

# **Study of Traditional Uses of Medicinal Plants (Herbs) of Hilly Areas of Lekhnath Municipality**

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## **Abstract**

*The present work is based on the exploration of traditional use medicinal plants ethnobotanically, of Lekhnath Municipality, Kaski. A general survey and study of medicinal plants, particularly wild and cultivated herbs was conducted from 1st Oct. 2012 to 30th Apr. 2013.*

*This paper deals about 24 species of medicinal herbs belong to 21 families. Included families are Amaranthaceae, Asteraceae (4), Cannabinaceae, Caryophyllaceae, Chenopodiaceae, Commelinaceae, Crassulaceae, Cyperaceae, Dioscoreaceae, Euphorbiaceae, Labiatae, Leguminosae, liliaceae, Malvaceae, Nyctaginaceae, Oxalidaceae, Primulaceae, Scrophulariaceae, Trapaceae, Urticaceae and Zingiberaceae.*

*This result was based on survey carried out consulting participatory techniques to collect detailed information about collection and utilization of traditional medicinal plants at that area. Important information and other details about the respective plants were collected by discussion with native inhaled, traditional medicine practitioners and villagers. Showing them the sample of the plants.*

**Keywords:** Medicinal plants, herbs, ethnobotanically, native inhaled, traditional medicine practitioner.

## **Introduction**

From the beginning of civilization, plants have served in several ways for the mankind and has been continuously using them for various purposes. Plants have been the sources of food, medicine and other essential materials for the existence of mankind. The medicinal plants are the most important aspects of the creation that cures the various diseases. Plant materials were the basis of Ayurvedic therapeutics since time immemorial and now it's contribution to human health care is deep rooted mostly in villages of Nepal. Every one uses herbs and medicinal plants in the treatment of diseases and normal illness (Anonymous).

Medicinal herbs are important component of flora of Nepal and confined mostly in mid hills and Himalaya regions. The plant material is harvested and collected in young stage without proper management. In this way, most of important medicinal plant species are unable to propagate and their number reduced year after year, and reached to threatened position. At the same time, it has been observed that proper knowledge of healing also not properly documented and ultimately loss with death of native inhealer and practitioners. Medicinal plants are getting diminished at due to lack of serious attempt to conserved them. Therefore, this work is an attempt to focus on importance of such medicinal herbs.

### **Objectives of Study**

A survey of medicinal plants of Hilly Areas of Lekhnath Municipality was conducted for followings achievements.

To determine the distribution of medicinal plants in Hilly area of Leknath Municipality.

To find out the present awareness of people about medicinal herbs grown around their fields.

To study parts of the plant, that are locally used for medicine.

### **Methodology Used**

This final paper is prepared on the basis of our fourteen field trips. We have done two trips per month from 1<sup>st</sup> October 2012 to 30 Apr. 2013. The main aims of these fields' trips were to collect the herb plants. Similarly, field trips were done to collect information, suggestion, and method of use, result of treatment of traditional herbal inhaling in that area.

In majority two methods are taken into considering at time of paper preparation.

#### **a. Primary data collection**

Primary data collection includes many aspects of traditional method of treatment enlisting following steps were taken into consideration during primary data collection.

- i. Number of field trips on study area,
- ii. Inquires with local people,
- iii. Inquires with traditional health workers, Baihdya's and native inhalers of wild plants.
- iv. Specimen collections.
- v. Morphological and floral description herb plants by cross examination with field notes, study notes and books.

#### **b. Secondary data collection**

The secondary data collection includes different related journals, documents, unpublished records available in VDCs, traditional workers and library. Different authorized books and articles have ratified information's about medicinal uses of many herb plants.

## Results and Discussion

In the studied area a total of 24 species of medicinal plants (herb) were found. They belonged to 21 families. The recorded plants are enumerated in following table.

### Description and use of selected herb plants

S. N.	Scientific Name	Vernacular name	Family	Description of plant	parts used	Uses of In medicine
	<i>Aloe barbadensis</i> Mill.	Ghiu Kumari	Liliaceae	A perennial herb with short stem and rosulate leaves, rounded on the reverse, gray green. Inflorescence raceme	leaves	The leaves are alterative, stomachic, aphrodisiac, cathartic, emmenagogic, astringent, antidotal, anthelmintic and hepatic stimulant; after removing their skin they are given in fevers, enlargement of the liver, spleen, and other glands, skin diseases, gonorrhea, constipation, menstrual suppression, piles, jaundice and rheumatic affections.
	<i>Amaranthus spinosus</i> Linn.	Lunde	Amaranthaceae	A glabrous procumbent annual cultivated herb, leaves small long petiolated, oblong ovate or rounded, usually two lobed at the apex, flowers in axillary clusters.	Whole plant	The plant is considered as cooling emollient and mildly astringent. In hilly region of Nepal, it is used as the substitute of wheat. Decoction of leaf and root is taken for intestinal diseases. Root juice is taken with cold water in the morning to treat painful urination; and is also taken with warm water before going to bed. Crushed leaves and roots are applied in skin infection, juice from leaves is used for dyscentery.

S. N.	Scientific Name	Vernacular name	Family	Description of plant	parts used	Uses of In medicine
	<i>Anagalis arvensis</i> Linn.	Nilkrishna	Primula-ceae	An annual herb, erect or procumbent. Leaves long, sessile, opposite, ovate, glabrous, entire, gland dotted. Flweors blue, axillary, solitary, peduncles with slender erect in flower and decurved in fruit. Fruit a capsule	Whole plant	It is used as expectorant in case of lung abscess.
	<i>Anaphalis contorta</i> (D.Don) Hook.F.	Bukiphool	Asteraceae	A herb, leaves crowded, sessile, linear or oblong, acute, obtuse, margin strongly recurved. Flowers in heads, yellowish or white.	Whole plant	Plant paste is taken to treat cough. Root paste is applied on wounds and boils.
	<i>Chenopodium album</i> Linn.	Bethe	Chenopodiaceae	An annual herb to, usually grown as a weed, with often purple tinged stem and leaves. Flowers small green, in rounded clusters, borne in slender spikes	Whole plant	Whole plant used as mild laxative. Leaves and shoots are used to drink as tea which relieve pain in stomach. It contains important biochemical like carotene, linolenic acid, vitamin C and iron.
	<i>Curcuma Longa</i> Linn.	Kalohaledo	Zingibera-ceae	Root stock is ovoid and cylindrical. Leaves very large, oblong lanceolate. Flowers in spikes.	Rhizome	The rhizome is a household remedy as aromatic, stimulant, tonic and carminative, for relief of cough. Tumeric is given in diarrhea, intermittent fevers, dropsy, jaundice, liver disorder and urinary diseases.
	<i>Cyperus rotundus</i> Linn.	Mothe	Cy-pera-ceae	A perennial, stoloniferous herb with erect stem. Inflorescence simple or compound umbel.	Whole plant	The plant is diuretic, emmena gogue, anthelmintic and stimulant. It is also sued in stomach disorder, irritation of bowels, leprosy, dysentery, cough and cold.

S. N.	Scientific Name	Vernacular name	Family	Description of plant	parts used	Uses of In medicine
	<i>Dioscorea bulbifera</i> Linn.	Gittha	Dio-scoreaceae	A climbing herb, growing near the buses. Leaves stalked, alternate, palmately compound. Flowers, sessile, greenish in dropping, unisexual	Tuber	Powdered tuber is applied to sores, and is taken internally for dysentery. Boiled tubers are taken to treat fever, loss of appetite, general debility and immediate after taking food.
	<i>Drymeria cordata</i> (L.) Willd. ex Roemer and Schultes.	Abhijalo	Caryo-phyllaceae	Prostrate herb, occurring in bare lands with broadly ovate leaves, white flowers in cymes.	whole plant	Plant paste is applied on forehead to treat headache. Extraction of plant is given in cold, throat trouble, diarrhea and dysentery. Plant juice is applied on cuts and wounds. Root juice is given to treat stomach disorder.
	<i>Eclipta prostrata</i> Roxb.	Bhringraj	Asteraceae	A small, coarsely hairy, erect or prostrate herb. Leaves hairy, variable in shape. Flower heads in white color.	whole plant	It is a valuable pectoral and anti-asthmatic; as an alterative it is given in liver disorders. The leaves are tonic and given in cough, headache and enlargement of the liver.
	<i>Oscimum basilicum</i> Linn.	Babari	Labiatae	A herbaceous, erect, strongly aromatic plant, leaves large, variable, ovate to lanceolate. Flower in branched or unbranched racemes.	Whole plant	The herb is aromatic, stimulant, carminative and expectorant. The leaves are expectorant, stomachic and they are given with ginger and white pepper in intermittent fevers.
	<i>Oxalis corniculata</i> Linn.	Chariamilo	Oxalida-ceae	A small creeping herb. Leaves trifoliate on long and erect petiole. Inflorescence subumbellate	whole plant	The plant is used against scurvy. It is a good appetizer. Roots and leaves are used to treat dysentery and diarrhea.

S. N.	Scientific Name	Vernacular name	Family	Description of plant	parts used	Uses of In medicine
	<i>Phyllanthus niruri</i> Avct.	Bhuin amala	Euphorbiaceae	A small glabrous pale green herb. Leaves variable, sub sessile. Flower numerous, shortly pedicelled.	whole plant	The plant is acrid, cooling and useful in thirst, bronchitis, asthma. It is most useful in jaundice.
	<i>Tagetes Petula</i> Linn.	Sayapatri	Asteraceae	An annual herb, erect and much branched. Leaves pinnately compound with strong scented. Flowers yellow head	whole plant	An extract of the roots is used as laxative. The leaves are given in kidney troubles and muscular pains. The florets are used in eye diseases and ulcers.
	<i>Trapa bispinosa</i> Roxb.	Simalkande	Trapaceae	Floating herb. flowers axillary, solitary and peduncled.	fruit	Nuts are cooling, useful in diarrhea and bilious affections. Plant cures urinary discharges, bronchitis and bad teeth.
	<i>Urtica dioica</i> Linn.	Sisnu	Urticaceae	A robust dioecious herb, with grooved stem. Leaves ovate or lanceolate. Stem and leaves contain epidermal hairs.	whole plant	The plant is haemostatic in vomiting of blood and bleeding from the nose. The plant is diurectic and antiperiodic. It is a household remedy for kidney diseases.
	<i>Vicia sativa</i> Linn.	Kutil Kosha	Leguminosae	A slender wiry herb. Leaves paripinnate ending in to a leaf tendril. Flowers pinkish.	Fruit	The green fruits are alterative and make the user fall to asleep.
	<i>Antirrhinum majus</i> Linn.	-	Scrophulariaceae	A herb, cultivated as ornamental plant. Leaves are simple exstipulate often alternate. It shows racemose inflorescence with bisexual flower.	whole plant	The powdered dry plant is given for bleeding at the nose.

S. N.	Scientific Name	Vernacular name	Family	Description of plant	parts used	Uses of In medicine
	<i>Bryophyllum pinnatum</i> (Lam) oekn.	Ajambbari	Crassulaceae	A perennial herb, mostly adapted to dry habitat. Stem and leaves are fleshy. It shows cymose inflorescence, usually dichasial cyme.	leaf	It is anthelmintic, blood purifier, cooling and stomachic.
	<i>Cannabis sativa</i> Linn.	Bhang	Cannabaceae	An annual aromatic herb growing on waste land. Male and female flowers borne on different plants.	leaf and flowers	It is anesthetic, appetizer, digestive, an expectorant. It serves as a remedy for malaria, black fever and blood poisoning.
	<i>Hibiscus rosa sinensis</i> Linn.	Barmase phul	Malvaceae	A medium sized cultivated herb. Leaves short petiolated. In florescence cymose with solitary axillary flowers.	leaf and flower	Leaves are considered as laxative. Young Buds remove burning of the body, urinary discharges, and seminal weakness.
	<i>Innuul cappa</i> DC.	Laxhmi Phool	Asteraceae	A stout, strongly armed herb. Steam woody, hairy with creamy white colour. Inflorescence head with bright yellow flowers.	leaf	Leaves are safe and effective to care arthritis.
	<i>Mirabilis jalpa</i> Linn.	Malati	Nyctaginaceae	It is a perennial herbs with herbaceous, erect, branched stem. Leaves are simple, and opposite. Flowers show biparous cyme.	Root	The juice extracted from root is cooling and often used to patient suffered from excretion of blood from urine.
	<i>Tradescantia paniculata</i> Roxb.	Rate Pate	Commelinaceae	It is erect perennial herb. Stem is rhizome and mostly branch. Leaves are simple with sheathing base. Flowers are in axillary monochasial cyme	Root	The root is bitter, refrigerant, laxative and beneficial in skin diseases.

Result shows that entire herbs are effective for traditional medicinal care as whole plant, because about 54.16% of studied plants are used a whole, followed by leaves

12.50%, fruit 8.35%, flower 8.35%, root 8.35%, Rhizome 4.16% and Tuber 4.16% respectively.

There were different types of medicinal plant grown elsewhere in Hilly area of Lekhnath Municipality. Some of them are very important and widely used as domestic medicine. The problem is that, most of us never tried to know or even think about our medicinal herbs which contained useful drugs. The majority of the people still have faith and confidence in their traditional medicines. These have been playing an important part in the health care of the people for a long time, especially the people in the rural areas.

### **Conclusion**

There are various types of plant species in hilly areas of Lekhnath municipality including medicinal, timber and fodder, and wild fruits. Single plant can be used for different purposes. Unfortunately, most of us never tried to know or even think about such plants. Not all people, fortunate to get facility of modern treatment, particular for under privilege group of Nepal. Traditional method of in healing medicinal plant could be better option for them. Similarly, although this work is a small step to overcome such gap of inhealing medicine, it could be a good option in days to come.

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