

Documentation and Assessment on Knowledge of Ethno-Medicinal Practitioners: A Case Study on Local Meetei Healers of Manipur

*D. S. Ningombam¹, S. P. Devi¹, P. K. Singh¹, A. Pinokiyo² & Bisheswori Thongam³

¹ Plant Physiology Lab., Center of Advanced Study in Life Sciences, Manipur University, Manipur, India

² PG Department of Botany, DM College of Science, Imphal, Manipur, India

³ Plant Systematic & Conservation lab., Institute of Bioresources & Sustainable Development, Takyelpat, Manipur, India

Abstract: The traditional medicinal healers of the state Manipur are generally known as Maibas for male health practitioner and Maibis in case of female health practitioner. Since time immemorial they are involved in prescribing folk-medicine with the help of herbal-medicine or mystic incantation. An investigation on 41 local Maiba and Maibi of Meetei community of Manipur is carried out to find reliability of their knowledge, and tested if these were related significantly to age, literacy, hesitation, results of their treatment, doses and to document such know ledges based on a total of 205 locally available medicinal plant spp. belonging to 87 families used for treating 18 major diseases classes. Traditional medicinal practitioners were also interviewed to gather information regarding knowledge of folk medicinal system, diagnostic system of ailments, classification of folk medicinal system, nomenclatural system and uses of medicinal plants found in Manipur as a remedy for various primary health complaints. In the present study three types folk medicinal system were recorded. The diagnostic system is based on pulsation and symptoms. Nomenclature of medicinal plants was made in with reference to its medicinal value and traditional culture for easy identification. The Meetei forefathers put several norms for do and don'ts of eating food plants accordingly to the season and its consequences. Most of the species (72.20%) were wild species and the part used for medicinal properties were above-ground (83.41%) amongst which leaves (27.80%) were mainly harvested. Concoction mode of preparation (21.46%) is the most common way of preparation and gastrointestinal ailments (13.170%) constitute the major ailments treated. About 55.60% of the medicinal plants collected were taken orally taken internally for treatment of various primary health ailments. For some ailments like jaundice, snake bites, dog bites and stone cases, etc, more than 90% of the Manipuris preferred folk medicine rather than modern medicine. Age interval 56 and above constitute 70.7 % of the informants of which majority of them are excellent professionals (46.3 %) in the field of medicine of which almost 48.8% of them are illiterate. Again, age 35 – 45 were persons who have good knowledge of folk medicine but lacks experience, 46 - 55 have mixed type of folk medicine knowledge where as age above 56 have a good experience and better knowledge except some who have limited knowledge of folk medicine as they are following their parents footsteps only or due to their expertise is meant for treatment of a very few diseases only.

Statistical analyses showed that there was significant correlation between the age of the informant and his knowledge of plants on folk medicine. According to our statistical analysis, spearman correlation showed significant correlation (Spearman correlation test, $r = 0.5435$, at 5% level of significance) between the education level of traditional healers and the number of species reported.

Majority of herbal healers learnt their knowledge of folk medicine from mangtak (43.9%), it is from followed by forefathers (24.4%) and senior herbal practitioners as guru (24.4%) later other few learnt from literature. An excellent herbal practitioner could be characterized by aged (56 years and above) old experience, educated, who were accustomed with the use of wild plants, whose forefathers were herbal practitioners, who had gained high confidence of doses and cure, and with good knowledge of folk medicine and plants.

Key words: Manipuris, Maibas, Meetei, mangtak, practitioner, ethno medicinal plants.

I. Introduction

In ancient times, medicinal plants have been used all over the world as unique sources of medicines and may constitute the most common human use of biodiversity (Bannerman 1982; Hamilton 2004; Hiremath & Taranath, 2010). AYUSH(2003) defines traditional medicine as “The health practices approaches, knowledge and beliefs incorporating plant, animals and mineral based, medicines, spiritual therapies, method therapies manual techniques and exercises applied singularity or in combination to treat, diagnose and prevent illnesses for maintain well beings. It is argued that the traditional form of health care delivered by the traditional healers

meets some important community-felt needs which modern or Western medicine does not meet Mankazana (1979). In India, it is estimated that approximately 70% of the population relies on traditional medicine to meet primary health care needs (Lavekar and Sharma 2005).

Since pre historic times the inhabitants of Manipur has a unique history of using medicinal plants for treatment of various primary health ailments. Manipur indigenous medicine started developing during the then king, *Meidunga senbi Kiyamba* (1467-1508) who use *Ponheiton* (Guava) as a medicine for treatment of diarrhoea. In written records, the healing practices by using herbs dates back to the then king *Naophangba* (428-518 A.D), latter reached its climax in the reigns of king *Meidunga Chingthangkomba* (1763-1798 A.D) who described well established medicine uses for plants. The *meetei* kings had a very sophisticated system of health, disease and treatment and appointed his personal *Maibas* (Herbalist) like *Konnok Thengra* and *Meidunga Lalhamba* as their *Maibas* respectively (Khelchandra 1969; Meitei 2004).

The herbs and wild edible medicinal plants have got great mythological significance during the pre-historic days and there are many legendary histories of many local herbal physicians (*Maiba* or *Maibi*) for their miraculous treatment using herbal medicine with mystic incarnation. The *Maibas* through ages recorded the experiences of indigenous medicine and compiled them in form of herbal book by them known as *Puyas*. The *Puyas* are written record handed down to posterity by the forefathers of the *Meeteis* written in traditional script with or without the author name maintained during king's time. The indigenous knowledge system of the herbal medicine practitioners were rewritten on small thin, rectangular boards of the sapwood of *Aquilaria agallocha* (Agar) and the ink used was made from lamp black and the pen was made from fully seasoned *Bambusa tulda* Roxb. . The *Puyas* are in the possession of various individuals and organization. Some of *Puyas* are *Hidaklon* (Folk medicine) in five volumes viz. *Kanglei saglen puba puya*, *Shingligi maram*, *Laimuron*, *Taorinai yangbi* and *Thepalon*. The system advocates a unique set of principles and guidelines of using traditional folk-medicine by the *Manipuris*. During king's times in Manipur, traditional healer has got two compartments led by the head *Maiba* known as *Maiba Ahal* and *Maibi Ahalbi* (Khelchandra 1969). However, *Maiba* and *Maibis* can be broadly divided into two types namely, (i) witch doctors-in this type of *Maibas*, they practice a superstitious systems, who are deeply inclined to incantation and (ii) Herbal doctors-they try to cure diseases by giving herbal medicines based on traditional systems. Traditionally, medicinal plants were conserved *in-situ* in *Umung lai* (sacred grooves) and *ex-situ* in their home gardens of traditional herbal practitioners *Maiba* and *Maibis* (Khumbongmayum *et al.* 2005).

During the reign of the then king *Pamheiba* (1709 – 1748) embraced Hinduism in 1717 and with the instigation of the guru *Santidas* massive destruction of pre-hinduism records of *Meetei* philosophy, literature, cultural history and health and hygiene books were burned popularly known as *Puya meithaba* on the 17th day, Sunday in 1654 sara (1732 A.D) in front of *Kangla Utra* (*Kangla Fort*) (Sanajaoba 2005). Moreover another reason for the disappearance of the *Puyas* is the consequences of the seven years devastation war fought with the Burmese (1817 -1832 AD) where mass destruction, migration and taking away of *Puyas* by the captives of war to Burma who were later on absorbed to Burma.

The threat from the *Meetei* king for the custodians of the *Puyas* must have led to keeping those materials in secret places for a very long time. Moreover the transition of *Meetei mayek* script to Bengali script for a several decades makes it difficult for the younger generations to read the contents of *Puyas*. A catalogue of Manipur manuscript published by *Manipur Shahita parishad* shows that the *Puyas* covered a number of human disciplines in which six (6) *puyas* were on Health and Hygiene (; Ebungohal & Khelchandra 1967; Khelchandra 1969).

The states blessed with richest repositories of medicinal and aromatic plants and moreover well-known for its diverse culture of human races. There is an age long intrinsic relationship between the ethnic *Meetei* community and medicinal plants for the treatment of various primary health care ailments which remained endemic to this particular community of this state. Although, less well documented, the use of traditional medicines and consultations with traditional healers is widely acknowledged in Manipur.

The people of Manipur continued the use of folk-medicine till recent years even though modern medical science is well established. There have been many reports by different researchers in recent years on folkloric treatment with herbal medicine by the *Meetei* community in Manipur viz., Sinha (1987, 1996), Singh & Singh (1995 a,b); Singh *et al.* (1996), Singh & Singh 1996; Singh *et al.* (1997), Singh & Singh (1997); Singh *et al.* (2001); Singh (2002); Elangbam (2002); Singh *et al.* (2003); Singh & Singh (2003a,b), Singh & Singh (2003); Khan (2005), Meitei *et al.* (2007), Devi & Singh 2008; Srivastav *et al.* (2009); Singh (2009); Devi *et al.* 2009; Singh *et al.* 2010; Devi *et al.* (2011), Yumnam & Triparthi (2012) and Yumnam *et al.* (2012) reported for folkloric treatment with herbal materials that are being used to cure different diseases by the people of Manipur.

However, assessment and documentation on the reliability of knowledge of such regional practitioners is yet to be carried out for such an ethno botanically significant state. Thus, in the present study the practitioners of *Meetei* community in Manipur using medicinal plants were identified and assess their way of treatment, types of folk medicinal system, source of knowledge, diagnosing methods, healing methods, reliability, etc.

It is an attempt towards the assessment of true ethno medicinal practitioners who are now decreasing and secondly to draw the attention of importance for proper documentation and conservation of these traditional knowledge of *Meetei* community in Manipur.

II. Methodology

Study area

The state Manipur is the last independent states to be incorporated into British India. Manipur formed an important link culturally and otherwise between India on one side and Southeast Asia on the other. It stretches between the 23° 80' N – 25° 68' N and 93° 03' E – 94° 78' E and has a geographical area of 22, 327 km² which constitutes 0.7% only to the total land surface of India (Vedaja 1998). The rich diversity of plants originates from the variations in the climatic and edaphic factors, location of the state on the confluence of Himalayas and Indo-Burma region. The region lying in the Indo-Burma Biodiversity Mega Hotspots ranks in the 8th amongst the 34th biodiversity hotspots of the world (Meyers *et al.* 2000). This holds immense potential for production and marketing of value added bio-resources in particular, spices, medicinal and aromatic plants.

Study Community

The documented history of Manipur begins with the reign of *Meetei* or *Meitei* King of *Ningthouja* clan *Nongda Lairen Pakhangba* (dragon king/god) (r. 33–154 AD), who unified the seven clans viz. *Ninthouja*, *Angom*, *Khuman*, *Luwang*, *Khaba-nagba*, *Moirang* and *Sarang-Leishangthem* of *Meetei* society (Ebungohal & Khelchandra, 1967). Comparative ethnographic studies that it is fairly certain that the origin of *Meeteis* might have belonged to the Tai race of the Indo Chinese group of Mongoloids. Generally known as *manipuris* and are genetically mongoloid in origin and speak a Tibeto Burman language follow *Shanamahism* the worship of *Shanamahi*, the creator aspect of *Shida Mapu*, the trinity God of the *Meeteis* one of the oldest sects of Southeast Asia. It is believed to be originated from Manipur, India (Sanajoba 2005; Laishram 2009). *Meeteis* has well established skills, beliefs and practices relating to promotion of positive health and avoidances of sickness even before the hospitals oriented system of medicine. The economy of the people of Manipur state is basically agrarian. About 70% of the people are engaged in agriculture for their livelihood (Vedaja, 1998).

Study methods

Survey and collection and identification of plants

Several collection come survey tours were undertaken in the 9 districts of Manipur during the flowering seasons during the successive years April 2008 to May 2013. Plants were identified for their medicinal uses following Sinha 1996 ; Singh 2002; Singh *et al.*, 2003; Singh, 2009. Information on the use of plants and products was collected from well known traditional healers, senior headman through personal contact and also through actual experiences. The authenticity of the uses was repeatedly verified by contacting various individuals. In case of contradictory information, efforts were made to get the correct uses. The plants were identified by following works of Clarke, 1884; Hooker (1872-97); Kanjilal *et al.* (1934-1940); Deb (1961 a, b); Singh & Arora, 1978; Sinha, 1987 a, b, 1996; Singh, *et al.*, 1988 *etc.* The herbarium sheets are prepared following Jain and Rao 1977 and deposited for inclusion in the herbaria of Department of Life sciences, Manipur University, India. Author name of plants follows Brummit & Powell 1992, plant names index. All the species were thus updated following above literature in their scientific names.

Collection of data from Traditional healers or Local Physicians

For this study the *Maibas* or *Maibis* who can be defined as indigenous folk healers who are acknowledged experts in diagnosing and treatment folk illness practices by using plants and other ingredients were selected as informants. The study was carried out for qualitative participatory documentation of the traditional healers of *Meetei* community in Manipur. Forty one (41) such practitioners staying in different villages were selected. All the plants collected were taken to these practitioners in the form of fresh plants, herbarium specimens, photographs or local names, *etc.* for them to get it understand. Close ended schedule type questioner is prepared and semi structured interviews of these practitioners were taken visiting their home for each professional traditional healer who medicated the local peoples by using ethno medicinal plants or folk medicine system. Moreover, the first author got the opportunities to interact with traditional healers every second saturday as there is an association called *Apunba Maiba Maibi Pharup* of Manipur where maximum numbers of more than 70 active members from different communities and districts were present. Ethnomedicinal uses of the plants were collected by visiting the houses of the informants, i. e. local herbal practitioners. The method of collection of such information follows Martin 1995, Haile *et al.* 2007 and Isil *et al.* 2004 with some modifications. Some of the criteria included in the questioner for statistical analysis are age of the informant, gender, education, employment, status, folk medicinal system, diagnostic system of ailment, classification of folk medicinal system, nomenclature of medicinal plants, preferability/hesitation to treatment, outcome, effectiveness, self confidence, doses, source of knowledge, mode of preparation, transfer of knowledge, dosages

was questioned in *manipuri* language which is common to all the different communities. Diseases are also categorized under 18 major groups 1). Gastrointestinal ailments (anthelmintic, colic pain, constipation, diarrhoea, dysentery, digestive complaints, gastric problems, Gastro-enteritis, indigestion & stomach troubles, stomach ulcer, piles, to expel intestinal worms of children), 2). Respiratory system disorder (asthma, bronchitis & inflammatory diseases of the chest, cough, hiccough, irritation and inflammation of throat, sinusitis, respiratory & breathing problems, sore mouth & tongue disorder, tonsillitis & throat trouble, 3). Inflammatory problems (Relieve pains & swellings, back pain, muscular pain, inflammation due to washing and cleaning of clothes and utensils, swollen joints, reduces pain and pains caused by pointed objects, 4). Urinary ailments (urinary problems, infection and stone case), 5). Cardiovascular (hypertension, cure obesity) 6). Dermatological problems (boils, leprosy, pimples, cracked skins, relieves body rashes, ringworm, warts, scabies, skin diseases, hair scalp & infection originating in a hair, small pox of children), 7). Gynaecological problems (complaints during pregnancy, easy delivery of child by pregnant women, menstrual complaints, to help conceive to occur, leucorrhoea, gonorrhoea, to prevent miscarriage, white discharge), 8). First aids (antiseptic, bruises, wounds, burns, coagulation of blood, cuts and injuries), 9. Dental problems (bleeding gums, toothache, gum bleeding), 10. Nervous disorderness (paralysis, headache, dizziness); 11. Endocrinology problem (controlling diabetes, swollen glands, dropsy, glandular swelling of neck). 12). Ear and eye problems (ear ache, catarrh, eye inflammation), 13). Bone fracture (enhanced healing of bone fracture, bone setting), 14). Tonic (liver tonic, jaundice, heart disease, kidney tonic), 15). Carminative (for rejuvenating women after giving birth, health improver for adults, for nursing mother and old person), 16). Fever (febrifuge, antipyretic); 17). Bites (dog, snake, insect bites), 18). Miscellaneous (hair care, aphrodisiac, promoting lactation, malnutrition, enhancing vocalism by singers, mouth fresher).

Data on human ailments treated, local name, parts used, growth form, degree of management (wild/cultivated), methods of preparation, route of administration and application, existing threats to medicinal plants species and indigenous knowledge transfer were recorded. The collected medicinal plants species were made voucher specimens and the collection numbers were recorded. The collected specimens are dried, identified and deposited at Manipur University, herbarium Canchipur, Imphal, Manipur, India.

Data analysis

Chi square (χ^2) test and Spearman rank correlation test were run in SPSS 12.0.1 to analyze ethno botanical data. Chi square test was used to determine whether there is any significant variation between the hesitation to medicate people with herbal medicine with the outcome of the treatment and also with the consumption of medicinal plants for every type of disease whereas Spearman rank correlation rank regression test was used to determine the correlation of knowledge of folk medicine with the age of the informant, education level, exact composition and dosages of ailments and transfer of knowledge. Analysis of types of plants, parts used major types of treatment and mode of preparation.

III. Results and discussion

Ethnobotanical data were collected from 41 randomly selected traditional healers using semi structured interviews and the folk medicine where common people used for self medications were also recorded. The traditional healers involved in the study were 37 were males and 4 were females ranged from 35 to 84. Most of the healers are illiterate (53.85%), able to read and write (30.77%) while few (15.38%) attended up to 10 standard and above.

Types of traditional medicine practitioner

In the present study it is recorded that there are two types of health care practitioners who supply or provide advice on herbal medicine in Manipur. The first type of health practitioners are those who provide complementary and alternative medicine. They adopted traditional medicine from outside *Meetei* traditional culture *i.e.* Indian system of Ayurvedic (Homeopathy and Ayurvedic). They are not considered as indigenous traditional and are known as *Kabiraj* or Ayurvedic doctor and the second type of traditional healers are generally known as *Maibas* or *Maibis* as male practitioner and later for female practitioner. They are unlicensed person who are involved in prescribing folk-medicine practices using indigenous traditional practices herbal remedies or person who has inherited the gift of healing or mystic incantation (magical formula or spiritually allegorical).

Indigenous healing methods of Manipuris

In the present study it was recorded that traditional healer's for the treatment of patients is based on three types of folk medicinal system namely:

(i) *Napi-singbina Laiyengba* (Herbal therapy) treatment with the use of herbal or medicinal plants. The health healers try to cure the diseases by giving folk medicines made from herbs, vegetables, spices etc. and other

ingredients for preparation of different formulations for mono-herbal or poly-herbal is done. Formulations are either taken internally in form of decoction, concoction and simply boiled and taken with or without spell. Formulations of some treatment ailments are very common that the villagers themselves as homeprepared remedies.

ii) *Hakchang noiduna Laiyengba* (Body message system/ Reflexology system), in this type fruits, seed oil, crushed part of plants are used along with massaging is done. This mixture is applied to all body organs and massage is done by giving certain nourish effect to the skin and other body systems. The *Maibas* will massage firstly on the navel part with or without spell believing that navel is the centre where the souls of human being lies. After that the *Maiba* will keep on changing the massaging proportions one by one navel- belly- abdomen- other part of the body which is found to be problematic. It is helpful in digestion, stomach problems, irregularity in menstruation, delivery problems, joints, muscle pains and for effective vibrating and re-healing activity of the human nervous system.

(iii) *Lai Thajaba Laiyeng* magico-religious or Psychotherapist system of folk medicine. It is the use of unseen powers to cure diseases. This practice is followed by the psychotherapist that are deeply inclined to the cure of ailments simply by incantation, oracles, performing ritual ceremonies, personal service of prayer, offering devils' gift, food vegetables, flowers, etc. In the present study this folk medicinal system is not included.

Diagnostic system followed by the informants

The diagnostic system followed by the ethno medicinal healers is based on *Mihun Kanglon yengduna Laiyengba* (pulsation for diagnosing diseases) and symptoms of the particular ailment and besides this *Maibas* also meditate with some incantations. The right hand of male and the left hand of the female folk are usually checked pulsation. The three fingers-index, middle and ring fingers are also used by the *Maiba* or *Maibi* for the pulse examination so as to enable to examine in deeper category.

Steps required of treatment of an ailment

The efficacies of medicine depend on correct harvesting, preparation and application of medicines. The traditional health healers for the treatment of a particular disease or illness follow the three steps:

i). *Selection of medicine*: After diagnosing symptoms and pulsation, *Maibas* select the required plants, plant parts, seed, bark, honey, mud, animal's parts etc depending upon the type of ailments. ii). *Collection of medicine*: Collection is done by the Healer or patients itself depending upon the type of ailment. For collect the plant and other materials it requires some certain rules and taboos. For example; plant parts which are directed towards east, pluck without breathing, collect on Saturday and to collect at particular timing i.e. mid night etc. iii). *Preparation of medicine*: Preparation of medicine is done at particular time depending upon the type of ailments with or without spells on it. Formulation of herbal medicine is freshly prepared Single drug remedy or mono-herbal and poly herbal type. Mode of preparation is in form of decoction, concoction, as food with added ingredients, boiled and taken for internal application and porridge, crushed extract, poultice, etc. for external application.

Indigenous nomenclature system of folk medicinal plants

The folk-medicinal plants can be easily identified from the rest of the other plants according to their local names. The *Meetei* fore-fathers particularly those who have the knowledge of folk-medicine named in such a way that even the younger generations who has got a little knowledge of medicinal plant and identify that the very plants is having a medicinal value. The three types of classification of medicinal plants are discussed below:

A) Nomenclature of medicinal plant- The folk medicinal plants are named with the inclusion of a suffix or a prefix, so as to enable to ranked as a traditional folk medicine as follows: (i) **Lai** (ii) **Yai** (iii) **Yen** (iv) **Hidak** (v)

Jam (Cham) (vi) **Ningthou** (vii) **Kok** (viii) **Ren** (viii) **Laangthrei** (xi) **Hee** and x) **Utong**.

Lai- *Laiutong* (*Equisetum arvense*); **Yai**- *Takhao yai khu* (*Curcuma aromatic*); **Yen**- *Kongun-yen* (*Cissus adanata*); **Hidak**- *Nungsi-Hidak* (*Mentha spicata*); **Jam (Cham)** – *Champra* (*Citrus aromaticum*); **Ningthou**- *Ningthou khongli* (*Tinospora cordifolia*); **Kok** – *Kokan* (*Alangium chinense*); **Ren**- *Tai-ren* (*Toona cialata*); **Laangthrei**– *Langthrei* (*Eupatorium birmanicum*); **Hee**- *Mana hee* (*Terminalia citrina*); **Utong**- *Utong-lei* (*Thevetia peruviana*).

In *Meeteilon* language medicine is term as *hidak*. The word *hidak* is added to the name of the plant as suffix or prefix at the time of naming of the plant which has got medicinal value. For example *Nungsi hidak* (*Mentha spicata* L.) is a very important medicinal plant which is plant for treatment of gastroenteritis in Manipur and moreover it correlates those modern scientific reports. From this concept it can be concluded that *Meetei* community is very advanced for the classification of medicinal plants according to the literary meaning of a particular medicinal value.

[2] Weekly Medicine –nomenclature of medicinal plants is also done based on according to the names of even days of a week. The *Meetei* ancestor's belief that some medicinal plants have their maximum curative power on a particular day in a week. If there is some sort of serious stage of a patient for treatment of a disease, the *maiba/ maibi* prescribe a medicine which is collected and prepared on that particular day of the week. Some of plants listed in Annexure: 1 is as set as example:

Nongmaijing (Sunday): Local name- *Nongmangkha*, Scientific name- (*Phlogacanthus thyrsifloris*); **Ningthoukaba** (Monday): Ningthou-khongli (*Tinospora cordifolia*); **Leibakpokpa** (Tuesday): *Leibakgnou* (*Artemisia nilagirica*); **Yumjakeisha** (Wednesday): *Yerum-keirum* (*Stellaria media*); **Shagolsen** (Thursday): *Sha-mei* (*Buddleja asiatica*); **Eerai** (Friday): *Ensil* (*Oxalis corniculata*); **Thangja** (Saturday): *Thang-hidak* (*Litsea sebifera*).

[3] Directional Medicine –nomenclature of folk-medicinal plants were also done based on collection systems of the plants with respect to the direction. Like in the above system nomenclature is done by adding either prefix or suffixes the eight directions to the plants name. For instance: The medicinal plants are named after the names of the eight directions as follows:

Mang/Nongpok (East): The word i.e. *Mang* or *Nongpok* are added as suffix or prefix to the name of the medicinal plant viz., *Mang-Heimang* (*Rhus succedanea*); **Kha/Makha** (South): *Kharom-leisom*, (*Holmskioldia arboretum*); **Awang/Wang** (North): *Wang-dem -khoibi*, (*Commelina benghalensis*); **Meiram** (South-East): *Meipokpi* (*Opuntia dillenii*); **Moirang Laiji** (South-West): *Moirang Khanum* (*Celerodendrum serratum*); **Koubru** (North-West): *Kou-rao- angouba* (*Erythrina variegata*); **Nongchup/Maning** (West): *Hei-ning*, (*Spondias pinnata*); **Chingkhei** (North-east): *Ching ensile* (*Antidesma acidum*).

The nomenclature of *Meetei* folk-medicinal plant according to indigenous methods of using prefixes and suffixes of vernacular way, weekly days, direction has got a significant value shows the immense expertise in the field of folk medicinal knowledge. Even though, it has got its inclination towards the superstition and incantation systems it is quite systematic and extremely helpful for the younger generation in *Meetei* indigenous knowledge system of medicine. The above mentioned medicinal plants are in the list of plants [Annexure: 1.]

The *Meetei* forefathers put several norms for do and don'ts of eating food plants accordingly to the season and consequences. The table in [Annexure: 2] shows the months (English & Vernacular) and food (Local name & scientific name) not to be taken and if taken its consequences in form of ailments.

A total of 205 plants belonging to cultivated (33), climbers (28), trees (46), shrubs (32) and herbs (66) arranged alphabetically under 87 families was found to be medicinally used (Table 1). The most commonly medicinally utilized families of plants were Asteraceae (17 spp.), Zingiberaceae (12 spp.), Verbenaceae (9 spp.), Curcubitaceae (9 spp.) as medicinally useful. Most of the species (77.56%) were wild species and the parts used for medicinal properties were above-ground (88.61%) amongst which leaves (26.86%) were mainly harvested. In all the growth type i.e. climbers, trees, shrubs and herbs the most used parts were leaves and in cultivated growth forms, it was fruit. Resin, tender pod, fronds, gum and pseudostem of single species each respectively were utilized. In case of small herbs, according to our informants generally the whole plant were collected entirely and taken whereas in case of large trees the twigs or stems were generally collected. An analysis on the collected plant species is provided in Table 3.

[Insert figure:1]

[Insert figure: 2]

According to our statistical analysis, spearman correlation shows significant correlation (Spearman correlation coefficient, $r = 0.5435$, 5% level of significance) between the education level of traditional healers and the number of species reported. There was no significant relationship (Spearman correlation coefficient, $r = 0.3146$.) correlation was observed between the age of the informant and his knowledge of plants on folk medicine. Amongst the 41 informants 90.2 % were males and only 9.8% were females. The existence of female professional herbal practitioners in recent years follows the footsteps of their expired husbands or fathers which were previously working as herbal practitioners or so called hereditary healers. Age interval 56 and above constitute 70.7 % of the informants which majority of them are excellent professionals (46.3 %) in the field of medicine of which almost 48.8% of them are illiterate. Again, age 35 – 45 were persons who have good knowledge of folk medicine but lacks experience, 46- 55 have mixed type of folk medicine knowledge where as age above 56 have a good experience and better knowledge except some who have limited knowledge of folk medicine as they are hereditary healers who specialized in treatment of very few diseases.

According to our statistical analysis there was no significant relationship (Spearman's correlation coefficient, $r = 0.4608$, at 5% level of significant) correlation was observed between the age of the informant and his knowledge of dosages of medicine.

No significant (X^2 calculated = 0.49, X^2 table value = 5.99) difference was observed between the consumption of medicinal plants for every type of diseases and hesitation to medicate people with herbal

medicine. Peoples does not hesitate to medicate with herbal medicine as they have accustomed with the used of wild plants (36.6%) followed by actual experience of the informants (31.7%) and confidence of the herbal practioners (31.7%). However, traditional healers of the opinion that it varies on individuals regarding the curing of a particular ailment. Herbal medicine are used for all types of primary diseases (36.6%) followed by some particular diseases (34.1%) and minor diseases (29.3%). regarding doses 51.2 % does not have idea about exact doses and only 12.1% of the informants have exact idea of doses. No significant (X^2 calculated $2 = 4.439$, X^2 table value = 5.99) difference was observed between outcome of the treatment and hesitation to medicate people with herbal medicine. It meant that confidence level of the practioner and the result of treatment is not significantly interdependent outcome of the treatment. Regarding the outcome of the treatment age intervals 35 – 45 were doubtful, 46- 55 have mixed type of opinion and age above 56 have greater confidence of their dosages of medicine.

All preparation is more or less the same way. Several species are believed to have medicinal properties and are commonly eaten by those villagers seeking therapeutically benefits. The mode of preparation falls under 16 categories (Table 5) in which decoction mode is the most prepared (20.79%) and the least in Ash and extraction. In case of climbers, trees and herbs the major mode of preparation is decoction whereas in cultivated it is added to meals and concoction in shrubs.

Regarding the type of ailments 18 types including miscellaneous are used for treatment. Of the 205 therapeutic applications described in the table Gastrointestinal ailments constitutes the highest (13.17%) followed by Respiratory system disorder (10.73%),Inflammatory problems, Dermatological problems andgynecological problems by (9.75%); Tonic(7.31%); First aids (5.85%); Miscellaneous (5.36%); Bites, Endocrinology problem and Urinary ailments by (4.87%); Fever (4.39%);Dental problems (2.43%); Nervous disorderness (1.95%); Carminative and Ear and eye problems (1.46%); CardiovascularandBone fractureby (0.97%).

[Insert figure:3]

In all the growth forms gastrointestinal ailments was the highest cured ailment. Several species where more than 90% of the *manipuris* significant took as self medications rather than modern medicine are *Cuscuta reflexa*, *Melothria maderaspatana*, *Mimosa pudica* and *Pavetta indica* boiled and the decoction is drunk to cure jaundice. Another such case is dog and snake bites where *Amaranthus viridis*, *Mikania cordata*, *Argyrea nervosa*, *Bambusanutans*and *Arundo donax*were effectively used by herbals practitioners. Minor ailments like stomach ulcer people simply boiled *Benincasa hispida* and consumed *Phologanthus thyrisiflmis* and *Solanum surattense*. *Drymaria cordata* is dried and the smoke is inhaled for treatment of asthma and respiratory problems. Species *Goniothalamus seoquipedalis* and *Crassocephalum crepidiodes*leaves are simply crushed and applied the cuts and wounds when children got hurt while playing. Stone case of problems is also cure by herbal practioners with great significant.

[Insert figure :4]

Moreover for urinary problems species like *Cissus adanata* Roxb, *Cissus javanica* (Thunb.)S.W, *Parthenocissus quinquefolia* were effectively used. *Diplocyclos palmatus* (L.) C. Jeffrey is used for reproductively problems. Some medicinal plants which were used for multiple therapeutic are *Oroxylon indicum* Vent, *Mikania cordata* (Burm.f.) B.L. Robinson, *Phlogacanthus thyrsiflorus* Nees, *Allium tuberosum* Rottl. ex Sprang, *Tinospora cordifolia* Miers ex hook.f. Thong, *Curcuma angustifolia* Roxb, *Allium tuberosum* Rottle ex Spreng, *Sapindus mukorosii* Gaertn and *Lygodium cernum* L. Most frequently uses of herbal medicine are for bites (dog and snake bites), jaundice, stone case and gastrointestinal disorder were more preferred than modern medications.

There was significant relationship (Spearman correlation coefficient at 5% level of significance, $r = 0.4164$. $\alpha = 0.05$, $p = 0.3199$) correlation was observed between the knowledge of plants on folk medicine and the mode of transfer of traditional knowledge from as most of the peoples in Manipur take herbal medicine for medicinal value(39%) followed by body of beliefs and concepts (34.1%) and traditionally accepted trend (26.8%).

Most of the traditional healers got their knowledge from their religious beliefs, forefathers, and traditional healers as guru or teachers. Majority of herbal healers learnt *mangtak* (a superstition where herbal practioners beliefs that information about curing a particular ailments by a medicinal plant is given by god in his dream) 43.9%, followed by forefathers (24.4%) and senior herbal practioners as guru (24.4%) later others learnt from text based classical knowledge.

Ideally a plant can be regarded as safe if it is used for both food and medicinal purposes. Home remedy is a treatment to cure a disease or ailment that employs certain species, vegetables or other common item. About 85.85% of the medicinal plants collected are considered as home prepared remedies which are used both as foodstuff and folk medicine.

These past and current dependence upon plant as source for medicine gives impetus to ethnopharmacological studies for medicines their efficacy, safety and drug discovery potentials. Clinical studies with human subjects represent the only assessment of effectiveness and safety that can translate into medical practice, and national or local health policy (Graz et al 2007).

IV. Conclusion

Traditional health care practices by the *Manipuri*'s are differ in their historical origin, theoretical basis, diagnostic technique, therapeutic practice and healing methods with the complementary and alternative medicine practices followed in the Indian mainstream. Traditional healers of Manipur were found to play great roles in the primary healthcare systems and curing some diseases with greater success and greater preference from the people than that of modern medications. There is a common cultural understanding regarding spirituality and healing that harbours trusts between the patients and the *Maiba* and *Maibi*. The findings revealed herbal remedies have many advantages like easily availability, easier to prepare and in addition to that it can be used home prepared remedies and moreover it was also linked to family influence and traditional, spiritual, dual health care and socioeconomic status.

While stereotypical folk medicine in some form of home prepared remedies of treatment of minor illnesses is widely practiced in Manipur. However, most of the knowledge acquired by the local people has been passed on to them by words of mouth from generation to generation. Further research is needed to ascertain the efficacy and safety of several of the practices and herbal formulation used by traditional medicine systems. The study showed that people collect leaves and fruits mostly thereby leaving a space for more survivality of the plants in comparison to that of use of underground plant plants.

Practitioners with only one specialization of treatment: i.e treatment a single particular disease is more knowledgeable and dependable, like diabetes, stone case, jaundice, bone fracture etc. Practitioners with multifarious disease depend mostly on others knowledgeable persons or bookish knowledge, knowledge acquired for others practitioners therefore they do not have deep understanding and experience of treatment with herbs.

The revival of *Meetei mayekin* recent years and Govt. of Manipur put up the ancient script in school curriculum in replace of Bengali script in 2005, the valuable indigenous knowledge for the future generation for precautionary measures and maintenance of good health from the secrets of these *Puyas* can be revealed. But, with the declining trend of indigenous herbal healers and few generations are coming forward to adopt folk healing practices as a profession in Manipur. The department of AYUSH and related institutions is actively trying to revitalize Manipuri Local health tradition and folk healing by conducting workshop, training programme and seminars. The challenges are to educate folk healers about their weakness and strengths and to attract young generation to adopt this profession by means of momentary benefits and to preserve both knowledge and biodiversity. It is high time for preservation and promotion of age old traditions of the *Meetei* community and to integrate the traditional knowledge with the modern medicine for the welfare of the Manipuri and mankind as whole.

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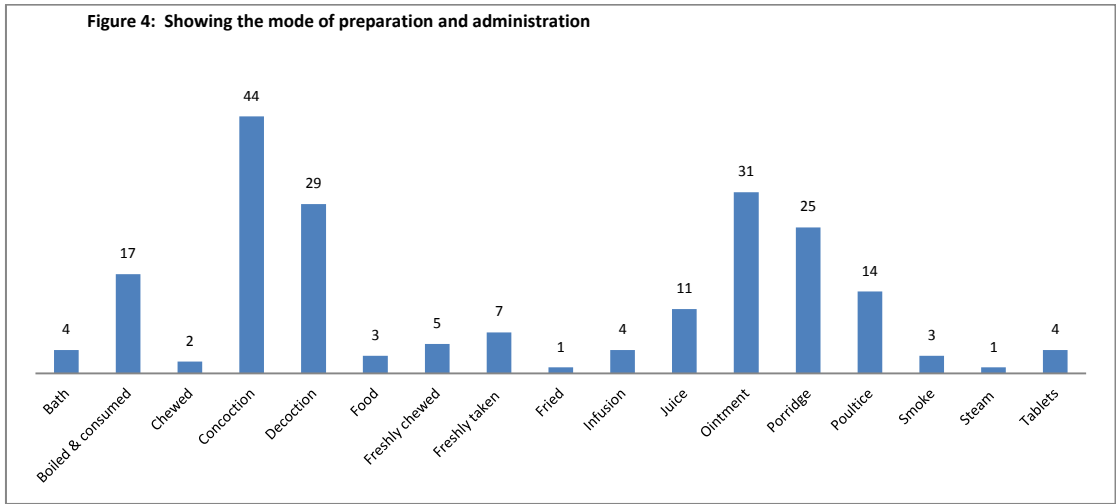
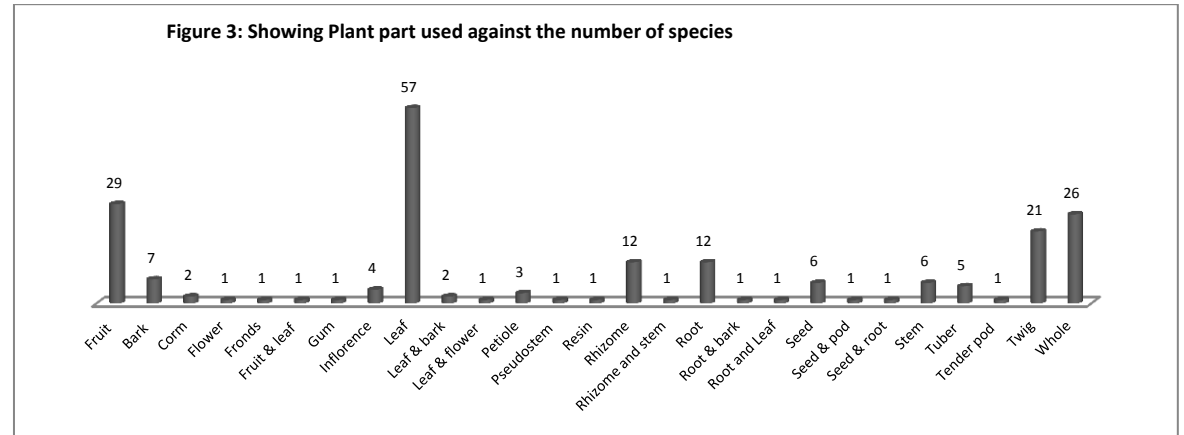
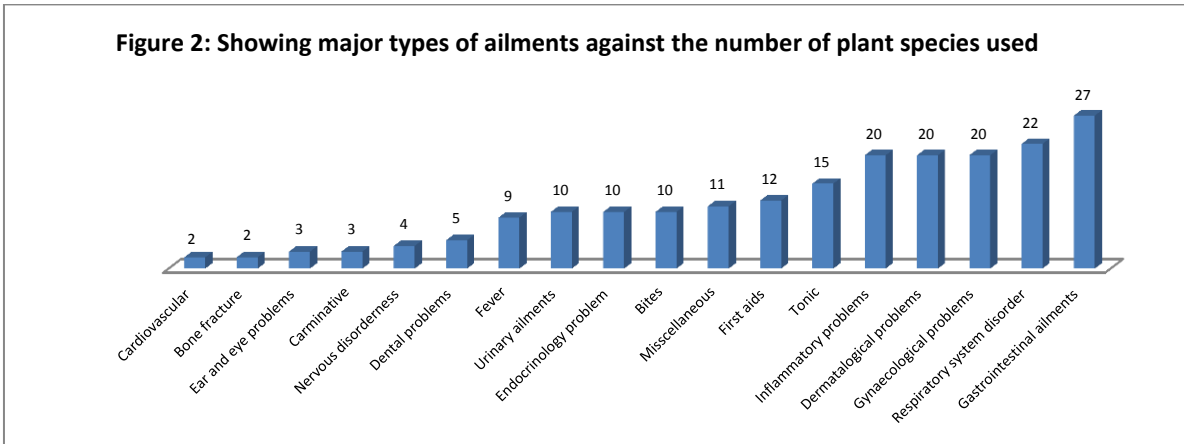
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Table 3: Showing correlation of Knowledge with age, level of education, knowledge of dosages and source of folk medicine of the 41 informants using SPSS ver. 15.

Parameters	Age of the Informant	Level of Education	Knowledge on dosages of ailments	Source of knowledge on folk medicine
Knowledge on Folk medicine	-0.474** 0.002 41	0.544** 0.000 41	-0.417* 0.007 41	-0.455** 0.003 41



Annexure 1: Table showing the ethno-medicinal uses of plants used by the Meetei community of Manipur, North east India.

Sl No	Scientific name	Local name	Family	Type	Part used	Mode of preparation	Uses for treatment
1	<i>Abelmoschus esculentus</i> (L.) Moench MUMS 31327	<i>Lam-bhelendri</i>	Malvaceae	Cult	Fruit	Young fruit decoction is mixed with milk and taken orally	Aphrodisiac
2	<i>Acanthopanax trifoliatum</i> Merr. MUMS 31311	<i>Singli nouree mana</i>	Araliaceae	H	Whole	Crushed juice mixed with <i>Brassica rapa</i> L. oil is massage over the area	Paralysis
3	<i>Achyranthes aspera</i> L. MUMS 31238	<i>Khujumpere</i>	Amaranthaceae	H	Root	Decoction is taken daily orally for a week beforehand	Timely delivery of child by Pregnant woman
4	<i>Acorus calamus</i> L. MUMS 31243	<i>Ok-hidak</i>	Acoraceae	H	Tuber	Decoction mixed with honey is orally taken	Severe cough & chest congestion
5	<i>Adiantum capillus-veneris</i> L. MUMS 31550	<i>Mayur pambi</i>	Adiantaceae	H	Whole	Boiled till tender and consumed	Bronchitis & inflammatory diseases of the chest
6	<i>Aerva lanata</i> (L.) Schult. MUMS 31249	<i>Napi</i>	Amaranthaceae	H	Twig	Decoction is orally taken	Sore throat & cough
7	<i>Ageratum conyzoides</i> L. MUMS 31266	<i>Khongjai napi</i>	Asteraceae	H	Leaf	Boiled with the decant of rice water and concoction is as used shampoo	Hair care
8	<i>Alangium chinense</i> (Lour.) Harms MUMS 31470	<i>Kokan</i>	Alanginaceae	T	Leaf	Decoction is orally taken	Febrifuge
9	<i>Allium ascalonicum</i> L. MUMS 31267	<i>Meitei tilhou</i>	Alliaceae	Cult	Whole	Crushed juice mixed with <i>Brassica rapa</i> L. oil is spread over affected area	Sore mouth, tongue problems of children
10	<i>Allium hookeri</i> Thw. MUMS 31516	<i>Maroi nakupi</i>	Alliaceae	Cult	Whole	Crushed juice mixed with <i>Sesamum orientale</i> L. oil is spread over the head	Hair scalp & infection originating in a hair follicle
11	<i>Allium sativum</i> L. MUMS 31732	<i>Chanum</i>	Alliaceae	Cult	Whole	Pounded and mixed with vegetable oil and spread over the area	Pains in joints & bones
12	<i>Alocasia indica</i> Schott. MUMS 31534	<i>Yendem</i>	Araceae	Cult	Petiole	Boiled with added ingredients and taken	For rejuvenating women after giving birth
13	<i>Alocasia macrorrhizos</i> (L.) G. Don MUMS 31725	<i>Hongoo</i>	Araceae	H	Corm	Paste mixed with fermented fish then preserved for 3 months to make <i>Hentak</i> (contain iron, calcium)	Food for nursing mother and old men
14	<i>Alpinia galanga</i> Willd. MUMS 31513	<i>Kanghoo</i>	Zingiberaceae	Cult	Rhizome	Fresh rhizome juice with warm water is taken orally	To expel intestinal worm
15	<i>Alpinia allughas</i> Roscoe MUMS 31492	<i>Pullei</i>	Zingiberaceae	Cult	Rhizome	Paste prepared is applied over the area	Gout
16	<i>Amaranthus spinosus</i> L. MUMS 31671	<i>Chengkruk thingkhungp anba</i>	Amaranthaceae	H	Twig	Pounded shoot mixed with egg is applied to skin	Burns
17	<i>Amaranthus viridis</i> L. MUMS 31355	<i>Chengkruk</i>	Amaranthaceae	Cult	Tender leaf	Boiled with added ingredients and taken as food	Health improver for adults
18	<i>Amomum aromaticum</i> Roxb. MUMS 31261	<i>Namra</i>	Zingiberaceae	H	Rhizome	Crushed juice is used as droplets	Eye inflammation
19	<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson MUMS 31580	<i>Haopan</i>	Araceae	Cult	Corm	Paste prepared is applied as porridge, also baked and consumed	Rheumatic swellings
20	<i>Anemone rivularis</i> Buch.-Ham. ex DC. MUMS 31319	<i>Waun</i>	Ranunculaceae	H	Root tuber	Crushed juice is applied on the affected area	Cuts & wounds
21	<i>Anthocephalus chinensis</i> Walp. MUMS 31611	<i>Keli</i>	Rubiaceae	T	Bark	Decoction mixed with honey is orally taken	Febrifuge
22	<i>Antidesma acidum</i> Retz. MUMS 31837	<i>Ching yensil</i>	Phyllanthaceae	H	Leaf	Cooked as food and taken	Indigestion & stomach troubles
23	<i>Aphanaxis polystachya</i> (Wall.) R. Parker MUMS 31173	<i>Heirankhoi</i>	Meliaceae	T	Fruit	Fresh juice with sugar candy is boiled and concoction is orally taken	Liver tonic

24	<i>Ardisia odontophylla</i> Wall. MUMS 31164	Napi	Myrsinaceaea	H	Tuber	Crushed juice is massage over the surface	Rheumatism
25	<i>Argyreia nervosa</i> (Burm.f) Bojer MUMS 31130	Pungding uri	Convolvulaceae	Clim	Root	Cushed juice mixed with <i>Sesamum orientale</i> L. oil is mixed and massage over the area	Rheumatism
26	<i>Arisaema triphyllum</i> Schott MUMS 31350	Lin marei	Araceae	H	Whole	Crushed juice is applied over the surface as ointment	Snake bite
27	<i>Artabotrys hexapetalus</i> (L.f.) Bhandari MUMS 31475	Chinichamp ra	Annonaceaea	S	Twig	Boiled with decant of rice and concoction is used as hair lotion	Hair care
28	<i>Artemisia nilagirica</i> (C.B. Clarke) Pamp MUMS 31436	Laibakgnou	Asteraceae	H	Leaf	Crushed juice is applied on affected area	Mouth sores
29	<i>Arundo donax</i> L. MUMS 31122	Yenthou	Poaceae	S	Young shoot	Pounded is applied over bitten area	Snake & dog bites
30	<i>Asclepias curassavica</i> L. MUMS 31185	Krishna chura	Asclepiadaceae	H	Leaf	Pounded paste is applied on bitten area	Snake bites
31	<i>Asplenium nidus</i> L. MUMS 31273	Sumei	Aspleniaceae	H	Leaf	Extract of the leaves is applied over the surface	Skin diseases
32	<i>Averrhoa carambola</i> L. MUMS 31368	Heinouzom	Averrhoaceae	T	Fruit	Extract juice is spread over the affected surface	Burns & scalds
33	<i>Melia azaderach</i> L. MUMS 31615	Seizrak	Meliaceae	T	Leaf	Boiled with <i>Cynodon dactylon</i> leaves and take bath	Small pox of children
34	<i>Bambusa nutans</i> Wall. ex Munro MUMS 31748	Ootang	Poaceae	S	Young shoot	Pounded and smeared over the bitten area	Dog bites
35	<i>Bambusa oliveriana</i> Gamble MUMS 31769	Warak	Poaceae	S	Young shoot	Pounded and applied over affected area	Injuries due to nails or any sharp things
36	<i>Bambusa tulda</i> Roxb. MUMS 31866	Saneibi	Poaceae	S	Young shoot	Pounded and spread over the infected area	Ringworm
37	<i>Basella alba</i> L. MUMS 31352	Urok shumbal	Basellaceae	H	Leaf	Smashed and mixed with <i>Sesamum orientale</i> L. and massage over the area	Muscular sprain
38	<i>Bauhinia purpurea</i> Wall. MUMS 31275	Chingthrou leimachu	Caesalpinaceaea	T	Bark	Decoction of bark is orally taken	Liver tonic
39	<i>Benincasa hispida</i> (Thunb.) Cogn. MUMS 31140	Torobot	Cucurbitaceae	Cult	Fruit	Boiled with water and consumed as food empty stomach at early morning	Stomach ulcer
40	<i>Bidens pilosa</i> L. MUMS 31618	Hameng sampakpi	Asteraceae	H	Twig	Pounded and applied over the area	Swollen glands
41	<i>Bixa orellana</i> L. MUMS 31136	Ureirom	Bixaceae	T	Leaf	Leaves paste applied over bitten area	Snake bites
42	<i>Blumea hieracifolia</i> D.C. MUMS 31271	Ching terapaibe	Asteraceae	H	Leaf	Crushed leaves is applied over the injuries	Coagulation of blood
43	<i>Blumeopsis arborea</i> (D.Don) Merr. MUMS 31464	Haochak	Asteraceae	H	Whole	Cloth is soaked crushed juice and placed over the required area	Antipyretic
44	<i>Bombax ceiba</i> L. MUMS 31555	Tera	Bombaceae	T	Root	Root decoction along with sugar is boiled in water and taken for seven days	Aphrodisiac
45	<i>Bryophyllum pinnatum</i> (Lam.) Kurz MUMS 31773	Mana hidak	Crassulaceae	H	Leaf	Crushed extract is applied over the affected area	Insects bites
46	<i>Buddleja asiatica</i> Lour. MUMS 31349	Shamei	Buddlejaceae	S	Leaf	Crushed extract is smeared over the surface	Scabies & others skin diseases.
47	<i>Butea monosperma</i> Kuntze MUMS 31264	Mondol	Verbenaceae	T	Seed	Dried, powdered and form tablets and taken	To expel intestinal worm
48	<i>Cajanus cajan</i> (L.) Millsp. MUMS 31827	Mairongbi	Fabaceae	Cult	Seed	Seed powdered to made paste and taken	Promoting lactation
49	<i>Callicarpa arborea</i> Roxb. MUMS 31836	Mondol	Verbenaceae	S	Leaf	Crushed extract with <i>Sesamum orientale</i> L. oil is massage over the joints	Rheumatic pain & swellings
50	<i>Calotropis arboretum</i> (L.) W.T. Aiton MUMS 31605	Angkot	Asclepiadaceae	S	Leaf	Crushed mixed with <i>Sesamum orientale</i> L. is spread over the affected area	Relieve pains & swellings
51	<i>Cannabis sativa</i> L. MUMS 31592	Ganja	Canabinaceae	H	Leaf	Powdered leaves mixed with honey	Leucorrhoea
52	<i>Canthium angustifolium</i> Roxb. MUMS 31400	Lam heibi	Rubiaceae	T	Fruit	Crushed mixed in water and honey is orally taken	Vomiting & diarrhoea of children
53	<i>Capsella bursa-</i>	Chantruk	Brassicaceae	Cul	Whol	Freshly taken	Urinary problems

	<i>pastoris</i> (L.) Medik. MUMS 31881			t	e		
54	<i>Carica papaya</i> L. MUMS 31853	<i>Awathabi</i>	Caricaceae	Cul t	Fruit	Pounded and paste over the bitten area	Insects & dog bite
55	<i>Cassia occidentalis</i> L. MUMS 31290	<i>Thounam</i>	Fabaceae	S	Leaf	Dried powdered leaves with water is taken orally	Diabetes
56	<i>Celtis australis</i> L. MUMS 31293	<i>Heikreng</i>	Ulmaceae	T	Fruit	Juice with sugar in warm water is orally taken	Jaundice
57	<i>Centella asiatica</i> (L.) Urb. MUMS 31586	<i>Peruk</i>	Apiaceae	H	Whole	Chewing and consumption of the whole plant	Irritation, inflammation of throat
58	<i>Chenopodium album</i> L. MUMS 31317	<i>Monshaobi</i>	Chenopodiaceae	Cul t	Twig	Boiled till tender and consumed	Leucorrhoea
59	<i>Ciccus adnata</i> Roxb. MUMS 31262	<i>Kongouyen</i>	Vitaceae	Cli m	Leaf	Boiled extract of leaves is orally taken	Urinary stone case
60	<i>Cinnamomum zeylanicum</i> Blume MUMS 31190	<i>Uchingsha</i>	Lauraceae	T	Root & bark	Boiled in water and used as gargle	Bad breath / mouth freshener
61	<i>Cissus javanica</i> D.C. MUMS 31788	<i>Kongyouyen laba</i>	Vitaceae	Cli m	Leaf	Boiled extract of leaves is taken	Urinary disorder
62	<i>Citrus medica</i> L. MUMS 31693	<i>Heizang</i>	Rutaceae	Cul t	Fruit	Cut pieces with decant of rice is boiled and concoction is used as shampoo	Hair care
63	<i>Citrus limon</i> (L.) Burm f. MUMS 31377	<i>Champra</i>	Rutaceae	Cul t	Fruit	The juice with honey in warm water is orally taken	Cure obesity
64	<i>Citrus macroptera</i> Mont. MUMS 31280	<i>Haribob</i>	Rutaceae	Cul t	Fruit	The rind of the fruit is used in the preparation of a gargle	Enhancing vocalism by singers
65	<i>Clerodendrum colebrookianum</i> Walp. MUMS 31631	<i>Khuthap</i>	Verbenaceae	S	Leaf	Boiled in water adding ingredients and consumed	Diabetes & regulation of blood pressure
66	<i>Clerodendrum indicum</i> Kuntze MUMS 31847	<i>Charoi utong</i>	Verbenaceae	S	Whole	Decoction mixed with honey and is orally taken	Menstrual disorder
67	<i>Clerodendrum serratum</i> Moon MUMS 31830	<i>Moirang khanam</i>	Verbenaceae	S	Leaf	Freshly taken	Stomach disorder
68	<i>Coix lacryma-jobi</i> L. MUMS 31100	<i>Chaning</i>	Poaceae	S	Root	Root infusion is orally taken	Menstrual disorders and as blood purifier
69	<i>Colocasia esculenta</i> (L.) Schott. MUMS 31235	<i>Pan</i>	Araceae	Cul t	Petiole	Leaf is boiled with fresh milk and concoction is orally taken.	Used for pregnancy to occur / conceived
70	<i>Commelina benghalensis</i> L. MUMS 31600	<i>Wangdem khoibi</i>	Commelinaceae	H	Whole	Crushed juice is applied over the surface	Burns
71	<i>Convolvulus arvensis</i> L. MUMS 31505	<i>Uri</i>	Convolvulaceae	Cli m	Root	Crushed juice	Purgative
72	<i>Conyza japonica</i> Less. MUMS 31790	<i>Terapaibi manbi</i>	Asteraceae	H	Leaf	Crushed leaves is applied over the surface	Scabies
73	<i>Cordia grandis</i> Roxb. MUMS 31658	<i>Lamuk</i>	Boraginaceae	T	Fruit	Decoction is orally taken	Urinary infections
74	<i>Coriandrum sativum</i> L. MUMS 31512	<i>Phadigom</i>	Apiaceae	Cul t	Petiole	Crushed juice with hot water is orally taken	Hiccough
75	<i>Costus speciosus</i> (J. Koenig) Sm. MUMS 31795	<i>Khongban takhelli</i>	Zingiberaceae	H	Rhizome and stem	Boiled in water with added sugar candy and concoction is taken orally	Tonic for kidney
76	<i>Crassocephalum crepidioides</i> (Benth.) S. Moore MUMS 31388	<i>Terapaibi</i>	Asteraceae	H	Leaf	Crushed leaves applied to the cuts area	Antiseptic
77	<i>Cucumis sativus</i> L. MUMS 31816	<i>Thabi</i>	Cucurbitaceae	Cul t	Fruit	Freshly or boiled with water with a pinch of sugar consumed	Stomach ulcer
78	<i>Cucurbita maxima</i> Lam. MUMS 31884	<i>Mairel</i>	Cucurbitaceae	Cul t	Tender twig	Pounded and is applied over the surface	Antipyretic
79	<i>Curcuma angustifolia</i> Roxb. MUMS 31599	<i>Yaipan</i>	Zingiberaceae	Cul t	Rhizome	Boiled and consumed	Expectorant
80	<i>Curcuma caesia</i> Roxb. MUMS 31562	<i>Yaimu</i>	Zingiberaceae	Cul t	Rhizome	The fresh crushed juice added in water with salt and taken orally	Gastric problems
81	<i>Curcuma domestica</i> Valetton MUMS 31407	<i>Yangang</i>	Zingiberaceae	Cul t	Rhizome	Dried powdered is made paste and spread over the area	Burns & skin tonic
82	<i>Cuscuta reflexa</i> Roxb. MUMS 31573	<i>Uri hangamapal</i>	Convolvulaceae	Cli m	Whole	Decoction is orally taken	Jaundice

83	<i>Cymbopogon citratus</i> Stapf. MUMS 31374	Hoana	Poaceae	H	Whole	The dried plant is boiled in water and decoction is taken orally	Stone case.
84	<i>Cyperus rotundus</i> L. MUMS 31199	Tingthou	Cyperaceae	H	Whole	The plant juice mixed with honey is orally taken	To expel intestinal worm of children
85	<i>Dichrocephala integrifolia</i> (L.f.) Kuntze MUMS 31864	Lalukok	Asteraceae	H	Leaf	The crushed extract is applied over affected area	Skin infections
86	<i>Dillenia indica</i> L. MUMS 31910	Heigri	Dilleniaceae	T	Tender shoot	Decoction is orally taken twice daily	Asthma
87	<i>Dioscorea alata</i> L. MUMS 31593	Haa	Dioscoreaceae	Clim	Tuber	Tubers are boiled and eaten as food	Gonorrhoea
88	<i>Dioscorea bulbifera</i> L. MUMS 31471	Laa- haa	Dioscoreaceae	Clim	Fruit	Decoction is orally taken	Ulcer & piles
89	<i>Diplocyclos palmatus</i> (L.) C. Jeffrey MUMS 31713	Leipungkhanga marichatpa	Curcubitaceae	Clim	Seed	Powdered and mixed with steamed <i>Melocanna bambusoides</i> fruit is consumed	To help conception to occur & prevent miscarriage.
90	<i>Dipterocarpus tuberculatus</i> Roxb. MUMS 31944	Khangra	Dipterocarpaceae	T	Root	Condensed decoction of root is applied over the surface	Rheumatism
91	<i>Docynia indica</i> (Colebr.) Decne MUMS 31188	Heitoop	Rosaceae	T	Fruit	Infusion with sugar kept for two week and orally taken	Urinary troubles
92	<i>Drymaria cordata</i> (L.) Roem. & Schult. MUMS 31958	Tandal pambi	Caryophyllaceae	H	Whole	Dried in sun and smoke is inhaled	Sinusitis, respiratory & breathing problems
93	<i>Duabanga grandiflora</i> (Roxb.) Walp. MUMS 31221	Bandarhulla	Sonneratiaceae	T	Fruit	Juice extract	Ringworm and warts
94	<i>Eclipta alba</i> Hassk MUMS 31547	Uchi sumbal	Malvaceae	H	Leaf	Fresh leaves is chewed and kept for while and spit out	Sore mouth & tongue disorder
95	<i>Elsholtzia communis</i> (Coll. & Hemsl.) Diels MUMS 31909	Lomba	Lamiaceae	S	Inflorescence	The dried inflorescence is dipped in honey overnight and chewed	Tonsillitis & throat trouble
96	<i>Emblica officinalis</i> Gaertn. MUMS 31956	Heikru	Euphorbiaceae	T	Fruit	Infusion mixed with honey is orally taken	Hypertension
97	<i>Equisetum debile</i> Roxb. ex Vaucher MUMS 31282	Laiutong	Equisetaceae	H	Whole	Plant along with <i>Phlogacanthus thyrsiformis</i> Nees are crushed and steam bath	Aching back & arms to get relief from pain.
98	<i>Eryngium foetidum</i> L. MUMS 31818	Awaphadigom	Apiaceae	Cult	Whole	Crushed juice diluted with water and orally taken	Digestive complaints
99	<i>Erythrina variegata</i> L. MUMS 31112	Kurao angouba	Fabaceae	T	Twig	Decoction mixed with honey is orally taken	Liver tonic
100	<i>Eupatorium adenophorum</i> Spreng. MUMS 31432	Japan napi	Asteraceae	H	Leaf	Leaf juice is applied on cuts and injuries for clotting blood and quick healing	Astringent
101	<i>Eupatorium birmanicum</i> DC. MUMS 31786	Langthrei	Asteraceae	H	Leaf	Crushed fresh juice is taken orally	Gastro-enteritis
102	<i>Eupatorium odoratum</i> L. MUMS 31900	Kambleirei	Asteraceae	S	Leaf	Decoction mixed with honey is orally taken	Gonorrhoea
103	<i>Euphorbia hirta</i> L. MUMS 31472	Pakhangleiton	Euphorbiaceae	H	Whole	Boiled with <i>Cuminum cyminum</i> L. seeds in water and is taken orally	Stone case
104	<i>Ficus benghalensis</i> L. MUMS 31229	Khongnang	Moraceae	T	Gum	Gum is applied on the affected area	Boils
105	<i>Ficus hispida</i> L.f MUMS 31926	Ashiheibong	Moraceae	T	Bark	Decoction of bark is added pinch of powdered <i>Piper nigrum</i> with honey is orally taken for 7 days	Asthma
106	<i>Ficus semicordata</i> Buch.-Ham MUMS 31468	Heiyit	Moraceae	T	Bark	Pounded bark is applied externally	Pimples & cracked skin
107	<i>Flacourtia jangomas</i> (Lour.) Raeush. MUMS 31677	Heitroy	Flacourtiaceae	T	Fruit	Fresh fruit is chewed and kept for sometime	Bleeding gums & toothache
108	<i>Galinsoga parviflora</i> Cav. MUMS 31598	Hameng sampakpi	Asteraceae	H	Leaf	Decoction mixed with honey is orally taken	Diarrhoea & dysentery
109	<i>Garcinia pendunculata</i> Roxb MUMS 31733	Heibung	Clusiaceae	T	Fruit	Boiled in water and the pulp is applied on affected area	Gout & Bone setting

110	<i>Girardinia diversifolia</i> (Link) Friis MUMS 31481	Santhak manbee	Apiaceae	H	Leaf	Crushed juice is applied externally to relieve	Swollen joints.
111	<i>Glycosmis arborea</i> (Roxb.) DC MUMS 31263	Yong komla	Rutaceae	T	Fruit	Juice mixed with honey is orally taken	Jaundice
112	<i>Gmelina arborea</i> L. MUMS 31957	Wang	Verbenaceae	T	Root	Pounded and applied to the bitten area	Poisonous bites.
113	<i>Gnaphalium uliginosum</i> C.B. Clarke MUMS 31474	March cudweed	Asteraceae	H	Twig	Decoction is used as gargle	Mouth ulcer
114	<i>Goniotalamus sequipedalis</i> Hook.f. & Thoms. MUMS 31363	Leikham	Annonaceae	H	Leaf	Boiled extract is used to bath new born child	Antiseptic
115	<i>Hedychium coronarium</i> J. Koenig MUMS 31595	Takhellei agouba	Zingiberaceae	H	Rhizome	Decoction is used as a gargle	Throat complaints
116	<i>Hedychium greenii</i> W.W. Smith MUMS 31872	Takhelli anganba	Zingiberaceae	H	Rhizome	Decoction is mixed with honey and orally taken	Leucorrhoea
117	<i>Hedychium spicatum</i> Sm. MUMS 31936	Takhelli hanngamapan	Zingiberaceae	H	Rhizome	Decoction is orally taken	Liver tonic
118	<i>Hedyotis auricularia</i> L. MUMS 31935	Langban kuokha	Rubiaceae	H	Leaf	Decoction is orally taken	Colic pain
119	<i>Hemidesmus indicus</i> R.Br MUMS 31417	Urikhomthokpi	Asclepiadaceae	Clim	Root	Dry root is made paste and applied to the area	Rheumatism
120	<i>Hibiscus cannabinus</i> L. MUMS 31533	Sougree	Malvaceae	Cult	Leaf	Cooked with added ingredients for more flavouring dish and taken as food	Gastritis & constipation
121	<i>Hibiscus sabdariffa</i> L. MUMS 31182	Silo sougree	Malvaceae	Cult	Leaf	Initial boiling later added ingredients for more flavouring dish and taken as food	Purgative
122	<i>Holmskioldia arboretum</i> Retz. MUMS 31334	Kharom leitshom	Verbenaceae	S	Twig	Pounded and mixed with oil and applied to head	Headache & dizziness
123	<i>Houttuynia cordata</i> Thunb. MUMS 31617	Tuningkhok	Sauraceae	Cult	Whole	Crushed juice is spread over the affected area	Muscular sprain
124	<i>Impatiens balsamina</i> L. MUMS 31946	Khujiang	Balsaminaceae	H	Leaf & flower	Fresh crushed juice of leaves and flowers is applied to the effective area	Reduces the pain & poison of wounds caused by nails
125	<i>Ipomoea batatas</i> (L.) Lam. MUMS 31945	Mangra	Convolvulaceae	Cult	Twig	Boiled and consumed	Promoting lactation
126	<i>Ipomoea cairica</i> (L.) Sweet MUMS 31497	Uri hingchabee	Convolvulaceae	Clim	Leaf	Crushed juice and smeared over the infected area	Relieves body rashes
127	<i>Iris kumaonensis</i> Auct. MUMS 31288	Komberei manbee	Iridaceae	H	Root and Leaf	Crushed juice is applied as poultice over forehead	Antipyretic
128	<i>Juglans regia</i> L. MUMS 31176	Heijuga	Juglandaceae	T	Bark	Pounded bark is chewed	Gum bleeding
129	<i>Kaempferia galanga</i> L. MUMS 31193	Yaithamnam ambi	Zingiberaceae	H	Rhizome	Decoction mixed with honey is orally taken	Muscular strengthening
130	<i>Lagenaria hispida</i> Ser. MUMS 31482	Khongdrum	Cucurbitaceae	Cult	Fruit	Decoction is mixed with <i>Brassica rapa</i> oil and exposed to sex organ	For easy delivery of baby
131	<i>Lagenaria siceraria</i> (Molina) Standl. MUMS 31596	Tumba	Curcubitaceae	Clim	Fruit	Boiled with a pinch of sugar and consumed	Leucorrhoea
132	<i>Lantana camara</i> L. MUMS 31175	Nongbanlei	Verbenaceae	S	Leaf	Crushed juice is applied on the affected area	Controlling bleeding in injuries
133	<i>Leucas aspera</i> Link MUMS 31904	Mayang lembum	Lamiaceae	H	Twig	Cooked with <i>lata</i> fish	Malnutrition
134	<i>Ligustrum indicum</i> (Lour.) Merr. MUMS 31627	Ching kundo	Oleaceae	S	Leaf	Poultice applied to the affected area	Bruises
135	<i>Litsea monopetalata</i> Pers. MUMS 31778	Tumitla	Lauraceae	T	Leaf & bark	Extract & powdered is made paste and spread over the surface	Muscular pains
136	<i>Litsea sebifera</i> Pers. MUMS 31954	Thang hidak	Lauraceae	T	Leaf & bark	Juice/ powdered is made paste and applied over the affected area	Cut and injuries
137	<i>Melanorrhoea usitata</i> Wall. MUMS 31833	Khe-U	Anacardiaceae	T	Resin	Spread over the affected area	Leprosy

138	<i>Melastoma malabathricum</i> L. MUMS 31704	<i>Yachubi</i>	Melastomaceae	S	Twig	Freshly chewed	Dental problems
139	<i>Melothria maderaspatana</i> (L.) Cogn. MUMS 31955	<i>Lamthabi</i>	Cucurbitaceae	Clim	Whole	Decoction is orally taken	Jaundice
140	<i>Mentha spicata</i> L. MUMS 31917	<i>Nungsi-hidak</i>	Limiaceae	H	Whole	Fresh leaves is consumed	Gastro-enteritis
141	<i>Mesua ferrea</i> L. MUMS 31776	<i>Nageshor</i>	Clusiaceae	T	Flower	Decoction is orally taken	Asthma
142	<i>Michelia champaca</i> L. MUMS 31224	<i>Leihow</i>	Magnoliaceae	T	Leaf	Decoction is orally taken with honey	Colic
143	<i>Mikania cordata</i> (Burm.f.) B.L. Rob. MUMS 31195	<i>Uri hingchabi</i>	Asteraceae	Clim	Leaf	Decoction is orally taken	Snake bite
144	<i>Millettia pachycarpa</i> Benth. MUMS 31444	<i>Ngamuyai</i>	Fabaceae	S	Stem and root	Extract juice is applied over affected area	Scabies
145	<i>Mimosa pudica</i> L. MUMS 31932	<i>Kangphan ekaiithabi</i>	Mimosaceae	H	Whole	Decoction is orally taken	Jaundice
146	<i>Mirabilis jalapa</i> L. MUMS 31942	<i>Mukaklei</i>	Nyctaginaceae	H	Leaf	Crushed juice is applied over the surface	Bruises & wounds
147	<i>Momordica charantia</i> L. MUMS 31396	<i>Karot akabee</i>	Curbitaceae	Cult	Fruit	Sliced parts are fried in <i>Brassica rapa</i> oil and consumed	Controlling diabetes
148	<i>Mucuna pruriens</i> (L.) DC. MUMS 31416	<i>Samu hawai</i>	Fabaceae	Clim	Seed & pod	Powdered mixed with milk is orally taken	Aphrodisiac
149	<i>Musa x paradisiaca</i> L. MUMS 31731	<i>Laphu</i>	Musaceae	H	Pseudostem	Boiled till tender and orally taken	Purgative
150	<i>Muscari commutatum</i> Vent MUMS 31551	<i>Lam napi</i>	Hyacinthaceae	H	Leaf	Crushed juice diluted is orally taken	Cough
151	<i>Mussaenda frondosa</i> L. MUMS 31858	<i>Hanulei</i>	Rubiaceae	Clim	Leaf	Paste of the crushed leaves is applied to the broken part	Healing bone fracture
152	<i>Mussaenda roxburghii</i> Hook.f. MUMS 31107	<i>Hanulei</i>	Rubiaceae	Clim	Bark	Pounded bark juice is applied over the bitten area	Snake bite
153	<i>Ophiopogon intermedius</i> D. Don MUMS 31220	<i>Ching charot</i>	Haemodoraceae	Clim	Tuber	Decoction is orally taken	Dropsy
154	<i>Opuntia dillenii</i> Haw. MUMS 31616	<i>Meipokpi</i>	Cactaceae	H	Stem	The tip of stem is cut and made a hole in the middle and the affected finger is inserted into it	Inflammation of fingers due to washing or cleaning of clothes and utensils.
155	<i>Oroxylum indicum</i> Vent MUMS 31223	<i>Shamba</i>	Bignoniaceae	T	Bark	The inner bark is peel off upwards and made into paste and applied on the anus	Piles
156	<i>Osbeckia stellata</i> Wall. MUMS 31333	<i>Nura khongjomba</i>	Melastomaceae	S	Twig	Crushed juice mixed with honey is orally taken	Menstrual complaints
157	<i>Oxalis corniculata</i> L. MUMS 31728	<i>Yensil</i>	Oxalidaceae	H	Whole	Cut pieces is mixed with honey is taken	Tonic for heart disease
158	<i>Paederia foetida</i> L. MUMS 31406	<i>Oinum</i>	Rubiaceae	Clim	Twig	Crushed extract and paste is applied at the broken part	Enhanced healing bone fracture
159	<i>Paris polyphylla</i> Sm. MUMS 31212	<i>Haopan</i>	Liliaceae	H	Rhizome	Decoction is orally taken	Anthelmintic
160	<i>Parkia roxburghii</i> G. Don MUMS 31165	<i>Yongchak</i>	Mimosaceae	T	Tender pod	Freshly or boiled and consumed	Constipation
161	<i>Parthenocissus quinquefolia</i> (L.) Planch. MUMS 31174	<i>Angurmanbi</i>	Vitaceae	Clim	Fruit	Extract juice with sugar candy is orally taken	Liver tonic
162	<i>Passiflora edulis</i> Sims. MUMS 31119	<i>Sitaphal</i>	Passifloraceae	Clim	Leaf	Fresh leaves boiled with sugar candy and n orally taken	Dysentery
163	<i>Pavetta indica</i> L. MUMS 31357	<i>Nongmang ha asinba</i>	Rubiaceae	S	Leaf	Boiled with sugar candy and the concoction is orally taken	Jaundice
164	<i>Phlogacanthus thyrsoformis</i> Nees MUMS 31222	<i>Nongmang ha</i>	Acanthaceae	S	Twig	Boiled with water and steam is inhale through a small hole	Cough & fever
165	<i>Piper longum</i> L. MUMS 31262	<i>Uchi thi</i>	Piperaceae	Clim	Fruit	Powdered mixed with milk is orally taken	Respiratory problems
166	<i>Plantago erosa</i> Wall. MUMS 31787	<i>Yempat</i>	Plantaginaceae	H	Leaf	Crushed leaves are applied to the affected area	Muscular sprains & swellings
167	<i>Plumbago zeylanica</i> L. MUMS 31637	<i>Telhidak</i>	Plumbaginaceae	H	Twig	Crushed fresh leaf juice is orally taken	Menstrual disorder
168	<i>Prunus persica</i> (L.) Batsch MUMS 31103	<i>Heikha</i>	Rutaceae	T	Fruit	Infusion with sugar kept for two week and is orally	Urinary troubles

						taken	
169	<i>Psidium guajava</i> L. MUMS 31283	Pungdon	Myrtaceae	Cul t	Fruit & leaf	Crushed tender leaves juice with little water is drunk or the fruit is freshly eaten.	Diarrhoea
170	<i>Pteris ensiformis</i> Burm. F. MUMS 31110	Laichangkhr ang	Pteridaceae	H	Fron ds	Decoction of the fresh fronds is orally taken	Glandular swelling of the neck
171	<i>Quercus serrata</i> Thunb. MUMS 31207	Uyung	Fagaceae	T	Leaf	The ash obtained by burning the leaves are mixed with water until it turns coffee colour and taken orally	White discharge
172	<i>Rhododendron arboretum</i> Sm. MUMS 31860	Ching leihao	Eriaceae	T	Twig	Decoction is orally taken before delivering child	Easy deliver
173	<i>Rhus succedanea</i> Murray MUMS 31606	Heimang	Anacardiaceae	T	Seed	Seed mixed <i>Allium cepa</i> and sugar candy is boiled in water and the concoction is orally taken	Controlling diabetes
174	<i>Ricinus communis</i> L. MUMS 31607	Kege	Euphorbiaceae	S	Root	Boiled together with <i>Pinus Kesiya</i> Royle ex Gordon leaf, stife of <i>Nymphaea nouchali</i> Burm.f. and concoction is orally taken	Complaints during pregnancy
175	<i>Rubus ellipticus</i> Sm. MUMS 31369	Lam- hejampet	Rosaceae	S	Leaf	Fresh tender leaves are chewed and sap is swallowed	Tongue sores
176	<i>Sapindus mukorossi</i> Gaertn. MUMS 31301	Kekru	Sapandiaceae	T	Fruit	Fresh foam on stirring the fruit with water is applied as poultice	Antipyretic for children
177	<i>Schefflera venulosa</i> (Wight & Arn.) Harms. MUMS 31246	Utang	Araliaceae	Cli m	Root	Boiled root mixed with rice and consumed	Dropsy
178	<i>Schima wallichii</i> Choisy MUMS 31241	Usoi	Theaceae	T	Fruit	Fleshly part is stirred along with little water to form foam and applied as poultice	Antipyretic
179	<i>Scutellaria discolor</i> Wall. ex Benth. MUMS 31325	Yenakhut	Lamiaceae	H	Whol e	Decoction is orally taken	Controlling diabetes
180	<i>Senna tora</i> (L.) Roxb. MUMS 31253	Thaunam	Fabaceae	S	Youn g twig	Boiled and pounded and applied as porridge	Cuts and wounds
181	<i>Sesamum indicum</i> L. MUMS 31239	Thoiding amuba	Pedaliaceae	H	Seed	Crushed seed oil is applied on a cotton and applied on head	To relieve acute headache and dizziness.
182	<i>Sida rhombifolia</i> L. MUMS 31230	Uhan	Malvaceae	S	Root	Mixture of powdered root, sugar, fresh milk and pure ghee is orally taken	For pregnancy to happen/ Conceived
183	<i>Smilax zeylanica</i> L. MUMS 31348	Keishum	Liliaceae	Cli m	Twig	Crushed mixed with vegetable oil is applied as poultice	Rheumatic swellings
184	<i>Solanum anguivi</i> Lam. MUMS 31441	Leipung khang	Solanaceae	S	Fresh Leaf	Crushed juice mixed with honey is oral taken	Sore mouth & tongue disorder
185	<i>Solanum surattense</i> Burm.f. MUMS 31300	Singkhang	Solanaceae	H	Seed	Dried and burn in charcoal and smoke is allowed to enter mouth	Toothache & anti-asthmatic
186	<i>Solanum torvum</i> Sw. MUMS 31200	Shing khangga	Solanaceae	S	Fruit	Crushed juice mixed with honey is orally taken	Tonsillitis
187	<i>Spilanthes paniculata</i> Wall ex DC. MUMS 31387	Manjareng	Asteraceae	H	Inflor ence	Freshly chew	Toothache
188	<i>Spondias pinnata</i> (L.f.) Kurz MUMS 31366	Heining	Anacardiaceae	T	Leaf	Crushed juice is applied in drops	Ear-ache
189	<i>Stephania japonica</i> (Thunb.) Miers. MUMS 31411	Thangga uri angouba	Menispermaceae	Cli m	Tuber	Crushed juice is applied as poultice over forehead	Antipyretic
190	<i>Swertia chirata</i> C.B. Clarke MUMS 31398	Chirata	Gentianeae	H	Whol e	Decoction is orally taken	Gastro-enteritis
191	<i>Terminalia citrina</i> Roxb. MUMS 31877	Manahi	Combretaceae	T	Fruit	Decoction is orally taken	Controlling diabetes
192	<i>Thalictrum foliolosum</i> DC. MUMS 31359	Kharuri	Ranunculaceae	H	Root	Decoction is taken with honey orally	Febrifuge
193	<i>Thunbergia alata</i> Sims MUMS 31404	Sambal sana khudop	Acanthaceae	Cli m	Leaf	Poultice is mixed with the bee hive mud and applied over forehead	Relief from acute headache
194	<i>Thunbergia grandiflora</i>	Sambal	Acanthaceae	Cli	Leaf	Decoction is orally taken	Stomach

	Roxb. MUMS 31394	khudop		m			complaints
195	<i>Tinospora cordifolia</i> Miers MUMS 31703	<i>Ningthoukongli</i>	Menispermaceae	Clim	Leaf	Boiled and consumed	Menstrual disorder & impotency
196	<i>Tithonia diversifolia</i> A. Gray MUMS 31379	<i>Lamnumetlei</i>	Asteraceae	S	Inflor escence	Pounded and spread over the affected area	Wounds & bruises
197	<i>Toona ciliata</i> M. Roem. MUMS 31552	<i>Tairen</i>	Meliaceae	T	Leaf	Boiled in water and take bath	Skin diseases
198	<i>Tridax procumbens</i> L. MUMS 31405	<i>Mayangnapi</i>	Asteraceae	H	Leaf	Crushed juice is used as droplets	Catarrh
199	<i>Vitex negundo</i> L. MUMS 31363	<i>Urishibi</i>	Verbenaceae	S	Tender leaf	Freshly taken	Gastro-enteritis
200	<i>Wendlandia tinctoria</i> DC. MUMS 31337	<i>Pheijammom</i>	Rubiaceae	T	Inflor escence	Freshly taken	Gastro-enteritis
201	<i>Xylosma longifolia</i> Clos. MUMS 31452	<i>Nongleishang</i>	Flacourtiaceae	T	Fresh leaf	Boiled till reduces 1/3 of the initial volume and bath	Scabies
202	<i>Zanthoxylum acanthopodium</i> DC. MUMS 31410	<i>Mukthruhi</i>	Rutaceae	S	Twig	Crushed juice mixed with CaCO ₃ is applied over the area	Warts
203	<i>Zanthoxylum rhetsa</i> (Roxb.) DC. MUMS 31356	<i>Naoseknun</i>	Rutaceae	T	Leaf	Decoction is taken orally taken	Jaundice
204	<i>Zehneria scabra</i> (L.) Sonder MUMS 31351	<i>Lamthabi</i>	Cucurbitaceae	Clim	Whole	Decoction is taken orally taken	Jaundice
205	<i>Zingiber officinale</i> Roscoe MUMS 33310	<i>Sing</i>	Zingiberaceae	Cult	Rhizome	Decoction is mixed with <i>Brassica rapa</i> L. oil & curd and orally taken	Menstrual disorder

Annexure 2: Table showing do and don'ts of eating food plants accordingly to the season and its consequences

Months	Local Name	Edible plants and parts not be taken	Consequences
Mid Apr - mid May	Sajibu	<i>Musa paradisiaca</i> L. (Laphu) pesudostem and inflorescence <i>Gnaphalium luteo-album</i> L.	Less strength and complexion
Mid May - mid Jun	Kalen	<i>Hedychium coronarium</i> Koenig (Loklei) & <i>Alpinia nigra</i> (Gaertn) Burtt. (Pullei)	Urinary trouble and gastroenteritis
Mid Jun - mid Jul	Inga	<i>Oenanthe javanica</i> (Blume) DC. (Komprek) & <i>Polygonum barbatum</i> L. (Yellang)	Dry cough
Mid Jul - mid Aug	Ingel	<i>Plantago erosa</i> Wall. (Yempat), <i>Pterospermum acerifolium</i> , (Kawkla) <i>Citrus reticulata</i> Blonco. (Komla), <i>Agaricus campestris</i> L. (Chengum) & <i>Lactarius princeps</i> Berk. (Chengum)	Urinary trouble
Mid Aug - mid Sep	Tawan	<i>Hedychium coronarium</i> Koenig (Loklei), <i>Alpinia nigra</i> (Gaertn) Burtt. (Pullei) <i>Sagittaria sagittifolia</i> L. (Koukha)	Skin disease and nervous problem
Mid Sep - mid Oct	Langba	<i>Alocasia indica</i> Schott. (Pangkhok) <i>Leucus aspera</i> Link., <i>Knoxia roxburghii</i> (Yembum), <i>Pogostemon purpurascens</i> (Tekta)	Stomach trouble
Mid Oct - mid Nov	Mera	<i>Cucurbita maxima</i> Duch. (Mairel), <i>Houttuynia cordata</i> Thunb. (Tokningkok)	Nervous and stomach troubles
Mid Nov - mid Dec	Hiyangei	<i>Brassica rapa</i> (Hangam), <i>Centella asiatica</i> (L.) Urban (Peruk), <i>Lentinus conatus</i> Berk. (Uyen) & <i>Lentinus squarrossulus</i> Mont. (U-yeu)	Skin diseases and gum problems
Mid Dec - mid Jan	Poinu	<i>Luffa cylindrica</i> (L.) Roem. (Sebot), <i>Trichosanthes anguina</i> L. (Sebot-linmanbi)	Gum disease and weakness
Mid Jan - mid Feb	Wakching	<i>Schima wallichii</i> Choisy (Usoi), <i>Teinostachyum wightii</i> Beddome (Nat), <i>Cephalostachyum capitatum</i> Munro (Nat) shoots (Soijin), <i>Psophocarpus tetragonolobus</i> DC. (Tengnoumanbi).	Migraine and hair falls
Mid Feb - mid Mar	Phairel	<i>Wendlandia glabrata</i> DC. (Pheija), <i>Alternanthera sessilis</i> (L.) R.Br. ex DC. (Phakchet), <i>Plantago erosa</i> (Yempat)	Dermatological problems
Mid Mar - mid Apr	Lamta	<i>Dolichos lablab</i> L. (Hawai-thangpak), <i>Lysimachia parvifolia</i> Franch (Kengoi)	Leucorrhoea or white discharge