Root, BL: Bulb, LT: Latex, ST: Stem, RH: Rhizome, W: Wood, T: Thorn, P: Petals

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**TABLE 4: DIFFERENT AILMENT CATEGORIES** 

S. no.	Ailment category	Ailments
1.	Gastrointestinal	Abdominal pain, Anal infection, Constipation, Diaorrhea, Dysentery, Interstitial worms,
		Spleen enlargement, Stomach ache, Purgative
2.	Gynecological	Abortion, Agalactia, Early breast swelling, Foeticidal, Increases lactation, Leucorrhoea,
		Menorrhagia, Pregnancy determination
3.	Bacterial	Leprosy, Typhoid, Tuberculosis, Tetanus
4.	Viral	Foot and mouth disease, Chicken pox, Cough and cold, Hepatitis B, Rabies, Small pox,
		Dengue
5.	Neurological	Epilepsy, Nervous disorder
6.	Aesthetic	Hair growth, Cracking feet, Astringent, Dandruff, Hair lice
7.	Ear Nose Throat (ENT)	Ear- ache, Eye infection, Eye sight improvement, Nose bleeding, Throat infection
8.	Fungal	Ringworms, Fungal infection
9.	Respiratory	Bronchitis, Asthma, Bronchial spasm
10.	Urinogenital	Menorrhagia, Diuretic, Gonorrhea, Piles, Uric acid level normalization, Urinary tract
		infection, Enlarged testicles, Impotency in males and females, Night Discharge, Unequal
		testis
11.	Dermatological	Skin rashes, Burnt skin, Eczema, Boils, Leucoderma, Pimples, Psoriasis, scabies, Scores,
		Vitiligo, Carbuncles, Skin cancer, Warts
12.	Dental	Dental cavities, Bleeding gums, Mouth infections, Mouth ulcer, Tooth ache, Tooth
		problems
13.	Arthrolical	Rheumatoid, Arthritis, Bone Fracture, Slip disc problem, Muscular Pain, Rheumatic pain
14.	Poisoning	Snake bite, Datura poisoning, Insect bite, Scorpion bite, Snake bite
15.	Veterinary	Easy delivery in cattle, Uterus cleaning in cows and buffalo
16.	Calculus	Gall bladder stone, Kidney stone
17.	Hepatic	Jaundice, Liver disease
18.	Inflammation	Conjunctivitis, Fistula, Inflammation, Inflammation in groin Acne
19.	Cardiovascular	Heart troubles
20.	General	Diabetes, Blood purifier, Burning sensation, Blood pressure, Blood cholesterol, Fever,
		Wound healing, Swelling, Stress relief, Sore eyes, Pus drying, Loss of appetite, Itching,
		Induce vomiting, Inner injury, Immunity booster, Heat stroke, Hiccup, Cooling effect,
		Eyesight improvement, Rejuvenating cells
21.	Parasitic	Malaria

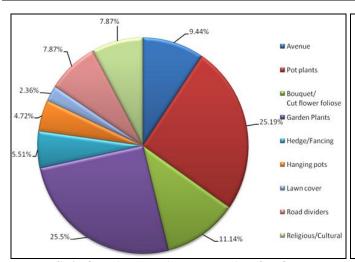


FIG. 3: ORNAMENTAL UTILIZATION OF DOCUMENTED SPECIES IN THE REGION

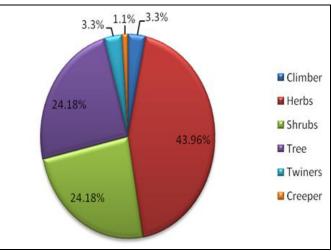


FIG. 4: HABIT OF THE ORNAMENTAL PLANTS DOCUMENTED FROM REWARI DISTRICT

Maximum number of ethnomedicinal uses were reported for skin disease (17) followed by wound, boils (13), constipation (12), piles, cough and cold (10), jaundice, asthma (09), swelling, pimples and intestinal worms (07) respectively **Fig. 5**. Among the plant parts, leaves (36.50%) were the most commonly used followed by roots (13.69%), whole plant (11.41%), seed (9.13%), bark (7.98%), flower (6.46%), fruit (6.08%), stem (3.42%), petal (1.52%), bulb (1.14%) gum and latex (0.76%).

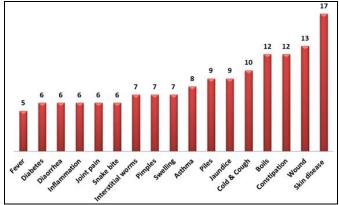


FIG. 5: DIFFERENT DISEASES TREATED BY ETHNOMEDICINAL UTILIZATION OF ORNAMENTAL PLANTS

Various plant parts used of the abovementioned ethnomedicinal ornamental plants are mentioned in **Fig. 6**. Freshly gathered plant parts were overwhelmingly utilized in preparation, followed by dried powder, latex and gel from therapeutic plants. Numerous methods were used for the preparation of herbal remedies, such as decoction, poultice, powder, paste, fomentation, juice, infusion, latex, tea, etc.. These were used in combination with other plants or singly used. Oral applications followed by external were the most well-known method of administration.

The vast majority of the homemade preparations taken bv the patients needed appropriate normalized portions. Notwithstanding, surmised measurements were taken depending on the patients' age, sexual orientation, and appearance. It was observed that the treatment method utilized by individuals generally relies upon the ailment. Skin issues were generally treated by applying topically juice or decoction of therapeutic plants, while wounds and ulcers were treated by applying gel, juice, latex, or paste. For internal issues, natural preparations were mostly regulated orally in various portions, contingent upon the seriousness of the issue

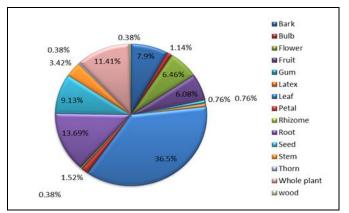


FIG. 6: DIFFERENT PLANT PARTS USED FOR THE TREATMENT OF DIFFERENT MEDICINES

**Informant Consensus Factor (ICF):** The degree of informant agreement was calculated and presented in the form of ICF. The value of ICF ranged from 0.44-1. A higher value of ICF denoted of information specificity and represented acceptability of information among the informants. Higher value of ICF also displayed frequent exchange of that particular information among the people. The highest degree of consensus was observed for gastrointestinal issues, skin allergies, sores, urinary tract infection, male sexual potency, bone fracture, dandruff, early delivery in cattle, uterus cleaning in cows, gynecological disorder, foeticidal, inflammation, pain and numerous other ailments showed highest degree of informant consensus. While, lower ICF values were observed for cough (0.55), wound healing (0.75), skin disease (0.44), piles (0.57) and ringworm (0.62). Lower ICF values signified the randomness of the particular ailment category and represented minimal information sharing for that particular ailment.

**DISCUSSION:** The findings of the study indicate close relationship of the local residents with plants. Local people, particularly living in rural and remote areas utilize plants for numerous purposes *viz.* aesthetic, devotional, positivity, pollution scavengers, industries, medicinal, food and fodder. The region is a rich treasure chest of cultivated and wild OPs. This selection of OPs by the local residents is believed to have been influenced by numerous factors, primarily by socioeconomic and cultural factors <sup>7, 22, 23</sup>.

A total of 91 OPs belonging to 42 families have been documented. The documented OPs were utilized as garden (G), pot (P), bouquet/cut flower/cut foliage (B), avenue plant (A), road dividers (R), religious and cultural (RC), hedge and fencing (H), lawn covers (L). During the study, the ornamental uses of plants were classified into different sections based on observations and personnel interviews with informants from different socioeconomic and cultural backgrounds. All the plants grown on both sides of the roads primarily for shade, beautification and real estate enhancement were listed as avenue plants <sup>24, 25</sup>. It was evident from the results that combinations of cultivated and wild plants were used in different ornamental categories.

Albizia lebbeck, Delonix regia, Melia azedarach, Morus alba, Tabernaemontana divaricata were widely used avenue plants in the region. Although the documentation of avenue plants has not been done from the region, but there are instances of these plants being documented in plant biodiversity studies <sup>26, 18</sup>. All the plants grown in institutional, public and home gardens were listed as garden plants and fulfilled various goals like beautification of the estates, stress reduction, psychological balancing, positivity and build curiosity <sup>27</sup>. Similar findings were also observed in other ornamental studies from India and other nations <sup>18, 28</sup>.

OPs grown in pots and used for decoration of public, private offices, hospitals, industries, educational institutes, terrace gardens, balconies were enlisted into pot plants categories <sup>29</sup>. Rosa indica, Epipremnum aureum, Polianthes tuberosa, Asparagus racemosus, and Aloe vera were the region's most frequently encountered pot plants. Studies have also suggested the use of similar plant species decorations, specifically for homegardens <sup>30, 31</sup>. Bouquet/cut flower/ cut foliage category included those plants which were used by local florists, nurseries, and residents in their houses and offices for decoration purpose <sup>32</sup>. Rosa indica, Canna indica, Asparagus racemosus, Saccharum spontaneum, Tagetes erecta, Portulaca oleracea, were the most dominantly used plants. Hedge and fencing plants category included those shrub or trees which were closely grown and had profuse branching. These plants are used for demarcation of boundaries, maintaining privacy and as wall against stray animals <sup>3</sup>. These included

Clerodendrum phlomidis, Pithecellobium dulce, Lawsonia inermis and Hibiscus rosa-sinensis relatable results were also shared by numerous studies <sup>28, 30, 31</sup>. Road dividers included those plant species which were grown between roads and dividers with the purpose of absorbing dust, aesthetic appearance to pavements, improve air quality, and protection from high beam lights from vehicles. These includes Albizia lebbeck, Hibiscus rosa-sinensis, Putranjiva roxburghii, Bougainvillea spectabilis, Cascabela thevetia, Nerium oleander and were majorly grown and maintained by the government and private agencies <sup>24</sup>.

There is growing interest in plants for lawn covers, including species used for reviving barren land and preparing grass beds in gardens and homes. Religious and cultural plant species were also noted during the study tenure. These included *Crinum asiaticum*, *Tecomella undulata*, *Canna indica*, *Butea monosperma*, *Mitragyna parvifolia*, *Datura metel* and *Ficus religiosa*. Different studies also reported similar findings in similar socio-cultural traditions and conditions <sup>33, 34, 35</sup>. It was evident from the results that wild plants were prominently used by different fractions of the society primarily due to the low cost of maintenance and domestication of wild ornamental species <sup>36</sup>.

Industries, hospitals, and shopping malls consisted of cultivated ornamental plants procured from private nurseries due to the distribution of cultivated ornamentals by private nurseries for maintaining status and institutional integrity<sup>37</sup>. While, homesteads, terrace gardens, educational institutes, temples, ashrams, and nurseries consisted of both cultivated and wild species of plants. It was also observed that most wild plant species grown in homes were shared amongst the local residents like Acacia leucocephloea, Cynodon dactylon, Albizia lebbeck, Aloe vera, Opuntia dillenii, and Tinospora sinensis. The previous studies have also highlighted the impact of urbanization on perception and traditional knowledge of medicinal plants <sup>18</sup>. Results have also exhibited that the nearby local areas have massive ethnomedicinal information. Countless individuals, especially those living in rural and remote regions, use them for essential medical services. Nearby individuals depend on ethnomedicinal plants because of their availability, efficacy, and affordability. It was observed during

the tenure of study, that maximum participation was from temple priests, gardeners, workers and owners of nurseries. The large number of OPs species belonged to Leguminosae followed by Asteraceae, Euphobiaceae, Poaceae, Apocynaceae, Lamiaceae, Bignoniaceae, Convolvulaceae, Nyctaginaceae and Solanaceae families. The dominance of these families could be attributed to prevailing edaphoclimatic conditions. Further, the dominance of Leguminosae members in the region and adjoining areas have also been reported by earlier studies 10, 38, 39.

Herbaceous plants (43.96%) were the dominating life form in this region followed by trees, shrubs, twines, climbers and creepers. These findings are like other past investigations and could be inferred to high usage of herbaceous plants in gardens, pots and institutions for ornamental purposes<sup>40, 41, 42</sup>. This could be ascribed to their easy accessibility in the nearby regions and nurseries than different habits like trees, bushes and climbers. The findings of the current study are in concurrence with the findings of the previous studies 43,44.

Leaves were the most often utilized plant part, followed by the roots, entire plant, seeds, bark, flower, fruit, stem, petal, bulb, gum, and latex. Similar findings have also been reported in other ethnomedicinal and ethnopharmacological studies 38, 39, 43, 40, 41. Leaves are a rich reservoir of diverse phytochemicals <sup>45</sup>. Moreover, reaping leaves guarantees the survival of the plants dissimilar to the roots, stem bark, and entire plant. The current study's findings likewise showed maximum utilization of freshly gathered plant parts for therapeutic purposes for the treatment of different ailments. The broad utilization of fresh plant materials followed by dried powder, latex and gel in the space might be connected with the thought that active constituents could be lost on drying. Other ethnomedicinal studies have additionally opined that fresh parts have better viability when contrasted with the dried plant parts 46, 48. The maximum ethnomedicinal uses were reported for skin disease (17) followed by wounds, boils (13), constipation (12), piles, cough (10), jaundice, asthma (09), swelling, and pimples (07). Skin disease, wounds, boils, constipation, piles, cough, jaundice, and asthma are the most common ailments in the region. The homogeneity of the

ethnomedicinal information led to the discovery of frequently shared knowledge for treating various routine maladies like gastrointestinal issues, skin allergies, sores, urinary tract infection, male sexual potency, bone fracture, dandruff, early delivery in cattle, uterus cleaning in cows, gynecological disorder, foeticidal, inflammation and pain which showed ICF value of 1. While, certain ailment categories were found to be rarely shared amongst the individuals, like cough, wound healing, skin disease, piles, and ringworm.

Other ethnomedicinal studies have also shared findings that have documented higher and lower ICF values for respective categories <sup>10, 21, 23, 42</sup>. Thus, locals have identified various ways of their treatments over the period through hits and trials. Similar other reports favor the present investigations from other communities <sup>46, 47, 49</sup>. Our analysis confirmed the availability hypothesis and revealed that most OPs are utilized for numerous ornamental and medicinal purposes in the region.

Limitations of the Current Study: The current study attempted to incorporate informants from backgrounds, specifically from adornment point of view for which individuals working in Nurseries, floral shops, and gardeners working in different institutions were approached. However, the region is facing zealous development, but there is little development in the OPs sector. It was observed there is limited no. of nurseries in the district, and the majority of the nurseries are primarily restricted to Rewari block. Further, the Rewari and Bawal blocks were the only blocks that had reputed schools, hospitals, shopping malls and factories which have tried to incorporate OPs for positive ambience and beautification purposes. Thus, other community blocks of the district were neglected from OPs perspective.

Moreover, the ethnomedicinal knowledge was mainly restricted to local residents, temple priests, and region gardeners. It was also observed that the informants harbored of aged most the ethnomedicinal knowledge and younger generations were not very keen to accept this traditional knowledge. The toxicological profile of the plants documented was neglected in the study, which should be consolidated in future studies.

**CONCLUSION:** The current ethnomedicinal exploration of wild and cultivated ornamental plants in Rewari district revealed 91 plant species belonging to 42 different families. It was conclusive from the study that the residents of the Rewari district are using a combination of wild and cultivated ornamental plants in gardens, pots, bouquet/cut flower/ cut foliage, as avenue plants, road dividers, religious, cultural, lawn covers, hedge, and fencing. The selection of OPs by the local people was greatly influenced by the Sociocultural and economic factors, which further paved the way for the selection of wild plants for ornamental purposes. It was evident from the findings that the local people harbour immense ethnomedicinal knowledge and use it frequently to treat various routine maladies. However, it is recommended to conduct more studies on the validation of ethnomedicinal claims as no such studies have been conducted on the ethnomedicinal ornamental plants from the region. Further, the findings of the study provide useful information that can be utilized in urban forestry planning and redesigning of nurseries that could incorporate wild plants of the region. The present study is expected to help in conservation and sustainable use and influence the floristic perspective for utilization of local ornamental flora of the region for utilization by local people for multipurpose uses. The current study will be useful for local inhabitants of the region to develop diversified, sustainable home gardens and revenue for local people by promoting younger generations into OPs businesses and startups. It is recommended to conduct more in-depth studies on the impacts of OPs on households and

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ethnopharmacological studies.

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