

Common Medicinal Folk Recipes of Siran Valley, Mansehra, Pakistan

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Issued 23 February 2006

Abstract

The present studies were aimed to investigate ethnomedicinal folk recipes used to cure different diseases in the study area. Questionnaire method was adopted for documentation of folk indigenous knowledge. The interviews were carried out in local community, to investigate local people and knowledgeable persons (Hakims, Women and Herdsmen) who are the main user of medicinal plants. The ethnomedicinal data on 44 plant species belonging to 31 families were recorded during field trips from different villages of the area. The botanical name, followed by local name, family, part used and ethnomedicinal uses in different folk recipes was recorded. Plants were collected, pressed, dried, preserved, mounted and identified through the available literature (Nasir & Ali, 1971- 2001) and were confirmed by the experts in Department of Biology, Quaid-I-Azam University Islamabad. The specimens were deposited in the Herbarium, Department of Plant Sciences, and Quaid -i-Azam University Islamabad Pakistan (ISL).

Key words: Ethnomedicinal, folk recipes and Siran Valley, Pakistan.

Introduction

The study area is located in the Hazara Civil Division, District Mansehra of the North West Frontier (NWFP), Pakistan. The Siran River catchments area is commonly known as, "Siran Valley". It is situated between $34^{\circ} 33' 35''$ and $34^{\circ} 44' 30''$ North Latitude, and between $73^{\circ} 13' 38''$ and $73^{\circ} 22' 40''$ East Longitude. The tract is bounded on the north by Allai Valley, on the south by Lower Siran, on the west by the Konsh Valley and on the east by the Kaghan Valley. The Siran River is 130 km in length joining the Indus at Tarbala in Hazara Division. The total area of the tract is 5284.2 km. The climate of the tract is moist temperate with very marked seasonal periods of snow, rain and drought. Snowfall is considerable and occurs any time from later half of November to the end of March. Snow often remains to the end of May. Most of the rain occurs during Monsoon viz. July- August between these two seasons of snow and rain the Spring and Autumn months are periods of less rain and drought.

According to standard classification of forest types of Pakistan (Champion, Seth and Khattak 1965) the upper Siran reserved forests fall under the major type "Montane Temperate Forests." Gymnosperms consist of *Pinus roxburgii*, *P. wallichiana*, *Abies pindrow*, *Taxus wallichiana* and *Cedrus deodara*. Several other broad-leaved species like *Aesculus indica*, *Populus ciliata*, and *Juglans regia* are also found. The shrubby dominant undergrowths are, *Sarcococca saligna*, *Indigofera heterantha*, *Rubus fruticosus.*, *Cotoneaster sp.*, *Plectranthus rugosus.*, *Stachys sp.*, *Rhododendron sp.*, *Rosa webbiana* etc. Among the herbaceous flora *Viola Serpens*, *Fragaria vesca*. *Potentilla nepalensis.*, *Anemone sp.*, *Thymus serpyllum .*, *Eremurus sp.*, *Impatiens sp.*, *Arisaema sp.*, *Pennisetum sp.*, *Sauromatum venosum*, *Artemisia sp.*, *Delphinium sp* etc. is common. In the shady places especially cliffs, several

species of ferns are found. Examples are *Adiantum sp.*, *Onychim sp.*, *Cetrach sp.*, *Pteris sp.*, and *Asplenium sp.*, *Pteridim sp* etc.

People living in remote areas and in villages are using indigenous plants as medicines from long ago because this knowledge reaches to them through generation to generation (Shinwari and Khan, 1998). Marwat and Shinwari (1996) documented ethnobotanical information of Upper Siran Valley, Mansehra. Upper Siran Valley is a moist temperate region of NWFP and is very rich in floristic composition. Altogether 79 species of plants belonging to 48 families have been recorded as ethnobotanically important.

Qureshi and Khan (2001) conducted the study in Kahuta; Rawalpindi to list the medicinal plants there. In total 25 species of herbs belonging to 18 families were recorded, which were being used medicinally by inhabitants of the area. Some of the most interesting and representative plants of the area were *Cyprus rotundus* mainly used for Cholera, dyspepsia and fever and *Saussurea hereomala* as a tonic for animals. The oil of *Pongamia pinnata* was applied to cure herpes and eczema. Leaves of *Euphobia helioscopia* were used to cure mad dogs. *Boerhaavia diffusa* was useful for jaundice and other liver complaints

Materials and Methods

Field trips of 60 days duration to various parts of Siran Valley was undertaken from January 2001 to January 2003 to collect various plant species of ethnodecinal importance present in the area in different seasons. The main target sites in Siran Valley were Baffa, Shinkiari, Banda Piran, Dhodial, Dadar, Jabori, Jacha, Mandagucha, Panjul, Kund Bungla, Shaheed Pani, Khori, Bakki, Jabbar and Musa- Ka-Musallah. Field numbers were given to the specimens and field data scientific names, vernacular names, family and other relevant information was noted in the Field Note Book .The collected material was pressed, dried using blotting papers for about two weeks at room temperature and identified through the available literature (Nasir & Ali, 1971-1999). The dried material was poisoned using mercuric chloride and absolute alcohol (2 gm mercuric chloride dissolved in 100 ml of absolute alcohol). After poisoning, the plants were mounted on the standard size herbarium sheets. Local people, herds men, local healers (Hakims) and plant collectors were interviewed for ethnobotanical information of the area. A questionnaire was constructed and survey was carried out in every study village.

Results

Achillea millefolium Linn.

Vernacular Names: Birangesif (Hindko), Sultani booti (Urdu), Yarrow (English)

Family: Asteraceae/ Compositae

Parts used: Whole plant

Recipe: The plant is boiled and hot infusion is used to induce sweats that cool fevers. One teacup is taken at night. Fresh plant is crushed and used as a poultice for healing wounds, chapped skin and rashes and as mouth wash. The tea made from the plant is used to treat tuberculosis, discarded stomach and headache. Fresh or dried ground leaves are taken for relieving headaches, anorexia and constipation.

Voucher No: GMS/ KI/S-115

Achyranthes aspera Linn.

Vernacular Names: Laina (Hindko), Prickly-chaff flower (English).

Family: Amaranthaceae

Parts used: Whole plant.

Recipe: Decoction of both leaves and roots are used as toothache. It is also used for abdominal pain. The juice of the herb is given in dysentery, rheumatism and skin diseases. The paste of fresh leaves is applied over insect bite. An infusion of the root is used for bowel complaints, night blindness and skin diseases. The ash of the plant with honey is given in cough and asthma. Leaves of *A. aspera* and ripen fruit of *Rubus fruticosus* are mixed and crushed; the juice obtained is applied in eye diseases i.e. "Phola". The dry leaves are smoked in a pipe in asthma. The ash of the plant is given with honey in colic and stomachache. Paste is prepared from the fresh leaves of the plant, gur and soap. Then is applied to the blister twice a day

Voucher No: GMS/BD/S-94

Aconitum heterophyllum Wall ex Royle

Vernacular Names: Patris (Hindko), Atis (Urdu), Bonga (Punjabi)Aconite root, (English).

Family: Ranunculaceae

Parts used: Dried tuberous roots.

Recipe: Juice of the fresh leaves is applied to the pigmentation of the skin. Mixed with milk and honey, a cure for rheumatism and pain in the body.

Voucher No: GMS/MH/H-72

Adhatoda vasica Nees.

Vernacular Name: Bhaikar (Hindko, Gujri), Arusha (Urdu), Bhaikkar, Malabar Nut Tree (English)

Family: Acanthaceae

Parts used: Dried leaves

Recipes: The juice of leaves is used for cough and asthma. For tuberculosis, 500 grams of leaves are crushed and boiled in 2 liters water in an earthen vessel, till it is left to half. It is given to the patient with honey for fifteen days four times in a day. The leaves are also used as insecticide. Leaves are crushed and used as poultice on the wounds as antiseptic. Leaves are boiled and are given for throat pain. Also used joints pain and skin problems "Hasba"

Voucher No: GMS/JI/H-52

Aesculus indica Wall. ex Camb

Vernacular Names: Bankhor (Hindko, Gujri), Horse Chest nut (English).

Family: Hippocastanaceae

Parts used: Leaves, bark, fruit, seed

Recipe: Seed endocarp is crushed and mixed with wheat flour and is given to horses to relieve stomach pain

Voucher No: GMS/SI /H-22

Ajuga bracteosa Wallich ex Benth.

Vernacular Names: Kori booti (Hindko, Urdu), Bugle (English)

Family: Lamiaceae/Labiataeae

Parts used: Whole plant

Recipe: Decoction of this plant is used in headache and earache. Also effective in jaundice, malarial fever and hypertension. Decoction of the fresh or dried leaves is also swallowed for fever. The leaf juice is poured in ear to cure earache.

Voucher No: GMS/PL/H-48

Aloe barbadensis Mill

Vernacular Names: Kanvar (Hindko, Gujri), Ghee-Kunvar (Urdu), Musabar (Tib) Pakistani Aloe (English)

Family: Liliaceae

Parts used: Leaves and the dried juice obtained from leaves

Recipe: The roasted leaves of Aloe are applied over blisters. Latex from the leaves with salt is used to cure stomach ulcer. Aloe leaf is washed with water. The pulp is exposed by longitudinal section and then placed on pussy wounds, which drain out it efficiently. Crushed leaves are mixed with turmeric and the paste thus obtained is applied on the eruptions on any part of the body.

Voucher No: GMS/ BP /H-112

Amaranthus viridis Linn.

Vernacular Names: Ganhar (Hindko), Dhindo (Punjabi), Green Amaranth (English).

Family: Amaranthaceae

Parts used: Whole plant.

Recipe: The upper surface of the leaves are smeared with ghee and then warmed gently. The slightly warmed leaves are applied to the abscesses and boils for ripeness. The tender tops are cooked and are eaten by the people in urinary diseases. Juice of the leaves is mixed with oil, applied to the scalp as hair tonic.

Voucher No: GMS/ND/H-32

Artemisia vulgaris Linn.

Vernacular Names: Duck Chawo (Hindko), Biranjisf (Urdu), Indian wound wood (English)

Family: Asteraceae/ Compositae

Parts used: Inflorescence and leaves.

Recipe: The plant is burnt to ash and mixed with mustard oil and is applied to tumors. The whole plant is dried and crushed into powder form and given to horses in colic. Dried leaves in very small doses (Mg) are given as anthelmintics.

Voucher No: GMS/NT /H-147

Arisaema flavum (Forsskal) Schott

Vernacular Names: Surganda /Sanp Ki Booti (Hindko), Indian Turnip (English)

Family: Araceae

Parts used: Rhizome

Recipe: Juice of the fresh rhizome is applied to snake bite and scorpion sting. .

Voucher No: GMS/ JI /H-62

Asparagus racemosus Willd.

Vernacular Names: Shahghandal (Hindko), Shakakul (Urdu), Asparagus (English).

Family: Liliaceae

Parts used: Roots and bark of the stem are generally used.

Recipes: The juice of the roots of Asparagus given with milk is very effective when the stone has been present in the kidney for a long time. Corm is used to stimulate sexual desire and carminative. Decoction of rhizome is given for fever. The juice of the herb with equal portion of milk is given to remove calculi.

Voucher No: GMS/ DR/H-108

Atropa acuminata Royle

Vernacular Names: Cheela Lubur (Hindko), Angurshefa (Urdu), Pakistan belladonna (English)

Family: Solanaceae

Parts used: Leaves and root

Recipe: Root crushed and applied externally in the treatment of gout and rheumatism. Leaves are applied to boils.

Voucher No: GMS/SPI/H-133

Berberis lycium Royle.

Vernacular Names: Sumbal (Hindko), Kashmal (Urdu), Zirishk (Persian), Berberry (English)

Family: Berberidaceae

Parts used: Dried roots

Recipe: The roots are used for the relief of intestinal colic (antispasmodic) and also used as cooling agent. Plant and bark is astringent, used for the improvement of internal wounds, throat pains mouth diseases “Chall” .The dried powder of root is used for this purpose). Decoction of fruit is used in typhoid and common fever. Powdered bark is locally used in dysentery; 5-10gm is taken daily. Root bark is mixed with Ghee and heated. This is used as bandage on the broken organs. The root bark is dried and grinded; the powder is put in water along with small amount of sugar and is taken before sleeping which is effective for pain, sore throat and jaundice. This is also considered useful in stomach ulcer. One cup is taken daily before breakfast. An infusion of the root bark is taken internally to cure sore throat and also as gargle. Extract of leaves is used in jaundice. The concentrated juice of berries is used for gums and teeth trouble. Decoction of fruit is used in typhoid and common fever

Voucher No: GMS/DR/S-144

Bergenia ciliata (Haw.) Sternb.

Vernacular Names: Butpehwa/Zakh –mi-Hiyat (Hindko)

Family: Saxifragaceae

Parts used: Rhizomes.

Recipe: Powder is used for healing of wounds. Rhizome mixed in milk and sugar is used in colon cancer and muscular pains daily before breakfast. Powdered rhizome is applied over wounds. Powdered rhizomes mixed with honey are given to the children when teething. A powdered rhizome is mixed with wheat floor, sugar is added and

cooked in “*Desi Ghee*” This “*Halwa*” is eaten as tonic

Voucher No: GMS/SPI/H-89

Bistorta amplexaule (D.Don)

Vernacular Names: Masloon (Hindko), Bistort (English).

Family: Polygonaceae

Parts used: Leaves, rhizome, root

Recipe Tea made from fresh roots and leaves is used in joint pain and colic and give warmth to body in winter. Decoction of rhizome is used in cough and stomach problems Whole plant or syrup of the dried root is considered as a general body tonic. Whole plant is dried and powdered and is given internally in pneumonia.

Voucher No: GMS/JR/H-155

Catharanthus roseus G.Don

Vernacular Names: Sada phul, Sadabahar (Hindko, Gujri), Sada-phul (Urdu), Periwinkle (English)

Family: Apocynaceae

Parts used: Leaves.

Recipe: The juice of the leaves is applied to wasp-sting. The extract from the plant is applied to certain human tumors.

Voucher No: GMS/DL/S-5

Cannabis sativa Linn.

Vernacular Names: Pang (Gujri), Bhang (Urdu, Punjabi), Pakistani Hemp (English)

Family: Cannabinaceae

Parts used: Leaves and flowering tops.

Recipe: The leaves crushed with onion and used for boils in the form of poultice. The resinous exudation that collects on the leaves and flowering tops of the plant is taken and are smoked as narcotic

Voucher No: GMS/GN/H-146

Colchicum luteum Baker.

Vernacular Names: Surinam talk, Qaimat-Gula (Hindko), Golden collyrium (English)

Family: Colchicaceae

Parts used: Dried corms.

Recipe: The corms are dried and grinded to powder form then it is mixed with Ghee and used externally for lessening inflammation and pain.

Voucher No: GMS/ DR /H-41

Crataegus songarica C.Koch

Vernacular Names: Batsangli (G), Bansangli (P), Hawthorn (E).

Family: Rosaceae

Parts used: Dried fruits.

Recipe: The extract of fruit is used as cardiac tonic and other heart diseases like hypertrophy and vascular insufficiency.

Voucher No: GMS/JLI/H-172

Cyperus rotundus Linn.

Vernacular Names: Muther (Hindko)

Family: Cyperaceae

Parts used: The rhizomes are used

Recipe: The tubers are scraped and pounded with green ginger and mixed with honey are given in dysentery. Fresh tubers are crushed and one spoon is given in skin allergies. The rhizomes paste is applied in the healing of wounds.

Voucher No: GMS/ SI /H-79

Datura stramonium Linn.

Vernacular Names: Datura (Hindko, Punjabi), Sada dhutura (Urdu), Jimson Weed (English).

Family: Solanaceae

Parts used: Dried leaves, seeds and roots.

Recipe: Green leaves are applied for the softening of the boils. Juice of the fruit is applied to scalp for falling hairs and as antidandruff. Juice of the flower is used in earache. One drop is poured in the ear at night.

Voucher No: GMS/DL/H-139

Foeniculum vulgare Mill

Vernacular Names: Saunf (Hindko, Punjabi, Urdu), Fennel fruit (English).

Family: Apiaceae/Umbelliferae

Parts used: Whole plant.

Recipe: Fennel seeds are boiled and filtered. Water is given in colic and flatulence to children Four or five seeds are swallowed daily to improve eyesight, gum disease, sore throats and to alleviate hunger and easier digestion. The dried fennel seeds and Thymus seeds are crushed in equal amounts and black salt and soda in small amount is also added. All the ingredients are mixed. One spoon is taken daily with fresh water to improve digestion, urinary disorders, constipation and piles. Fennel seeds are boiled along with green tea leaves and Mentha leaves and sugar is added. One cup is taken daily in stomach complaints.

Voucher No: GMS/SI/H-37

Geranium wallachianum D.Don ex Sweet .

Vernacular Names: Ratanjot (Gujri, Hindko, Urdu), Laljhari (Punjabi).

Family: Geraniaceae

Parts used: Dried rhizomes.

Recipes: The rhizomes of the plants are dug out, dried, grinded into powder form, mixed in wheat flour, ghur or sugar and Desi ghee (Animal fat) in order to make halwa. The halwa is eaten once in a day at nighttime as tonic for backache. Powdered root with milk or oil is also used as tonic

Voucher No: GMS/MA /H-111

Mentha arvensis Linn.

Vernacular Names: Poodna (Hindk) Pudinah (Urdu, Punjabi), Field Mint (English).

Family: Lamiaceae/Labiatae

Parts used: Leaves

Recipe: Dried leaves are taken with curd to control dysentery. Tea of dried leaves is drunk for stopping vomiting and nausea.

Voucher No: GMS/ND /H-157

Oxalis corniculata Linn

Vernacular Names: Khutkorla / Khati buti (Hindko), Indian sorrel (English) .

Family: Oxalidaceae

Parts used: Whole plant.

Recipe: Fresh leaves are crushed, extract is mixed with water, and sugar is mixed and syrup “*Sharbat*” is used in jaundice and also in stomach complaints. Leaves are crushed and applied as poultice to skin during inflammation and warts. Fresh leaves are applied as antiscorbutic.

Voucher No: GMS/JBA/H-59

Otostegia limbata (Bth.) Boiss

Vernacular Names: Chitta Kanda (Hindko), Bui (Punjabi).

Family: Lamiaceae/Labiatae

Parts used: Leaves.

Recipe: Some time powder of the plant is mixed butter and used for wounds. Fresh leaves are applied to gums and extract of leaves is used in ophthalmia.

Voucher No: GMS/SN/H-24

Paeonia emodi Wall ex Royle

Vernacular Names: Mamekh (H indko), Udsalib (Urdu), Paeoney Rose (English).

Family: Paeoniaceae

Parts used: Dried tuberous roots.

Recipe: Dried tubers grinded into fine powder, mixed with flour and desi ghee to make *halwa*. One or two spoons of this *Sheera/halwa* is used daily at night before sleeping for rheumatism, backache and as tonic. Dried tubers mixed with “*Ratta jot*” and boiled in milk or fried in food are used once daily for all kinds of pains especially lumbago, rheumatism, arthritis, muscular pain and backache.

Voucher No: GMS/ KA/H-38

Pistacia integerrima J.L.Stewart ex Brandis

Vernacular Names: Kangar (Hindko, Gujri), Kakar shingi (Urdu) Spogel seed (English).

Family: Anacardiaceae

Part Used: Bark, galls and leaves.

Recipe: Galls are burnt to ash and mixed with honey or sugar. One spoon is given daily to cure whooping cough and asthma. The bark is torn from the tree and boiled in water. This boiled extract is cooled and used as refrigerant and in jaundice. The galls are powdered and fried in Ghee and given internally in dysentery. The galls are powdered and used as an antidote to snake venom and scorpion sting. Galls are crushed, wheat flour and gur is mixed and given to buffaloes in intestinal colic.

Voucher No: GMS/ND/T-50

Plantago amplexicaulis Cav

Vernacular Names: Ispaghol (Hindko), Plantago (English).

Family: Plantaginaceae

Parts used: The ripened seeds.

Recipe: The seeds are mixed with syrup made of sugar and this mixture is called “*Sharbat*” as is used as laxative and also used in diarrhoea when the blood is coming in the stool. One teacup is taken daily. One gram of seeds are mixed with one cup of curd and taken in diarrhoea. The seeds and husk are used to cure inflammation of mucous membrane of gastro-intestinal and genito urinary tracts, duodenal ulcer and piles.

Voucher No: GMS/GR/H-31

Podophyllum emodi Wall. ex Royle

Vernacular Names: Bankakri (Hindko, Punjabi), May apple, Mandrake (English).

Family: Podophyllaceae

Parts used: Roots and rhizomes.

Recipe: The dried fruits or seeds crushed and mixed with root bark of *Berberis lycium* and 3 mg is taken with water in jaundice and other hepatic problems. Dried grinded rhizome is used as cardiac stimulant. It is used in a very minute amount because rhizomes are poisonous. The root paste is applied on ulcers, cuts and wounds.

Voucher No: GMS/KA/H-26

Portulaca oleraceae Linn.

Vernacular Names: Lorank (Hindko), Common pursalane (English)

Family: Portulacaceae

Parts used: Leaves and stem.

Recipe: Fresh leaves and branches of the Portulaca are collected. These are washed with water, grinded and juice is extracted. This juice is given to children to relieve their abdominal pain. Its leaves are also used for external inflammation in form of poultice and seeds decoction is used as a cooling demulcent.

Voucher No: GMS/BTI/H-119

Punica granatum Linn.

Vernacular Names: Daruna (Hindko), Anar (Punjabi, Urdu), Abortive Pomegranate tree (English).

Family: Punicaceae

Parts used: Dried bark of roots, stem and rind of fruit.

Recipe: The rind of fruit is powdered and mixed with sugar and used as a remedy for diarrhoea and dysentery. The root bark is used for the expulsion of tapeworm. Flowers dried and powdered are used as tooth powder, strengthen the gums and act as haemostatic for bleeding gums. Seeds dried and used traditionally in sauces and fresh chutneys. They serve as astringent, appetizing and digestive. Bruised in water, seeds act as a favorable anti-diarrhoeal. The juice is widely used as a cooling refrigerant given in dyspepsia and fever, dysentery, and against tapeworms. Dried fruit made into powder, boiled and used as such. Fruit juice is beneficial for leprosy patients. *Pimpinella stewarti* and *Zingiber officinale* and a very little amount of salt are a best cure for dysentery and belly swelling in children.

Voucher No: GMS/SV/H-63

Ricinus communis Linn.

Vernacular Names: Erand (Hindko, Gujri), Arand (Punjabi, Urdu), Castor oil plant (English)

Family: Euphorbiaceae

Parts used: Seeds, leaves, bark and root.

Recipe: The decoction of ginger given with the addition of castor oil is very effective in flatulence, it also relieves pain in the back. Fruit of *Ricinus communis* is roasted in Ghee and is used for the remedy of skin disease “Chambal”. The leaves of *Ricinus communis* are warmed over fire and applied to the breast of women acts as galactagogue i.e. increase the milk secretion. For the treatment of leucorrhoea fresh leaves are crushed and are boiled in 250 ml of milk. This is filtered and the filtrate is taken for one month in divided doses. Heated and oiled leaves are placed on rheumatic joints, swellings and inflamed muscles. **Voucher No:** GMS/KKI/H-170

Rumex hastatus D. Don

Vernacular Names: Khatimbal (Hindko), Khatbiri (Punjabi).

Family: Polygonaceae

Parts used: Leaves, roots and stem

Locality: Dhodial

Recipe: Grounded powdered dried roots are applied as a poultice for sore joints. The extract of the root of this plant is used as a tonic and slight purgative. The grounded root powder is taken with water in diarrhoea. The leaves are rubbed on the skin in inflammation caused by *Urtica* plant. The sap of the leaves and stem is applied on cuts for its astringent properties.

Voucher No: GMS/ DL/H-103

Salvia moorcroftiana Wallich ex Benth.

Vernacular Names: Kalgari /Gadhikan (Hindko, Gujri), Meadow clary (English).

Family: Lamiaceae/Labiatae

Part Used: Leaves and rhizome

Recipe: Ghee is applied to leaf and warmed and placed on boils. Rhizomes are crushed and mixed with the crushed leaves of *Vitex negundo* and *Zanthoxylum armatum* and is given to buffaloes in colic and other diseases. Rhizomes are washed and crushed; gur and wheat flour is mixed and given to buffaloes to increase milk

Voucher No: GMS/MA/H-81

Sarcococca saligna (Don) Muell.

Vernacular Names: Ban Sathera, Shela (Hindko), Sweet box (English).

Family: Buxaceae

Parts used: Leaves and shoots.

Recipe: The leaves and shoots are boiled and applied on swollen joints or in pain in the form of poultice. A Sharbat prepared from root is given in gonorrhoea.

Voucher No: GMS/JA /S-44

Saussurea lappa (Dene)

Vernacular Names: Kuth (Gujri, Urdu), Arabian costus (English)

Family: Asteraceae/ Compositae

Parts used: Rhizome

Recipe: The dried rhizome is grinded in to powder form and mixed with maize flour. Tablets of larger size are formed and given to goats in a disease locally called as “*Bagri*”. A few mg is taken once a week to improve digestion and to keep the body warm .The rhizome is grinded to powder form along with other ingredients like Acacia gum and “*Kabli misri*”and mixed with honey .A few mg is given to the women for pregnancy and in a disease called “*Hasba*” .Dried roots in powder form are taken with water as carminative.

Voucher No: GMS/MH /H-154

Skimmia laureola Hook

Vernacular Name: Ner (Gujri), Nera (Hindko), Sheshar (Punjabi).

Family: Rutaceae

Parts used: Leaves.

Recipe: The rhizome is rubbed down and given with honey to children when teething. In powdered form it is used in the form of “ *Halwa*” as tonic. Dried ground leaves are taken orally with water as an antacid and also for flatulence, colic and heartburn. Decoction of leaves is used in complains of liver and stomach. The leaves when crushed have an orange like smell and are burried near small pox patients with a view to curative effects.

Voucher No: GMS/JA/H-156

Swertia chirayita (Roxb. ex Fleming)

Vernacular Names: Chirta karita (Hindko), Chiraita (Tib) Chiratta, Bitter stick (English)

Family: Gentianaceae

Parts used: Whole plant.

Recipe: Root is mixed with milk and used in ophthalmia.

Voucher No: GMS/BI/H-51

Taraxacum officinale Weber.

Vernacular Names: Hand, Dudal, Khanphul (Urdu, Punjabi, Hindko), Dandelion (English)

Family: Asteraceae/ Compositae

Parts used: Dried rhizomes, roots and leaves.

Recipe: The flowers are boiled and used with honey for coughs. One teaspoon is sufficient. The leaves are cooked and eaten to release constipation and also to purify blood. Roots are used to increase urine flow.

Voucher No: GMS/TA/H-169

Thymus serpyllum auct

Vernacular Names: Bunn Ajwain (Hindko), Wild Thyme (English)..

Family: Lamiaceae/Labiatae

Parts used: Dried leaves.

Recipe: The seeds are grinded and one spoon is used daily with water for abdominal pain and internal wounds. The decoction is used for abdominal pain and raising body temperature. The infusion of leaves is used in skin diseases. The herb is dried and crushed in to powder which is used as antiseptic The plant is boiled and used as mouthwash, and is excellent remedy for sore throats and infected gums. Decoction of dried ground seed is taken for joint pain and asthma. Juice from leaves is applied to toothache. Powder of flowers is mixed in ‘Gur’ and is given as vermicide.

Voucher No: GMS/DR/H-153

Vernonia anthelmintica Willd

Vernacular Names: Kali Ziri (Hindko, Gujri), Purple Flebene (English).

Family: Asteraceae/ Compositae

Parts used: Seeds

Recipe: Five seeds are taken daily with water for cough and flatulence an infusion of the powdered seeds is used as tonic, diuretic and stomachic. Crushed seeds with honey are given for the treatment of round worms. Two or three seeds are swallowed to cure toothache and also mouth problems.

Voucher No: GMS/ DL/H-2

Verbascum Thapsus L.

Vernacular Names: Gidar Tambako (Hindko, Punjabi), Common Mullein (English)

Family: Scrophulariaceae

Parts used: Leaves and flowers.

Recipe: Leaves in powder form of poultice are used for healing the wounds. The leaves are warmed and then tightly tied on the joints to relieve the pain and also used for softening the boils. Warm poultice of the fresh leaves is externally applied to blisters and carbuncle

Voucher No: GMS/DR/H-90

Zanthoxylum armatum D.C.

Vernacular Names: Timar (Hindko), Tejbal (Punjabi), Prickly ash (English).

Family: Rutaceae.

Parts used: Bark, Fruit

Recipe: The seeds are dried and grinded and mixed with the powdered leaves of *Mentha* and rock salt is mixed. Three to five grams are taken daily to improve digestion and also other stomach problems. The seeds are chewed to

cure toothache. Branches are also used as toothbrush”*Maswak*”

Voucher No: GMS/JI/H-145

Discussion

The present study provides information about some therapeutic uses in different traditional recipes of 44 plant species belonging to 31 families. The plants are either used singly or in combination with some other plants or plant parts. Some plant species are claimed to be quite effective remedies for coetaneous affection of head, snakebite, diarrhoea, boils, cough and cold, and stomach troubles .The recipes are made by different methods. Preparation of compounds from dry parts of one plant or several plant drugs and from ashes by using small mortars or grinding stones. Pressing, boiling or soaking in hot or cold water and milk and various other solvents is common and in this way, orally administered liquid preparations are obtained. Preparation for applications to the skin such as ointments, liniments, lotions, foamlotions, and baths, inhalants etc. Application is frequently percutaneous, by rubbing or covering (including poultices), by washing or baths, occasionally complemented by messages. More research is needed on the long-term effects of specific remedies.

Taking into account the serious health problems of the people and livestock, medicinal uses of plants in the Siran Valley may prove to be of greater importance for many people than firewood, timber, food, forage and various raw materials. Various plant recipes used to cure different diseases were collected during the studies. Some of the common recipes of the area are:

Powdered rhizome of *Bergenia ciliata* (But Pewa) is mixed with wheat flour, sugar is added and cooked in “*Desi Ghee*” This “*Halwa*” is eaten as tonic The dried rhizome is grinded in to powder form and mixed with maize flour. Tablets of larger size are formed and given to goats in a disease locally called as “*Bagri*”. This recipe is an example of Ethnoveterinary medicine The leaves of *Verbascum thapsus* are warmed and then tightly tied on the joints to relieve the pain and also used for softening the boils

The dried *Foeniculum vulgare* seeds and thymus seeds are crushed in equal amounts and black salt and soda in small amount is also added. All the ingredients are mixed. One spoon is taken daily with fresh water to improve digestion, urinary disorders, constipation and piles. *Foeniculum vulgare* recipes are used as antidiarrhoeal, gases expulsion (Trease and Evens, 198

The leaves of *Canabis sativa* crushed with onion and used for boils in the form of poultice. The rhizomes of *Geranium wallichianum* are dug out, dried, grinded into powder form, mixed in wheat flour, ghur or sugar and Desi ghee in order to make “*halwa*”. The “*halwa*” is eaten once in a day at nighttime as tonic for backache.

Dried tubers of *Paeonia emodi* grinded into fine powder, mixed with flour and Desi ghee to make *halwa*. One or two spoons of this *halwa* is used daily at night before sleeping for rheumatism, backache and as tonic. *Salvia moorcroftiana* recipes are used for abdominal pain and external wound (Rehman, 1986) Perezgrovas et al. (1994) has tested the effectiveness of some common herbal remedies in Highland. The most effective treatment was 5g garlic +5g epazote, which significantly reduced the number of eggs of gastrointestinal nematodes by 66 ± 8 and $61 \pm 28\%$ at 1 and 2 weeks treatment respectively.

Siran Valley is rich in medicinal floristic diversity and there is a need of further exploration of the area in this regard. The main aim of this traditional recipes study is to bring to the screen that what type of plants does the people of valley use medicinally. During the research project it was noted that the medicinal plant wealth of Siran Valley, district Mansehra are not fully exploited. Some plants are exploited on very large scale while others are

unexploited; there is an increased threat to plants being utilized for various purposes resulting into habitat destruction. Conventional in situ conservation may no longer be realistic or straightforward approach. Some sort of reintroduction programme, with the back up of ex situ facilities, provides a practical solution to the conservation of plants. The conservation programme can protect the medicinal plants by participation of local community.

References

- Champion, H.G. Seth. S.K. and Khattak, G.M.1965. Forest Types of Pakistan. Pakistan Forest Institute Peshawar.pp-238.
- Marwat, Q. and Z. K. Shinwari. 1996. Ethnobotanical studies in Upper Siran, Mansehra, Pakistan. In Z. K. Shinwari, B. A. Khan and A. A. Khan, Proceedings of the First Training Workshop on Ethnobotany and its application to conservation, National Herbarium, PARC., Islamabad. pp. 73-82.
- Nasir, E. & Ali, S.I. (Eds). (1970-2001). Flora of Pakistan Fascicles 1 – 200.
- Perezgrovas, R., A. Parry, M. Peralta, L. Zaragza, D. Trow and P. Pedraza. 1994. Chiapas sheep wool production and animal health in a unique sheep breed. Proceedings of the New Zealand society of animal production. 54:177-180.
- Qureshi, S. J and M.A Khan 2001. Ethnobotanical study of Kahuta from Rawalpindi District Pakistan. J. Biol. Sci. 1(1).
- Rehman, M. 1986. Medicinal Plants of Upper Swat. M. Sc. Thesis, Department of Botany, University of Peshawar.
- Shinwari, M. I and M.A Khan .1998. Ethnobotany of Margalla hills, National park Islamabad. M.Phil thesis Department of biological Science Quaid-e-Azam University Islamabad, Pakistan
- Trease, and Evans. 1985. The cultivation of medicinal plants, Pharmacognosy, London. :259-271.