

ETHNOBOTANICAL STUDY OF MEDICINAL PLANTS OF RESUNGA HILL USED BY MAGAR COMMUNITY OF BADAGAUN VDC, GULMI DISTRICT, NEPAL.

Rajendra Acharya*

*Madan Bhandari Memorial College, Binayak Nagar, New Baneshwor, Kathmandu, Nepal.

Abstract: Present study aims to explore the ethnobotanical information on medicinal plants used by Magar community of Badagaun VDC of Gulmi district. The study was carried out during different periods of the year 2010. Informations on plant and plant parts uses were collected interviewing key informants by using semi-structured open-ended questionnaire. Altogether 161 different plant species belonging to 87 families and 144 genera were documented and majority of them are herbs. In terms of plant parts use, leaf and stem/bark are in top priorities. These plants are used to treat different ailments ranging from gastro-intestinal to headache and fever, respiratory tract related problems to dermatological problems, snake bite to ophthalmic and cuts and wounds. Easy access to modern medicines and less recognition of traditional healers are the main causes leading to decrease in interest of young generation in the use of traditional medicinal practices.

Keywords: Ethnobotany; Medicinal plants; Resunga hil; Magar community.

INTRODUCTION

Today, ethnobotany plays a crucial role in the study of traditional medicine, as it has an interfacial function linking nature with culture and traditional knowledge with modern technology thus contributing to all understanding of traditional medicinal knowledge (Pei, 2005). The main aim of ethnobotany is to document the knowledge about plants that have come through generations and use the knowledge for the benefit of the society (Chaudhary, 1998). The ethnic communities have significant customary knowledge on utilization of plant and plant parts and there is a long tradition of transferring this indigenous knowledge from generation to generation (Acharya and Acharya, 2009). Use of plants for curing diseases was common in most parts of the world for a long time. Of the 75,000 plants used in different systems of medicine, more than 20,000 species of higher plants are used in the traditional treatment practices of indigenous cultures living around the world (Ved Prakash, 1998). Therefore, medicinal plants or plant derived medicines have always played a key role in world health including the maintenance of health as well as in the introduction of new treatment. The world health organization (WHO) has estimated that about 80% of the population in developing countries depend on traditional medicine for their primary health care needs. Many such plants also have other domestic uses. It is therefore very important that studies in ethnobotany and ethnopharmacology continue so as to preserve traditional knowledge (Kurmi and Baral, 2004).

Nepal is rich in biological resources and particularly well known for medicinal and aromatic plants; it is necessary

to investigate the medicinal value of Nepalese medicinal and aromatic plants which might have tendency to influence human biochemistry since plant species being used as traditional herbal medicine (Singh, 2006). In Nepal, about 70-80 percent of population in the mountain region depend on traditional medicines for health care (Manandhar, 1980). Medicinal plants have been in use traditionally for times immemorial and have been serving the mankind. Recently updated database revealed a total of 1950 species of medicinal plants used in Nepal and out of which 1906 species are identified under vascular groups comprising 1614 native, 192 introduced and/cultivated and 100 naturalized taxa (Ghimire, 2008). Majority of such valuable plants grow in wild conditions as natural components of vegetation of different regions of Nepal from tropical to sub tropical and temperate to alpine climatic conditions. The plant and plant resources for medicinal use are collected by local people and herbal healer from various habitats such as forest, scrubland, grassland and cultivated fields and use them as crude drugs. It is known that the way of administration to cure disease using a particular plant widely differs among the indigenous people and also *healers, jhakris and amchies* (homeopathic/ayurvedic doctors) (Manandhar, 2002; Shrestha and Dhillion, 2002). These plants has also become the important source of medicine for the local healers in the villages as well as the basic raw materials for Ayurvedic, Tibetan, homeopathic and allopathic medicines (Ghimire *et al.*, 1999). It is a fact that a large number of medicinal plants and associated indigenous knowledge on their uses still remain without proper documentation (Chaudhary, 1998) although many traditional

Author for correspondence: Rajendra Acharya, Madan Bhandari Memorial College, Binayak Nagar, New Baneshwor, Kathmandu, Nepal.
E-mail: acharya.raj2010@gmail.com.

systems of medicine are now being gradually documented in Nepal. So, the priority should be given to the documentation of indigenous knowledge and conservation of the existing species and inhabitants before some of these are eliminated from the area (Joshi *et al.*, 2003).

Magar community or Magars is known as a Shino-Tibetan ethnic group whose homeland mainly extend from the western and southern part of Dhaulagiri to the Mahabharat mountains and the Siwalik foothills and eastward into the Gandaki basin. According to Nepal census 2001, 1.6 million people identified themselves as belonging to the Magar ethnolinguistic group, representing 7% of Nepal's population and making them the largest indigenous ethnic group in the country (CBS, 2002). They have cultural diversity within and among communities. Cultural diversity often follows the patterns of biophysical diversity because of the intimate relationship between people and plant resources which has led to the wealth of ethno- botanical knowledge associated with plant resources in their use for food, fiber and medicine (Ale *et al.*, 2009).

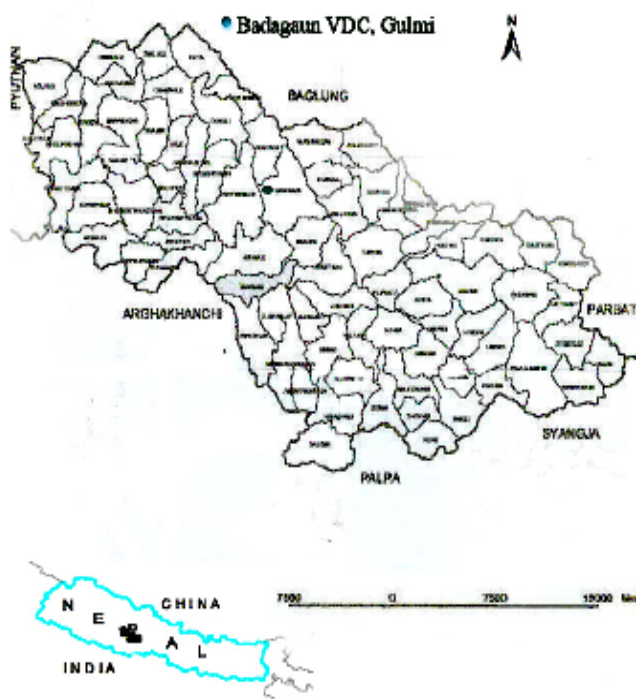
Despite advances in modern technologies, ethnobotanical knowledge is still used in Magar community of Nepal and rests primarily in older generations *vaidyas*, *kabirajs*, *dhamis* and *jhankris* (traditional healers). The traditional healing practice of the Magars is limited to certain key member of the society, they communicate these knowledge orally from generation to generation. In this context, very few sporadic works have been already done to collect the ethnobotanical data and traditional knowledge systems of Magar community (Mahato, 1998; Ale *et al.*, 2002; Poudel and Gautam, 2008). The ethnobotanical information of Magar community of Badagaun VDC is still undocumented,

however utilization of plant resources of Resunga forest area by local people of eleven VDCs of Gulmi district was already done by KC (2006). In this background present study was devised to document the traditional knowledge on medicinal plants with their indigenous uses and practices.

Materials and Methods

Study Area

Badagaun VDC is located in Gulmi district, which lies between 27°55' to 28° 27' N latitude and 83° 10' to 83° 35' E longitude. Gulmi is one of the hilly district of western development region of Nepal and covers a total area of about 107918.2 ha of which about 50.2% agricultural land, 11.8% grazing land, 37.6% forest and Shrubland, 0.4% landslide area and others (sand, concrete, rocks) 0.7% (Nepal, 2003). The altitude of the district ranges from 465m to 2690m asl. and most of the area in the district belongs in the Mahabharat range. Present study was carried out on Resunga hill which covers a total area of about 3400 ha. The altitude of the Resunga hill varies from 700 m (Chhaldi khola) to 2350m asl. Out of 3400ha forest land of Resunga, 1973.93ha is covered by eighteen community forest and is managed by community and the rest area is under government managed. The mountain is known for the place of historical and religious importance where a sage by the name of 'Rishya Shringa' is supposed to be observed meditation in the long past and as the time passed on the word 'Rishya Shringa' changed to 'Resunga' (Subedi, 1998). Resunga, a natural forest block with historically and religiously importance place, which is surrounded by eleven VDCs. Different temples with religious importance like *Siddhababa*, *Bishnu Paduka*, *Radha Krishna*, *Siwalayas*, *Yagyashala* (hall for worshipping), *Gaushala* (cowshed), *Samadhithal* (grave stone) of Shashidhar (a renowned sage), still prove the Resunga as a place of religious, historical and archeological importance (Khadka and Pokharel, 1999) and monasteries are situated on the top of the forest where every year in *Harisayani*, *Haribodhani*, *Akadashi* and throughout the *shrawan* month people come to worship and bath in the Resunga pond situated within the forest (Nepal, 2003). At the base of Resunga peak, headquarter of the district-Tamghas is situated. Local inhabitants are benefitted from the mountain directly or indirectly for their both major and minor forest products. Besides forest products about 252 watersheds have been estimated in the Resunga area (Panthi, 1984); which is also the resource of drinking water for several VDCs. The forest is being traditionally used for timber, fodder, fuel wood, leaf litter, medicinal herbs, etc. (KC, 2006). The study area is dominated mainly by three ethnic groups Magar, Brahmin and Chhetri and a number of other ethnic groups like Kami, Sarki, Damai and Newar. The total population of Badagaun VDC is about 8430 accounting 1550 household (HH) of which about 2215 are Magar (Anonymous, 2009). Landscapes of Resunga is very rich in biodiversity with great variation in vegetation housing sub-tropical to lower temperate regions flora accompanied by sub tropical and temperate types of forest which consists of *Schima - Castanopsis*, *Pinus roxburghii*, *Quercus semecarpifolia*, *Rhododendron arboretum*, *Pyrus pashia*, *Aesculus Pinus roxburghi indica*, *Myrsine capitellata*, etc. (Khadka and Pokhrel). The climate



of the study area is typically sub tropical to temperate type with cool and humid climate. The average temperature is maximum 26°C and minimum 4.1°C and it receives average annual rainfall of about 1,939mm (GoN, 2008). *Castanopsis*, , *Quercus semecarpifolia*, *Rhododendron arboretum*,

FIELD STUDY

The study area was surveyed during different periods of the year 2010. Information on plant and plant parts uses was collected by interviewing key informants using a semi-structured open-ended questionnaire. The selected ward for interview were ward number 1,2,3 & 4 of Badagaun VDC. To collect plant species for herbarium preparation, key informants were employed. Some of the collected specimens were identified in the field, whereas others were identified with the help of standard literature (Hara *et al.*,1978,1982; Hara and Williams, 1979; Polunin and Stainton, 1984; Stainton, 1988) and with cross checking the specimens deposited at Tribhuvan University Central Herbarium (TUCH), Kirtipur while some of them were identified with the help of experts of taxonomy. The nomenclature of the identified species and their family names follows Hara *et al.* 1978 & 1982, Hara and Williams (1979) and Press *et al.* (2000).

RESULT AND DISCUSSION

We collected informations on 161 medicinal plant species which fall under 144 genera and 87 families. Among them 152 species are angiosperms, six species are pteridophytes, two species are lichens and one species of gymnosperm. List of medicinal plants with their scientific name, family, collection number, local name, life form, parts used and uses are presented in table 1. The species are arranged alphabetically. Out of total species used for medicinal value, majority are herb (39%) followed by tree (26%), shrub (24%) and climber (11%) (figure 2). However, herbaceous species were most commonly used which may be due to easy to collect, store and transport or easily available. The family Labiatae is represented by the highest number of species (eight species) followed by Leguminosae, Poaceae (seven species each), Euphorbiaceae, Lauraceae (five species each),

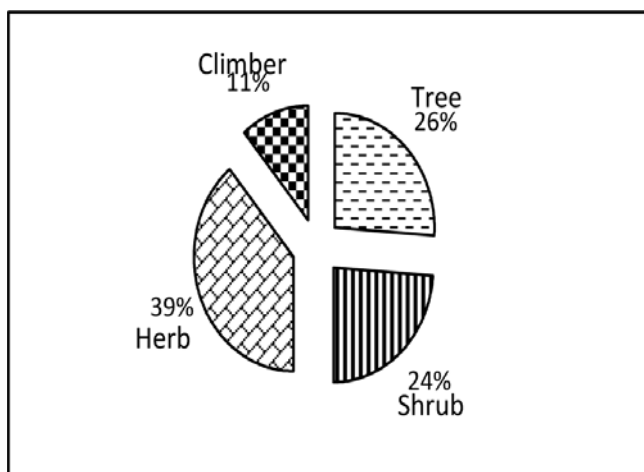


Fig. 2: Different life forms of medicinal plants collected.

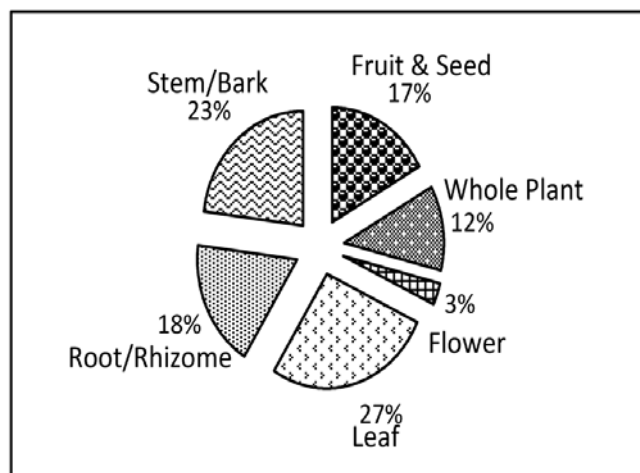


Fig. 3: Graph showing plant and plant parts used

Ranunculaceae, , and Zingiberaceae (four species each), Anacardiaceae, Dioscoreaceae, Ericaceae, Myrtaceae, Solanaceae and Saxifragaceae (three species each) and Amaranthaceae, Amaryllidaceae, Araceae, Combretaceae, Gentianaceae, Liliaceae, Menispermaceae, Oxalidaceae, Piperaceae, Thymelaceae and Valerianaceae (two species each) . The study shows more or less similar results with those reported in an earlier studies in Palpa district (Shrestha *et al.*, 2004; Ale *et al.*, 2009), Dhading district (Poudel and Gautam, 2008), Arghakhanchi district (Poudel *et al.*, 2010), Salyan district (Kurmi and Baral, 2004) and Sindhupalanchok district (Rai *et al.*, 2004). Out of 161 species documented for medicinal use in the present study area, 72 species are reported by Ale *et al.* (2009), 60 species by KC(2006), 61 species by Poudel *et al.*(2010), 47 species by Kurmi and Baral (2004) and 30 species by Shrestha *et al.* (2004). But 23 species reported in this study have not been reported in above mentioned references.

Different parts of the plants are used to treat various ailments at the local level. The plant parts widely used for medicinal purposes include leaf and stem/bark are used (each being 27% and 23% respectively) followed by root/rhizome, fruit and seed (each bearing nearly equal 18% and 17% respectively), whole plant (12%) and least the flower (3%) (figure 3).

Regarding different disease categories, we found that 57 medicinal plant species used to treat gastro-intestinal problems (dysentery, diarrhea, gastritis, abdominal pain, ulcer, etc.), 38 species are used to treat headache, toothache, joint pain, fever, etc, 27 species are used to treat for respiratory tract related problems (cough/cold, bronchial problem, sore throat, asthma, etc), 20 species for ophthalmic and cuts and wounds, 16 species are used to cure dermatological problems (scabies, burns, swellings and other skin related problems) and very less (3 species) for snake/scorpion bite (Table 1). This result indicated that Magar people have retained indepth knowledge of medicinal values of plants. In response to the question regarding the prevalent diseases in the study area vaidyas responded that major diseases are typhoid, jaundice, dysentery, diarrhea and gastritis, etc. For the purposes to

treat the diseases, various forms of preparation were used. The most popular medicinal preparations used were in the form of powder, paste, decoction and juice. Some of the plant species available were not used alone as medicine but were used by mixing with other herbs in specific amounts. Some medicinal plants such as *Maesia chisia*, *Sapindus mukorossii*, *Entada phasioloides* and *Agave cantula* are also used in fish poisoning or fishing. On the other hand, certain medicinal plants like *Arisaema tortuosum*, *Justicia adhatoda*, *Osyris wightiana* and *Artemisia vulgaris* are used as green manuring in agricultural land and pesticides as well. From this research work, it was found that one plant has curative properties against different types of diseases and even a single disease can be cured by different medicinal plants where as use of individual medicinal plants to cure a single disease was less in number. Out of 161 plant species, 27 species have single use whereas 134 species have two or more uses (Table 1).

Although modern systems of remedy like allopathy, surgery are common in practice in the cities and town and a few remote areas of Nepal, most of the rural people rely up on the nature to fight against the germs and worms even today. Certainly the crude plants and plant products are less potent than modern medicines which have been introduced by passing a series of examinations (Rai *et al.*, 2004). However, local healers, local people and patients are not well informed about the chemical nature of plants and plant products, which may even be fatal. There is common belief that medicine from plant sources have no side effects. But it is remarkable that there are some toxic plants which are more hazardous and may be fatal if administered by unknowledgeable person or learner healer or taken crude (Rai and Pokhrel, 2006). It may be true that most of the plant based medicines have fewer side effects. This study showed that the elderly persons/traditional healers have greater knowledge upon the utilization of medicinal plants in comparison to younger generations. During field work we found that women know more herb species than men. This may be due to their role in collecting grass as fodder to feed their cattles. I also found that they were not comfortable to share their knowledge to other people. The knowledge of plant availability, collection time, method of preparation, disease diagnosis and prescribed uses was limited to their some senior family members only.

During our study period, I found some cases that the people are seeking help from the traditional healers when their illness was not cured by modern medicines. Except highly communicable diseases and emergency cases, people of the study area 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 tradition belief on the effectiveness for curing ailments rather than just poverty. When we interacted with younger generation of the society, they showed less interest in traditional practices mostly because of poor recognition of traditional healers and availability of modern health facilities such as ayurvedic clinics, hospitals and health centers are located in the headquarter of the district near to the study area (about 16 km

far from the headquarter). Although there was high use of plant resources in community level, the indigenous knowledge about medicinal plants seems depleting generation to generation.

The retardation of traditional knowledge on medicinal plants may be due to lack of successor of faith healers, wider use of modern medicine and inadequacy of plants availability (Mardar and Chaudhary, 1992). There is lack of continuation and flow of indigenous knowledge from elder to younger generation, since the young generations are reluctant to learn about the traditional practices. Therefore, there is great chance of decline of the wealth of knowledge (KC, 2006). The trend of disinterest of young generation shows that the traditional knowledge on medicinal plants is deteriorating in present study area. It is important to share the knowledge and experiences from older to younger generations. This knowledge can be the valuable assets for future generation and economic development of the community. The emphasis should also be given on wide cultivation of medicinal plants which are in pressure of excessive harvesting and are medicinally more valuable. To preserve these valuable natural resources first these existing valuable information are needed to be documented before they are lost or disappeared. Unfortunately little knowledge of this important resource, unscientific collecting practices, lack of awareness in harvesting, regulation, conservation, cultivation, proper use and importance of a variety of herbs and shrubs amongst the community, many valuable species of medicinal plants have already become extinct and many more are endangered. Some valuable medicinal plants are in threatened condition. On the basis of interview taken with local people and fields observation, some of the medicinal plant like *Aconitum ferox*, *Paris polyphylla*, *Sapindus mukorossii* and *Valeriana jatamansii* have been to be significantly decreased in these days in comparison to earlier days (about 25 years ago) (Khadka and Pokharel, 1999), which may be due to indiscriminate harvesting without sustainable management like immature collection, uprooting of underground parts and over exploitation. Strong emphasis should be given for the documentation of indigenous uses, traditional knowledge and practices. Besides documentation, biochemical analysis (i.e. phytochemistry) of the documented plant species and ecological study of the particular medicinal plants is also essential to check the reliability and validity of current finding and to know their diversity as well.

CONCLUSION

Present study shows that the study area is rich in various types of valuable medicinal plants. Magar community has a good ethnobotanical knowledge in using plant resources and developed their own traditional system of using plants for medicinal uses. Specially, the elderly people of a community and the local traditional healers have greater knowledge on medicinal plants. But the youngsters of the study area showed less interest in traditional practices mainly due to less recognition of traditional healers and easy availability of modern medicines and instant effect. Because of which the practice of using plants and plants parts for medicinal use is decreasing. So the emphasis should be given for the

Table 1: List of medicinal plant with their scientific name, family and collection number with their local name, life form, parts used and uses.

SNo.	Plant species, Family and Voucher number	Local name	Life form	Parts used	Uses
1.	<i>Acorus calamus</i> L. ARACEAE RA 84	Bojho	H	Rhizome	Rhizomes are chewed to cure cough and cold. The crushed rhizome is used to cure gout, epilepsy.
2.	<i>Aconitum ferox</i> wall. ex Ser RANUNCULACEAE RA 89	Bikhma (M)	H	Whole plant	Whole plant is crushed to make powder or decoction which is used to cure fever, nausea and vomiting, however taking large quantity may be fatal.
3.	<i>Achyranthes aspera</i> L. AMARANTHACEAE RA 75	Ulteyannash (M)	H	Leaf, stem and root	Paste of leaf is applied to cure boils, juice of stem and root is diuretic, laxative, expectorant, stomachic, haementinic.
4.	<i>Adiantum cappilluserneris</i> L. ADIANTACEAE RA 82	Unyu	H	Root	Root juice is taken in migraine, snakebite and scorpion sting.
5.	<i>Aegle marmelos</i> (L.) Correa RUTACEAE RA 155	Bel	T	Ripe fruit	Used to treat diarrhoea and dysentery. Also cure hotness of body, heart tonic. The unripe fruit is astringent, stomachic and digestive. A <i>sharbat</i> (juice) of the ripe fruit is given for chronic constipation and dyspepsia.
6.	<i>Aesculus indica</i> (Colebr. ex Cambess.) Hook. HIPPOCASTANACEAE RA 63	Lekh pangro	H	Root	Root is crushed to make power or decoction which is used to cure typhoid.
7.	<i>Agave cantula</i> Roxb. Ex Salm-Dyck AGAVACEAE RA 157	Hattibar (M)	H	Leaf	Leaf juice with jaiphal (<i>Myricaria germanica</i>) oil is massaged to cure sprain. Leaf juice is also used in fish poisoning or fishing.
8.	<i>Ageratum conyzoides</i> L. COMPOSITAE RA 197	Gandhe jhar	H	Leaf	Leaf juice is applied over cut wounds to stop bleeding.
9.	<i>Allium wallichii</i> Kunth AMARYLLIDACEAE RA 149	Ban lasun	H	Bulb	Used to treat headache, backbone pain, arthritis, sprain, kidney problem, stomach problem.
10.	<i>Alnus nepalensis</i> D.Don BETULACEAE RA 36	Utis	T	Bark	The concentrated decoction of mature bark is applied on the wounds. A powder of the bark is applied to cure scabies.
11.	<i>Aloe vera</i> (L.) Burm f. ASPHODELACEAE RA 80	Ghiukumari	S	Leaf	Cure burn wounds, regulation of menstruation, constipation, ascariasis.
12.	<i>Alternanthera sessile</i> (L.) DC. AMARANTHACEAE RA 141	Bhirangi jhar	H	Leaf	Leaf juice is used to cure cut wounds.
13.	<i>Ampelocissus divaricata</i> (Wall. ex M.A Lawson) Planch. VIOLACEAE RA 34	Pureni	C	Stem	Used to treat eye disease.
14.	<i>Anagallis arvensis</i> L. PRIMULACEAE RA 168	Armale	H	Whole plant	Used to cure stomach-ache and gastritis, indigestion.
15.	<i>Anemone rivularis</i> Buch.-Ham. ex DC. RANUNCULACEAE RA 77	Kangreshi jhar	H	Root	Decoction of root is given to cure typhoid.
16.	<i>Anemone tetrasepala</i> Royale ANUNCUACEAE RA 150	Kaude	H	Root	Root juice is used to cure stomachic problem
17.	<i>Arisaema tartuosum</i> (Wall.) Schott ARACEAE RA 85	Sarpako makai (M)	H	Whole plant	Used to cure wounds and blisters (<i>khatira</i>). Also used as insecticides.
18.	<i>Artemisia vulgaris</i> L. COMPOSITAE RA 156	Patik (M)	H	Leaf	Leaf juice is used to stop bleeding on cut wounds, scabies, gastritis, asthma and asscariasis.
19.	<i>Artocarpus lakoocha</i> Wall. ex Roxb. MORACEAE RA 30	Badahar	T	Bark	Latex of bark is used to cure boils and blister (<i>khatira</i>).
20.	<i>Arundinaria</i> sp. POACEAE RA 137	Nigalo	S	Root	Root juice is anthelmintic and is also used to cure gastritis, balancing hotness and coldness in the body.
21.	<i>Asparagus racemosus</i> Willd. LILIACEAE RA 167	Bhik (M)	S	Root tuber	Used to increase lactation in delivered woman and tonic.
22.	<i>Astibile</i> sp. SAXIFRAGACEAE RA 78	Gujargano	C	Root tuber	Used to treat headache, stomach-ache, ascariasis, gastritis.
23.	<i>Astibile rivularis</i> Buch.-Ham.ex D. Don SAXIFRAGACEAE. RA 159	Thulo okhati	S	Root	Root juice is taken for appetizer, to check vaginal bleeding in pregnant woman, tonic in post delivery, disorder of menstruation, diarrhoea, dysentery and hemorrhage. Powder of root is mixed with soaked seeds of <i>Trigonella foenumgracium</i> (methi) & is taken with milk or <i>jad</i> (locally prepared drug) to cure rheumatism.
24.	<i>Bauhinia vahlii</i> Wight & Arn. LEGUMINOSAE RA 23	Bhorla (M)	C	Bark	Bark juice is used to cure dysentery and stomach-ache.
25.	<i>Bauhinia variegata</i> L. LEGUMINOSAE RA 86	Byagan (M)	T	Bark/Stem	Used as antidote in snake bite. Bark juice is used to treat dysentery.
26.	<i>Begonia picta</i> Sm. BEGONIACEAE RA 29	Makarkanchi	H	Leaf	Paste of leaf is applied on wound between toes caused due to prolonged walking on mud.

SNo.	Plant species, Family and Voucher number	Local name	Life form	Parts used	Uses
27.	<i>Berberis aristata</i> DC. BERBERIDACEAE. RA 160	Chautara (M)	S	Bark	Bark juice is used to cure bile disorder; eye boils (<i>aankha pakeko</i>). Ripe fruits are edible.
28.	<i>Berginia ciliata</i> (Haw.) Sternb. SAXIFRAGACEAE RA 198	Pakhane (M)	H	Stem/Root	Powder or decoction of stem/root is used to cure stone problem, burning sensation of urination, sexual incapability, vaginal flowing of white water, and stomach-ache during menstruation, backbone ache and tonic.
29.	<i>Betula alnoides</i> Buch.-Ham. ex D. Don BETULACEAE RA 170	Saur	T	Bark	Bark juice is applied on cut wound to check bleeding, bone fracture, sprain (<i>sarke markema</i>).
30.	<i>Bistorta amplexicaulis</i> (D. Don) Greene POLYGONACEAE RA 35	Khalidi	H	Root	Root juice is used to cure scabies.
31.	<i>Bombax ceiba</i> L. BOMBACACEAE RA 37	Simal	T	Bark	Paste of bark is used to cure wound, scabies and for pimples.
32.	<i>Cassia fistula</i> L. LEGUMINOSAE RA 169	Rajbrikchha	T	Fruit, Seed	Cure hotness of body, urinary problem.
33.	<i>Calotropis gigantea</i> (L.) Dryand. ASCLEPIADACEAE RA 138	Aank	S	Fruit, Leaf	Used to treat body pain, sinusitis, latex of leaf is used to cure boils, sprain.
34.	<i>Centella asiatica</i> (L.) Urb. UMBELLIFERAE RA 108	Ghodtapre	H	Leaf	Leaf juice is used to cure fever, nerve troubles, enhances memory and brain tonic.
35.	<i>Cheilanthes bicolor</i> (Forss K.) Kaulf PTERIDACEAE RA 28	Ranisinki (M)	H	Whole plant	Used to cure fever, gastritis, cut wounds.
36.	<i>Cinnamomum camphora</i> (L.) J. Presl. LAURACEAE. RA 74	Ban kapur	T	Leaf	Used to cure pneumonia, asthma.
37.	<i>Cinnamomum glaucescens</i> (Nees) Hand-Mazz LAURACEAE RA 27	Malaygiri (M)	T	Fruit, Stem	Fruit is used for perfumery oil production. Stem is used for the purpose of <i>chandan</i> (substitute of <i>srikhand</i>) and in treating various skin diseases.
38.	<i>Cinnamomum tamala</i> (Buch.-Ham.) Nees LAURACEAE. RA 38	Tiji (M)	T	Leaf, Bark	Used to cure stomach-ache, sexual incapability, dysentery, vomiting oil is used to cure toothache. Bark and leaf also used as spices.
39.	<i>Cissampelos pareira</i> L. MENISPERMACEAE RA 87	Tikunthyak (M)	C	Leaf, Rhizome	Leaf juice is taken with <i>mishri</i> (derivative of sugar) to cure jaundice. Juice of rhizome is given to cure gastritis.
40.	<i>Clematis buchananiana</i> DC. RANUNCULACEAE COMOSITAE RA 113	Baghjunge	C	Leaf	Leaf juice is applied over cut wounds to stop bleeding and can also be externally applied to cure skin diseases.
41.	<i>Circium verutum</i> (D. Don) Spreng. COMOSITAE RA 117	Sungure kandaa (M)	H	Leaf	Leaf juice is taken during stomach inflammation and burning sensation of urination.
42.	<i>Clinopodium umbrossum</i> L. LABIATAE RA 148	Bilajor	H	Stem	Used to cure joint pain and sprain (<i>sarke-markema</i>).
43.	<i>Colebrookea oppositifolia</i> Smith LABIATAE RA 111	Daksya (M)	S	Leaf	Decoction or powder of leaves is used to cure sinusitis.
44.	<i>Crateva unilocularis</i> Buch.-Ham. CAPPARACEAE RA 109	Siplican	T	Tender shoot/ Young leaf	Used to treat fever, stones, diabetes. Laxative, anthelmintic.
45.	<i>Crotalaria cystisoides</i> Roxb. LEGUMINOSAE RA 114	Chengiphul	S	Seed	Used to cure fever, menstrual disorder, sterility.
46.	<i>Curcuma caesia</i> Roxb. ZINGIBERACEAE RA 147	Kalo haledo	H	Rhizome	Used to treat paralysis, gastritis, sprain (<i>sarke-markema</i>). Appetizer, blood purifier.
47.	<i>Curcuma zeodaria</i> Roxb. ZINGIBERACEAE RA 142	Kachur	H	Whole plant	Used to treat backbone pain, headache, stomach problem and urinary disorder.
48.	<i>Curcuma aromatica</i> Salisb. ZINGIBERACEAE RA 56	Hardi (M)	H	Rhizome	Used to cure pinash, gastritis and heart trouble.
49.	<i>Cuscuta reflexa</i> Roxb. CUSCUTACEAE RA 53	Ranilata (M)	C	Whole plant	Juice of the plant is given with crushed garlic to the cattle in case of indigestion. Powder of the whole plant is used externally to cure dandruff, scabies. Also used to cure jaundice.
50.	<i>Cymbopogon pendulus</i> (Nees ex Steud.) W. Watson POACEAE RA 140	Pirre	H	Whole plant	Juice of the plant is given with crushed garlic to the cattle in case of indigestion. Powder of the whole plant is used externally to cure dandruff, scabies. Also used to cure jaundice.

SNo.	Plant species, Family and Voucher number	Local name	Life form	Parts used	Uses
51.	<i>Cynoglossum zeylanicum</i> (Vahl ex Horhem) Thunb. ex Lehm. BORAGINACEAE RA 99	Kanike kuro (M)	H	Flower	The paste of flower is applied to cure boils.
52.	<i>Cynodon dactylon</i> (L.) Pers. POACEAE RA 172	Dubo	H	Leaf	Crushed young leaf is eaten to improve defects of eye, stomach wash, indigestion, excessive bleeding during menstruation, gastritis.
53.	<i>Cyperus rotundus</i> L. CYPERACEAE RA 71	Mothe	H	Leaf, Root	Used to treat indigestion, diarrhoea, vomiting, cough, bronchitis, fever.
54.	<i>Daphne papyracea</i> Wall. ex Steud. THYMELIACEAE RA 195	Seto baruwa	S	Seed and Root	Seeds are anthelmintic. Root bark is crushed to make decoction and is taken for curing digestive troubles.
55.	<i>Datura stramonium</i> L. SOLANACEAE RA 52	Dhaturu	S	Flower, seed and leaf	Used to treat toothache, bronchitis, asthma and insomnia (sleepiness).
56.	<i>Desmostachya bipinnata</i> L. POACEAE RA 23	Kush	H	Root	Root paste is applied to treat toothache while juice is given in case of stomach disorder.
57.	<i>Dichroa febrifuga</i> Lour. HYDRANGEACEAE RA 169	Chhapo	S	Fruit	Paste of fruit is mixed with powder of <i>Curcuma</i> which is taken daily to cure gastritis.
58.	<i>Dioscorea bulbifera</i> L. DIOSCOREACEAE RA 161	Lakwa (M)	C	Bulbil	Boiled bulbils are used to cure stomach pain, gastritis, round worm.
59.	<i>Dioscorea deltoidea</i> Wall. ex Griseb DIOSCOREACEAE RA 128	Bannamya (M)	C	Root	Paste of Tuber is used to kill louse.
60.	<i>Dioscorea pentaphylla</i> L. DIOSCOREACEAE RA 136	Bantarul	C	Bulbil/Tuber	Boiled bulbils are used to cure back bone pain and Tuber is used as vegetable.
61.	<i>Diploknema butyracea</i> (Roxb.) H. J. Lam SAPOTACEAE RA 72	Aakhen (M)	T	Seed	Oil extracted from seed is used for massage to get relief from muscles pain, ruptured skin of foot and hand.
62.	<i>Drymaria diandra</i> Blume CARYOPHYLLACEAE RA 55	Naplupya (M)	H	Leaf	Leaf Juice is taken during indigestion. Leaves are smouldered over fire and inhaled through nose in case of headache. Also cure hotness of body sinusitis.
63.	<i>Duchesnea indica</i> (Andrews) Focke ROSACEAE RA 64	Kauwa kaphal (M)	H	Whole plant	Plant paste mixed with paste of <i>Centella asiatica</i> and applied on forehead to get relief from headache.
64.	<i>Entada phasioloides</i> (L.) Merr. LEGUMINOSAE RA 118	Lek pangra (M)	T	Fruit	Used to cure arthritis, swelling due to coldness. Also used to kill fishes
65.	<i>Equisetum debile</i> Roxb. ex Vaucher EQUISETACEAE RA 153	Kurkure (M)	H	Whole plant	Used for balancing hotness and coldness (<i>sardigarmi milau</i>) in the body.
66.	<i>Erythrina stricta</i> Roxb. LEGUMINOSAE RA 83	Mohorje (M)	T	Bark	Used to cure hotness of body and constipation.
67.	<i>Eulaliopsis binnata</i> (Retz.) C.E. Hubb. POAEACEAE RA164	Bankasi (M)	H	Whole plant	Leaf or root juice is given in case of urinary trouble.
68.	<i>Eupatorium adenophorum</i> Spreng. COMPOSITAE RA 22	Banmara (M)	H	Leaf	Paste of leaf is applied to cure cut wounds.
69.	<i>Euphorbia royleana</i> Boiss. EUPHORBIACEAE RA 104	Sijha (M)	S	Bark, Leaf	Leaf juice is used to cure ringworm. Latex of bark is used to cure tetanus.
70.	<i>Ficus benghalensis</i> L. MORACEAE RA 120	Bar	T	Leaf, Bark	Tender leaves are used to cure cholera or dysentery, bark juice is useful in diabetes, latex of leaf or bark is used to treat ulcer.
71.	<i>Ficus religiosa</i> L. MORACEAE RA 07	Pipar (M)	T	Bark	Bark juice is used to cure cut wounds.
72.	<i>Girardiana diversifolia</i> (Link) Fris URTICACEAE RA 95	Chalne sisnoo (M)	H	Leaf	Leaf juice is given to cure anaemia, fever, headache, menstrual disorder.
73.	<i>Gaultheria fragrantissima</i> Wall. ERICACEAE RA 175	Dhasingre	S	Leaf, Fruit	Paste of leaf is used to cure sprain and paste of fruit is used to treat stomach worm.
74.	<i>Imperata cylindrica</i> (L.) Palisot POACEAE RA 174	Siuri (M)	H	Rhizome	Used to treat gastritis, dysentery. Rhizome powder is anthelmintic.

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75.	<i>Imula cappa</i> (Buch.-Ham. ex D. Don) DC. COMPOSITAE RA 115	Bachhadanga (M)	S	Root	Root juice is used to treat fever, headache, giddiness and tonsillitis.
76.	<i>Jatropha curcas</i> L. EUPHORBIACEAE RA 51	Rathyn (M)	S	Stem	Twigs are used as toothbrush to cure discharge of blood from the gums.
77.	<i>Juglans regia</i> L. JUGLANDACEAE RA 11	Okhar	T	Fruit, Bark	Used to treat skin diseases. Bark juice is anthelmintic.
78.	<i>Justicia adhatoda</i> L. ACANTHACEAE RA 05	Machham (M)	S	Leaf	A decoction of leaves is taken to cure fever, cough (<i>khoki, dam</i>), scabies, joint pain, burning sensation of eye. Also used as pesticides.
79.	<i>Kalanchoe pinnata</i> Pers CRASSULACEAE RA 127	Ajambari jhar	H	Leaf	Paste of leaf is applied to cure wound and blisters (<i>khatira</i>).
80.	<i>Lantana camera</i> L. VERBENACEAE RA 62	Banmara	S	Leaf	Paste of leaf is applied to cure cut wounds.
81.	<i>Leucas lanata</i> Benth. LABIATAE RA 112	Gante jhar (M)	H	Whole plant	Plant juice is used to cure jaundice.
82.	<i>Lilium wallichianum</i> Schultes & Schultes. f. LILLIACEAE RA 61	Hadelasun	H	Bulb	Used to cure joint pain, backbone problem and kidney problem.
83.	<i>Lindera neesiana</i> (Wall.ex Nees) Kurz LAURACEAE RA 33	Siltimur	T	Seed	A decoction of seed is taken to cure gastritis and diarrhoea. Also used as antidote of poison.
84.	<i>Lobelia pyramidalis</i> Wall. CAMPANULACEAE RA 107	Eklebir	H	Flower, leaf and bark	Used to treat asthma, cough, bronchitis, fever, jaundice, urinary problem and tonic.
85.	<i>Lycopodium clavatum</i> L. LYCOPODIACEAE RA 59	Nagbeli laharo	C	Cone	Dust of spores of the cone is applied in old infected wounds, sores.
86.	<i>Lyonia ovalifolia</i> (Wall.) Drude ERICACEAE RA 26	Pharsing (M)	S	Leaf, Bark	Juice of young leaf is used to cure scabies and ringworm. Bark juice is anthelmintic.
87.	<i>Maesia chisia</i> Buch.-Ham. ex D. Don MYRSINACE RA 21	Bilouni	T	Stem, Leaf & Fruit	Bark juice anthelmintic, used to treat ringworm and paste of ripe fruit is applied to treat scabies. Bark & leaf juice are also used as fish poison.
88.	<i>Mahonia nepaulensis</i> DC. BERBERIDACEAE RA 69	Jamane mandro	S	Fruit, Bark	Ripe fruits are used to treat dysentery, urinary problem and skin diseases. Bark juice is used as an eye drop for eye inflammation.
89.	<i>Mallotus philippensis</i> (Lam.) Muller.- Arg. EUPHORBIACEAE RA 191	Rohini (M)	T	Fruit, Root	Used to cure scabies, asthma, ringworm, dandruff. Root juice is used to cure gastritis.
90.	<i>Mangifera indica</i> L. ANACARDIACEAE RA 08	Satak (M)	T	Leaf, bark and fruit	Used to cure dysentery, stomach problem, scabies and other skin diseases. Ripe fruits constitute a rich source of vitamin A.
91.	<i>Melia azedarach</i> L. MELIACEAE RA 60	Bakaina (M)	T	Bark	Bark juice is anthelmintic.
92.	<i>Mentha spicata</i> L. LABIATAE RA 106	Bamarisar (M)	H	Leaf	Used to cure gastritis, dysentery and diarrhoea. Leaf juice and ginger is taken during vomiting.
93.	<i>Mentha arvensis</i> L. LABIATAE RA 163	Patuna (M)	H	Leaf	Cure hotness of body and headache.
94.	<i>Michelia champaca</i> L. MAGNOLIACEAE RA 25	Chanp	T	Bark, Fruit	Bark juice is used to cure infected wound, scabies, gastritis and fruit is useful to cure fever, cholera and kidney problem.
95.	<i>Mucuna pruriens</i> (L.) DC. LEGUMINOSAE RA 101	Kaucho	C	Seed	Used to treat fever, menstrual disorder and sterility.
96.	<i>Myrica esculenta</i> Buch.-Ham. ex D. Don MYRICACEAE RA 73	Hande kaphal	T	Bark	Bark juice is used to cure fever, asthma, indigestion, toothache and measles. Fruits are edible.
97.	<i>Nephrolepis cordifolia</i> (L.)K. Presl DRYOPTERIDACEAE RA 31	Sanghrap (M)	H	Rhizome	Cure hotness of body and headache. Rhizome is also used to quench the thirst.
98.	<i>Ocimum tenuiflorum</i> L. LABIATAE RA 111	Ban tulasa (M)	H	Whole plant	Used to treat cough, cold, asthma, fever, burning sensation in eye, earache (<i>kan dukhema, pakema</i>), high blood pressure and gastritis.
99.	<i>Oroxylum indicum</i> (L.) Kurtz BIGNONIACEAE RA 199	Saunetata (M)	T	Seed	Used to cure typhoid.

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100.	<i>Oxyris wightiana</i> Wall. SANTALACEAE RA 119	Syarus (M)	S	Leaf	Leaf paste is applied and bandaged by cloth from outside in case of bone fracture and wound. Also used as pesticides. Young leaves are poisonous for goat.
101.	<i>Oxalis corniculata</i> L. OXALIDACEAE RA 162	Jhyamruk (M)	H	Whole plant	Plant juice is used to cure conjunctivitis, toothache, earache and stomach-ache. Also cure hotness of body.
102.	<i>Oxalis latifolia</i> Humb. OXALIDACEAE RA 48	Amilijhar	H	Whole plant	Used to cure dysentery, cholera and gastritis.
103.	<i>Paris polyphylla</i> Sm. LILIACEAE RA 103	Satuwa	H	rhizome	Used to cure cut wounds, blisters, burns, headache, fever and as antidote of poison (mainly to neutralize poison when the livestock feed on poisonous herbs).
104.	<i>Parmelia nepalensis</i> Tayl. PARMELIACEAE RA 102	Jhyau	H	All parts	Used to cure disease of gum, throat scabies, piles and leprosy.
105.	<i>Persea odoratissima</i> (Nees) Koesterm LAURACEAE RA 123	Yatlak (M)	T	Bark	Bark paste is applied and bandage by cloth from outside in case of bone fracture.
106.	<i>Phyllanthus emblica</i> L. EUPHORBIACEAE RA 50	Ghormet (M)	T	Seed, fresh fruit and bark	One of the constituents of <i>triphal</i> which is used to treat gastritis, for cooling, diuretic and laxative, source of vitamin C. Bark juice is used to treat fever and dysentery. The infusion of seeds is a useful eye-wash in ophthalmic diseases.
107.	<i>Phyllanthus parvifolius</i> (Buch.-Ham. ex D.Don) EUPHORBIACEAE RA 43	Khabreto (M)	S	Leaf	Leaf paste is used to cure sprain (<i>sarke-markema</i>) and bone fracture.
108.	<i>Piper longum</i> L. PIPERACEAE RA 193	Pipala	C	Fruit	Used to cure cough (<i>khoki, dam</i>), leprosy and indigestion.
109.	<i>Piper chaba</i> Hunter PIPERACEAE RA 194	Chabo	S	Fruit, Leaf	Used to cure mouth wound and abdominal disorder.
110.	<i>Pinus roxburghii</i> Sargent PINACEAE RA 04	Arghee (M)	T	Bark	Resin extracted from the bark is applied around boils to draw output. Resin is also used as stimulant, stomachic and diuretic.
111.	<i>Plantago major</i> L. PLANTAGINACEAE RA 06	Isabagol	H	Seed and seed husk	Used to treat fever, diarrhoea dysentery, laxative, demulcent, expectorant, diuretic.
112.	<i>Pogostemon benghalensis</i> (Burm. f.) Kuntze LABIATAE RA 118	Makaisar (M)	S	Leaf	Used to cure common cold, cough and fever.
113.	<i>Potentilla fulgens</i> Wall.ex. Hook ROSACEAE RA 146	Bajradanti	H	Root, Leaf	Root juice is used to treat toothache, bleeding from the gum and leaf juice in dysentery.
114.	<i>Prunus cerasoides</i> D. Don ROSACEAE RA 129	Phalamsing (M)	T	Bark	Used to cure gastritis, sprain (<i>sarke-markema</i>). Bark juice is anthelmintic.
115.	<i>Psidium gujava</i> L. MYRTACEAE RA 03	Amba	T	Leaf, Fruit	Extract of leaf is taken during vomiting. Boiled fruit is eaten during indigestion.
116.	<i>Pteris biaurita</i> L. PTERIDACEAE RA 126	Sanghrap (M)	H	Leaf	Used to cure cut wounds.
117.	<i>Pyrossia</i> sp. POLYPODIACEAE RA 176	Unyu	H	Root	Used to cure acute rheumatism and joint problem.
118.	<i>Pyrus pashia</i> Buch.-Ham. ex D.Don ROSACEAE RA 12	Ghorpal (M)	T	Fruit	Used to cure diarrhoea, indigestion.
119.	<i>Quercus semecarpifolia</i> Sm. FAGACEAE RA 131	Khasru (M)	T	Bark	Used to treat backbone pain. Also used for cattle illness.
120.	<i>Ramalina</i> sp. USNEACEAE RA 132	Jhyau	H	Whole plant	Antiseptic, burns and wounds, epilepsy, ointment and antibiotic.
121.	<i>Reinwardtia indica</i> Dumort LINACEAE RA 13	Pyauli	S	Flower	Used to cure gastritis, indigestion balancing hotness and coldness in the body (<i>sardi garmi milaun</i>).
122.	<i>Rhododendron arboreum</i> Sm. ERICACEAE RA 133	Pataksar (M)	T	Fruit	Used to cure stomach disease, indigestion, dysentery, gastritis and tonic.
123.	<i>Rhus javanica</i> L. ANACARDIACEAE RA 177	Muruk (M)	T	Fruit	Powder of fruit is taken with curd to cure diarrhoea and dysentery.
124.	<i>Rhus wallichi</i> Hook.f. ANACARDIACEAE RA 116	Jhyano	H	Whole plant	Used to cure stomach problem.
125.	<i>Rubia manjith</i> Roxb. ex Fleming RUBIACEAE RA 42	Gijanbhik (M)	C	Whole plant	Used to cure jaundice, joint pain, bronchial problem, appetizer. Plant juice is anthelmintic.

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126.	<i>Rubus ellipticus</i> Sm. ROSACEAE RA 14	Chigausi (M)	S	Fruit Stem and root	Ripe fruits are eaten raw to cure coldness in the body. Root juice is taken to cure pneumonia, fever, stomach-ache. Inner stem is chewed to cure tonsillitis.
127.	<i>Rubus paniculatus</i> Sm. ROSACEAE RA 24	Chigausi (M)	S	Root, stem	Decoction of root and stem is used to cure pneumonia usually among children.
128.	<i>Rumex nepalensis</i> Spreng. POLYGONACEAE RA 02	Halhale	H	Rhizome	Paste of rhizome is applied to cure swelling.
129.	<i>Schima wallichii</i> (DC.) Korth. THEACEAE RA 178	Ghyansing (M)	T	Fruit, Bark	Fruit paste is applied as antidote against scorpion sting Bark juice is applied on cut wounds to stop bleeding. Crushed bark is given with grain to the cattle against liver flukes and intestinal worms.
130.	<i>Scutellaria repens</i> Buch.-Ham. ex D. Don LABIATAE RA 130	Pepema jhar (M)	H	Whole plant	Plant juice is used to cure tetanus.
131.	<i>Selinum wallichianum</i> (DC.) Reizanda and Saxena UMBELLIFERAE RA 134	Bhutkesh	H	Root	Decoction of root is used to cure rheumatism. Root paste is used to get relief from body pain and fever.
132.	<i>Semicarpus anacardium</i> L. f. ANACARDIACEAE RA 50	Bhalayo	T	Fruit	Used to cure dysentery, asthma and acute rheumatism.
133.	<i>Shorea robusta</i> Gaertn. DIPTEROCARPACEAE RA 194	Phoksing (M)	T	Bark	The powdered resin extracted from bark is taken with curd during dysentery.
134.	<i>Smilax aspera</i> L. LILIACEAE RA 01	Narbhok (M)	C	Root	Root juice is taken to cure stomach-ache, bowels and vomiting problem.
135.	<i>Solanum virginianum</i> L. SOLANACEAE RA 179	Kanthagiri (M)	H	Fruit, Seed	Roasted few seeds are kept on the infected teeth during toothache. Powder of fruit is used to cure epilepsy.
136.	<i>Solanum anguivi</i> Lam. SOLANACEAE RA 136	Bihin	S	Fruit	During headache caused by cough and cold, fruit is squeezed and the juice along with seeds is rubbed on forehead.
137.	<i>Sapilanthes calva</i> DC. COMPOSITAE RA 39	Ban maratti (M)	H	Flower	Decoction of flower is taken to cure cough and cold. A single flower head is kept on the infected teeth during toothache.
138.	<i>Spindus mukorossi</i> Gaertn. SAPINDACEAE RA 87	Jharlyang (M)	T	Fruit	Fruit is used to cure epilepsy, asthma, expectorant. Pulp of fruit can be used as substitute of washing soap. Also used in fish poisoning or fishing.
139.	<i>Swertia ciliata</i> (D. Don ex G. Don) B. L. Burtt GENTIANACEAE RA 08	Lekhtite (M)	H	Whole plant	Decoction of plant is mixed with curd and given to cure diarrhoea. Plant juice is used to cure typhoid.
140.	<i>Swertia nervosa</i> (G. Don) CB Clarke GENTIANACEAE RA 54	Lehtite (M)	H	Whole plant	Plant juice is taken during abdominal disorder.
141.	<i>Syzygium cumini</i> (L.) Skeels MYRTACEAE RA 99	Pharet (M)	T	Bark, Fruit	Bark juice is given during diarrhoea and dysentery. Ripe fruits are edible.
142.	<i>Terminalia chebula</i> Retz COMBRETACEAE RA 126	Bor (M)	T	Fruit, Bark	Fruit is one of the constituent of <i>triphala</i> that is used for constipation, stomach pain, cough. Bark juice is useful for jaundice, bronchial problem, stone, blood pressure.
143.	<i>Terminalia bellirica</i> (Gaertn.) Roxb. COMBRETACEAE RA 194	Thuksing (M)	T	Fruit	Used to remedy in cough, fever, piles, leprosy, appetizer, one of the constituent of <i>triphala</i> .
144.	<i>Themeda triandra</i> Forssk. POACEAE RA 166	Khar	H	Leaf	Leaf juice is useful for gastritis.
145.	<i>Thespesia lampas</i> (Cav.) Dalzell & Gibson MALVACEAE RA 125	Ban kapas	S	Stem, Root	Used to reduce joint pain, backbone pain and to make strong bone.
146.	<i>Thysanolaena maxima</i> (Roxb.) Kuntze POACEAE RA 58	Badani (M)	H	Root	Root juice is taken during stomach pain and for gastritis.
147.	<i>Tinospora cordifolia</i> (Willd) Miers MENISPERMACEAE RA 103	Gurjegana (M)	C	Stem	Used to cure asthma, cough, bronchitis fever, jaundice, urinary problem, diabetes and tonic.
148.	<i>Trichilia connaroides</i> (Wight & Arn.) Benth. MELIACEAE RA 43	Chhoyosar (M)	T	Fruit	Used to cure wound, scabies, ring worm and other skin disease.
149.	<i>Trichosanthes tricuspidata</i> Lour. CUCURBITACEAE RA 98	Inndrayani (M)	C	Root, Fruit	Root juice is taken during abdominal pain. Root/fruit paste is applied to cure boils.
150.	<i>Urtica dioica</i> L. URTICACEAE RA 67	Ghyo (M)	H	Leaf	Regular intake of young shoots as vegetable provides relief from diabetes, anaemia. Leaf paste is applied on the cuts and dog bite.
151.	<i>Valeriana jatamansii</i> Tones VALERIANACEAE RA 100	Somai jhar (M)	H	Root/Stem	Watery extract obtained by crushing stem is filtered and applied as eye drop in case of conjunctivitis. Root juice is tonic which helps in post delivery.
152.	<i>Viburnum erubescens</i> Wall. CAPRIFOLIACEAE RA 97	Guwatyotsing (M)	S	Bark	Used to cure common cold and typhoid.

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153.	<i>Vitex negundo</i> L. VALERIANACEAE RA 153	Simali	S	Leaf	Leaf paste is applied to cure blisters. Leaf juice is used to cure pinash, cough and asthma.
154.	<i>Wikstroemia canescens</i> Meisssn THYMELIACEAE RA 70	Dandapate (M)	S	Root	Root bark is crushed to make powder and is given during indigestion.
155.	<i>Woodfordia fruticosa</i> (L.) Kurze LYTHRACEAE RA 57	Jharyak (M)	S	Leaf	Used to reduce labour pain, to control bleeding on cut wounds, gastritis, and dysentery and skin diseases.
156.	<i>Xeromphis spinosa</i> (Thunb.) Keay RUBIACEAE RA 68	Main kanda	S	Root	Root paste is applied on the forehead to get relief from headache.
157.	<i>Yongia japonica</i> (L.) DC. COMPOSITAE RA 151	Dulla jhar	H	Leaf	Leaf juice is taken during indigestion.
158.	<i>Zanthoxylum armatum</i> DC. RUTACEAE RA 165	Timur	T	Fruit	Fruit is chewed to cure toothache, fever, gastritis. Decoction of fruit with salt and powdered turmeric is taken to treat cough and cold.
159.	<i>Zephyranthes carinata</i> Herbert AMARYLLIDACEAE RA 96	Bhuichampa	H	Rhizome	Used to cure backbone pain, joint pain and bone fracture.
160.	<i>Zingiber cassumunar</i> Roxb. ZINGIBERACEAE RA 154	Chhebok (M)	H	Root	Used to cure pinash, gastritis and heart problem
161.	<i>Zizyphus mauritiana</i> Lam. RHAMNACEAE RA 128	Bayar	S	Fruit	Used to cure hotness of body and stomach problem. Fruits are edible.

documentation of this knowledge and biochemical analysis (i.e photochemical study) of the documented plant species and ecological study of the particular medicinal plant is also essential to check the reliability and validity of current finding and to know their diversity as well. Emphasis should also be given to identification, conservation and cultivation techniques of different species of medicinal & aromatic plants. Besides that ecological study of the forest vegetation helps for the conservation and utilization of the forest resources in its optimum capacity.

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