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INDIGENOUS KNOWLEDGE ON ETHNOBOTANICAL PLANTS OF KAVREPALANCHOWK DISTRICT

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ABSTRACT
Ethnobotanical knowledge is common and important among the tribal people but much of the information is empirical at best lacking logical validation. A number of ethnic communities residing in the study area are partially or fully dependent on the forest resources to meet their requirements. The present study analyses indigenous knowledge of ethnobotanical plant species and utilization of 68 species belonging to 59 genera under 37 families in day-to-day life of ethnic communities of Kaverpalanchowk district of central Nepal. The diverse ethnic communities such as tamang, newar, magar, chhetri, pariyar, biswakarma, and tolange have a good association with plants and their potential role they use for different purposes; treatment of various ailments, economic and other values, and worship in different religions and customs. The traditional knowledge on the utilization of these ethnobotanical plants is widely accepted by these indigenous people.

Keywords: Ethnobotanical, Kavrepalanchowk, medicinal plants

INTRODUCTION
The use of plants as medicine is widespread throughout the world. The plant and plant products have augmented human culture since time immemorial. But few people realize that plant species are an important part of our environment (Singh, 1993). Traditional medicine practices and ethnobotanical information play an important role in the scientific research, particularly when the literature and fieldwork data have been properly evaluated. The documentation of indigenous knowledge on the utilization of local plant resources by different ethnic groups or communities is one of the main objectives of ethnobotanical research (Shrestha, 1998). In general, ethnobotanical studies focus on the indigenous people and the minorities. Indigenous people are the ones who were the original inhabitants of any place and live a life of their own which is of self-sufficient type with no foreign involvement. Indigenous knowledge systems are not only for the cultures from which they evolve, but also for scientists and planners striving to improve conditions in rural societies (Shengji, 1999). The rural people have developed unique indigenous knowledge related to the uses of plant resources due to constant association with the forests. This existing valuable information is needed to be documented before lost or disappeared. As there is lake of the documentation system, priority should be given to develop a system for the systematic recording of the information related to the ethnobotanical uses and indigenous knowledge of the medicinal plant species. Ethnic

people have immense plantlore, folklore which they pass on from generation to generation just through oral conservation (Rao & Shanpru, 1981 & Chhetri, 1994).

Nepal is one of the rich mega-biodiversity countries of the world having wide variety of plants with medicinal value. Herbal medicines have good values in treating many diseases including infectious diseases, hypertension, that they can save lives of many, particularly in the developing countries, is undisputable. Ethnobotany is a relatively new field of study in Nepal, as it is in many other developing countries. It has taken its own way of development, depending on local traditions. It is known that the way of administration to cure diseases using a particular plant widely differs among the indigenous people and also Healers, Jhakaris and Amchies (Manandhar, 2002, Shrestha & Dhillion, 2003).

Several papers were published on different aspects of ethnobotany by different workers such as (Pandey, 1964; Adhikari & Shakya, 1977; Sacherer, 1979; Malla & Shakya, 1984-1985; Manandhar, 1985, 1990b, 1994, 1995, 2002; Shrestha & Pradhan, 1986, 1993; Bhattarai, 1992; Singh, 1999; Shakya *et. al*., 1999; Ghimire *et al*., 2000; Joshi and Joshi, 2001; Rajbhandari, 2001; Taylor *et.al*., 2002; Balami,2004; Chhetri and Shrestha, 2004; Mahato & Chaudhary, 2005; Devkota and Chhetri, 2007; Poudel & Gautam, 2008; Kunwar *et.al*., 2009). The present study, therefore aimed to investigate and document the oral heritage of ethnobotanical knowledge of the ethnic people of kavrepalanchowk district.

STUDY AREA

Nepal is a multiethnic and multilingual country. There are more than sixty different ethnic groups speaking about seventy-five languages in Nepal (Shrestha, 1998). The district of Kavreplanchowk lies between 85° 24' to 85° 49' east latitude and 27° 22' to 27° 85' north longitude, is one of the 75 districts of Nepal. Its total area is about 1404 sq.km and the average temperature ranges from 10^{o}C-31^{o}C. The height ranges from 275 m. (Dolalghat) to 3,018 m. (Bethanchowk hill) from the sea level. Present ethnomedicinal study was carried out on ethnic people of Kavrepalanchowk district in Jaisithok, Panchkhal, Methinkot, Khanalthok and Nasikasthan. It has been found that various traditional knowledge systems are being practiced and followed by since long by the inhabitants of different areas of Kavrepalanchowk district (Fig.1). The major ethnic people of this district include Tamag, Chhetri, Brahimin, Newar, Magar, Pariyar, Biswakarma and Tolonge. These ethnic people have a common Nepali dialect but some ethnic people such as tamang, newar and magar, have their own dialect.

MATERIALS AND METHODS

The present study was conducted during 2008 to 2009 covering different village development committees of the Kavrepalanchowk district at monthly and fortnightly intervals. During the filed visits, ethnobotanical information was gathered through oral interviews and discussion with traditional healers and knowledgeable persons of the ethnic community. Voucher specimens were collected from the field during the flowering

and fruiting periods. While noting ethnobotanical information, every care was taken to record the local names of the plants, parts used, method of drug preparation and dosage uses. The specimens were identified with the help of local floras (Hara *et al*. 1978, 1979, 1982). Herbarium specimens will be lodged in the Department of Environmental Science and Engineering, Kathmandu University, Dhulikhel, Nepal.

ENUMERATION

In the present study, fifty-six species were selected for enumeration based on information availability from the local ethnic people. Plant species are arranged in alphabetical order, mentioning the botanical name, family name in parenthesis, vernacular name, locality and voucher specimen number followed by plant parts and mode of use. The vernacular name is abbreviated as Nepali (N) and Tamang (T).

Abelmoschus esculentus L. (Malvaceae); 'Ramtoriya' (N); Methinkot, 0153. Juice of the plant is used to treat cuts and wounds, and urinary problems. It is also useful to cure an abdominal disorder, ease constipation, diarrhoea and general debility. Tender fruits are cooked as vegetable.

Achyranthes bidentata Blume (Amaranthaceae); 'Datiwan' (N); 'Phrekphrek' (T); Jaisithok, 0169. A decoction of plant is applied for urinary problems. Juice of the root is used to cure asthma, indigestion, toothaches. The stem is used as a toothbrush. It is also considered as toothbrush in the religious purpose at 'Teej', Hindu festival.

Allium sativum L. (Amaryllidaceae); 'Lasun' (N); 'Noh' (T); Panchkhal, 0155. Leaves and tubers powder are extensively used as a spice and stimulant. Leaves and tubers juice is used to cure fever and cough. Roasted tubers are eaten fresh and pickled. Fresh leaves are cooked as vegetables. Oil is administrated to cure rashes skin. It is also chewed raw for blood pressure.

Alnus nepalensis D.Don. (Betulaceae); 'Uttis' (N); 'Bomsin' (T); Jaisithok, 0121. A decoction of roots is taken orally for the treatment of diarrhoea, dysentery and burns. Leaf paste is applied in cuts and wounds. Wood is used for furniture, other construction purposes and fuel.

Artocarpus heterophyllus Lam. (Moraceae); 'Rukhkatahar' (N); 'Singkatahar' (T); Methinkot, 0157. Leaf past is used to cure in skin disease. A decoction of root is used to treat diarrhoea and dysentery. The latex of plants is applied to glandular swelling and abscesses to promote suppuration. Ripen fruits are eaten fresh. Unripe fruits are laxative and it is also cooked as a vegetable and pickled. Roasted seeds are eaten. Leaves are lopped for fodder.

Barleria cristata L. (Acanthaceae); 'Bhandekuro' (N); Khanalthok, 0150. Juice of the root is useful to relief indigestion and inflammations. Juice of leaves, about 3 teaspoons three times a day is given to treat fever, bronchitis and asthma. Past of the leaf is applied to boils and pimples.

Bergenia ciliate (Haw.) Sternb. (Saxifragaceae); 'Pakhanbed' (N); 'Bregyal' (N); Nasikasthan, 0120. Juice of rhizome is applied to cure piles, tumor, urinary trouble, heart diseases, asthma and lungs problems. Powdered rhizome is used to treat in fever, diarrhea, cough and dysentery. A past of the rhizome is applied to boils. The flowers are boiled and pickled.

Betula alnoides Buch.-Ham.ex D.Don (Betulaceae); 'Saur' (N); 'Takpa' (T); Methinkot, 0154. Bark is boiled with water and the liquid mass is applied to dislocated bone and injury. Bark is chewed orally to treat sore throat and to check excessive menstruation. Wood is used for furniture, other construction purposes and fuel wood.

Bidens pilosa L.var. ***minor*** (Blume) sherff. (Asteraceae); 'Kalokuro' (N); 'Happa myan' (T); Nasikasthan,0087. Plant juice is applied to cure fresh cuts and wounds. Tender shoots are cooked as vegetables by poor people. The whole plants are given as fodder to goats.

Boehmeria platyphylla D. Don (Urticaceae); 'Chalnesisnu'(N); 'Balbapungi'(T); Jaisithok, 0126. A decoction of the plant is given to livestock for diarrhoea and dysentery. A past of the root is used to treat cattle wounds and cuts. Juice of the leaves is applied to fresh cuts and wounds. Bark yields white shiny and strong threads for various purposes. Leaves are used as fodder for livestock.

Boehmeria regulosa Weddell (Urticaceae); 'Dar' (N); 'Syomsing' (T); Jaisithok, 0173. Juice of the bark is applied to treat cuts and wounds and body pain. Powdered of the bark is mixed with flour to make bread soft and testy. The wood is famous to make bowls, 'Theki' and other household materials. Leaves are lopped for fodder.

Brassica campestries L. var. ***sarson*** Prain (Brassicaceae); 'Sarson' (N); Jaisithok, 0089. Seeds are used to make pickle. Seed oil is used to cooking and lightning. Seed oil cake is useful for cattle food. The tender shoots and leaves are cooked as vegetables. Husks are good sources for plastering houses and 'Bhakari'.

Brassica napus L. (Brassicaceae); 'Tori' (N); 'Namnam' (N); Jaisihok, 0158. Seeds oil is put in the ear to relieve earaches and it is also used for cooking vegetables. Husks are used to plastering the housed and bamboo baskets. Tender green leaves are cooked as a vegetable.

Brassia oleracea L. var ***capitata*** (Brassicaceae); 'Bandha' (N); 'Bandagobi' (T); Nasiksthan, 0138. Leaf juice is used to treat rheumatism and stomach disorder. Mature leaves are fermented for making 'gundruk'.

Bridelia retusa (L.) Sprengel (Euphorbiaceae); 'Gayo'(N); 'Gramsachhe'(T); Khanalthok,0165. Bark juice about 5 teaspoons three times a day is given to treat diarrhoea, dysentery and peptic ulcer. Ripen fruits are eaten fresh. Leaves are lopped for fodder.

Cajanus cajan (L.) Huth (Fabaceae); 'Rahar' (N); 'Radal'(T); Khanalthok,0160. Young leaves are chewed to treat boils on the tongue. Leaf juice is used treat in jaundice, cough and cold and diarrhoea. The past of the young leaves is used to treat wounds. Dry leaves are good sources of fodder for cattle. Seeds are used for soup and 'daal'.

Castanopsis indica (Roxb.) Miquel (Fagaceae); 'Katus' (N); 'Berkap' (T); Nasikasthan, 0127. A decoction of the leaves applied to treat stomach disorder and skin diseases. Powdered leaves are given to cure indigestion. A plant resin is given to treat diarrhoea. A paste of leaves is applied for headache. The leaves are lopped for fodder and wood is used for fuel and house construction.

Cipadessa bccifera (Roth) Miq. (Meliaceae); 'Kaligeri'(N); 'Bhaska'(T); Nasikasthan, 0119. Root juice about 3 teaspoons three times a day is given to treat cough and cold and digestive problems. Past of the bark is applied to relieve bleeding and gums. Ripen fruits are eaten fresh. Leaves are lopped for fodder.

Citrus aurantifolia (Christ.) Swingle (Rutaceae); 'Kagati' (N); 'Kagat' (T); Khanalthok, 101. Fruits juice is used to relieve rheumatism, dysentery, diarrhea and indigestion.

Citrus aurantum L. (Rutaceae); 'Suntala'(N); 'Suntalo'(T); Methinkot,0095. Past of the dried fruits bark is applied to cure pimples and used as skin ointment.

Colebrookea oppositifolia Sm. (Lamiaceae); 'Dhursil' (N); 'Bodebade' (T); Khanalthok, 0137. Root juice is given to treat in epilepsy. Leaf juice is used to relieve fever, headaches and wounds. The juice of the young inflorescence is given to treat gastric problems and is also put in the nose for sinusitis. The plant is lopped for fodder to cattle.

Colocasia esculanta (L.) Schott (Araceae); 'Karkalo', 'Pindalu' (N); 'Tayabha' (T); Nasikasthan, 0081. The fresh shoots are dried for making 'masaura'.

Cucurbita maxima Duch. ex Poiret (Cucurbitaceae); 'Pharsi', 'Kabali'(N); Nasikasthan, 0090. Seeds of the ripen fruits are used to make pickle.

Curcuma domestica Valeton (Zingiberaceae); 'Besar' (N); 'Haldi' (T); Panchkhal, 0145. A decoction of rhizomes powder is used to relieve cough and colds and tonsillitis. A powdered rhizome mixed with lemon juice and is applied to treat swellings by inflammation. It is also used in cooking for flavor and colour.

Daphne bholua Buch.-Ham. ex D. Don. (Thymelaeaceae); 'Lokta' (N); 'Dyasin' (T); Methinkot, 0088. A decoction of the bark is taken to relieve fever. Roots juice is used for intestinal disorder and parasites. Fibers from the bark are used for handmade Nepalese paper production. The plant is also used for stimulating buffaloes for intercourse. Bark of the stems is used for making ropes and strings.

Dendrocalams hamiltonii Nees & Arnott ex Munro (Poaceae); 'Choyabans' (N); Jaisithok, 0125. Young shoots are cooked as a vegetable. Shoots are also preserved in the

form of *tama*-fermented shoots and pickled. Mature bamboo is used to construct house, to make basket, mats, screens, fences.

Dioscorea bulbifera L. (Dioscoreaceae); 'Bantarul' (N); Methinkot, 0117. Juice of the root tubers is used to treat piles, dysentery, syphilis and ulcers. Tubers are boiled and eaten fresh. It is also cooked as a vegetable.

Dioscorea pentaphylla L. (Dioscoreaceae); 'Jagatebhyakur' (N); Khanalthok, 0111.juice of the leaf is applied to treat boils. Tubers are boiled and prepared as vegetable. Sometimes, boiled tubers are eaten fresh.

Diplazium polypodioides Blume (Dryopteridaceae); 'Hadeunyu' (N); Methinkot, 0116. Juice of the root is applied to cure cuts and wounds. Plants are used as livestock beds. It is also used to make manure with mixing cattle dung.

Diplazium stoliczke Beddome (Dryopteridaceae); 'Kalinyuro' (N); Nasikasthan, 0129. Juice of the tender fronds is given to treat diarrhea and dysentery. The tender shoots are cooked as a vegetable. The plants are used to make manure.

Drepanostachyum falcatum (Nees) keng fil. (Poaceae); 'Ghorenigalo' (N); 'Mha' (T); Methinkot, 0139.young shoots are cooked as a vegetable and pickled. It is also fermented as *tama*. Stems are useful in making basket, mats, fishing rods and line ceiling. Leaves are useful fodder for cattle during winters.

Drepanostachyum intermedium (Muro) keng.fil. (Poaceae); 'Nigalobans' (N); Khanalthok, 0103. Plants are used for construction, wearing mats, baskets and walking sticks. Leaves are good sources of fodder for cattle during scarcity of green fodder in winter. Young shoots are cooked as vegetables and pickled.

Elaeocarpus sphaericus (Gaertn.) K. Schum. (Elaeocarpaceae); 'Rudraksha'(N); 'Rudrachhe'(T);Nasikasthan,0115. Fruits juice is used as liver tonic and is useful to treat blood pressure and mental disorders. The plant has great religious value, especially for Hindis. The hard seed are used as ornaments.

Eulaliopsis binata (Retzius) C.E.Hubbard (Poaceae); 'Babiyo'(N); Jaisithok,0166. Plant is used to make rope, homemade paper. It is also useful for thatching roofs. Plants are used for fodder to cattle.

Eupatorium adenophorum Sprengel (Compositae); 'Banmara'(N); 'Kaljhar'(T); Nasikasthan,0113. Juice of the plant is used to cuts and wounds. Juice of root is useful for fever treatment. A past of the leaf is applied to cure boils and it also used to treat eyes insomnia. I t is used for green manure and bio-briquette.

Euphorbia hirta L. Millsp. (Euphorbiaceae); 'Dudhejhar' (N); 'Chhumen'(T); Methinkot,0123.Plant juice is useful in the treatment of cough, diarrhoea, dysentery, asthma and bronchial infections. Juice is applied to heal wounds. A past of the root is

used to treat dislocated bones and snake bites. Plant extraction is given to cow and Buffalo or Mother for increasing milk.

Euphorbia pulcherrima Willd ex Klotzsch (Euphorbiaceae); 'Lalupate'(N); 'Lalpatemhendo'(T); Jaisithok, 0104. Latex of the plant is applied to relieve boils. A past of the leaf is useful for skin diseases. The plant is cultivated as an ornamental and various rituals purposes.

Ficus bengalensis L. (Moraceae); 'Bar' (N); Khanalthok, 0077. A decoction of bark is used in dysentery, diarrhoea and diabetes. The milky latex is externally applied for pains and bruises and as an anodyne in rheumatism. It is also used as a remedy for toothache. The leaves are heated and applied as poultice to abscesses. Fruits are eaten fresh and seeds are considered cooling and tonic. Wood is suitable for furniture and other construction purposes. The leaves are looped for fodder. The plant is used for religious purpose.

Ficus glaberima Blume (Moraceae); 'Pakhuri' (N); Jaisithok,168. Ripen fresh fruits are eaten. Fiber from the inner bark is used to prepare rope. The leaves are lopped for fodder in winter season.

Garuga pinnata Roxb. (Anacardiaceae); 'Ramsinghe' (N); Khanalthok, 0080. A decoction of the root is useful in pulmonary affections and skin diseases. Juice of the bark is useful to treat dislocated bones and wounds. The juice of leaves is good for asthma. Fruits are used to cure roundworm. The plant is lopped for fodder.

Jasminum gracile Andrews (Oleaceae); 'Chameliphool' (N); Panchkhal, 0128. Juice of the root is useful for treatment of ringworm. Juice of the flowers is used to cure indigestion. The plant is cultivated as ornamental purposes.

Juniperus indica Bertol (Cupressaceae); 'Dhupee' (N); 'Syukpa' (T); Khanalthok, 0106. Plant juice is used as appetizer, diarrhoea and abdominal pain, diseases of spleen, tumors, piles bronchitis, and vaginal diseases. Berries are good for toothache and piles. It has also religious value.

Lablab purpureus (L.) Sweet. (Fabaceae); Hiundesimi' (N); Methinkot, 0143. Leaf juice is applied to cure various skin diseases. Seeds are used to relief stomachic. Pods and seeds are cooked as a vegetable. The plant is used for fodder to cattle.

Lagenaria siceraria (Molina) Standley (Cucurbitaceae); 'Lauka' (N); Khanalthok, 0085. Juice of the fruit is given to cure indigestion, ulcers, stomach acidity and for cooling. The fruits are cooked as a vegetable. Pulp of the fruit is emetic and purgative.

Lannea coromandelica (Houttuyn) Merrill (Anacardiaceae); 'Dabadabe' (N); 'Bheldhap' (T); Jaisithok, 0136. Juice of the bark is useful to treat ulcers. The bark is applied for tannin. The plant leaves are lopped for fodder to cattle. Wood is used for fuel, furniture and construction purposes.

Lepidium sativum L. (Brassicaceae); 'Chamsur' (N); 'Chamsurdhap' (T); Khanalthok, 0133. Plant juice is administered in cases of asthma, cough and bleeding piles. Root juice is useful for syphilis. Seed past is administered after being boiled with milk and applied to pains or hurts. Tender foliage is cooked as a vegetable.

Litsea monopetala (Roxb.) Pers. (Lauraceae); 'Kutmero' (N); 'Chaput' (N); Jaisithok, 0140. Bark juice is astringent, and used in diarrhoea. Powdered bark and roots are used in external applications of pains. Leaves are lopped for fodder for cattle. The wood is used for fuel.

Lycopodium clavatum L. (Lycopodiaceae); 'Nagbeli' (N); 'Chhemhendo' (T); Nasikasthan, 0156. A past of the seed is applied to treat wounds, fissures and cracks and rheumatism. The plant is used in different festival and ceremonials.

Madhuca longifolia (Koeing) Machr.(Sapotaceae);'Mahuwa'(N); 'Mahuwaairag'(T); Khanalthok,0124. Latex from tree trunk is used to cure boils. Decoction of the bark is given to diabetes. A decoction of the flower is about 4 teaspoons three times a day is given in case of cough and cold. Seeds are useful in rheumatism and skin disease. Young leaves are ground and used for fish poison. Wood is used for construction, furniture and fuel.

Magnifera indica L. (Anacardiaceae) 'Aanp' (N); 'Kyungwa' (T); Panchkhal, 0076. The juice of the bark is boiled with water and used to wash the body and legs to relief from jaundice. Decoction of the bark is used treat rheumatism and ulcer. Leaf juice is given to cure cough and cold, dysentery. The latex is useful for treatment of scabies and skin disease. Wood is used for furniture and fuel. Ripen fruits are eaten fresh.

Melia azedarach L. (Melaceae); 'Bakaino' (N); 'Chanyal' (T); Panchkhal, 0163. The juice of the bark is used to cure leprosy, scrofula and skin diseases. Decoction of leaves is administrated to hysteria. A past of the bark is applied to treat headaches and rheumatic pain. Fruits and flowers are boiled in water and applied for killing lice. Wood is used for furniture and fuel. Leaves are lopped for fodder.

Mentha spicata L. (Lamiaceae); 'Pudina' (N); 'Bawari' (T); Jaisithok, 0152. Leaf juice is given to treat nausea, diarrhoea, bloody dysentery, vomiting and gastric disorder. Leaves are also chewed for boils on the tongue. Leaves are used to prepare pickle.

Morina longifolia Wallich ex de Candolle (Morinaceae) 'Thakailikanda' (N); Nasikasthan, 0144. Juice of the root is used to treat dysentery and diarrhoea. Tender stem is eaten with extraction of bark. The plant is used as incense.

Morus macroura Miq. (Moraceae); 'Kimbu' (N); Panchkhal, 0109. Bark juice is applied to cure cuts and wounds. Fruits are refrigerant in fever, used as a remedy for soar throat, dyspepsia and melancholia. Ripen fruits are eaten fresh. Leaves are lopped for fodder to cattle.

Musa paradisiaca L. (Musaceae); 'Kera' (N); 'Moje' (N); Panchkhal, 0098.Unripe fruit juice is given to treat diarrhoea and dysentery. Banana powder is applied to treat colic disease. It is also used for intestinal disorders in adults. Ripe fruits are eaten fresh and useful in diabetes, uremia, nephritis, gout, hypertension and cardiac disease. Juice of flowers is used in dysentery. Flowers are boiled and pickled. Green bananas are cooked as a vegetable. Leaves are used as plates. Plant is used as ritual and religious purposes.

Oryza sativa L. (Poaceae); 'Dhan' (N); 'Sun' (T); Nasikasthan, 0083.Rice is soaked about an hour and the liquid is drunk to treat inflammation of the heart and indigestion. Rice straw is good sources of food for cattle in dry season. It is also used for making mat and wearing shoes. Rice is one of the most popular foods for human. It is also used to prepare 'Chhang'.

Phyllanthus urinaria L. (Euphorbiaceae); 'Bhuinamala' (N); Jaisithok, 0140. The tubers juice of the plant is given to treat diarrhoea and dysentery. A past of the leaf is used in gonorrhea, urinary troubles and boils. Plants are also used for ornamental purposes.

Psidium guajava L. (Myrtaceae); 'Amba' (N); Khanalthok, 0146. Bark juice is administrated to cure dysentery. Leaves juice is taken to treat bowels, wounds and ulcers. A decoction of the leaves is applied in cholera, diarrhea and indigestion. A past of leaf is applied for rheumatism, cuts and wounds. Leaf buds are chewed to treat fever and headaches. Ripen fruits are eaten fresh.

Rhus javanica L. (Anacardiaceae); 'Bhakamilo' (N); 'Tibro' (T); Khanalthok, 0130. Fruits are ground and used to treat paralysis, colic, and diarrhoea and bloody dysentery. A past of the fruits is applied to treat swellings and wounds. Fruits are chewed in case of stomachic and appetizer. Powder fruit is given to cure profuse menstruation. A decoction of fruit is administrated to animal foot and mouth diseases. Ripen fruits are eaten fresh or pickled.

Saccharum officinarum L. (Poaceae) 'Ukhu' (N); 'Usyup' (T); Jaisithok, 0102. Stem juice is used to treat jaundice and urinary problems. It is also drunk for the remedy of stomach disorder and ulcers of the skins, seminal weakness. Plant is used as ceremonial and religious purposes.

Solanum melongena L. (Solanaceae); 'Bhanta' (N); Khanalthok, 0096. A decoction of the root is used to treat heart problems. Leaf juice is applied to treat throat aches and stomach problems. A green fruit is roasted and eaten to relieve cough and cold. Fruits are cooked as a vegetable and pickled in different ways.

Swertia angustifolia Buch.–Ham.ex D.Don. (Gentianaceae); 'Chiraito' (N); 'Kampman' (T); Methinkot, 0082. Root juice is given to treat fever. Decoction of plants is used for blood purifier and useful in bile disease and cough and cold.

Taxus baccata (L.) subsp. ***wallichiana*** (Taxaceae); 'Lothsalla' (N); 'Sigi' (T); Methinkot, 0164. Juice of the leaves is given for cough and cold, bronchitis and asthma.

Toxal extracted from bark and leaves of this plant is also used as anti-tumor agent and also to cure cancer particularly of breast and uterus. Leaves are sold in the market.

Thysanolaena maxima (Roxb.) Kuntze (Gramineae); 'Amreso' (N); 'Sarsi' (T); Khanalthok, 0174.A past of the root is applied to cure boils. The villagers use bundle of the inflorescences to make brooms, which are the good sources of income generation. Tender portion of leaf base is eaten fresh. Plant is also the good sources of food for cattle.

Toona ciliate (M.) Roemer (Meliaceae); 'Tuni' (N); Nasikasthan, 0151. Bark juice is administrated to cure in chronic infantile dysentery, external application for ulcer and boils. Leaves are lopped for fodder to cattle. Woods are used for furniture, carving and fuel.

Triticum aestivum L. (Poaceae); 'Gahun' (N); 'Kwa' (T); Khanalthok, 0149. The grains are edible. Roasted seeds are also eaten. Wheat straw is used to feed cattle in dry season. The straw is used in various purposes craft. The grains are also used to prepare 'Chhang'.

Vigna mungo (L.) Hepper. (Fabaceae); 'Mass' (N); Methinkot, 0176.Root juice is used to treat nostalgia and abscess an inflammations. Seeds are cooked as lentil soup 'daal' in Nepali and taken as appetizer, tonic and it is also used for urinary problems. Seeds are ground in flour and use to prepare breads. The husk and straw are used as fodder to cattle in dry season.

Zea mays L. (Poaceae) 'Makai' (N); Methinkot, 0175. The grains are important of food sources. Roasted seeds are eaten fresh and sometimes fresh grains are ground to prepare bread. Husks are used to make roughly woven goods. The dry plants and husks of the *Zea mays* are used as fodder to cattle in dry season.

DISCUSSION

The traditional knowledge of the tribal people of kavrepalanchowk district have tremendous ethnobotanical importance. They use plants and their parts such as roots, rhizomes, tubers, leaves, steam, wood, bark, flowers, seeds, and fruits in various purposes in their daily life. It is evident from the present study that the tribal communities are dependent on a variety of plants to meet their requirements and beliefs to cure many diseases. The different plant parts are used for medicinal preparation, mode of administration, dosage and other human consumption. In some cases, the whole plant parts are utilized only for medicinal purposes. The plant parts are generally used by the ethnic communities to cure some important diseases viz., diarrhea, dysentery, asthma, fever, stomach disorder, cuts and wounds, sore throat, rheumatism, blood pressure, urinary problems, ear diseases, headache, constipation and piles etc. Except some few earlier researches (Manandhar, 1991; Rajbhabdari, 2001; Chhetri and Shrestha, 2004; Chhetri and Gauchan, 2007), these areas were unexplored ethnobotanically. A total of 68 plant species, belonging to 59 genera, under 37 families are used in day-to-day life of the tribal people.

Out of 68 plants species, 57 species are used for various medicinal purposes, 38 for edible, 26 for fodder, 18 for wood and fuel, 7 for religious beliefs, 5 for ornamental, 16 species have miscellaneous uses such as house construction, furniture, mat, fiber, dye, manure and other household purposes. Two species *Oryza setiva* and *Triticum aestivum* are used in the preparation of 'Chhang'. Several species have been recorded to have more than one use. The elder ethnic people are familiarity with the plant species and their used for common ailments, and the plant remedies being used regularly. Majorities of young generation do not know many plants and their medicinal values. Only few younger are followed the medicinal practices and traditional knowledge by the elders and healers as in the case in other areas of Nepal (Joshi and Edington, 1990; Shrestha and Dhillion, 2003). Information that is related to women's health problems viz., urinary infections, bleeding and pregnancy are difficult to acquire and treat. Such curative information is kept with secret, with the belief that the medicines would lose their effectiveness if reveled to other people (Bhat and Jacobs, 1995). So, scientific cultivation, conservation and sustainable use of plant species by ethnic communities would be highly advantageous for socio-economic growth, in conservation of rare and endangered plant species and the indigenous knowledge for the future generations.

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