ETHNOBOTANICAL STUDIES ON SOME USEFUL PLANTS OF DIR KOHISTAN VALLEYS, KPK, PAKISTAN

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Abstract

An ethnobotanical exploration was carried out in Dir Kohistan Valleys. The checklist consisted of 65 species out of which 62 species were of 47 angiospermic families while three were of gymnospermic families. These plants were used medicinally and for other purposes. The investigation indicated that medicinal plants were used singly or in mixtures by local inhabitants. It was observed that unplanned exploitation had resulted in loss of medicinally important plant species. It was concluded that reforestation programs followed by proper protection is need of time.

Introduction

The word "Kohistan" means the place of mountains. It is the name although given to all the hilly areas as Swat Kohistan, Dir Kohistan and Indus Kohistan (Hamayaun, 2005) valleys of Khyber Pakhtunkhwa, Pakistan. The Kohistan under focus is generally called as Dir Kohistan. Dir Kohistan Valleys cover 140,351 acres of the coniferous forests situated between latitude 35°-9' to 35°-47' and longitude 71°-52' to 72°-22' in the northern position of the watershed of Panjkora river. Territories adjoining the tract are Chitral on the north as well, on the West, Swat Kohistan and Upper Swat on the east and Painda khel and Dir on the South. The whole area is generally covered with forests. The research area is rich with medicinal plants and the local people of the area widely use them as a remedy for various ailments. The northern areas of Pakistan with unique biodiversity due to the presence of Himalayas, Kara Korums and Hindu-Kush mountain ranges are under tremendous pressure from locals because of illicit cutting of valuable plants, poor collection and storage methods of medicinal plants, smuggling of timber wood, over grazing, corrupt forest officials, illiterate population with no sense or lust for conservation and above all passive and non practical policies of Government as well as NGO,s working in the area (Hamayaun, 2005).

Pakistan has rich history on the folk use of plants. Afridi (1986) listed 67 medicinal plants from Khyber agency. Haq & Hussain (1993) reported local medicinal and other traditional uses of plants of Mansehra. Medicinal plants of Rawalpindi (Arshad & Akram, 1999; Durrani & Hussain, 2003), Kurram (Gillani *et al.*, 2003), Margalla (Shinwari & Khan, 1998), Abbotabad (Abbasi *et al.*, 2010), Kotli (Ajaib *et al.*, 2010), Chitral (Ali & Qaiser, 2009) and Attock (Noor & Kalsoom, 2011) have also been investigated. Ethnobotanical studies have also been made in the various parts of Dir Kohistan valleys (Gul *et al.*, 1999; Ali *et al.*, 2010). The area is rich in plant wealth; therefore this study has been undertaken to prepare an inventory of indigenous medicinal plants and to bring other traditional knowledge on record.

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Materials and Methods

Regular study trips were made to representative areas and collections were completed in their flowering season from March 2000 to August 2010. During these trips, different plants were collected, dried, documented and were identified both by comparing them with herbarium specimen and with the help of Flora of Pakistan (Stewart 1967, 1982). Specimen sets were given to the Herbarium of Quaid-e-Azam University for future reference. Through a questionnaire, medicinal plants usage data was collected from local people and Hakims that practice the medicine regularly.

Results and Discussion

The use of plants for the existence of human being is as old as the human race itself. The accumulation of knowledge of plants uses however co-evolved with human civilization through the experiential use of plants, generation after generation. People would have remained exposed to epidemic, endemic and chronic diseases, besides acute ailments (Hamayaun, 2003). The people of Dir Kohistan Khyber Pakhtunkhwa, Pakistan have always used medicinal plants for various diseases and have been dependent on surrounding plants. During the survey, information obtained about the uses of plants against different medical problems practiced by the people and Herbalist. The local community uses 65 species belonging to 50 families for various purposes. They used 59 plants for curing of different ailments (Table 1). Besides this other plants are used for many other purposes such as timber, fuel, fruit, potherb and fodder (Ahmad et al., 2009; Ghufran et al., 2010; Tareen et al., 2010; Hazrat et al., 2011; Khan et al., 2011). The basic health facilities are not available; therefore the inhabitants of the area largely depend on plants for the treatment of diseases. It was observed that old age people are more inclined to the use of plants as primary health care in comparison with young generation (Qureshi & Bhatti, 2009; Qureshi et al., 2009, 2010, 2011; Sardar & Khan 2009; Ahmad et al., 2010).

1. Acousta modesta Wall. Animarianthosee Sarba Zadia Animarianthose Sarba Zadia Animarianthose Animarianth	S. No.	Botanical name	Family	Local name	Parts used	Local uses	Flowering
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Acontum Meteorophyllum Wall, ex Royle Adhyrumlus aspera I. Amaranthaseae Sarba Zaha Annaranthaseae Chichan Annaranthaseae Chichan Annaranthaseae Mannaranthaseae Mannaranthaseae Chichan Annaranthaseae Mannaranthaseae Mann						honeybees.	
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Accraceae Salvagia Rhizom The Cheed Inturnous is salvagia Robas and Continum Intercraptifum Wall, ox Royle Ramanculasceae Sarba Zilan Roots Salvagia Rhizome The Cheed Inturnous Salvagia Sambaceae Sarba Zilan Wall Saxinge Particles Chairm The Cheed Time School The Cheed Time Roots are seen cheed to the School The Cheed Time Roots are seen cheed to the Cheed Time Roots are generally used in Artaceae Cheed Time Roots and School The Cheed Time Roots and Leaves T	ri	Aconitum violaceum. Jacq.ex Stapf.	Ranunculaceae	Zohar Mora	Roots	Roots (Tuber) are used for gout and rheumatism.	July-September
Acontium heterophyllium Wall, ex Royle Acontium heterophyllium Wall, ex Royle Aduathus adictional Mall Swape Aduathus Adiathus Ad	र्च	Acorus calamus L.	Aceraceae	Skhwaja	Rhizome	The dried rhizome is used in dysentery and chronic diarrhea.	April-October
Adiabate algebra of the control of t	'n	Aconitum heterophyllum Wall, ex Royle	Ranunculaceae	Sarba Zaila	Roots	The Dried roots from the male plant are given to weak children along	June-August
Advications and insistion (Mull.) Simple Amaranthaceae Spay Booty Roots Amaranthaceae Parkata Arisement florant solution Brocketia (Jaint florant solution) Brocketia (Jaint florant solution) Brocketia (Jaint florant solution) Brocketia (Jaint florant) Brocketia (Jaint florant solution) Calabraphy Brocketia (Jaint florant) Brocketia (Jaint florant solution) Calabraphy Brocketia (Jaint florant) Brocketia (Jaint florant) Brocketia (Jaint florant solution) Calabraphy Brocketia (Jaint floranticae) Broketia (Jain						with mutton for enhancing their growth and weight.	
Affauthus Listing Mulle, Sningle Simmerbosee Bakkah Wood Timber, Tell wood	9	Achyranthus aspera L.	Amaranthaceae	Spay booty	Roots	Roots are used for stomach, urine formation and cough.	April-August
Ainga bractoon Wallex Benth Lantiscee Pantkash Leaves Grands Alexandition syldiffer. Benth Annacandiaceae Grands Wallex Benth Annacandiaceae Grands Wallex Benth Annacandiaceae Grands Wallex Benth Annacandiaceae Grands Wallex Benth Annacandiaceae Ariacand Bentheria by Annacandiaceae Ariacand Januar Shott Annacand Bentheria by Annacandiaceae Rama Panta Berberis Josepha Berberis J	7.	Ailanthus altissima (Mull.) Swingle	Simarubaceae	Bakiana	Wood	Timber, Fuel wood, visited by honeybees.	July-September
Amountulises of rights L. Amountulisease of Gunbar (Nucle plant) Whole plant (Seed Based furnetis and expectormat. Local as folders: August (Seed Based furnetis and capacitormat. Local as folders: August (Seed Based furnetis and capacitormat. Local as folders: August (Seed Based furnetis and displacetic properties. Leaves are generally used in the Araceae (Sanfragueene (Sanfra	œ.	Ajuga bracteosa Wallex Benth	Lamiaceae	Panrkash	Leaves	Used against abdominal pain, fever and good for liver. Fish poison	February-June
Anagalis an eventis I Primulscene Chichna Whole plant Directic, dispherosis and expecterain Used is folder. Advingabili an eventis I Activates Ramuculaceae Wouli Gwalae Seels and leaves Seed leaves Seed leaves Seed and leaves Seed and leaves Seed and leaves Seed and leaves Rizone Berberis bycium Royle Bercheridaceae Ziarinega Rinzone Rizone Description is used for pamping through through the seed in the pamping through the seed is seed in the seed and through the seed in t	6	Amaranthus viridis L.	Amaranthaceae	Gunhar	Whole plant	Used as potherb, used as emollient poultice to abscesses and boils.	July-September
Aquilogia publifora Wall ex Royle Ranunculaceae Would Gwalae Seeds and leaves Seed has diaretic and diaphoretic properties. Leaves are generally used in the finitions of thizone is used for jaundice powder for theumatism. Actacase Madjary Rhizone Seed has diaretic and diaphoretic properties. Leaves are generally used in the finition of thizone is used for jaundice powder for theumatism. Berberidaceae Saxifingaceae Kamar panra Rhizone Phocotion of thizone is used for jaundice powder for thematism. Calondula consoperant (Lam) O. Kuntz. Berthaleeae Kamar panra Rhizone Phocotion of thizone is used for jaundice powder for thematism. Calondula consoperant (Lam) O. Kuntz. Askeraceae Tar gula Phocotion of thizone is used for panra and wounds. Calondula consolated (Lam) O. Kuntz. Askeraceae Shalmay Steam of leaves is used for promote of panra and survey. Calondula control or calondula value. Askeraceae Hun Roots and leave is used for Jaundice. Leaves are used for carried to promote digestion. Calondula value. Solumaceae Bhang Whole plant Its solution to the carries and used to promote digestion. Epidedra gerardiana Wall. Solumaceae Shin cal leaves Seeds and leaves was for carring ashma bronchitis and thematism.	10.	Anagallis arvensis L.	Primulaceae	Chichra	Whole plant	Diuretic, diaphoretic and expectorant, Used as fodder.	March-April
Aricacena flowing Aricacena flowing Rhizome flowed flowing Rhizome flowed f	11	Aquilegia publflora Wall.ex Royle	Ranunculaceae	Woudi Gwalae	Seeds and leaves	Seed has diuretic and diaphoretic properties. Leaves are generally used in lations for consument, and throats	July-September
Berberdaceae Ziarlingay Rhizome Decoction of rhizome is used for jaundice powder for rheumatism Bergenia ciliata (Haw) Stemb Saxifiagaceae Kamar panar Rhizome Decoction of rhizome is used for the teament of burns and wounds. Butea monosperma (Jam.) O. Kantz. Betulaceae Ziar galae Tower is suivised by honopless. Calandhua venisis L. Asteraceae Ziar galae Tower is used so fined. Level for teament of burns and wounds. Calonrium intybus L. Asteraceae Liangalae Proper is used for reament of burns and wounds. Calonrium intybus L. Asteraceae Hum Roots and leave is used for randice. Leaves are used as a "Sang" against or in the color is used for curing and antispasmodic. Copydalis govaniana Wall. Fumariaceae Distrum Roots and leave Roots and leaves for Jamdice. Leaves are used as "Sang" against properties. Dainaceae Distrum Roots and leaves Roed for earlies or towbles. Scels and leaves both are poisonous. Leaves are applied on boils for plant is used for curing asthma bronchitis and rheumatism. Bolanaceae Shamala Solanaceae Shamala Socks and leaves Roed and leaves both are poisonous. Leaves are used for lambles. Hypericane	12	Arisaema flavum Schott	Araceae	Mariary	Rhizome	Used for snake bites	April-October
Resignite ciliata (Haw) Stemb Betulaceae Kannar para Birch Wood and terrizone is used for the treatment of burns and wounds. Betulaceae Calandhia versis L. Calandhia versis L. Calandhia versis L. Calandhia versis L. Canabinaceae Bhang Whole plant in socialized sormana Wall. Saderaceae Bhang Whole plant in the cots are used for saming of the cots are used for saming. Cardalis governian injebus L. Asteraceae Bhang Whole plant in the cots are used for saming of the cots are used for saming. Cardalis governian wall. Solamaceae Bhang Rhote plant is sedative, Louic, narcotic, anodyne refrigerant and antispasmodic, and between State of the cots are used for saming and its used for experience and is used to promote digestion. Epidedra gerardiana Wall. Solamaceae Shamal Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Behang Whole plant Brockland and the cots are used for saming both and the cots are used for saming and receiving and stringent on the plant is used for curing asthma bronchitis and rheumatism. Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Behandera viscous L. Behandera L. Behandera L. Behandera L. Behandera R. Behandera L. Behandera L. Behandera L. Behandera R. Behandera L. Behandera L.	~	Recheris Incinus Royle	Rerheridaceae	Ziarlaroav	Rhizome	Decortion of rhizome is used for jamilion nowder for rheimatism	March-lime
Burgania allowing Saxifragaceae Kamar panra Rhizome The rhizome is used for the treatment of burns and wounds. Buteu monosperma (Lam.) O. Kuntz. Berdiaceae Brain Wood Used is fuel wood Used is fuel wood Calandula a venish L. Asteraceae Zanabinaceae Bhang Whole plant It is sedarive, tonic, narcotic, anodyne refrigerant and antispasmodic. Canabinaceae Bhang Whole plant It is sedarive, tonic, narcotic, anodyne refrigerant and antispasmodic. Canydalis govaniama Wall. Asteraceae Hun Roots and leaves list set in is used as miss. The moust are modyne refrigerant and antispasmodic. Canydalis govaniama Wall. Asteraceae Hun Roots and leaves list set in is used for promote digestion. Ephedra gerardiana Wall. Funatiaceae Asmani botai Whole plant The plant is used for promote digestion. Ephedra gerardiana Wall. Solamaceae Asmani botai Whole plant The plant is used for relieving and theumatism. Ephedra gerardiana Wall. Solamaceae Shamala Socks and leaves both are chewed for relieving Ephedra gerardiana L. Asquilanceae Shamala Leaves Decocion is diuret						&backache, visited by honeybees.	
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Calandula avenisis L. Asclepiadaceae Spalmay Stem and leaves is used as miswak; the milk of the leave is used for asthma. Carlotropis procera (Wild). Candrus sartiva L. Canabinaceae Spalmay Stem and leaves is used as miswak; the milk of the leave is used for asthma. Caryadis governiam Wall. Caryadis governiam of the leave is antispensing the leaves is feature is undefined to thickness. Caryadis governiam of the law of the leaves for piles. I the wood of the leaves is defined. Caryadis governiam of the leaves governia and static governiam of the leaves governia and antispersia of the leaves governia and antispersia of the leaves governia and antispersia of the leaves governia and static governiam of the leaves governia and static governi	15.	Butea monosperma (Lam.) O. Kuntz,	Betulaceae	Birch	Wood	Used as fuel wood.	August-October
Carlotropis procera (Wild). Asclepiadaceae Spalmay Stem and leaves its stem is used as miswak; the milk of the leave is used for asthma. Canabinaceae Hun Roots and leaf The roots are used for Jamafice. Leaves are used as a "Stag" against Typhod. It also increases ble secretion and is used to promote digestion. Ephedra gerardiana Wall. Ephedraceae Asmani bota i Shamala Seeds and leaves South are poisonous. Leaves are applied on boils for maturation. Ephedraceae Asmani bota i Shamala Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Ephedraceae Asmani bota i Shamala Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Ephedraceae Asmani bota i Beach Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Ephedraceae Asmani bota i Beach Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Ephedraceae Shin chai bota i Leaves Docotion is directed. Ephedraceae Shin chai bota i Leaves Docotion is directed. Ephedraceae Asmani bota i Root Inta and wood a stringent properties. Ephedraceae Da zmakay toot Fruit and wood and leaves both are dool handles and walking sticks. Leaves are used a smith and leaves beliable and laxative for piles, latex is anthelmentic. Fragaria indica Andrews Continuaceae Da zmakay toot Fruit and wood is used to make tool handles and walking sticks. Leaves are used a smith and leaves beliable and leaves as fodder. Gentianaceae Da zmakay toot Fruit and wood is used to make tool bandles and walking sticks. Leaves are used a scholer. Gentianaceae Da zmakay toot Roots seeve as fodder. Prevaria Scholer. Aralineceae Da zmakay toot Shouney seeve as fodder. Prevaria Shouts seeve as fodder. Prevaria Shouts seeve as fodder. Bay and the seeds and leaves are used a stringent, tonic, antispasmodic. Bay and the seeds and leaves are used a stringent tonic, antispasmodic for thatching and fencing. Andrews as fodder. Bay and the seeds are the seed for the seeds and walking sticks. Lea	16.	Calandula avenisis L.	Asteraceae	Ziar gulae	Flower	Flower is antispasmodic and omamental	March-July
Canabia sativa L. Carabia saria Mall.ex Stapl. Ephedra gerardiana Wall.ex Stapl. Franciscus L. Franc	17.	Calotropis procera (Wild).	Asclepiadaceae	Spalmay	Stem and leaves	Its stem is used as miswak; the milk of the leave is used for asthma.	
Cichorium intybus L. Asteraceae Hun Roots and lead The roots are used for Jaumcice. Leaves are used as a "Saag" against The roots are used for Jaumcice. Leaves are used as a "Saag" against Typeoid It also increases ble secretion and is used to promote digestion. Behieves Dainaceae Dainaceae Shamala Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Ephedraceae Shamala Seeds and leaves both are poisonous. Leaves are applied on boils for naturation. Ephedraceae Shamala Seeds are chewed for relieving to the plant is used for critical and rheumatism. Byperican perforatum L. Solanaceae Shamala Seeds and leaves both are poisonous. Leaves are applied to boils for tothacher is used for relieving to the plant is used for ples, latex is anthelmentic. Frequent viscosa L. Lacq Beinsceae Da zmalay toot Fruit and wood and leaves Wood is used to make tool bandles and walking sticks. Leaves are used as fedder. Gentlana kurvoo Royle Araliaceae Brownia Leaves Stomachache, astringent, tonic, antispasmodic. Araliaceae Brownia in Leaves Leaves are used social control and factoring and fencing. A honeybee species.	18.	Canabus sativa L.	Canabinaceae	Bhang	Whole plant	It is sedative, tonic, narcotic, anodyne refrigerant and antispasmodic,	April-August
Cichorium intybus L. Asteraceae Hun Roots and leaf The roots are used for Jaundice. Leaves are used as a "sing" against Typhoid. It also increases bile secretion and is used to promote digestion. Bairea stramonium L. Solanaceae Asmani botai Ephedraceae Shamala Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Ephedraceae Asmani botai Hyperican Pepericane Shamala Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Ephedraceae Asmani botai Hypericane Shamala Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Ephedraceae Shamala Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Byoscicum perforatum L. Alphaericane Shamala Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Byoscicum perforatum L. Hypericaceae Shin chai botai Leaves Decoction is diructic. Bolomeu vivorou L. Jacq Shamala Seeds Shin chai botai Leaves Decoction is diructic. Epilobium hirsatum L. Phopericaceae Shin chai botai Leaves Decoction is diructic. Bolomeu vivorou L. Jacq Shamala Seeds Shin chai botai Leaves Decoction is diructic. Epilobium hirsatum L. Progration and partening and matching. Epilobium hirsatum L. Progration and an antipological sudder Shamala Shoots Shoots Shoots serve as fodder. Root matchedra nepalensis K. Koch. Araliaceae Choureja Shoots Shoot						used as a fuel.	
Coryadalis govaniana Wall. Fumariaceae Desi mamera Flowers Used for eye troubles. Datura stramonium L. Solanaceae Dhatura Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Ephedraceae Asmani botai Whole plant It is used for curing asthma bronchitis and rheumatism. Solanaceae Asmani botai Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Hypericaceae Shin chai botai Leaves Decoction is directiving to character. Hypericaceae Shin chai botai Leaves Decoction is directiving. Bodopyrus kaki L. Ephedraceae Chawarskay Whole plant Fruit and wood Laxative. Fuel wood. Epitobium hirsulum L. Moraceae Da zmakay toot Fruit and wood Laxative. Fuel wood. Fragaria indica Andrews Canifana karroo Royle Araliaceae Chawatsia Leaves Inzar Roots Sum Roots Somachache astringent, tonic, antispasmodic. Hedera nepalensis K. Koch. Araliaceae Chourga Shoots Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.	19.	Cichorium intybus L.	Asteraceae	Hun	Roots and leaf	The roots are used for Jaundice. Leaves are used as a "Saag" against Typhoid. It also increases bile secretion and is used to promote digestion.	July-Sept.
Datura stramonium L. Solanaceae Dhatura Seeds and leaves Seeds and leaves both are poisonous. Leaves are applied on boils for maturation. Ephedra gerardiana Wall.ex Stapf. Ephedraceae Asmail botai Whole plant The plant is used for curing asthma bronchitis and rheumatism. Hypericam perforatum L. Solanaceae Shamala Seeds The seeds are chewed for relieving toothache Hypericam perforatum L. Sapindaceae Shamarskay Whole plant Fuel and thatching. Dodonea viscosa L. Jacq Ebinaceae Shawarskay Whole plant Fuel and thatching. Epilobium irratum L. Sapindaceae Tair amlok Fruit and wood Laxative. Fuel wood. Epilobium irratum L. Moraceae Unknown Root Fruit is edible, used for piles, latex is anthelmentic. Frazinus xantholoides Wall.ex DC. Rosaceae Da zmakay toot Fruit Edible and laxative Gentianaceae Unknown Root Stomachache, used for pilest. Leaves as fodder. Gentianaceae Prewatai Leaves Leaves used for diabetes. Hedera nepalensis K. Koch. Papillionaceae Prewatai L	20.	Corydalis govaniana Wall.	Fumariaceae	Desi mamera	Flowers	Used for eye troubles.	May-August
Ephedra gerardiana Wall.ex Stapf. Ephedraceae Asmani botai Whole plant The plant is used for curing asthma bronchitis and rheumatism. Hypericane Pipoxyannus niger L. Solanaceae Shamala Seeds The seeds are chewed for relieving toothache Hypericane Perforatum L. Hypericaceae Shin chai botai Leaves Decoction is diuretic. Dodoneus viscosa L. Jacq Sapindaceae Ghawarskay Whole plant Fuel and thatching. Disappras kaki L. Epilobium divatum L. Anargaceae Drinchan Fruit and wood Laxative. Fuel wood. Epilobium hivatum L. Moraceae Da zmakay toot Fruit is edible, used for piles, latex is anthelmentic. Fragaria indica Andrews Rosaceae Da zmakay toot Fruit is edible, used for piles, latex is anthelmentic. Fragaria indica Andrews Oleaceae Sum Wood and leaves Wood is used to make tool bandles and walking sticks. Leaves as fodder. Gentiana kurroo Royle Araliaceae Unknown Roots Stoonachache, astringent, tonic, artispasmodic. Hedera nepalensis K. Koch. Araliaceae Prewatai Leaves used for diabetes. Indigofera gerardiana Wa	21.	Datura stramonium L.,	Solanaceae	Dhatura	Seeds and leaves	Seeds and leaves both are poisonous. Leaves are applied on boils for	May-September
Hypericam niger L. Solanaceae Shamala Seeds The sector of crelieving toothache Hypericam perforatum L. Hypericaceae Shin chai botai Leaves Decoction is diaretic. Beinaceae Shin chai botai Leaves Decoction is diaretic. Dodonea viscosa L. Jacq Beinaceae Shin chai botai Leaves Decoction is diaretic. Beinaceae Charanskay Whole plant Fuel and thatching. Epilobium hirsutum L. Moraceae Da ranakay toot Fruit is edible, used for piles, latex is anthelmentic. Ficus curica L. Rosaceae Da ranakay toot Fruit Edible and laxative Edible and laxative Centianaceae Sum Wood and leaves Wood is used to make tool handles and walking sticks. Leaves as fodder. Gentiana kurroo Royle Araliaceae Ghoureja Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.	23	Enbedra gerardiana Wall ex Stanf	Enhedraceae	Asmani hotai	Whole plant	Institution. The relant is used for curino asthma bronchitis and rhannatism	
Hypericae Shin chai botai Leaves Decoction is diuretic. Sapindaceae Ghawarskay Whole plant Fuel and thatching. Biospyrus kaki L. Epilobium hirsutum L. Moraceae Inzarive Fuel wood Fruit and wood Fruit and wood Fruit and wood Fruit and wood Fruit is edible, used for piles, latex is anthelmentic. Fragaria indica Andrews Fragaria indica Andrews Rosaceae Da zmakay toot Fruit Edible and laxative Fruit sedible, used for piles, latex is anthelmentic. Fragaria indica Andrews Rosaceae Da zmakay toot Fruit Edible and laxative Gentianaceae Unknown Rood and leaves Wood and leaves Wood is used to make tool handles and walking sticks. Leaves are used Rosaceae Da zmakay toot Fruit and wood and laxative Edible and laxative Gentianaceae Unknown Roots Stomachache, astringent, tonic, antispasmodic. Hederu nepalensis K. Koch. Araliaceae Prewatai Leaves used for diabetes. Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.	23.	Hyoscyamus niger L.	Solanaceae	Shamala	Seeds	The seeds are chewed for relieving	May-Sept.
Hypericame Dodonea viscosa L. Jacq Sapindaceae Ghawarskay Whole plant Fuel and thatching. Ebinaceae Ghawarskay Whole plant Fuel wood. Epilobitum hirsutum L. Onargaceae Unknown Root It has cooling and astringent properties. Frequency and leaves wall ex DC. Onargaceae Da zmakay toot Fruit Edible and laxative Edible and laxative Fraxinus xantholoides Wall ex DC. Oleaceae Da zmakay toot Roots are tool handles and walking sticks. Leaves are used fertiana karroo Royle Gentianaceae Unknown Roots Stomachache, astringent, tonic, antispasmodic. Hedera nepalensis K. Koch. Araliaceae Ghoureja Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.						toothache	0.000
Dodonea viscosa L. Jacq Sapindaceae Criawarskay Whole plant Fuel and thaching. Diospyrus kaki L. Epilobium hirsutum L. Frais carlca L. Frais cooling and laxitive. Food and laxitive carlca Laves used for diabetes. Frais carlca L. Frais carlca Laves are used as fooder. Gentiana karroo Royle Araliaceae Unknown Roots Stomachache, astringent, tonic, antispasmodic. Hedera nepalensis K. Koch. Araliaceae Choureja Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.	24.	Hypericum perforatum L.	Hypericaceae	Shin chai botai	Leaves	Decoction is duretic.	April-August
Diospyrus kaki L. Ebinaceae Zair amlok Fruit and wood Laxative. Fuel wood. Epilobium hirsutum L. Moraceae Unknown Root It has cooling and astringent properties. Frait is edible, used for piles, latex is anthelmentic. Frait is edible, used for used for piles, latex is used to make tool handles. Frait is edible, used for used for used for diabetes. Frait is edible, used for used for used for diabetes. Frait is edible, used for used for used for diabetes. Frait is edible, used for use	Ġ.	Dodonea viscosa L. Jacq	Sapindaceae	Crhawarskay	Whole plant	Fuel and thatching.	
Epilobium hirsulum L. Daragaceae Unknown Root It has cooling and astringent properties. Ficus carica L. Fragaria indica Andrews Frazinus xantholoides Wall.ex DC. Gentiana karroo Royle Araliaceae Onargaceae Da zmakay toot Fruit Edible and laxative Edible, used for piles, latex is anthelmentic. Edible and laxative Edible and laxative Bdible and laxative Charles and walking sticks. Leaves are used as fodder. Sum Wood and leaves Wood is used to make tool handles and walking sticks. Leaves are used as fodder. Gentiana karroo Royle Araliaceae Unknown Roots Stomachache, astringent, tonic, antispasmodic. Hedera nepalensis K. Koch, Araliaceae Choureja Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.	26.	Diospyrus kaki L.	Ebinaceae	Zair amlok	Fruit and wood	Laxative. Fuel wood,	April-May
Ficus carica L. Fragaria indica Andrews Frazinus xantholoides Wall.ex DC. Gentiana karroo Royle Araliaceae Orentiana karroo Royle Gentiana Wall. Moraceae Da zmakay toot Fruit Edible and laxative Edible and laxative Edible and laxative Edible and laxative Bdible and laxative Edible and laxative Sum Wood and leaves Wood is used to make tool handles and walking sticks. Leaves are used as fodder. Gentiana karroo Royle Araliaceae Unknown Roots Stomachache, astringent, tonic, antispasmodic. Hedera nepalensis K. Koch. Araliaceae Prewatai Leaves Leaves used for diabetes. Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.	27.	Epilobium hirsutum L.	Onargaceae	Unknown	Root	It has cooling and astringent properties.	9
Fragaria indica Andrews Rosaceae Da zmakay toot Fruit Edible and laxative Frazinus xantholoides Wall.ex DC. Oleaceae Sum Wood and leaves Wood is used to make tool handles and walking sticks. Leaves are used as fodder. Gentiana karroo Royle Gentianaceae Unknown Roots Stomachache, astringent, tonic, antispasmodic. Hedera nepalensis K. Koch. Araliaceae Prewatai Leaves used for diabetes. Indigofera gerardiana Wall. Papillionaceae Ghoureja Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.	28.	Ficus carica L.	Moraceae	hzar		Fruit is edible, used for piles, latex is anthelmentic.	May-August
Fraxinus xantholoides Wall.ex DC. Oleaceae Sum Wood and leaves Wood is used to make tool handles and walking sticks. Leaves are used as fodder. Gentiana karroo Royle Gentianaceae Unknown Roots Stomachache, astringent, tonic, antispasmodic. Hedera nepalensis K. Koch, Araliaceae Prewatai Leaves used for diabetes. Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.	29.	Fragaria indica Andrews	Rosaceae	Da zmakay toot	Fruit	Edible and laxative	March-June
Gentiana karroo Royle Gentianaceae Unknown Roots Stomachache, astringent, tonic, antispasmodic. Hedera nepalensis K. Koch, Araliaceae Prewatai Leaves used for diabetes. Indigofera gerardiana Wall. Papillionaceae Ghoureja Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.	30.	Fraxinus xantholoides Wall.ex DC.	Oleaceae	Sum	Wood and leaves	Wood is used to make tool handles and walking sticks. Leaves are used as fodder.	April-June
Hedera nepalensis K. Koch. Araliaceae Prewatai Leaves Leaves used for diabetes. Indigofera gerardiana Wall. Papillionaceae Ghoureja Shoots Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.	31.	Gentiana kurroo Royle	Gentianaceae	Unknown	Roots	Stomachache, astringent, tonic, antispasmodic.	August-October
Indigofera gerardiana Wall. Papillionaceae Ghoureja Shoots Shoots serve as fodder. Fuel wood, for thatching and fencing. A honeybee species.	32.	Hedera nepalensis K. Koch,	Araliaceae	Prewatai	Leaves	Leaves used for diabetes.	SeptOcto
honeybee species.	33,	Indigofera gerardiana Wall.	Papillionaceae	Ghoureja	Shoots		May-June
	7990		CST Trouble Transport		NEWSON PRO		FOURTH CONTRACTOR

S. No.	Botanical name	Family	Local name	Parts used	Local uses	Flowering
34.	Juglen regia L.	Juglandaceae	Ghuze	Seeds and bark	Brain tonic. Bark is used for cleaning of teeth.	FebApril
35.	Juniperus communis L.	Cupressaceae	Gojar	Fresh ripe berries	Berries are diuretic, carminative, stimulant and are used in skin diseases. The berries are given in scanty urine and chronic cough.	-
36.	Melia azedrach L.	Meliaceae	Shandai	Leaves	Used for flatulence in animals, leaves are used as insecticide in grains.	FebApril
37.	Mentha longfolia L.	Lamiaceae	Villanay	Leaves	Leaves are carminative used for diarrhea and gastric problem.	July-August
38	Morus alba L.	Moraceae	Speen toot	Fruit	Fruit is laxative, edible. Fodder, Fuel, Timber.	March-April.
39.	Myrsine africana L.	Myrsinaceae	Maru rang	Leaves	Used as spice, carminative, appetizer, flavoring agent, digestive.	February-April
40	Nasturtium officinalis R. Br.	Amarylidaceae	Talmeera	Leaves	Leaves are used as potherb. Laxative.	February-March
41.	Olea ferraginea Royle (L.) P.	Oleaceae	Кропа	Seeds and wood	Oil is obtained from seeds used for rheumatism, cooking. Wood is used for aericulture tools.	April-May
42.	Origanum vulgare L.	Lamiaceae	Shamakev	Leaves	It is used against abdominal pain, fever and good for liver.	February-June
43.	Otostegia limbata (Benth). Baiss.	Lamiaceae	Pishkaar	Leaves	Used for gum diseases and curing of wounds.	May-June
4	Paeonia emodi Wall ex HK. Royale	Paeoniaceae	Mamaikh	Rhizome	Rhizomes are used to cure backache, dropsy and epilepsy. It is also used as tonic, emetic, cathartic blood purifier and colic.	April-May
45.	Papaver somniferum L.	Papaveraceae	Dhodda	Latex and seeds	It is narcotic and an anodyne. It increases excitement and physical vigor.	April-June
46	Disease we what meeting Courses	Dimensional	Mathem	Channe	It is also used as ornamental. Thinker functions used and final	
	Linus toyourgin sargent.	I marcae	Manifeat	manc	Tannon's transmiss wood and the	
·	r odopnymin nesamarum wan.	Lonopinymaceae	Makola	Nullcome & Itali	richarte, samutant, purgative and efficie, it also yields resilis. The fluit is "suy-septembel used as drastic purgative.	amy-septemo
48.	Platanus orientalis L.	Plataginaceae	Chinar	Bark	Bark is given in toothache and diarrhea, Used as fuel wood.	April-May
49.	Plantago lanceolata L.	Plantaginaceae	Isphaghol	Seeds	Seeds are faxative and are used to cure dysentery and mouth diseases.	
50.	Populus nigra L.	Salicaceae	Sperdad	Leaves and wood	Fodder, Fuel wood, Omamental, a shade tree.	March-April
51.	Punica granatum L.	Punicaceae	Anarghorai	Leaves and fruit	The leaves are used for skin diseases and against dysentery. Fruit is an actionant and and blood meriting	April-July
53	Oscorous dilatata Baula	Pagagaga	Commit	Wood and mile	and mood exactor Sande are adily actionant and dimensi	Man. Ammer
4 5	Constant and	Attended	Chodonom	T ame muss	Codda, for hideen inflammation.	Many Annual
67	Trees asper L.	Trended	Demmi	Leaves	Course, for Kater and cond in boundaries who waster county and authors.	Index-install
ico.	Taxas wanterming Luce.	Tayareae	Dollya	Canca.	Leaves are ontel and used in probellius, whothping cough and asumia.	
00	Jeucrium stockstamum Boiss.	Lamiaceae	Spairbotay	Whole plant	It is used as a cooling agent. It is used against hepatitis.	May-June
26.	Tribulus terrestris L.	Zygophylaceae	Markondai	Fruits	Fruits and roots are given for urmary disorders	April-August
57.	Skimmia laureola (Dc.) Stele& Zacexwall	Rutaceae	Nazar panra	Leaves	It is believed that smoke from its leaves purifies the air and repel evils.	April-May
58.	Valeriana jatamansi DC.	Valerianaceae	Mushk-e-bala	Rhizome	Rhizome is carminative, aromatic and antispasmodic.	February-August
59.	Viola canescens Wall ex Roxb	Violaceae	Binowsha	Whole plant	Astringent, demulcent, purgating diaphoretic, antipyretic, febrifuge and anticancer.	March-April
.09	Vitis jacquemontii Parker.	Vitaceae	Gedar kwar	Fruit	Laxative.	April-May
61.	Withania somnifera (L.) Dunal.	Solanaceae	Kutilal	Roots	Aphrodisiae tonic, diuretic, narcotic and used in rheumatism.	
62.	Woodfordia fraticosa (L.) Kurz.	Lytheraceae	Datki	Flower and wood	Dried flowers are used as astringent, stimulant and used in liver	May-June
63.	Zanthoxylum armatum DC.	Rutaceae	Dambara	Fruit	Stomachache, toothache and carminative.	April-May
4.	Ziziphus jujube Mill.	Rhamnaceae	Baira	Fruits	Expectorant, emollient and blood purifier.	June-July
65.	Ziziphus mauritiana L.	Rhamnaceae	Markhanaey	Fruits branches and leaves	Fruits are edible and used as an astringent. Fuel wood and used for fencing and hedge. The leaves provide fresh fodder for goats. A honeybee	June-July
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