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Medicinal and aromatic plants: A synopsis of Makawanpur district, central Nepal

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Abstract

Objective: All people of the world depend largely upon plant resources for their existence as majority of food, medicine, fiber and clothes, fuel (firewood), construction materials etc. are derived from plants. This paper aims to provide an inventory based research work on medicinal plants carried out at various places of Makawanpur district.

Methods: The data was collected by cataloguing existing information, personal interviews (Key informant interviews), field observation, consultative meeting/ workshops, focus group discussion etc.

Results: A total of 193 species of medicinal plants belonging to 77 families were recorded. Most of the medicinal plants recorded in this study were herb (43%) followed by tree and shrub. Specific uses of each plant along with botanical name, local name, family, habit and parts used were recorded.

Conclusion: Except highly communicable diseases and emergency cases, people of the many areas of developing countries still depend and rely on their own traditional medicinal system.

Keywords: Medicinal plants, Aromatic plants, Makawanpur, Herbs

Introduction

People in all country of the world to a large extent depend on plant species which provide wide range of useful products like food, medicine, timber, fodder, ornament etc. The basic needs are obtained from the plants which meet the daily requirement of human life. Moreover, many plants have been used for medicine from the time immemorable. In the present context of extensive use of modern system of treatment still there is a wide space for the plants having medicinal property and have been used in different ways. More than 80% people of the developing country depend largely on these plants for the betterment of their livelihood.

Although modern systems of remedy like allopathy, surgery are common in practice in the cities and a few remote areas of Nepal, most of the rural people rely upon the nature to fight against the germs and worms even today. Except highly communicable diseases and emergency cases, people of the many areas still depend on traditional medicinal practices in the treatment of various common diseases such as dysentery, diarrhea, stomach problem, gastritis, jaundice, skin related problems, etc. The dependence of people on these plants for health care is associated with their traditional belief on the effectiveness for curing rather than just poverty. A large number of people in the Himalayan region derive employment and income from the collection, processing and trade of medicinal plants. However, due to increase in

demand, unorganized and haphazard methods of collection ultimately lead to the declination of the resources.

Materials and methods

The study was mainly based on questionnaire and personal interview with villagers, collectors, traditional healers, community forest staffs with the objective of obtaining better information about the local names, part/s used, and purpose of use.

Study area

The study was conducted from December, 2014 to June 2015 in Namtar, Bharta, Sarikhet, Makwanpur Gadhi VCDs, Daman of Thaha municipality, Padam Pokhari and Hatiya village of Hetauda sub-metropolitan city. Among these, Padam Pokhari and Hatiya village lie in Churiya range of Tropical zone; Namtar, Bharta, Sarikhet and Makwanpur Gadhi in Mahabharat range of sub-tropical zone and Daman in Temperate zone. The points in the map indicate the study area.

Data collection

The study was primarily based on questionnaire method and participants were chosen to represent both genders and all age groups as far as possible. A semi-structured questionnaire was used and the questions aimed mainly to collect information on the basis of purpose of uses. Plant collection and exhibition of plant species were performed during the group or individual interviews. Additional key

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informants like plant collectors, cultivators, traditional healers, traders, community heads and community forest staffs were purposively selected for interviews. The specimens collected

were identified using relevant literatures like Hara et al. (1978, 1979, 1982), Malla et al. (1986), Pande (1967), Press et al. (2000), Stainton (1988), Suwal (1969) etc. [1-6, 13].



Figure 1: Dots indicating the study area

Results and discussion

During the field survey, some 193 species of medicinal plants belonging to 77 families were recorded. Most of the medicinal plants recorded in this study were herb (43%) followed by tree and shrub. A few climber species were also equally important to cure various diseases. Among the reported species, the family Leguminosae was the largest representing 20 species followed by Asteraceae, Poaceae and so on.

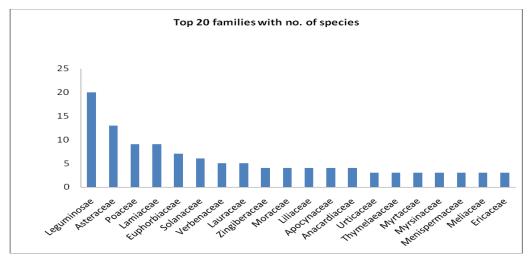


Figure 2: Top 20 families with no. of species

Table 1: List of plant species along with their uses

Scientific name	Local name	Family	Habit	Part/s used	Use in
Acacia catechu (L. f.) Willd.	Khayar	Leguminosae	Tree	Stem	Fracture,
Acacia nilotica (L.) Willd. ex Delile	Babul	Leguminosae	Shrub	Stem	Tooth paste

Acacia rugata (Lam.) Voigt	Sikakai	Leguminosae	Shrub	Leaf, Fruit	Constipation, urinary trouble, malaria, Scabies, to make soap
Achyranthus aspera L.	Datiwan	Amaranthaceae	Herb	Root	Typhoid
Aconitum ferox Wall. ex Ser.	Bisma	Ranuncnlaceae	Herb	Whole plant	Cough, fever, asthma, diarrhea, throat problem, anthelmintic
Aconitum spicatum (Bruhl) Stapf	Bikh	Ranuncnlaceae	Herb	Whole plant	Cough, fever, asthma, diarrhea, throat problem, anthelmintic
Acorus calamus L.	Bojho	Araceae	Herb	Rhizome	Cold & cough, toothache, insecticide, anthelmintic, rheumatism
Aegle marmelos (L.) Correa	Bel	Rutaceae	Tree	Bark, Fruit	To get relief from heat, typhoid, dysentery, diarrhea, jaundice, fever
Agave americana L.	Kettuke	Agavaceae	Shrub	Leaf	Wound
Ageratum conyzoides L.	Gandhe	Asteraceae	Herb	Leaf	Cut & wound
Ageratum houstonianum Mill.	Nilo gandhe	Asteraceae	Herb	Leaf	Heart pain
Ageretina adenophora (Spreng.) King & H. Rob.	Banmara	Asteraceae	Herb	Leaf	Cut & wound, fever
Ainsliaea latifolia (D. Don) Sch. Bip.	Sahadeva/ sahadevi	Asteraceae	Herb	Leaf	Ferment in brewing
Albizia julibrissin Durazz.	Patke siris	Leguminosae	Tree	Bark	Dandruff
Albizzia lebbek (L.) Benth.	Kalo siris	Leguminosae	Tree	Bark	Snake & scorpion bite
Aloe vera (L.) Burm. f.	Ghiu kumari	Liliaceae	Herb	Leaf	Heat stroke, Joint pain, constipation, piles, rheumatism
Alstonia scholaris (L.) R. Br.	Chhatiwan	Apocynaceae	Tree	Bark	Temporary family planning, fever, skin diseases, ulcer, diarrhea
Amomum subulatum Roxb.	Alainchi	Zingiberaceae	Herb	Fruit	Spice, stomachache, appetizer, indigestion, common cold, mouth infection
Andrographis paniculata (Brum. f.) Nees	Kalomegh	Acanthaceae	Herb	Whole plant	To get relief from heat stroke, appetizer, fever, snake bite, diarrhea
Artemisia indica Willd.	Tite pati	Asteraceae	Herb	Leaf	Fever, cut & wound, scabies, anthelmintic, dysentery, diarrhea
Asparagus racemosus Willd.	Kurilo	Asparagaceae	Shrub	Root	Tonic, laxative, jaundice
Astilbe rivularis BuchHam. ex D. Don	Thulo okhati	Saxifragaceae	Herb	Whole plant	Body pain, tonic, diarrhea, dysentery, menstrual problem
Atropa belladonna L.	Beladona	Solanaceae	Herb	Root, Leaf	Hooking cough, urinary disorder, gastritis, ulcer, rheumatism, Sleeplessness
Azadirachta indica A. Juss.	Neem	Meliaceae	Tree	Leaf, Bark, Fruit	Fever, cough, skin disease, insecticide, asthma, scabies, ulcer, to make soap
Bauhinia purpurea L.	Tanki	Leguminosae	Tree	Flower, Bark	Severe diarrhea,

Bauhinia vahlii Wight & Arn.	Vorla	Leguminosae	Climber	Root, Bark	Piles, dysentery
Belamcanda chinensis (L.) Redoute	Tarbare ful	Iridaceae	Herb	Root	To check abortion
Berberis aristata DC.	Chutro	Berberidaceae	Shrub	Bark	Malaria, skin disease, eye problem, jaundice, piles, to make wine, dye
Bergenia ciliata (Haw.) Sternb.	Pakhan Ved	Saxifragaceae	Herb	Whole plant	Cut & wounds, diarrhea, stone, urinary problem, anthelmintic, fever
Betula alnoides BuchHam. ex D. Don	Saur	Betulaceae	Tree	Bark	Dysentery
Betula utilis D. Don	Vojpatra	Betulaceae	Tree	Bark	Anthelmintic, urinary disorder, jaundice, to make paper
Boehmeria rugulosa Wedd.	Dar	Urticaceae	Tree	Bark	Putting in wood furniture
Boerrhavia diffusa L.	Punarwa	Nyctaginaceae	Shrub	Whole plant	Cough, stomachache, urinary disorder, piles, rheumatism, asthma, hernia, jaundice, blood purifier
Bombax ceiba L.	Simal	Bombacaceae	Tree	Flower, Bark	Severe diarrhea
Bryophyllum pinnatum (Lam.) Oken	Patthar churna	Crassulaceae	Herb	Pseudobulb	Swelling, fracture
Butea monosperma (Lam.) Kuntze	Palans	Leguminosae	Tree	Flower	Anthelmintic, skin disease, urinary problem, diarrhea
Callicarpa arborea Roxb.	Guyalo	Verbenaceae	Tree	Bark	Fever
Callicarpa macrophylla Vahl.	Dahichamle	Verbenaceae	Shrub	Root	Fever
Calotropis gigantea (L.) Dryand.	Aank	Asclepiadaceae	Herb	Latex	Scorpion bite, crack, asthma, nasal catarrh cough, dysentery, skin diseases
Camellia kissi Wall.	Hinguwa	Theaceae	Shrub	Fruit	To make soap
Canarium bengalense Roxb.	Gokuldhup	Burseraceae	Tree	Latex	To be away from ghosts and spirits, to make incense
Cannabis sativa L.	Ganja	Cannabaceae	Herb	Leaf, Fruit	Diarrhea of cattle
Careya arborea Roxb.	Kumvi	Lecythidaceae	Tree	Bark	Snake bite
Caryopteris odorata (D.Don) B.L.Robinson	Mohani	Verbenaceae	Shrub	Flower	To get relief from heat
Cassia alata L.	Dadpat	Leguminosae	Shrub	Leaf	Skin disease
Cassia fistula L.	Rajbrikcha	Leguminosae	Tree	Bark, Fruit	Severe diarrhea, constipation, ulcer, piles
Catharanthus roseus (L.) G. Don	Sadabahar	Apocynaceae	Herb	Whole plant	Cancer (lungs, intestine and stomach)
Centella asiatica (L.) Urb.	Ghodtapre	Apiaceae	Herb	Whole plant	To get relief from heat, memory improvement, high blood pressure, uric acid, sleeplessness
Cheilanthes bicolor (Forssk.) Kaulf.	Ranisinka	Pteridaceae	Herb	Leaf	Wound
Chenopodium album L.	Bethe	Chenopodiaceae	Herb	Fruit, Leaf	Body pain
Chlorophytum borivilianum L.	Seto musli	Liliaceae	Herb	Root	Diarrhea, jaundice, asthma, diabetes, scabies, piles,

sexual stimulant Fruit Choerospondias axillaris (Roxb.) Lapsi Anacardiaceae Tree To make pickle B. L. Burtt & A. W. Hill Chromolaena odorata (L.) King & Banmara Asteraceae Herb Leaf Cut and wound H.E. Robins. Chrysanthemum Pairethram Asteraceae Herb Flower Pesticide cinerariifolium (Trevir.) Vis. Sugandhakokila Cinnamomum glaucescens Tree Fruit Scent Lauraceae (Nees.) Nand.Mazz Lauraceae Cinnamomum tamala (Buch.-Tejpat Tree Leaf, Bark Flavoring agent. Ham.) Nees & Eberm. stomachache, stimulant Dalchini Cinnamomum zeylanicum Breyn. Lauraceae Tree Bark Spice Rhizome Cissampelos pariera L. Gujar gano Menispermaceae Climber Sleeplessness, wickedness, gastritis Leaf, Bark Cleistocalyx operculata (Roxb.) Kyamuno Myrtaceae Tree Headache, nasal catarrh Merr. & Perry Gol kakri Typhoid Coccinea grandis (L.). Voigt. Cucurbiataceae Climber Root Colebrookea oppositifolia Sm. Dhusure Lamiaceae Shrub Leaf Snake bite, toothache Coriandrum sativum L. Dhaniya Apiaceae Herb Fruit Spice Betlauri Zingiberaceae Costus speciosus (Koenig) Sm. Herb Rhizome Fever, indigestion, disease, cough, snake bite, rheumatism Syal dhote Amaryllidaceae Curculigo orchioides Gaertn. Herb Root Gastritis, asthma, sexual stimulant, piles, stomach disorder, ulcer, jaundice, itching, to check bleeding Curcuma angustifolia Roxb. Haledo Zingiberaceae Herb Rhizome Jaundice Convolvulaceae Whole plant Jaundice and Cancer Cuscuta reflexa Roxb. Akashbeli Climber Cymbopogon flexuosus (Nees ex Kagati ghans Poaceae Herb Leaf Scent, insecticide, tea Steud.) W. Watson Cymbopogon martinii (Roxb.) W. Herb Pamarosa Poaceae Leaf Scent Watson Cymbopogon winterianus Jowitt Citronella Poaceae Herb Leaf To make soap and scent Cynodon dactylon (L.) Pers. Dubo Poaceae Whole plant High blood pressure, cuts Herb and wounds Daphne bholua Buch.-Ham. ex D. Lokta Thymelaeaceae Shrub Bark Tο make paper, Don anthelmintic, stomachache, fish poisoning Daphne papyracea Wall. ex Barua Thymelaeaceae Shrub Bark Paper making Steud. Datura metel L. Kalo Dhaturo Fruit Solanaceae Herb Anti rabies. asthma. parkinson's disease Dendrocalamus strictus (Roxb.) Bans Poaceae Shrub Root To cure boil Nees Dillenia pentagyna Roxb. Tatari Dilleniaceae Tree Exudates, Bark Centipede bite Dioscorea deltoidea Wall. ex Ban tarul Dioscoreaceae Climber Fruit Dysentery, gastritis, Griseb. constipation, family planning, fish poisoning, to cure louse Seed, Fruit Diploknema butyracea (Roxb.) Chiuri Sapotaceae Tree Scabies, gastritis Baehni Drymaria diandra Blume Avijalo Caryophyllaceae Herb Whole plant Nasal catarrh _____ 10

Eclipta prostrata L.	Vringaraj	Asteraceae	Herb	Leaf	Jaundice, skin disease, blood purifier, high blood pressure, fever, wound
Edgeworthia gardneri (Wall.) Meisn.	Kaghuti / Argeli	Thymelaeaceae	Shrub	Root	Eye problem, fish poisoning, to make paper
Elephantopus scaber L.	Sayajari	Asteraceae	Herb	Leaf	Ferment in brewing
Embelia tsjeriam-cottam (Roem. & Schult.) A. DC.	Bayu bidang	Myrsinaceae	Shrub	Fruit	Anthelmintic, skin disease, blood purifier
Entada phaseoloides (L.) Merr.	pangra	Leguminosae	Shrub	Fruit	Tonic, fish poisoning
Ephedra gerardiana Wall. ex Stapf	Somlata	Ephedraceae	Herb	Whole plant	Asthma, nasal catarrh
Erythrina stricta Roxb.	Phaledo	Leguminosae	Tree	Bark	Chronic disease of cattle
Eulaiopsis binnata (Retz.) C. E. Hubb.	Babiyo	Poaceae	Herb	Whole plant	Eat ashes with cow milk to cure pain due to fall down
Euphorbia hirta L.	Dhudhe Jhar	Euphorbiaceae	Herb	Exudates	Cut and wound
Euphorbia royleana Boiss.	Siudi	Euphorbiaceae	Tree	Exudates, Leaf	Massage, swelling
Ficus benghalensis L.	Bar	Moraceae	Tree	Exudates	To get relief from heat
Ficus hispida L.	Khasreto	Moraceae	Tree	Sap	Ear problem
Ficus racemosa L.	Dumri	Moraceae	Tree	Fruit	Appetite
Ficus semicordata BuchHam. ex Sm.	Khanyu	Moraceae	Tree	Exudates	Boil
Gaultheria fragrantissima Wall.	Dhasingre	Ericaceae	Shrub	Leaf	Massage, scabies
Girardinia diversifolia (Link) Friis	Allo	Urticaceae	Herb	Bark	Diabetes, to get fiber
Glycyrrhiza glabra L.	Jethimathu	Leguminosae	Herb	Root	Common cold, skin disease, acidity
Holarrhena pubescens (Buch Ham.) Wall. ex G. Don	Khirro	Apocynaceae	Shrub	Bark	Piles, dysentery, toothache
Imperata cylindrica (L.) P. Beauv.	Siru	Poaceae	Herb	Root	Anthelmintic
<i>Indigofera heterantha</i> Wall. ex Brandis	Sakino	Leguminosae	Shrub	Flower	To make pickle
<i>Inula cappa</i> (BuchHam. ex D. Don) DC.	Gaitihare	Asteraceae	Herb	Flower, Leaf	Ferment in brewing
Jasminum humile L.	Jai	Oleaceae	Shrub	Root	Wound of mouth
Jatropha curcas L.	Sajiwan	Euphorbiaceae	Shrub	Fruit	Biogas
Juglans regia L.	Okhar	Juglandaceae	Tree	Fruit, Bark	Pesticide, dyeing
Juniperus horizontalis Moench	Dhupi	Cuppresaceae	Shrub	Wood	Incense
Juniperus indica Bertol.	Dhupi	Cuppresaceae	Shrub	Wood	Incense
Juniperus recurva BuchHam.ex D.Don	Dhupi	Cuppresaceae	Shrub	Wood	Incense
Justicia adhatoda L.	Asuro, Vashak	Acanthaceae	Shrub	Leaf	Asthma, rheumatism, malaria, insecticide
Lepidium sativum L.	Chamsur	Brassicaceae	Herb	Fruit	Body pain
Leucas cephalotes (Roth) Spreng.	Dronapuspi	Lamiaceae	Herb	Flower	Jaundice, asthma, common cold, rheumatism, piles, scabies, anthelmintic
Lindera neesiana (Wall. ex Nees) Kurz	Siltimur	Lauraceae	Tree	Fruit	Antivenom, gastritis
Lobelia pyramidalis Wall.	Eklebir	Lobeliaceae	Herb	Root	Cough, rheumatism, fever
Lycopodium clavatum L.	Bhutle lahara	Lycopodiaceae	Climber	Whole plant	Rheumatism, lung & kidney problem, fracture, to make gun powder

Lygodium japonicum (Thunb.) Sw.	Janai laharo	Lygodiaceae	Shrub	Whole plant	Gastritis
Lyonia ovalifolia (Wall.) Drude	Angeri	Ericaceae	Tree	Leaf	Scabies
Macrotyloma uniflorum	Gahat	Leguminosae	Herb	Seed	Stone
Maesa macrophylla (Wall.) DC.	Vogate	Myrsinaceae	Shrub	Bark, Leaf	Fish poisoning
Mangifera india L.	Aamp	Anacardiaceae	Tree	Bark	Typhoid
Matricaria chamomilla L.	Kamomail	Asteraceae	Herb	Flower	Scent, gastritis,
Melia azedarach L.	Bakaino	Meliaceae	Tree	Bark	Headache, nasal catarrh
Mentha arvensis L.	Pudina	Lamiaceae	Herb	Leaf	Fever, tooth paste, scent
Millettia extensa Benth.	Gaujo	Leguminosae	Shrub	Root	Scabies
Mimosa pudica L.	Lajjawati	Leguminosae	Herb	Root	Infertility
Mimosa rubicaulis Lam.	Arari	Leguminosae	Shrub	Leaf	Massage
Morchella conica Pers.	Guchchhi chyau	Helvellaceae	Herb	Fruit	Tonic, fever
Mucuna pruriens (L.) DC.	Kauso	Leguminosae	Herb	Fruit	Dysentery, paralysis, urinary problem, tonic, scorpion bite
Musa paradisiaca L.	Kera	Musaceae	Herb	Fruit	Jaundice
Mussaenda macrophylla Wall.	Dhobini	Rubiaceae	Shrub	Root	Typhoid
<i>Myrica esculenta</i> BuchHam. ex D. Don	Kaphal	Myricaceae	Tree	Bark	Bronchitis, tickling in the throat
Myrsine semiserrata Wall.	Kalikath	Myrsinaceae	Tree	Seed	Tapeworm
Nicotiana tabacum L.	Surti	Solanaceae	Herb	Leaf	Antiworm
Nyctanthes arbor-tristis L.	Parijat	Oleaceae	Shrub	Leaf, Flower	Pneumonia
Ocimum basilicum L. Ocimum sanctum L.	Babari Tulasi	Lamiaceae Lamiaceae	Herb Herb	Leaf Leaf	Asthma, common cold, urinary problem, gastritis, wound Common cold
Ocimum sanctum L. Ocimum tenuiflorum L.	Tulasi	Lamiaceae	Herb	Leaf	
Ocimum tenumorum E.	Tulasi	Lamateae	пего	Leai	Common cold, fever, asthma, ear pain, headache, blood purifier, to control sugar, to make tea
Operculina turpethum (L.) Silva Manso	Nisodh	Convolvulaceae	Climber	Fruit	Piles, jaundice, fever, tumor
Oroxylum indicum (L.) Kurz	Tatelo	Bignoniaceae	Tree	Bark, Seed	Wound, fever
Paris polyphylla Sm.	Satuwa	Liliaceae	Herb	Rhizome	Anthelmintic, cut & wound, dysentery, diarrhea, tonic
Phyllanthus amarus Schum. & Thomsoni	Bhui amala	Euphorbiaceae	Shrub	Fruit	Acidity, asthma, common cold, skin disease, bronchitis, anemia, jaundice
Phyllanthus emblica L.	Amala	Euphorbiaceae	Tree	Fruit	Cough, dysentery, to aid vitamin 'c'
Piper longum L.	Pipla	Piperaceae	Climber	Fruit	Asthma, jaundice, pails, sleeplessness, stomach pain
Plumbago zeylanica L.	Chitu	Plumbaginaceae	Shrub	Whole plant	Rheumatism, nasal catarrh
Pogostemon benghalensis (Brum. f.) Kuntze	Rudilo	Lamiaceae	Herb	Leaf	Cough, pneumonia
Premna latifolia L.	Ginneri	Verbenaceae	Tree	Bark, Root	Massage in pain, to check abortion, fever
Prunus persica (L.) Batsch.	Aaru	Rosaceae	Tree	Young tip	Wound, to cure disease with boils affecting the

					hoofs and mouth of animals
Psidium guajava L.	Amba	Myrtaceae	Tree	Bark	Gastritis, dysentery
Pueraria tuberosa (Roxb. ex Willd.) DC	Birali ko lahara	Leguminosae	Climber	Whole plant	Dysentery
Rabdosia lophanthoides (Buch Ham. ex D. Don) Hara.	Mirre	Lamiaceae	Herb	Leaf	Fever
Rauvolfia serpentina (L.) Benth. ex Kurz	Sarpagandha	Apocynaceae	Herb	Root	High blood pressure, diarrhea, fever, snake & other insect bite
Rheum australe D. Don	Padam chal	Polygonaceae	Herb	Petiole	Constipation, diarrhea, rheumatism, fracture, to make pickle
Rhododendron anthopogon D. Don	Sunpate	Ericaceae	Shrub	Leaf	Common cold, bronchitis, massage
Rhus wallichii Hook. f.	Valayo	Anacardiaceae	Tree	Fruit	To cure swelling due to its touch
Ricinus communis L.	Ader	Euphorbiaceae	Shrub	Leaf, Root	Burn wound, asthma, jaundice, skin disease, fever
Rubia manjith Roxb. ex Fleming	Majitho	Rubiaceae	Climber	Root	Skin disease, allergy, swelling, heat stroke, ulcer, dysentery, scorpion bite to make dye, rheumatism
Rubus ellipticus Sm.	Aiselu	Rosaceae	Shrub	Root, Fruit	Wound, jaundice
Sapindus mukorossi Gaertn.	Riththa	Sapindaceae	Tree	Fruit	Cough, epilepsy, toothache, fish poisoining, to make soap
Sapium inisgne (Royle) Benth.ex Hook.f.	Khirro	Euphorbiaceae	Tree	Latex	Fish poisoning
Saurauia napaulensis DC.	Gogan	Saurauiaceae	Tree	Bark	Fever, typhoid
Schima wallichii (DC.) Korth.	Chilaune	Theaceae	Tree	Bark	Antivenom, Fish poisoning
Scutellaria discolor Colebr.	Ratopate	Lamiaceae	Herb	Root	Fever, typhoid
Selinum wallichianum (DC.) Raizada & Saxena	Vutkesh	Apiaceae	Herb	Whole plant	Common cold, cut & wound, gastritis, anthlmintic, indigestion, fever, spice, sleeplessness
Semecarpus anacardium L.f.	Valayo	Anacardiaceae	Tree	Fruit	To make foot soft and glorious
Shorea robusta Gaertn.	Saal	Dipterocarpaceae	Tree	Bark, Latex	Incense, severe diarrhea
Sida cordifolia L.	Balu	Malvaceae	Herb	Root	Rheumatism
Smilax aspera L.	Kukurdaino	Liliaceae	Herb	Root	To be away from ghosts and spirits
Solanum anguivi Lam.	Thulo bihi	Solanaceae	Herb	Root, Fruit	Toothache, cough
Solanum virginianum L.	Kalcheda	Solanaceae	Herb	Ftuit	Tonic, scorpion bite, fever
Spilanthes paniculata Wall.ex DC.	Marauti	Asteraceae	Herb	Fruit	Toothache, fish poisoning, stomach disorder
Stellaria monosperma BuchHam. ex D. Don	Jethi madhu	Caryophyllaceae	Herb	Whole plant	Whooping cough
Stephania glandulifera Miers	Batulpate	Menispermaceae	Climber	Leaf	Menstrual disorder, hemorrhage
Swertia angustifolia BuchHam. ex D.Don	Chiraito	Gentianaceae	Herb	Whole plant	Fever

Swertia chirayita (Roxb. ex Fleming) Karsten	Chiraito	Gentianaceae	Herb	Whole plant	Anthelmintic, severe fever, jaundice, wound, high blood pressure, to make wine
Syzygium cumini (L.) Skeels	Jamuna	Myrtaceae	Tree	Bark	Massage in pain, toothache, dysentery
Taraxacum officinale Wigg.	Tuki phool	Asteraceae	Herb	Whole plant	Urinary disorder, stomach problem, hepatic disorder & spleen problem
Taxus wallichiana Zucc.	Lauth sallo	Taxaceae	Tree	Leaf	Cancer, cough, asthma
Tectaria macrodonta (Fee) C.Chr.	Kali niuro	Aspidiaceae	Herb	Leaf	Dysentery, stomach disorder
Terminalia alata Heyne ex Roth	Saj	Combertaceae	Tree	Bark	Dye, dysentery, snake bite
Terminalia bellirica (Gaertn.) Roxb.	Barro	Combertaceae	Tree	Fruit	Cough, gastritis, fever, skin problem, stimulant, diarrhea
Terminalia chebula Retz.	Harro	Combertaceae	Tree	Fruit	Cough, constipation, jaundice, stone & theca problem, high blood pressure
Thunbergia coccinea Wall. ex D.Don	Thapali lahara	Acanthaceae	Climber	Root	Fever
Thysanolaena maxima (Roxb.) Kuntze	Amriso	Poaceae	Herb	Root	Typhoid, wound
Tinospora sinensis (Lour.) Merr.	Gurjo	Menispermaceae	Climber	Root	Jaundice, constipation, to check abortion
Toona ciliata M.Roem.	Tuni	Meliaceae	Tree	Wood	To make bee-hive
Tribulus terrestris L.	Gokhur	Zygophyllaceae	Herb	Rhizome	Urinary problem, stone, tonic, scabies
Trichosanthes tricuspidata Lour.	Indreni	Cucurbiataceae	Climber	Seed	Abortion, to check bleeding, asthma, rheumatism, jaundice, ear pain, constipation
Urena lobata L.	Nalu kurro	Malvaceae	Herb	Root	Wound
Urtica dioica L.	Sisno	Urticaceae	Herb	Root,Leaf	Diabetes, fracture
Vetiveria zizanioides (L.) Nash	Khas khas	Poaceae	Herb	Leaf	Massage in body pain, anthelmintic, fever
Vitex negundo L.	Simali	Verbenaceae	Shrub	Leaf	Nasal catarrh, cough, scabies, swelling, gastritis, insecticide
Withania somnifera (L.) Dunal	Ashwogandha	Solanaceae	Herb	Root	Tonic, joint pain, scabies, sleeplessness
Woodfordia fruticosa (L.) Kurz	Dhayero	Lythraceae	Shrub	Flower	Severe diarrhea, dye
Zanthoxylum armatum DC.	Timur	Rutaceae	Shrub	Fruit	Gastritis, toothache, fever,
Zingiber officinale (Willd.) Roscoe	Aduwa	Zingiberaceae	Herb	Rhizome	Common cold, asthma, indigestion
Zizyphus mauritiana Lam.	Bayer	Rhamnaceae	Shrub	Seed	Diabetes
Zizyphus rugosa Lam.	Rukh bayer	Rhamnaceae	Tree	Bark	Diarrhea

The plant parts used for medicinal preparations are bark, flowers, fruits, leaves, rhizomes, roots, sap, seeds, stems and young shoots. In some cases, the whole plant including the roots was utilized [7-12, 14-18]. The local people use these plants and their parts for the treatment of ailments following

traditional practices. Moreover, in some cases the people are seeking help from the traditional healers when their illness was not cured by modern medicines. The people living near by the forest have good information of using pattern of medicinal plants. Similarly, women and elderly people have

the deep knowledge. The knowledge level differed heavily with respect to generation. Traditional beliefs and practices are deeply rooted in their culture so that the ideas of using these plants have been transferred from one generation to another through oral communication, this vital knowledge needed to be scientifically and systematically documented before it is lost due to rapid change in their lifestyle.

Most of people interviewed were familiar with the species dealing with common ailments like cold/cough, digestive problems, fever, headache, skin infections and plant remedies were used on regular basis. The most popular medicinal preparation is infusion, decoction, paste or juice. Most of the information is good enough to precede scientific investigation as a research tool. Similarly, a large number of people in the Himalayan region derive employment and income from the collection, processing and trade of medicinal plants.

Conclusion

The medicinal plants have an important role in primary health care and livelihood of the local people. Except highly communicable diseases and emergency cases, people of the many areas of developing countries still depend and rely on traditional medicinal practices.

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