

## Medicinal Plants of Tehrathum District, Eastern Nepal

Mani Bahadur Rai\*

Department of Botany, P. G. Campus, Biratnagar

### Abstract

Vaidhya (Herbalist) use the medicinal plants to remove the ailments since time immemorial. Tehrathum district is found rich in medicinal plants. A total of 105 vascular plants were recorded to be used in different diseases. Information was collected by discussion through local communities and field observations. Some plants were found to be used in different diseases in different places. The indigenous knowledge is transferring from generation to generation in certain families without any written records.

*Keywords:* Medicinal Plants, NTFPs, Tehrathum, Shaman

### Introduction

Tehrathum is a hilly district, located 76°25' E to 87°75' E and 26°59' N to 27°30' N longitude and latitude of eastern Nepal, covering 679 sq. km. area. The altitude ranges from 530m ('Tamor Phedi') to 3,010m ('Tinjure') (Rai 1996). The area covers subtropical and temperate climate. The major ethnic groups of the district are Limbu, Sherpa, Tamang, Rai, Magar, Gurung, and Newar. *Amomum aromaticum*, *Asparagus* spp., *Astilbe rivularis*, *Bergenia ciliata*, *Daphne* spp., *Lycopodium clavatum*, *Nardostachys grandiflora*, *Picrorhiza scrophulariiflora*, *Piper longum*, *Potentilla fulgen*, *Rubia manjith*, *Sapindus mukorossi*, *Swertia chirayita*, *Taxus baccata*, *Thysanolaena maxima*, *Zanthoxylum armatum*, *Zingiber officinale* are exported as the main non timber forest product (NTFPs) from the district.

Most of the people of Tehrathum inhabit in rural area. The forest plants, as other areas, play an important part in their life and derive food, fodder, fuel, etc from their surroundings. They are also familiar about medicinal plants. Especially local 'Vaidhya' and 'Dhami-Jhankri' (Shaman) know the uses of these plants and are practicing to remove the ailments since time immemorial. So, medicinal

plants are their main source of remedy for diseases. Those persons, who use these plants, often keep their knowledge secret. They are against the exploration of their traditional knowledge. Such knowledge is transferring from generation to generation in certain families without any written record.

Works on medicinal plant surveys have been done from eastern Nepal by several workers (Banerji 1957, Manandhar 1971, Dobremez 1976, Gautam 1995). However, the literature of medicinal plants from Tehrathum district is not available except a single report on NTFPs (Pradhan and Manandhar 1997). Present work is a detailed survey of vascular medicinal plants, with help of local experts of the district. The surveying work was done mainly in five Village Development Committees. These are Jaljale, Simle, Oyakjung, Esibu and Solma. Plants were collected from forests of Chichiling (Jaljale and Simle VDCs), Sikre (adjoining area of Oyakjung, Samdhu and Pauthak VDCs) and Tinjure (Solma, Sungnam and Ambung). Most of such plants were found in temperate climate.

### Materials and Methods

Local 'Dhami-Jhakri' and 'Vaidhya' were identified. By making good relation with them,

*Correspondence:* \*Birat Science Campus,  
Biratnagar

information about medicinally using plants in different diseases were recorded. Thereafter, they were also requested to involve in the field visit during 1996.

The herbarium specimens were identified with the help of available literature (Hookers 1872-1897, Hains 1961, Grieson and Long 1983, Anonymous 1986, Mabberley 1987, Davis and Cullen 1988, Siwakoti 1995). The voucher specimens are deposited in the Department of Botany, Post Graduate Campus, Biratnagar. The recorded specimens have been arranged in alphabetical order with botanical and vernacular name after their family. The parts used along with their value also described.

### Results and Discussion

A total of 105 species of vascular plants were found frequently used in Tehrathum district in different diseases (Table 1). Some of these were found to

be used in more than one disease. A particular plant used for a specific disease in one places was found to be used for a different diseases in another places although the plants were available in both places. For example, *Cassia fistula* is used in diuretic, purgative and rheumatism at Jaljale, while in Solma; the plant is used as a remedy's for upper respiratory diseases. 'Vaidhyas' were found having adequate information about medicinal plant. They use these plants for curing diseases. 'Dhami-Jhankri' also do the same but they give priority to tantra, mantra. The work is totally based on the information provided by the local 'Vaidhyas' and 'Dhami-Jhankri.'

**Table 1.** List of Medicinal Plants

S. N.	Family	Botanical Name	Vernacular Name	Parts used	Diseases
1	Leguminosae	<i>Abrus precatoris</i>	Lalgedi	Seed, leaf, root	Nervous disorder, eye, skin diseases.
2	"	<i>Acacia catechu</i>	Khayar	Wood	Astringent, cooling, digest
3	Amaranthaceae	<i>Achyranthes aspera</i>	Apamarga	Root	Stones, diarrhea, dysentery
4	Araceae	<i>Acorus calamus</i>	Bojo	Rhizome	Cough, whooping cough, bronchitis
5	Acanthaceae	<i>Adhatoda vasica</i>	Asuro	All parts except stem	Diarrhea, dysentery
6	Rutaceae	<i>Aegle marmelos</i>	Bel	Half ripe fruit	Diarrhea, dysentery
7	Asteraceae	<i>Ageratum conyzoides</i>	Ilame jhar	Leaf, young shoot	Control bleeding (wound)
8	Liliaceae	<i>Allium cepa</i>	Piyas	Bulb	Aphrodisiac, anti-malaria
9	"	<i>A. sativa</i>	Lasun	Bulb	Gastric, diabetes
10	"	<i>Aloe barbadensis</i>	Gheu Kumari	Leaf	Burns

11	Zingiberaceae	<i>Amomum subulatum</i>	Alaichi	Fruit and seed	Indigestion, vomiting, aphrodisiac
12	Annonaceae	<i>Annona squamosa</i>	Sarifa	Fruit	Digestive, vomiting, diarrhea, dysentery
13	Euphorbiaceae	<i>Antidesma diandrum</i>	Archal	Leaves, bark, root	Astringent, cholera & dysentery
14	Asteraceae	<i>Artemisia vulgaris</i>	Titepati	Root	Anathematic, nervous fresher, antispasmodic
15	Saxifragaceae	<i>Astilbe rivularis</i>	Thulo Okhati	Rhizome	Uterine contraction during birth, dysentery,
16	Moraceae	<i>Artocarpus heterophyllus</i>	Katahar	Leaves, root	Skin diseases, diarrhea
17	Liliaceae	<i>Asparagus racemosus</i>	Kurilo	Rhizome bulb	Galactagogue, aphrodisiac, diabetes
18	Leguminosae	<i>Bauhinia vahlli</i>	Bhorla	Seeds, young shoot	Snake bite, aphrodisiac
19	"	<i>B. variegata</i>	Koiralo	Root, bark, bud	Dyspepsia, obesity, dysentery, cough, piles
20	Begonaceae	<i>Begonia rubella</i>	Makarkachi	Leaves	Chest pain, antibacterial
21	Berberidaceae	<i>Berberis aristata</i>	Chutro	Fruit	Jaundice, malaria, piles, sores, eye diseases
22	Saxifragaceae	<i>Bergenia ciliata</i>	Pakhanbet	Rhizome	Uterine contraction, ulcers, fever, kidney stone
23	Bombaceae	<i>Bombax ceiba</i>	Simal	Bark	Demulcent, tonic, dysentery, skin eruptions
24	Loganiaceae	<i>Buddleja asiatica</i>	Bhimsenpate	Root, leaves	Malaria, tumor
25	Verbenaceae	<i>Callicarpa macrophylla</i>	Dahidangalo	Root, leaves	Stomach disorder, rheumatism.
26	Asclepidaceae	<i>Calotropis gigantea</i>	Aank	Root, leaves	Cold, coughs, asthma, dysentery, elephantiasis
27	Cannabinaceae	<i>Cannabis sativa</i>	Ganja	Leaves, seeds	Diarrhea, sedative, narcotize
28	Leguminosae	<i>Cassia fistula</i>	Rajbrikhchha	Fruit, seeds	Diuretic, purgative, rheumatism, respiratory diseases
29	Apiaceae	<i>Centella asiatica</i>	Ghod tapre	Shoot	Diuretic, blood purifier, leprosy
30	Menispermaceae	<i>Cissampelis pareira</i>	Gugarganu	Root, leaves	Diuretic, purgative, dyspepsia, diarrhea, itch

31	Rutaceae	<i>Citrus lemon</i>	Kagati	Fruit	Carminative, rheumatism dysentery, diarrhea
32	Lamiaceae	<i>Clinopodium umbrasum</i>	Tulsijhar	Leaves	Astringent
33	Poaceae	<i>Coix lachryma- jobi</i>	Bhirkoule	Fruit, root	Diuretic, blood purifier & menstrual disorder
34	Cucurbitaceae	<i>Cucurbita pepo</i>	Pharsi	Seed	Anathematic
35	Zingiberaceae	<i>Curcuma longa</i>	Kalo Besar	Rhizome	Common cold, cough, skin diseases
36	Cuscutaceae	<i>Cuscuta reflexa</i>	Akash beli	Shoot	Jaundice, urinary tract inflammation
37	Solanaceae	<i>Datura metel</i>	Kalo Daturo	Leaves, flowers, fruit	Mad dog bite, sores, dandruff, hair falling
38	Poaceae	<i>Desmostachya bipinata</i>	Kush	Rhizome	Diuretic, dysentery
39	Hydrangeacea e	<i>Dichroa febrifuga</i>	Basak	Root, leaves	Malaria fever
40	Liliaceae	<i>Disporum cantoniense</i>	Aklebir	Root	Headache, fever
41	Caryophyllaceae	<i>Drymaria cordata</i>	Abijalo	Leaves	Laxative, diarrhea , dysentery
42	Elaeocarpaceae	<i>Elaeocarpus sphaericus</i>	Rudrakshya	Fruit	Headache, epileptic fits
43	Asteraceae	<i>Eclipta alba</i>	Bhumiraj	Whole plant	Emetic, purgative, jaundice
44	Euphorbiaceae	<i>Emblica officinalis</i>	Amala	Bark, fruit	Gastric trouble, haemorrhage, jaundice, dyspepsia
45	Moraceae	<i>Ficus bengalensis</i>	Bar	Leaves, barks	Rheumatism, dysentery, diabetes, vomiting
46	"	<i>F. cunia</i>	Khanyu	Root, fruit	Aphthous complaints, bladder ailments
47	"	<i>F. lacor</i>	Kabhro	Bark	Ulcer, gargle in salivation
48	"	<i>F. religiosa</i>	Pipal	Bark, leaves	Ulcer, skin diseases, antibacterial, purgative
49	Leguminosae	<i>Glycine max</i>	Bhatmas	Seed	Diabetes
50	Apiaceae	<i>Heracleum nepalense</i>	Chingfing	Fruit	Common cold, cough
51	Meliaceae	<i>Heynea trijuga</i>	Ankhataruwa	Leaves	Cholera, burn
52	Apocynaceae	<i>Holorrhena antidysentrica</i>	Khirro	Bark, seed	Astringent, dysentery, anathematic, febrifugal

53	Saururaceae	<i>Houttuynia cordata</i>	Gane	Whole plant	Cooling indigestion, dysentery, diuretic
54	Poaceae	<i>Imperata cylindrica</i>	Siru	Rhizome	Piles, diarrhea, dysentery, gonorrhoea, sedative
55	Juglandaceae	<i>Juglans regia</i>	Okhar	Leaves, fruits	Bactericide, rheumatism, laxative
56	Brassicaceae	<i>Lepidium sativum</i>	Chamsur	Leave, fruit	Asthma, cough, piles, diuretic
57	Lauraceae	<i>Lindera neesiana</i>	Siltimur	Fruit	Carminative, headache, gastric trouble
58	Lycododiaceae	<i>Lycopodium clavatum</i>	Nagbeli	Fruit	Scabies, rheumatism, catarrh, malaria
59	Ericaceae	<i>Lyonia avalifolia</i>	Angeri	Leaves	Skin diseases
60	Sapotaceae	<i>Madhuca butyracea</i>	Chiuri	Fruit	Rheumatism, emollient
61	"	<i>M. lougifolia</i>	Mauwa	Flower	Coughs, colds, bronchitis
62	Myrsinaceae	<i>Maesa macrophylla</i>	Bhogote	Young shoot	Anathematic, dysentery, gastric trouble
63	Berberidaceae	<i>Mahonia napaulensis</i>	Chutro	Fruit	Diuretic, dysentery
64	Lamiaceae	<i>Mentha arvensis</i>	Pudin	Shoot	Cholera, anathematic, cough
65	Leguminosae	<i>Mimosa pudica</i>	Lajjawati	Root, leaves	Urinary complaints, swelling, sores, piles
66	"	<i>Mucuna purita</i>	Kauso	Root	Tonic, stimulant, diuretic, purgative
67	Musaceae	<i>Musa paradisica</i>	Kera	Fruit	Diarrhea, dysentery, diabetes
68	Myricaceae	<i>Myrica esculenta</i>	Kaphal	Bark	Asthma, bronchitis, dysentery, diuretic
69	Lamiaceae	<i>Ocimum basilicum</i>	Babari Phool	Leaves	Carminative, diuretic, gonorrhoea, dysentery
70	"	<i>O. sanctum</i>	Tulsi	Leaves	Diaphoretic, stimulating, expectorant
71	Bignoniaceae	<i>Oroxylum indicum</i>	Totola	Bark, leaves	Rheumatism, ulcer, diarrhea, dysentery
72	Santalaceae	<i>Osyris wightiana</i>	Haadjaro	Roots, leaves	Bone crack, contraction of uterine muscles.
73	Oxalidaceae	<i>Oxalis corniculata</i>	Chariamilo	Shoot	Astringent, febrifuge, antiseptic
74	Piperaceae	<i>Piper nigrum</i>	Marich	Fruit	Common cold, catarrh

75	"	<i>P. peepuloids</i>	Pipla	Fruit	Common cold, leprosy
76	Plumbagonaceae	<i>Plumbago zeylanica</i>	Chittu	Leaves	Leprosy, skin diseases, bactericide, fungicide
77	Lamiaceae	<i>Pogostemon benghalensis</i>	Rudilo	Root, leaves	Haemorrhage
78	Polygonaceae	<i>Polygonum molle</i>	Thotne	Young shoot	Astringent
79	Rosaceae	<i>Potentilla fulgens</i>	Bajradanti	Root	Diarrhea, gastric trouble
80	Myrtaceae	<i>Psidium guajava</i>	Ambak	Bark, leaf, fruit	Cholera, vomiting, diarrhea, dysentery
81	Punicaceae	<i>Punica granatum</i>	Anar	Bark, leaf, fruit	Dysentery, bronchitis
82	"	<i>Rabdosia coesta</i>	Mirre	Young shoot	Antiseptic
83	Apocynaceae	<i>Rauwolfia serpentina</i>	Chandmaru wa	Bark, leaf, fruit	Mental disorder, blood pressure, diabetes
84	Ericaceae	<i>Rhododendron arboreum</i>	Laligurans	Flower	Diarrhea, dysentery
85	Anacardiaceae	<i>Rhus parviflora</i>	Satibayar	Fruit	Diarrhea, dysentery, stomached
86	Rubiaceae	<i>Rubia cordifolia</i>	Majito	Root, leaves	Ulcers, inflammations, skin diseases
87	Rosaceae	<i>Rubus ellipticus</i>	Ainselu	Root, bark	Wounds, gastric troubles, diarrhea, dysentery
88	Sapindaceae	<i>Sapindus cytheria</i>	Amaro	Flower, fruit	Pneumonia
89	"	<i>S. mukorossi</i>	Rittha	Fruits	Salivation, epilepsy
90	Theaceae	<i>Schima wallichii</i>	Chilaune	Bark, leaves	Rubefacient, fever
91	Scrophulariaceae	<i>Scoparia dulcis</i>	Chini Jhar	Root, leaves	Fever, cough, bronchitis, menstruation disorder
92	Apiaceae	<i>Selinum tenuifolium</i>	Bhutkesh	Fruit	Aphrodisiac, sedative, rheumatism
93	Diptherocarpaceae	<i>Shorea robusta</i>	Sal	Resin, fruit	Astringent, diarrhea, dysentery
94	Smilacaceae	<i>Smilax macrophylla</i>	Kukurdaino	Root	Rheumatism, bloodless dysentery
95	Solanaceae	<i>Solanum tuberosum</i>	Alu	Leaves, tuber	Antispasmodic in cough, burn

96	Asteraceae	<i>Spilanthes calva</i>	Pur-pure jhar	Flower	Toothache, throat pain, headache
97	Gentianaceae	<i>Swertia chirayita</i>	Chirayito	Whole plant	Hypertension, diabetes
98	Asteraceae	<i>Tagetes petula</i>	Sayapatri	Leaves, flower	Purgative, carminative, antiseptic, jaundice
99	Euphorbiaceae	<i>Urtica dioca</i>	Sisno	Whole plant	Diuretic, diarrhea, expectorant, blood purifier.
100	Polygonaceae	<i>Viscum articulatum</i>	Hadachur	Shoot	Aphrodisiac, bone fracture
101	Verbenaceae	<i>Vitex negundo</i>	Shimali	Leaves, flower	Cancer, diarrhea, liver complaints
102	Lyrthaceae	<i>Woodfordia fructicosa</i>	Dhaiaro	Flower	Ulcers, wounds, cough
103	Rutaceae	<i>Zanthoxylum armatum</i>	Timur	Bark, leaf, fruit	Stomached, gastric trouble
104	Zingiberaceae	<i>Zingiber officinale</i>	Aduwa	Rhizome	Expectorant, carminative, digestive, coughs.
105	Rhamnaceae	<i>Zizyphus mauritiana</i>	Bayar	Root, seed	Pneumonia, blood purifier

### Acknowledgements

Author is grateful to Mr. Rajendra Prasad Shah (Research Guide and Thesis Adviser, Lecturer of MMAC, Biratnagar). Author would like to thank Mr. Sher Bahadur Singhak (Vaidhya, Jaljale VDC-5, Tehrathum) for his kind co-operation

### References

- Anonymous 1986. Flora of Kathmandu Valley. *Bull. Dept. Med. Pl. Nep. No. 11*, Kathmandu.
- Banerji, M. L. 1957. Some Edible and Medicinal Plants From East Nepal. *J. Bomb. Nat. Hist.* **53**: 153-155.
- Davis, P. H. and J. Cullen 1988. *The Identification of Flowering Plant Families*. Edinburgh.
- Dobremez, J. F. 1967. Exploitation and Prospects of Medicinal Plants in Eastern Nepal. *Mountain Environment and Development*. Kathmandu. SATA (Swiss Association for Technical Assistance), pp. 97-110.
- Gautam, T. P. 1995. *Medicinal Plants of Panchthar District*. M. Sc. Thesis. Department of Botany, P. G. Campus, Biratnagar.
- Grierson, A. J. C. and D. G. Long 1983. *Flora of Bhutan*. Vols I-II, Edinburgh.
- Hains, H. H. 1961. *The Botany of Bihar and Orisa*. Allahabad.
- Hooker, J. D. 1872-97. *Flora of British India*. Vols. I-VII, London.
- Mabberley, D. J. 1987. *The Plant-Book*. A Portable Dictionary of the Vascular Plants. Cambridge University Press, Cambridge.
- Manandhar, N. P. 1971. Some Medicinal Plants of Eastern Nepal. *The Rising Nepal*. March 18, 1971, pp.2.
- Pradhan, M. and V. Manandhar 1997. *A Survey of Economically Utilized NTFPs in Tehrathum District*. A report submitted on workshop of ANSAB, Kathmandu, Nepal.
- Rai, M. B. 1996. *Medicinal Plants of Tehrathum District, Eastern Nepal*. M. Sc. thesis, P. G. Campus, T. U.
- Siwakoti, M. 1995. *Flora of Plain region of Eastern Nepal. Biratnagar-Dharan*, (Ph. D.thesis) T. M. Bhagalpur, University.