

## ETHNOBOTANICAL STUDY OF MEDICINAL PLANTS HATHIAN AND RUSTUM VALLEYS MARDAN AND MAIDAN VALLEY DIR LOWER KHYBER PAKHTUNKHWA PAKISTAN

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### ABSTRACT

There are rich florals of medicinal plants and ethno botanical information in Rustam and Hattian Valleys Distt Mardan and Maidan valley Dir Lower. Plants have been used as traditional medicine around the globe. Local people depend upon on these medicines to fulfill their requirements and frequently know about the use of medicine. Main aims of the study are to conserve the old knowledge about the medicinal plants. The Ethno medicinal information were collected from 122 plants belonging to 52 families, among these are 20% tree, 61.75% herb, 18.25% shrubs These plants are used for the treatment of Carminative major part i.e. leaves, stem, rhizome, fruits, seed and root and also used for various purposes including Propagative, Anti-diarrheal, Digestive, Stimulant etc. we collected some plants which used in different diseases. The literacy ratio of the area is low there for the people of the area used medicinal plants as fuel, fodder and for furniture purposes. Due to population explosion medicinal plants are decreasing day by day. The medicinal plants are the chief source of medicine for the local people and are commonly used. All the plants have ethno botanical values in the form of shoots, oats and rhizomes. The immoderate use for medicinal purposes, over grazing, deforestation, is the main threats to these medicinal plants. From the result it is concluded that awareness among the people are very necessary.

**Key words:** Ethnobotanical, Medicinal plants, Uses, Aromatic plant, blood purifier, diarrhea, cough, pain killer

### Introduction to Topic

The term Ethno-botany used for peoples perspective concerning plants was first recommended by John Harsh berger in 1896 to define a field of botany of native

peoples (Cotton, 1996). Many botanists were already including the use of plants by people within their studies already the use of the term ethno-botany. Because ethno-botanists wish to show plants which are used as medicine, food, shelter, clothing, hunting and for the religious programs. They highlighted the relation between the environment and society. This structure suggestions its origin to Greek medicine, which was approved by Arabs and then extent to India and Europe. These medicines have fewer side effects and man can get it simply from nature. Unani system is dominant in Pakistan but the ethno medicinal performs are also seen in the inaccessible areas (Shaheen et al., 2019). The ethno botanist look into how plants are used by the local population for housing medicine clothing and stalking purposes. It is the association between a given society and its floral biodiversity (Bano et al., 2014). Researchers that discovered the quantitative methods and amounts used and distributed by the local people were Shuiab *et al.*, (2014), Zentet *et al.*, (2004), Hamayun (2005) and Martin, Gary (2010). Man is dependent on plants since early time to concern for a variety of illnesses and disorders. The communication of men and plant lead to founding of foreseeable knowledge of plants, especially allopathic drug (Berkes, F. (1993) According to an estimate 2/3 of the world's plants species at least 12000 have medicinal value come from the developing countries (Atta, *et al.*, 2017) The ethno botany has a vital rule in the natural biodiversity fortification, culture and in particular civilizations. The traditional system of knowledge is thousands of years older not only for medicinal purposes but for food shelter hunting and protection purposes. Ethno botany is a building science and has a essential role in plants enhancement and its foodstuffs Cousins, S. R., & Witkowski (2015). Approximately 80% people of the world and 84% of Pakistan depends on the characteristic system of shape mind (Mehmood et al., 1999). Unnani system is principal in Pakistan but the ethno medicinal plants use are also see in the far regions (Ahmad et al., 2019). In India much literature applicable to ethno botany can be traced in the Vedic literature, Charak and Shusruta and Charak Samhita appeared as the most significant works. The handy advantages in ethno botany go reverse to the start of development when people trusted more on plants as a means of continuous existence. These days the world of ethno botany backs a mixture of skills: botanical supervision for detection and preservation of plant samples, anthropological education to know the civilizing concept around the awareness of plants, linguistic exercise, at slightest satisfactory to transcribe local terms and local morphology because the national healers are regularly unwilling to exactly distribute their knowledge to outsider (San 1983). Many of the researchers give their concentration to stock up and document knowledge about the plants and native people living in the world (Abbasi *et al.*, 2013). The conservation status of the plants and strategies on the protection of the high value medicinal flora are also mentioned for future use (Debbarm *et al.*, 2009). Documentation was completed by Asad *et al.*, (2011) certain plants species of Pakistan were enlisted showing anti-venom actions. Plants species were collected that have action against snake bite were 35 in number. It is admirable to note that more than 10% of the flora of Pakistan is dying out (Shinwari *et al.*, 2002) The present study examined the ethnomedicinally significant plants of several regions of Rustam, Hattian valleys Mardan and

Maidan valley, District Dir Lower. This study were designed to article ethnomedicinal uses of plants between various regions Rustam,Hattian valleys Mardan and Maidan Valley, Dir Lower.Our results shown that most of the species had several uses while few had single application.

#### **MATERIALS AND METHODS**

The study was conducted on local populations of Rustam and Hathian valleys District Mardan and Maidan valley Malakand during April 2021 to November 2021.Regular Field visit for collection of plants.After collection plants were contaminated and well-preserved for identification.The specimens are collected at every stage of their growth and reproduction and from different localities and habitat mostly from hilly areas of Rustam , Hathian and Maidan valleys. The two or three specimen collected in the late flowering season having both flowers and young fruits.

A list of instruments and material required for plants collection.

- A pair of secateurs for cutting woody twigs.
- A knife for cutting different parts of plant.
- A pair of forceps.
- A wooden plant press.
- Newspapers.
- A small note book to write notes about plants and their habitat.

#### **Preservation:**

After collecting the plants were pressed flat, to grit get decent specimens. The plants were pressed before their drooping between the pages of newspaper. The newspaper changed next every 24 hours. The exchanging of newspaper depends upon the weather situations.After Pressing and withering, the plant specimens were mounting on herbarium sheets for their identification.After their identification moved all the available information about the taxa upon their respective herbarium sheets.

#### **Identification:**

The collected plants were identified with flora of Pakistan.

## Result

In the present research area total number of ethno-medicinal plant was 122 plants which belongs to 52 families which were reported from different regions of Rustam and Hattian valley Distt Mardan, Khyber Pakhtunkhwa, Pakistan. Ethno-medicinal information of each species including botanical names, family name, local name, habit, plant part use, application of each plant. The family Asteraceae containing 10 (23.6%), sapindaceae 4 (9.44%), salicaceae 3 (7.8%), apiaceae 2 (4.72%), meliaceae 2 (4.72%), polygonaceae 2 (4.72%) lamiaceae 5 (11.8%) canabinaceae 2 (4.72%), moraceae 6 (14.16%), rosaceae 3 (7.8%), poaceae 9 (21.24%), myrtaceae 3 (7.8%), chenopodiaceae 3 (7.8%), malvaceae 2 (4.72%), Rutaceae 3 (7.8%), pinaceae 3 (7.8%), anacardiaceae, liliaceae 2 (4.72%), oliaceae 4 (9.44%), zygophyllaceae 2 (4.72%), fabaceae 2 (4.72%), brassicaceae 6 (14.16%), amaranthaceae 2 (4.72%), scrophulariaceae, laminaceae 3 (7.8%), iridaceae 3 (7.8%), amaryllidaceae, plantaginaceae 3 (7.8%), euphorbiaceae 3 (7.8%), oxalidaceae 2 (4.72%), urticaceae, fumariaceae, Cucurbitaceae, solanaceae, 3 (7.8%), Mimosaceae, Rhamnaceae, Nyctaginaceae, Asclepiadaceae, Caesalpiniaceae, Canabinaceae, Convolvulaceae, Cuscutaceae, Cyperaceae, Alismataceae 3 (7.8%), Nyctaginaceae, Punicaceae 3 (7.8%), Papervaceae 2 (4.72%), Ziziberaceae, Araliaceae 2 (4.72%), Menispermaceae 2 (4.72%), Luraceae 2 (4.72%), Serophulariaceae 3 (7.8%), It was observed that the Leaves were used (53.96%) followed by Fruit (20.63%) Whole plant (14.38%), Seed (7.9%), Root (7.9%), Stem (7.9%), Bark (6.3%), Gum (4.76%), Vegetable (4.76%), Flower (3.17%), Rhizome (1.58%) Latex (1.58%), Powder (1.58%). The majority documented plants were herb 38 (60.32%), followed by tree 17 (27%), and shrub 08 (12.69%)

Table 01: List of some medicinal plant and their botanical name, family

S. NO	Botanical Name of the plant	Family Name	Local Name	Habit	Part Used	Medicinal Uses	S.NO	Botanical name of the plant	Family name	Local name	Habit	Part used	Uses
1.	<i>Dodonaea viscosa</i>	Sapindaceae	Goraske	T	Stem, Leaf	Sore Throats, treat cold and Malaria	61.	<i>Acacia nilotica L.</i>	Mimosaceae	Kikar	T	Gum powder	Diarrhea, Cough, Diabetes
2.	<i>Salix Alba</i>	Salicaceae	Gurba Bed	T	Bark	Cold, Fever and Joint pain	62.	<i>Acacia modesta Wall</i>	Mimosaceae	Palosa	T	Gum	Blood purifier
3.	<i>Coriandrum sativum L.</i>	Apiaceae	Danyal	S	Fruits	blood pressure carminative agent.	63.	<i>Artemesia maritima L.</i>	Asteraceae	Terkha	H	Whole plant	Carminative, pain killer
4.	<i>Melia</i>	Meliaceae	Tora	T	Fruit	Orally	64.	<i>Artemesia</i>	Asteraceae	Jouke	H	Leaf	Vermicide &

	<i>azedarachL.</i>	eae	bakayan		ts	for health maintenance.		<i>scoparia Waldst.</i>	eae	y		es	purgative
5.	<i>Rumex dentatusL.</i>	Polygonaceae	Shalkhey	H	Leaves	diuretic, astringent and irritation	65.	<i>Aloe vera (L.) Burm</i>	Liliaceae	Alove ra	H	Leaves	Clear acne and digestion
6.	<i>Mentha longifolia (L.)</i>	Lamiaceae	Wenalay	S	Roots	Diarrhea temperature	66.	<i>Allium sativum L.</i>	Liliaceae	Ooga	H	Bulb	Blood pressure, diarrhea
7.	<i>Cannabis sativaL.</i>	Canabaceae	Bang	H	Fruit, seed	Headache, falling hairs	67.	<i>Boerhaavia procumbens Banks ex Roxb.</i>	Nyctaginaceae	Insat	H	Whole plant	night blindness, jaundice, inflammation.
8.	<i>Mentha arvensisL.</i>	Lamiaceae	Podina	H	Leaves, stem	Diarrhea, indigestion	68.	<i>Coriandrum sativum L.</i>	Apiaceae	Dania	H	Leaves, stem	Pain killer
9.	<i>Morus albaL.</i>	Moraceae	Spin tooth	T	Fruits	Purgative, laxative emollient	69.	<i>Calotropis procera (Wight.) Ali</i>	Asclepiadaceae	Spalmay	H	Leaves, Fruit	Snake bite, ear pain, cough, asthma.
10.	<i>Prunus arvensisL.</i>	Rosaceae	Khobany	T	Fruits	edible, fuel.	70.	<i>Xanthium strumarium L.</i>	Asteraceae	Geshke	H	Leaves	Eczema, blood purifier
11.	<i>Cymbopogon citratus</i>	Poaceae	Lemon grass	H	Leaves	digestive Tract.	71.	<i>Sonchus asper (L.) Hill</i>	Asteraceae	Shodapai	H	Leaves	Asthma, anti-poison
12.	<i>Psidium guajava</i>	Myrtaceae	Amrood	T	Fruits, Leaves	edible, diarrhea and lung diseases.	72.	<i>Carthamus oxycantha M. Bieb.</i>	Asteraceae	Kareeza	H	seed leaves	Laxative, fever, measeles
13.	<i>Cynodon dactylon (L.) Pers.</i>	Poaceae	Kabal	H	WP	ulcer.	73.	<i>Eruca sativa Mill</i>	Brassicaceae	Jama ma	H	Leaves	Skin diseases, cough
14.	<i>Ficus carica L.</i>	Moraceae	Inzar	T	Fruits	skin <b>problem</b>	74.	<i>Nasturtium officinale R. Br.</i>	Brassicaceae	Tarm eera	H	Leaves, seed	Purgative
15.	<i>Eucalyptus camaldulensis</i>	Myrtaceae	Lachi	T	Leaves	Asthma	75.	<i>Cassia fistula L.</i>	Caesalpiniaceae	Lamdes	T	Fruit	Diarrhea, abdominal pain
16.	<i>Prunus persica (L.)</i>	Rosaceae	Shaltalu	T	Fruit, seed	Strep throat	76.	<i>Cannabis sativa L.</i>	Canabaceae	Bang	H	Fruit, seed	Headache, jaundice, falling hairs

	<i>Batsch</i>				s								
17.	<i>Chenopodium Murale</i>	Chenopodiaceae	Chulwari	H	Whole Plant	piles, diuretic, diarrhea.	77.	<i>Chenopodium album L.</i>	Chenopodiaceae	Sarmey	H	Leaves	Carminative
18.	<i>Origanum vulgare L.</i>	Lamiaceae	Shamake	H	Leaves	Fever, diabetes	78.	<i>Spinacea oleracea L.</i>	Chenopodiaceae	Paluk	H	Leaves	Diuretic, stomach acidity
19.	<i>Sonchus asper (L.) Hill</i>	Asteraceae	Shodapai	H	Leaves	Asthma, antipoison	79	<i>Convolvulus arvensis L.</i>	Convolvulaceae	Perwaty	H C	whole plant	Antidandruf, skin diseases
20.	<i>Malva neglecta</i>	Malvaceae	Panerak	H	Leaves	Laxative	80	<i>Citrullus lanathus Mats.</i>	Cucurbitaceae	Hindwana	H	Fruit	Blood purifier
21.	<i>Citrus Lemela</i>	Rutaceae	Nimbo	T	Fruit	Analgesic	81	<i>Momordica charantica L.</i>	Cucurbitaceae	Karela	H C	Vegetable	Diabetes
22.	<i>Pinus Roxburghina</i>	Pinaceae	Pine	T	Fruit	Aromatic, haemostatic	82	<i>Luffa cylindrica L.</i>	Cucurbitaceae	Torai	H C	vegetable	Ulcer
23.	<i>Mongibera Indica</i>	Anacardiaceae	Mango	T	leaves	Diabetes, laxative	83	<i>Cuscuta reflexa Roxb.</i>	Cuscutaceae	Zailay	H P	Whole plant	Paralysis, anti-vomiting
24.	<i>Vitis Venifera</i>	Rosaceae	Anar	T	fruit	diarrhea and dysentery.	84	<i>Cyperus rotundus L.</i>	Cyperaceae	Dela	H	Leaves	Backache, pimples
25.	<i>Aloe vera (L.) Burm</i>	Liliaceae	Aloveira	H	Leaves	Clear acne and digestive health	85	<i>Ricinus communis L.</i>	Euphorbiaceae	Arand	T	Flowers fruit	Snake bite
26.	<i>Eriobotrya Japonica</i>	Rosaceae	Locat	T	Leaves	Coug, diabetes, cancer.	86	<i>Avena sativa L.</i>	Poaceae	Jawde r	H	Whole plant	Treat anxiety
27.	<i>Morus Nigra</i>	Moraceae	Tour Toot	T	Leaves fruit	use for purifying blood	87	<i>Cynodon dactylon L.</i>	Poaceae	Kabal	H	Leaves	Blood purifier
28.	<i>Ajugabractosa</i>	Lamiaceae	Gotee	H	Leaves +Root	aromatic, tonic, stimulant, diuretic	88	<i>Meliaazadrach</i>	Meliaceae	Torahandi	T	Bark and leaves	diabetes, piles and blood purifier

29.	<i>Oliaferogina</i>	Oliaceae	Khona h	T	Leaves	diabetes as blood purifier.	89	<i>Olia ferruginea</i>	Oliaceae	Khona	T	Leaves	diabetes and blood purifier
30.	<i>Peganum harmala .L</i>	Zygophyllaceae	Spylani	H	Seeds	antimicrobial, gastrointestinal	90	<i>Morusalba</i>	Moraceae	Speentoot	T	Bark and fruit	Blood purifier
31.	<i>Medicago truncatula.L</i>	Fabaceae	peshtary	H	Whole plant	antioxidant, antiulcer	91	<i>Morusnigra</i>	Moraceae	Toortoot	T	Bark and fruit	Blood purifier
32.	<i>Brassica campestris.L</i>	Brassicaceae	Shars ham	H	whole plant	In Skin diseases, Diabetes.	92	<i>Alisma plantagoaquatica L.</i>	Alismataceae	Ghwai aby	H	Leaves	Digestive disorder, sore throat, and hepatitis
33.	<i>Spinacia oleracea.L</i>	Amaranthaceae	Palak	H	Whole plant	Stomach, stimulant, cancer.	93	<i>Pyrusmalus</i>	Roseaceae	Mana	T	Fruit and root	tonic and purifying blood
34.	<i>Nasturtium officinale</i>	Brassicaceae	Tarmera	H	Leaves	cough, and bronchitis .	94	<i>Ficuscarica</i>	Moraceae	Inzar	T	Fruit and stem	for piles and for purifying blood
35.	<i>Verbascum thapsus .L</i>	Scrophulariaceae	khwar dag	H	Whole plant	asthma, coughs and headaches	95	<i>Platanus orientalis L.</i>	Platanaceae	China r	T	Powder	Inflammation, constipation, pain killer
37	<i>Salvia moorcroftinia.L</i>	Lamiaceae	Khwar ghwag	H	Root , leaves	Coughs, Emetic, dysentery, haemorrhoid	96	<i>Menthe arvensis L.</i>	Lamiaceae	Podina	H	Leaves ,stem	Diarrhea, gestroubles
36.	<i>Zea mays.L</i>	Poaceae	Jowar	H	Corn silk	kidney stones, and bedwetting .	97	<i>Menthe longifolia L.</i>	Lamiaceae	Elane	H	Leaves, stem	Jaundice, carminative
37.	<i>Iris germanica.L</i>	Iridaceae	Golin gus	H	Roots	coughs, catarrh and diarrhoea.	98	<i>Origanum vulgare L.</i>	Lamiaceae	Shamake	H	Leaves	Fever ,diabetes
38.	<i>Allium sativum .L</i>	Amaryllidaceae	Ogaa	H	bulb	High blood pressure, high cholesterol	99	<i>Malva neglecta Wallr.</i>	Malvaceae	Panerak	H	Leaves	Laxative

39.	<i>kickxia ramosis simawal</i>	Plantaginaceae	Zyargwali	H	Whole plant	rheumatism, diabetes, jaundice	100	<i>Abelmoschus esculentus L.</i>	Malvaceae	Binday	H	Vegetable	Burning sensation in bladder
40.	<i>Euphorbia helioscopia. L</i>	Euphorbiaceae	Mandano	H	Stem, leaves	anticancer properties.	101	<i>Ficus religiosa L.</i>	Moraceae	Peepal	T	Leaves stem	Vermicide, cough, asthma
41.	<i>Citrus sinensis. L</i>	rutaceae	Maltaa	T	Fruit	cholesterol, blood pressure	102	<i>Eucalyptus camaldulensis Dehnh</i>	Myrtaceae	Lachi	T	Leaves	Asthma
44	<i>Avena sativae . L</i>	Poaceae	Jowdarr	H	Whole plant	migraines, shingles, fatigue,	103	<i>Mirabilis jalapa L.</i>	Nyctaginaceae	Gulabasi	H	Leaves, tuber	Pain, chest pain, pus reliver
45	<i>Eulaliopsisbinate. L</i>	Poaceae	Sharghashi	H	Whole plant	antibacterial&antioxidant activity.	104	<i>Oxalis corniculata L.</i>	Oxalidaceae	Treewake	H	Leaves, fruit	Eye redness and irritation
46	<i>Hordium murinum . L</i>	Poaceae	Warbasy	H	whole plant	bladder ailments	105	<i>Punica granatum L.</i>	Puniceae	Anar	T	Fruit	Astringent, blood purifier
47	<i>Triticum aestivum. L</i>	Poaceae	Ghanam	H	whole plant	Digestion, blood pressure.	106	<i>Ziziphus jujube Mill.</i>	Rhamnaceae	Bera	T	Leaves, fruit	Bronchitis, cough, diabetes
49	<i>Oxalis corniculata. L</i>	Oxalidaceae	Taroky	H	whole plant	fever, urinary tract infections,	107	<i>Papaver somnifrum L.</i>	papervaceae	Doda	H	Seed & fruit	Cough & could
50	<i>Silybum marianum. L</i>	Asteraceae	kareza	H	whole plant	Hepatitis, cirrhosis, cancer.	108	<i>Prunus persica L.</i>	Rosaceae	Shaptalu	T	Fruit, leaves	Strep throat, cough & could
51	<i>Eryngium planum. L</i>	poaceae	seaholly	H	whole plant	diuretic, a stimulant,	109	<i>Citrus aurantifolia Christman n.</i>	Rutaceae	Nembo	S	Fruit, leaves	Nausea, vomiting
52	<i>Iris germanica. L</i>	Iridaceae	Golinus	H	whole plant	diuretic, coughs, catarrh	110	<i>Dodonaea viscosa (L.) Jacq.</i>	Sapindaceae	Ghearsky	S	Leaves	Burnt regions
53	<i>Urtica dioica.</i>	Urticaceae	Comennettl	H	whole	Hypertension,	111	<i>Datura stramoniu</i>	Solanaceae	Baltura	H	Leaves,	Abdominal pain, cough,



	<i>L</i>		e		plant	hyperplasia.		<i>m L.</i>				fruit	asthma
54	<i>Erigeron Canadensis. L</i>	Asteraceae	Horseweed	H	whole plant	diarrhoea, ulceration.	112	<i>Solanum nigrum L.</i>	Solanaceae	Karmachu	H	Fruit, gum	Skin diseases, swellings
55	<i>Lathyrus aphaca. L</i>	Fabaceae	Yellow pea	H	whole plant	Antibacterial	113	<i>Rosa indica L.</i>	Rosaceae	Gulab	S	Leaves	Intestinal disorder
56	<i>Fumaria indica. L</i>	Fumariaceae	papra	H	whole plant	liver complaints, vomiting.	114	<i>Daucus carota L.</i>	Apiaceae	Gazara	H	Root	Eye sight
57	<i>kickxia ramosissima. L</i>	Plantaginaceae	Fluelen	H	whole plant	Diabetes, immune system	115	<i>Fagonia cretica Burm.</i>	Zygophyllaceae	Azgha key	H	Whole plant	Typhoid, blood purifier
58	<i>Euphorbia helioscopia. L</i>	Euphorbiaceae	Mandano	H	whole plant	Anticancer.	116	<i>Zizipusmaritiana Mill</i>	Rhmanaceae	Markhany	T	Leaves, fruit	Diarrhea, dysentery & cough
59	<i>xanthium strumarium. L</i>	Asteraceae	geshey	H	Leaves	laxative, digestive, antipyretic.	117	<i>Zingiberofficinale Rose</i>	Ziziberaceae	Adrak	H	Rhizome	Corminative, stimulant, piles
60	<i>Polygonum hydropiper. L</i>	Polygonaceae	palpolak	H	Leaves	rheumatic pain, and skin diseases	118	<i>Hedera helix</i>	Araliaceae	Zalawaly	S	Seed & leaves	Purifying blood
119	<i>Tinospora coralifolia</i>	Menispermaceae	Dilpana	S	Whole plant	Purifying blood	120	<i>Arctium</i>	Daisy	Ghorerai	S	Whole plant	Purifying blood
121	<i>Sassafras albidum</i>	Luraceae	Sassafaras	S	Whole plant	Purifying blood	122	<i>Rehmannia glutinosa</i>	Scrophulariaceae	Babaghokhi	S	Whole plant	Purifying blood

## Discussion

Rustam

and Hattian valleys distric Mardan and Maidan valley distric Lower Dir is rewarded with natural resources and huge forest but the people are not financially stable. The area is rich in medicinal plants and have highly diverse ecosystem. it has been reported that about 6,000 species of medicinal plants are distributed in which 600/700 are used for various medicinal purposes. some plants have several uses and some have related acceptable utility. The study was undertaken in Mardan and Dir Lower districts in the Khber Pahtunkhwa province. The study was conducted on local populations of Rustam, Hattian and Maidan valleys during April 2021 to November 2021. Regular field visit for collection of plants. After collection plants were contaminated and well-preserved for identification. They were identified with the help of presented literature (Hazrat *et al.*, 2013). A questionnaire were arranged for ethno medicinal survey counting different information's viz. local names, parts used against different medications and to define its habits, powdered or juice form the local communities. People with different ages were interviewed but mostly people were interviewed from 30 to 65 years old. The people of different age groups were interviewed and information's like i.e. local name, its nature, local uses, parts used, distribution, flowering time, and fruiting time about the taxa were enquired. Also the data of rainfall, climate, temperature, and soil were collected from different areas of Rustam, Hattian and Maidan valleys. The ethnobotanical study of the area show that 122 species belonging to 52 different families, including *Mentha longifolia*, *Vitis vinifera*, etc, have medicinal importance and are used by the local people of the area for treatment of various diseases. The area is very rich to medicinal plants. Medicinal plants are considered to be important from economic point of view like fodder, shelter and furniture. Some remedies were used for human diseases and for animal diseases as well. Local people collected all plants species and used in different folk herbal remedies for curing their diseases, some plants which are not available in study area people purchased it from local market and used as their primary medicinal source (Begum *et al.*, 2005). The knowledge about medicinal plants and their preparation is now confined mostly to old people. Tare now seldom used. According to (shah *et al.*, 2020) due to the death of older people the local knowledge related to medicinal plants usage is under high risk of elimination from the local communities. The situation is more serious in this region where the knowledge of using traditional plants among the young population is extremely low. The ratio of

using medicinal plants is however still prominent among the women and old population thus it is necessary to promote knowledge of medicinal plants to the young population. Similar survey has been conducted by (shinwari *et al.*, 2011). Majority of the plant uses for the Diarrhea, Dysentery, Cough, Hypertension, Tonic, Malaria, Asthma, and many skin disease. The information collected about different plants but found about some of them more indigenous knowledge, Hamayun, in (2003) *Zizipus jujuba*, *Amaranthus viridis*, *Mentha longifolia*, *Mentha arvensis*, *Berberis lyceum*, *Rubus fruticosus*, *Acacia nilotica*, *Conyzacanadensis*, *Verbascum thapus*, *Ailanthus altissima*, *Plantanus orientalis* mention for the diarrhea so my results is same to the Haymoon results. Wood of *Acacia nilotica* used for burning, furniture and timber as well as for dysentery and cholera diarrhea. Bahadori and Zengin., (2018) said that the whole plants of *Mentha arvensis* and *Mentha longifolia* used for digestive trouble... *Rumex hastatus* is cooling agent and used for throat disease *Myrtus communis* is suitable for cholera, diarrhea, cough and fever. Leaves of *Amaranthus viridis* are used for digestive system Wazir *et al.*, (2018) similarly disease succeeded in the study area and for the treatment of these mostly local plant are used like for treatment of dysentery and diarrhea *Conyzacanadensis* and *Zizipus jujube*. The research valleys has a rural civilization and people have own way of dress weddings cultural functions, festivals and other events. The people of the area are very close with nature and derive many of their needs from the natural environment. They obtain original knowledge about the local plants from their elders and the plants and plant material are used for medicines and other purposes. The present research was carried for the purpose to evaluate the Ethno botanical documentation about medicinal uses of the local vegetation of the research area including herbs shrubs and trees. The areas have a diverse flora out of which many have high medicinal and economical value.

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