THERAPEUTIC AND ETHNOBOTANICAL

INVESTIGATIONS IN DANGS DT., GUJARAT STATE, INDIA

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CERTIFICATE

This is to certify that the thesis entitled THERAPEUTIC AND ETHNOBOTANICAL INVESTIGATIONS IN DANGS DT. GUJARAT STATE, INDIA which is being submitted by MS. THRESIA PAUL towards the requirement for the award for the degree of DOCTOR OF PHILOSOPHY IN BOTANY through Shri Jagdish Prasad Jhabarmal Tibrewala University, Vidyanagari, Jhunjhunu, Rajasthan, India is her own work carried out by her under my continuous supervision and guidance. She has completed it to the best of her capacities.

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ABSTRACT

In today's world many have realized the study of the native cultures which inhabit these regions can provide enormously valuable clues in the search for improved health. The medicine men of Dangs possess rich knowledge of medicinal use of various parts of plants and it should be preserved.

Therapeutic and ethnobotanical investigation carried out in South Gujarat reveal the richness of Dang forest and how people depend on plants for various ailments. Dangs is a mountainous area where most of the people live away from hospitals or medical care centres. People depend on plants for food, shelter and medicine. Each village has one or two medicine men to take care of the health aspects of the villagers.

The deciduous forests of Dang are having a wide variety of plants. Medicine men of this area most of the time use fresh plant parts for preparing medicine. But during summer certain herbs are not available, so the medicine men store these plants in dry form. The medicine men observe nature and connect the shape of a particular plants leaves, flower, fruit etc to the shape of human organ.

This study reveals that there are some plants repeatedly referred by many medicine men for a particular disease. Like *Sterculia villosa* is referred by many medicine men for bone fracture. Like wise many other plants used for many ailments are documented here.

With the help of reliable and known personals the investigator met 42 well known medicine persons from 25 villages scattered in different parts of Dangs (See Figure1). Though initially they were reluctant to share their knowledge, slowly and gradually they shared their Ethnic knowledge on gaining trust and confidence. They have shared their ethno therapeutic knowledge and also helped to identify the plants.

In this study of Therapeutic and Ethan botanical investigations in Dang Dt. Gujarat, India brought a detailed study of various diseases that are treated by the medicine men of Dangs. The therapeutic investigation is presented into **21** titles with its **sub titles**. The therapeutic practice under the title of *aches and pains* has **15 sub titles** such as stomach

ache, left side stomach pain, headache, migraine, toothache, body pain, backache, arthritis (joint pain), burns, cuts, wounds, fractures, sprains, massage oil for all kinds of pains & fractures, for all kinds of ailments, Under the title of Urinary problems' subtitles are painful micturition, burning during micturition, urine: excessive yellow colouring, urine: colour turning from red to yellow, kidney stone. The title Blood related problems' subtitles are lohi tutavu, low blood count, blood clots, diabetes. The title *Heart and Chest* **Problems'** subtitles are heart attack, uneasiness in the chest, chest pain, cough, congested chest, asthma, tuberculosis. The title *Common Ailments*' subtitles are dysentery, acidity, gas trouble, constipation, vomiting, cholera and certain other contagious diseases, worms in stomach, worms in the wound, rainy season itching on the feet (chikali), pain on the nail of the toes or fingers, sleeplessness, sun stroke. The title Eye and E.N.T. Problems' subtitles are eye problems watering in the eye, blurred vision, and white dots in the eyes, sore eyes, sties on the eyelids, *ear* pain, cold, and throat. The title *Various types of fevers* subtitles are Common fever chicken pox, measles, *cholera* & prevention from contagious diseases, falling sick after going to the forest. The title Skin diseases' subtitles are Eczema allergy, scabies, burns, leprosy, leucoderma. The title Swellings blisters boils, subtitles are ulcer, blister in the mouth big boils on the body, boils on the head, big boils on the neck, boils in the stomach, boils under the arm (pata rog), pimples, mumps. The title *Women's problems* subtitles are excess bleeding and irregular menstruation, white discharge, pain during menstruation, enhancing lactation, breast abscess, lumps on the uterus, problems after delivery (backache stomach ache heaviness and bleeding etc), back problem of pregnant women. The title Men's problems subtitles are Impotency (mega rog), sterility, swelling, boils. The title **Infants' problems** subtitles are jalanther rog (hand and leg thin with big stomach), patta rog (hand leg very small), rahvas rog (small leg hand and big stomach), lagut rog (stomach swelling in small children), cold and cough, fever, trisuva rog (eyes going upward and crying), indigestion, breathlessness, dabha rog, abnormal behaviour. The title **Bites & stings** subtitles are Dog bite, snake bite: common snake bite, cobra bite, podsi bite, asariya snake bite, maner snake bite, scorpion sting.

Animals are part and parcel of the people of Dangs. They are very much concerned about their health and have their own herbal remedies for its problems. The title *Animal health*,

cattle's subtitles are enhancing lactation, lack of proper appetite, fracture, wounds, and boil on the body, sterility and chick medicine.

Other titles are the medicinal practices for *Sterility in men& in women, Piles, Lumps* (Lumps on the neck or ear (chokipui)), *Paralysis, Epilepsy (khech), Jaundice, and Cancer* are also given in separate titles.

Under each title and subtitle there are various cures for different sicknesses which are referred by different medicine men. We can locate the medicine men by referring the number given at the end of the information. They are marked with a star, along with the names of the plants. Besides this I have also specified in this paper how to prepare the medicine and its application.

Treatments for various ailments that are dealt in the thesis is given along with its page numbers in **Appendix I.**

Besides the therapeutic practices ethnobotanical information for 195 plants that are referred by the medicine men are also identified and documented in **Appendix II** with *Botanical names, Family* which they belong to, *local names, habit, uses and the useful parts for each species.* The 195 identified plants include, 80 trees, 45 herbs, 32 shrubs, 28 Climber, six Grasses, two Orchids and two Parasites.

These 195 identified plants belong to 67 different families. The list of the medicinal plant families and their corresponding number of species for medicinal uses are recorded in **Appendix III.** Here the family **Fabaceae** outstands for its medicinal uses, even without including its subfamilies Mimosaceae and Cesalpinaceae. Fabaceae alone has seventeen species. The other dominant families are its sub family, Mimosaceae and Caesalpiniaceae with six species each. The families Poaceae, Euphorbiaceae, Apocynaceae, are also with six species. Then the families like Verbinaceae, Rhamnaceae, Moraceae, Malvaceae etc. are used in high rate.

The documented plant's root, rhizome, bulb, tubers stem, bark, leaves, flowers, fruits, seeds, gum, latex, gun etc are used to remedy most of their common and serious

problems, are shown in **Appendix IV** with the botanical names, family, local names habitat of the plant and the parts of a particular plant is used.

It is very important to identify the plants with its botanical name because same plant having different names on the other side there were two different plants having the same name. In most parts of Dangs *Bryophyllum calycinum* is known as **Dham pan**. It is also having the names like *Lagpan, Panputti, Elcho* etc. When the same Bryophyllum was shown to the popular healer one (Thukarambhai Ramubhai Chauhan) in Shamghan village and other one (Sukriyabhai Janibhai Chaudhar) in Dhumkal village they did not agree that Dhampan is Brayophylum. Both of them reported Dhampan is an aquatic plant which occurs only in pure water. However, neither of them could show the specimen as it was not available during the investigation. White flowered Keusa (Polas), *Butea sp.* and Saver, *Bombax sp.* are also used as medicine. But they are not a common plant here.

The parasitic plants like *Dendropthoe falcata* and *Viscum articulatum* are also highly used in their therapeutic practices. It is also important, on which tree these parasitic plant grow. The details about this are mentioned in therapeutic methods in chapter V and in Appendix II.

The plants which are used for many kinds of ailments are *Butea monosperma*, *Pterocarpus marsupium*, *Aegle marmelos*, *Sterculia villosa*, *Lagerstroemia lanceolata*, *Ailanthus excelsa*, *Hibiscus esculentus*, Most of these are trees. Most of the medicine men referred these plants for many ailments.

Trees like *Sterculia villosa, Pterocarpus marsupium are* endangered plants. *Sterculia villosa*'s roots are used for many kinds of ailments, many of the medicine men referred this plant for bone fracture. Since this plant's roots are used very much this plant is endangered. And hardly one can find a big tree of sterculia.

Pterocarpus marsupium is another plant where its bark and gum is used for medicinal purpose. Since bark is cut down constantly the plant gets affected very much and hence their growth is either often stunt or results in the death of the plant itself.

It is a felt a need to conserve these medicinal plants through Germplasm or increase its propagation rate though tissue culture methods or any other Bio Technological method. There are a few nurseries in Dangs where the medicinally useful plants' seedlings are conserved and maintained.

It's also important to preserve the therapeutic knowledge gathered from the medicine men should be further investigated and its usefulness can be applied for the common people who are affected by various illnesses or preserve this dying knowledge for future generations.

The medicine men who have contributed the therapeutic and ehnobotanical information are shown in **Appendix VI**. Their names, village names and reference page number are also given. Most of the medicine persons are men and are above the age of 45. This shows that this nature given wealth is declining as the young people are not interested in gathering or documenting this kind of dying information.

Now a day's people are looking for more and more natural and herbal products. Many pharmacists have realised this and are exploring on various plants to derive drugs for various ailments. The deciduous forests of Dangs, south Gujarat has an astonishing variety of medicinal plants. This place is considered a wealth wood of Gujarat for a wide variety of medicinal plants.

Thus this study urges the need to **conserve the ethnobotanical knowledge** of Dang Dt., To **propagate and preserve the medicinal plants** of this forest and to screen **for its active principals and the efficacy** of the plants which are mentioned by many medicine men for various disease.

CONTENTS

CHAPTER 1:	INTRODUCTION	13-19
CHAPTER 2:	REVIEW OF LITERATURE	20 - 26
CHAPTER 3:	METHODS AND MATERIALS	27- 29
CHAPTER 4:	RESULT	42- 165
CHAPTER 5:	DISCUSSION	166- 171
CHAPTER 6:	SUMMARY AND CONCLUSION	172 -177
CHAPTER 7:	REFERENCE	178 - 181

LIST OF FIGURES

FIGURE 1		
Map of Dangs, the Study area		
PLATE 1		
1. Abrus precatorius - Chanoti		
2. Acacia catechu - Kheir		
3. Acacia nilotica - Babali, Babad		
4. Acacia polycantha – Guvita		
5. Haldina cordifolia - Haldun		
6. Aegle marmelos – Bel, Belli		
7. Ailanthus excelsa - Hadsa, Bhootjad		
8. <i>Allium cepa</i> - Kanta		
PLATE 2	156	
9. Aloe barbadensis - Karpot		
10. Amaranthus spinosus - Matalabhaji		
11. Anacardium occidentale - Kaju		
12. Annona squamosa - Sitapala		
13. Arachis hypogaea - Singh		
14. Argemone mexicana -Karadai		
15. Asparagus racemosus – Shevara, Shevur		
16. Asteracantha longifolia – Poskatta, Kluskatta		
PLATE 3		
17. Azadirachta indica - Limbada		
18. Piliostigma foveoatum -Chamol		
19. Bauhinia varigata - Koharu		
20. Hyptis suachens - Bhangutta		
21. Bombax ceiba – Savar, Simaro		
22. Bryophyllum calycinum-Dhampan,Lagpan		

PLATE 6

33. Clematis hedysarifolia - Morvai 34. Clerodendrum fragrans - Mogra 35. Cocculus hirsutus – Tan, Lambapana Tan 36. Corchorus capsularis - Chunch

37. Cordia dichotoma – Bhokar, Gundi 38. Costus speciosus - Pevuta 39. Cymbopogon martinii - Roicha 40. Cryptolepis buchanani – Mendvel 41. Dalbergia volubilis - Nilisoti 42. Datura metel - Datura 43. Dendropthoe falcata – Bendgul, Vando 44. Dioscorea bulbifera - Lunthi 45. Dioscorea oppositifolia - Digad

46. Diospyros melanoxylon - Temarun

47. Dolichandrone falcata - Modsingh

48. Dregia volubilis - Thorsidi, Dorsidi

31. Catharanthus roseus - Barmasi 32. Cissampelos pareira – Golpana Tan

PLATE 5

29. Carica papayai Papayu

30. Cassia fistula – Bahava, Gharmalo

159

158

160

23. Buchanania lanzen – Achar, Charoli

25. Calotropis gigantea - Rui, Akhado

27. Careya arborea Kumbi, Kumbiyo

28. Casearia graveolens – Kirambada

26. Capparis zeylanica – Wagat, Vagatvel

24. Caesalpinia crista - Kachaka, Sagargotti

PLATE 4

49. Grewia tiliifolia - Dhaman		
50. Helicteres isora - Aati		
51. Hemidesmus indicus - Upparsadi		
52. Lagerstroemia lanceolata - Nano bondar		
53. Lagerstroemia parviflora - Bondar		
54. Lawsonia inermis - Methi		
55. Melia composita - Nimbara		
56. Millettia racemosa – Bibulavel, Alebibula		
PLATE 8		
57. Mitragyna parvifolia - Kalam		
58. Moringa oleifera – Shegu, Saragava		
59. Mucuna pruriens – Kuila, Kaucha		
60. <i>Plumeria rubra –</i> Chapo, Champa		
61. Pterocarpus marsupium – Bio, Bivula		
62. Ricinus communis – Arani, Arand		
63. Sauromatum venosum – Dhodadu		
64. Sapindus emarginatus- Arita		
PLATE 9		
65 Southur helping Dom		
65. Sorghum helepens Boru,		
66. Sphaeranthus indicus - Borothada		

67. Sterculia urens - Kandol, Kadayo

- 68. Tabernaemontana divaricata Tagari
- 69. Sorghum helipens Tanas

70. Pteramus labialis – Ranval, Jangalival

- 71. Terminalia arjuna Arjun sadada
- 72. Terminalia bellirica Behada, Beda

PLATE 10

73. Terminalia crenulata - Sadad

162

163

164

74. Tinospora cordifolia - Ghamoli

75. Ventilago denticulate - Ashivel, Ashi

- 76. Dioscoria sp. Marchikanth
- 77. Viscum articulatum Sakaliya, bendgul
- 78. Zizypus rugosa Toran, Toranvel

79. Zizyphus nummulari – Nana bor

80. Vitex negundo - Nirgud

PLATE 11

165

- 81. Nicotiana plumbaginifolia- Dangi tamaku
- 82. Adhatoda vasica- Nagchampo, Adusi
- 83. Eranthemum roseum ,Kalikarav
- 84. Syzygium cumin- Jabu, Jambuda
- 85. Ficus microcarpa- Payar
- 86. Holarrhena pubescens- Kuda
- 87. Ensete superbum- Jangali kel
- 88. Ficus benghalensis Vad

LIST OF TABLES

APPENDIX	Ι	182-187
APPENDIX	П	188 - 215
APPENDIX	III	216 - 224
APPENDIX	IV	225 - 233
APPENDIX	V	234-242
APPENDIX	VI	243 - 245
Acknowledgement		146
Declaration		147

This Work IS **DEDICATED TO MY BELOVED** PARENTS LATE MRS. & MR. PAUL



INTRODUCTION

From the beginning of time man depended on plants to meet the needs of their day to day life. Plants play a great role in all the living beings. In fact the survival of any animal on this planet is depending on plants. Plants provide, food, shelter, medicine and the life sustaining oxygen. In recent years, people depend more and more on plants for medicinal purposes. Due to the advancement of Science and Technology there are various methods to screen the active principles of plants and cultivate many medicinal plants.

Truly, Botany and medicine are inseparable. Today, most of the drugs have been derived from plants sources. Many of the pharmaceutical companies are having their own medicinal plant garden to propagate plants which contain particular drug. Even toxic plants contain many active principles which can cure some deadly disease. As the modern techniques of extracting useful drugs from plant sources, chemically-synthesized drugs are replaced plants as the source of most medicinal agents in many countries. Ethno botanists investigate and gather information from various sources and emphasises the role of plants in the life of man and in the environment.

The 1990's have seen a growing shift in interest once more; plants are remerging as a important source of new pharmaceuticals. More and more people are taking recourse to naturopathy as they are realising the harmlessness of the medicines prepared from plants. Industries are now interested in exploring parts of the world where plant medicine remains the predominant form of dealing with illness. The moist deciduous forest of Dangs, in South Gujarat for example, has an amazing diversity of plant species and has been regarded as a resource of medicinal plants.

Therapeutic and Ethanbotanical investigation is the study where people of Dangs dt. in Gujarat make use of indigenous plants for various medicinal purposes. In this study the investigator documented therapeutic practices of Dangs and the medicinal plants that are used for various therapies. Each therapeutic practitioner has ones own way treating and dealing with disease. As one explores and reads ahead the chapters of this study will know the richness and the wealth of medicinal knowledge of the traditional healers of Dangs.

1.2 GUJARAT STATE AND ITS BIODIVERSITY

Gujarat was constituted as a state of Union of India on May 1, 1960 after bifurcation of the Bombay State. The state of Gujarat with a geographical area of 196024 Sq. km accounts for 5.98% of the country. The largest coastline; two of the three gulfs in the country; unique saline desert of the Ranns of Kutch, Patan and Banaskantha; vast grasslands; extensive thorny and dry deciduous forest in Saurashtra and North Gujarat; moist to semi-moist forests in South Gujarat and a large area under variety of wetlands, lake and mountains make this state very important. Gujarat is a forest poor State yet it is rich in biodiversity has forest cover area of 19393 sq. Km. (i.e. 9.9%), but the actual forest cover area is 12957.5 Sq. Km. (i.e. 6.61%). Dangs contributes about 70% of the total major forest produce in the state.

1.3 "THE DANGS" THE STUDY AREA

The name Dangs means a hilly terrain. There is also another connotation of the word Dangs, which means a place of bamboo. The District of Dangs has geographical area of 1778 Sq. Km. with a population of 1.87 lakh and 311 villages. The entire population is rural living. Out of the total geographical area 1698.56 Sq. km is forest area which is about 95% of the total geographical area and it comprises of 844.06 Sq. km Reserved Forest and 854.50 sq. km protected forest. Dangs contributes about 70% of the total major forest produce in the state, and about 15 lakh bamboos produced that contribute about 50% of the state production.

1.4 LOCATION, TOPOGRAPHY AND GEOMORPHOLOGY

The tract falls between the parallels of latitude 20.33"53" and 21.4'52" and the meridians of longitude 73.27' 58" and 73.56'36". The Dangs forest tract starts from the rugged mountain chains of Sahyadri in the east and descends on the western side extending to the edge of plains of Gujarat. The hills are mostly low and flat topped, except in the south

and the East Dangs where hills are rugged and higher going up to 11.00m. The tract varies in elevation from 105M near Bheskhatri to 131M above MSL on the Khandesh border in Piplaidevi Range. On the whole most of Dangs lies between elevations of 300m to 700m above MSL. Saputara – the only hill station of Gujarat is also located in the Dangs.

1.5 CLIMATE

There are three distinct seasons namely the summer, the monsoon, and the winter seasons. The summer starts from march till middle of June, the monsoon starts from mid June till the end of October and the winter season starts from November till February. The average rainfall is about 2000mm per annum with 90-100 rainy days per annum. Maximum rainfall recorded is 4800mm in 1993.

Temperature varies from minimum of 10° C in January to maximum of 36°C in June. Easterly wind prevails in winter South-westerly winds of moderately velocity prevails throughout the year.

1.6 WATER RESOURCES

Dang is the place of origin of four gushing and torrential rivers: namely Purna, Girna, Ambika and Khapri. These rivers with crystal clear water provide beautiful scenery to any route that one takes in Dangs. Gira and Purna rivers are perennial. There are many small rivulets and streams, distributaries of the main rivers, which flow during monsoon and dry up in summer. Water table varies from 3m to 20m. The tract receives heavy rainfall in monsoon season but beyond the monsoon there is hardly any shower. The geological formation and soil condition is such that rainwater falling on the ground rapidly drains away creating very dry condition during several months of the year.

In monsoon with an average annual rainfall of 2,000 mm, this is spread over 90 days makes Dang a paradise. With lush green forest, bamboo brakes and waterfall greet at every nook and corner, one really feels that the wilderness-meeting nature face to face. The entire hilly terrain of Dangs harbours an amazing variety of plants, butterflies and birds; the forest appears alive and inviting. Although there are numerous waterfalls in Dangs, the Gira fall at Girmal stands out best, as it is the highest waterfall of the state.

1.7 VEGETATION TYPES

Dangs forests are rich in biodiversity with large diversified flora. It consists of mixed tree growth among which teak is the predominant species. The main characteristic features of the forests are the extreme variation in quality, density and irregular age class distributions. One and the same compartment may often have more than one or all of the moist, semi-moist and dry types irregularly mixed.

The north and east region of Dangs have superior growth than the west and the south. Bamboo is more in the western Dangs. The main forest types are moist teak and dry teak with bamboo bearing and non-bearing forest. Being deciduous forest the vegetation becomes leafless during the dry season. However there are good numbers of evergreen trees in under wood and shrubs cover

1.8 THE PEOPLE OF DANGS

It is interesting that Dangs is believed to be the "Dandakaranya" of Ramayana and Shabri" was a Bhil woman. Ethnic/tribal people mainly inhabit Dangs. 95% of the people of Dangs are tribals. These tribals are namely, Bhils, Kokanas, Warlis, and Gamits. All the tribal people are greatly dependent on the forests for variety of their needs ranging from food and shelter to medicines and fuel. By and large people of Dangs are closely knit by themselves, simple, peaceful and gentle.

The population of the Dangs was only 18,333 in 1901 which has increased to 71,567 in 1961 and 145000 in 1991. At present the population of the Dang district is 186712 with

94001 males and 92711 females. The sex ratio is 986 female to thousand males. In total 92% of population is of tribal community.

Almost 80% the population speaks the local language known as *Dangi* which is a mixture of Gujarati and Marathi but they understand Gujarati and Marathi as well. The main occupation of the people of Dangs is agriculture. Many work as labourers in forest and farmlands, livestock rearing and grazing. Dangs has not seen the light of industrialization due to its hilly terrain and forest dominated area. Hence the scope for employment opportunities in Dangs is very less. Therefore, migration of youths to adjoining districts for getting employment is the major concern for district authorities. Very few Dangi people are in Government jobs. Most of them have retained their old traditional way of lifestyle and it is indeed interesting to see how closely they are linked with forests.

1.9 HEALTH STATUS AND MEDICAL KNOWLEDGE.

The people of Dangs have developed their own traditional method of treatment using a wide variety of plants. The individuals involved in such kind of treatments are known as Bhagats. Normally these people derive this kind of traditional knowledge from their ancestors and pass it on from one generation to another. Some who had possessed rich herbal knowledge have vanished without revealing it to anybody. Some claim to have herbal knowledge through dreams where *Dungar Devi* revealed the uses of some particular plants. Some of the persons whom the investigator encountered in the present investigation also shared similar information. The medicine men of Dangs possess rich knowledge of medicinal use of various parts of plants such as root, rhizome, flower, leaf, latex, bark etc. These plants are used in a variety of forms like, paste, powder, decoction, extracted oil etc.

The seasonal diseases such as Dysentery, Jaundice, Respiratory tract infections Vomiting, Diarrhoea, Snake bite, fracture, swellings, injury, sickness affecting women and children are some of the widely prevailing diseases in Dangs forested areas. The medicine men of Dangs possess rich knowledge of medicinal use of various parts of plants such as root, rhizome, flower, leaf, latex, bark etc. Each village has 2-3 medicine persons to take care of the health of the needy. They have their own *Herbal remedies* to protect themselves

from various sicknesses. Since most of the people live far away from health centres they have their own *Herbal First Aids*. For example, if one is bitten by snake they take their own home remedies and then approach the hospital to save the patient. They have their own practices to protect and prevent themselves from contagious diseases like Cholera, Diarrhoea, and Vomiting etc., which are usually taken during summer and just before monsoon. They report that there are two main seasons where the sickness rate is maximum and they use their own natural remedies and prepare medicines in large quantity using various plant types, and distribute it to the whole village for people. They even give this medicine to their cattle too.

Having spent about seven years in the forest area of south Gujarat, the investigator had several occasions of meeting traditional healers by using local plants. Hence it was felt to take up the present investigation for the PhD thesis with the following objectives.

1.9. OBJECTIVES:

It is important to document this dying information for the future generations thus **the following objectives will be covered during the research**.

- To conduct a survey of traditional healers for exploring Ethnobotanical knowledge of Dangs in Gujarat.
- To Document the therapeutic practices that are practiced by the traditional healers.
- To document various remedies that are carried out for various illnesses, with name of the plants, plant parts, preparation and its intake or its application.
- To document most commonly used medicinal plants with their botanical names and family along with their local names and its uses.

The map of the Study area along with the name of 25 villages that were visited and investigated by the investigator is shown in the next page.

FIGURE 1



2.1 INTRODUCTION

Ethnobotany deals with the relationship of human beings with plants. The term has often been considered synonymous with either traditional medicine or with economic botany. Further ethnobotany includes study of foods, fibers, dyes and other useful and harmful plants and even magi co-religious beliefs about plants. This plant – human beings relationship is broadly classified into two. 1. Material 2.Cultural. The concrete relation include the material use such as food, medicine, house building, agriculture, plants in fine arts, house decorations and other domestic uses. The abstract relationship of human beings with plants includes faith in good or bad powers of plants, sacred plants, worship etc. Thus ethnobotany broadly deals with the study of total natural and traditional interrelationships between man and plant and man's domesticated animals (Jain, 2001). The word Ethnobotany literally means the study of botany of the primitive human race. This term was first applied by Harshberger in 1895 to the study of 'plants used by primitive and aboriginal people'. While Jones (1941) defined it as the study of the interrelations of primitive man and plants. Faulks considered the subject of ethnobotany as the total relationship between man and vegetation which meant more than even the scope of economic botany. After a decade, Jones revised his concept and treated ethnobotany as a unit of an ecological study specialising in the interaction of man and the plant world. Schultes (1962) interpreted ethnobotany as usually the study of relationships which exist between people of a primitive society and their plant environment. Now it generally includes total natural relationship of plant kingdom with man and also his animals. The culture and the habitat of ethnic groups are both changing to urban patterns at quite fast rate. Hence their knowledge, as also the environment where that knowledge took birth, has been diminishing. As during the last 100 years the attention of ethnobotanists has been more on primitive people, many such societies have been studied, and elements of their knowledge systems documented. Otherwise much of this knowledge would have been lost. Even now the villages inhabited by the tribals are considered ideal for ethnobotanical studies and the field methods in literature are largely

aimed towards their study. Ethnobotany is not rigid. That has got change from time to time by interactions and dependence between man and surroundings. The ethnic experimentation on plants will continue, which leads to identify more suitable way of its utilization. The traditional communities have the treasure troves of accumulated knowledge and wisdom particularly about the biological resources around them. Tribals use enormous range of wild plants in their daily life. They have used different plant parts as food, the potential agent for remedial measures; shelter etc., and they have depended on plants from time immemorial. The plants are wild and easy to get. From their ancestors they got the knowledge of medicinal use of the plants and their manifold uses and this knowledge was transferred through oral tradition. Large numbers of tribal population stay in area within and around forests.

The tribal societies all over the world use an enormous range of wild plants and they live mostly on forest products and also on some cultivation. Their cultivation is limited and primitive. Apart from cultivation they collect forest products including honey for domestic use and also for sale. The use of a large number of plants for various purposes by them reveals their great awareness, knowledge and intimate relation with the plant kingdom. The various kinds of plants used by tribal and folk people are described below. Tribal people through their hereditary traditional knowledge infer what to eat and what not to eat. Food habits of man developed on the basis of experience and survival through successive generation. The major food items used by the tribes of Attappady were tubers, pulses, cereals cultivated by them. Legumes are unique foods because of their rich nutrient content, including starch, vegetable protein, dietary fiber, oligosaccharides, phytochemicals, (especially the isoflavones in soy bean) and minerals (Mathur et al, 1973). Legumes are known to contain a number of antinutritional and toxic factors, some of which are thermoliable, while others are heat stable (Rackis, 1974). Legumes contain a variety of undesirable chemical substances also called inhibitory constituents that are known to exert a deleterious effect when ingested by man or animals (Phillips, 1993). Pulses are reported to be good sources of nutritionally important dietary nutrients viz., proteins, minerals, (iron and calcium) and vitamins (niacin and thiamine) (Rosaih et al., 1993). Most grain legumes contain an array of secondary metabolites which constitute important defences of the plant against insects and herbivores and which are resistant to

gastric and intestinal digestion. These so called anti nutritional factors often have detrimental effects on mammalian digestion and metabolism (Dixon and Hosking, 1992). A number of edible roots, tubers and corms form an important part of the diet of many people in different parts of the world. They are relatively easy to cultivate and yields much (Michael, 1997). Thompson (1996) opined that minor tubers form the major staple and contribute as major source of carbohydrate in the diet. Taro (Colocasia esculenta (L.) Schott), which is one of the most ancient food crops, is a herbaceous tuber bearing plant. Santha et al. (1999) found that taro is cultivated right from the foot hills of Himalays to the Southern plains of peninsula. Yam (Dioscorea) is another important minor tuber that has a place in the Indian dietaries (Prema et al., 1994). Man developed on plants for various necessities of life and still continues so. They provided food, food adjuncts and medicine as well. There are plant species which have both virtues- as a food and a medicine. However, the medicinal virtues of such plants are over shadowed by their increasing importance as food or food adjunct. This resulted in negligence of foodyielding plants in view of medicinal properties. There are a large number of food plants which were once used for medicine by our ancients. Few of these are still in vogue but they are also substituted by other wild plant sources as medicine. The present is an attempt to draw attention of the research workers particularly engaged in plant medicine to redeem the situation. Such attempts will bring to the fore front the lost glory of medicinal virtues especially of food plants. Reviews on this line may help examine validity of past records and offer a chance to point out their new potential after critical comparison. Tribal customs have an important role in forestry and agriculture. There were a perfect harmony between the forest and tribals living there. Many plants are used as biofertilizers for crops. They were aware of many plants with insecticidal and fungicidal properties. They feed their domestic animals with several wild plants.

2.2 ETHNOBOTANICAL STUDIES IN INDIA

The Ethnobotanical studies in India are rather young and only five decades old. Dr. E. K. Janaki Ammal initiated the studies on Ethnobotany as a separate science in India in 1954 and she worked on the economic aspects of the native plants of India. The paper on subsistence economy of India by her was the first pioneering and exclusive work in this field and therefore, she is considered as founder of ethnobotanical studies in the Indian

subcontinent. Moldenki's (1954) work on the economic plants of Bible, Sensarma' s (1984, 1988, 1989, 1991, 1992, 1994a, 1994b, 1995, 1996, 1998) knowledge of plants mentioned in Puranas, Neelatantram, Yoginitantram, Tanthrasastra and Arthasasthra of Koudilye. Balapure et al's (1987) studies on plants mentioned in Ramayana, Dash and Pandhy's (1997) ethnomycological aspects mentioned in Manusmrithi and Farooqi's (2000) plants mentioned in Qura'n. It was Dr. S. K. Jain who had started intensive studies among tribals of Central India. He has nourishing and strengthening the subject for almost five decades through several publications (Jain, 2002). There are almost 60 papers on food and fodder plants out of 400 research papers published. The various workers in Ethnobotany have attempted to document the wild food habits of the tribal communities. Sengupta (1952) conducted investigations on the dietary habits of the aboriginal tribes of the Abor hills of Northern India. Tosh *et al* (1959) studied the wild edible plants from the hilly regions of Maharashtra and Goa. Bargava (1959) documented the unusual and supplementary food plants of Kumaon. Bandari (1974) studied the famine food in Rajasthan desert. Kaul et al (1982) studied the wild edible plants of Kashmir with special reference to lesser known vegetable substitutes and beverages. Maji and Sikdar (1982) conducted a taxonomic survey on wild edible plants of Midnapur of West Bengal. Islam (1984a) studied wild plants used as vegetables in North Eastern regions. Bhujel et al studied the edible plants of Darjeleing. Kaul and Singh (1985) worked on the wild edible plants of Himalayas. Nagar (1985) documented the wild edible plants used by the aboriginal communities in Central India. Varthak and Kulkarni (1987) studied on wild edible leafy plants from the hilly regions of Pune and neighbouring places of Maharashtra. Jain and Sinha (1988) published an account of the life supporting species with special reference to some emerging and supplementary foods among the aboriginals of India. Srivastava (1988) conducted studies on wild edible plants of Jammu & Kashmir. Negi (1988) contributed to knowledge of wild edible plants of Uttar Pradesh. Girach et al (1988) conducted studieson wild edible plants from tribal popckets of Madhya Pradesh. Kumbhojkar and Varthak (1988) conducted studies on wild edible grapes from the sacred grooves in Western Maharashtra. Reddy (1989) noted several wild edible plants vegetables in India. Navchoo and Butch (1990) conducted studies on the beverages narcotics and food plants of Ladakh. Sebastian and Bhandari (1990) studied the wild

edible plants of the forest areas of Rajasthan. Haridasan et al (1990) described on the wild edible plants of Arunachal Pradesh. Jain et al (1990) studied some lesser-known food plants among aboriginals in India. Maikhuri (1991) conducted a detailed study on the nutritional values of some lesser-known wild food plants and their role in nutrition of tribes of North Eastern India. Joshi and Aswathi (1991) worked on the life support plants used in famine by the tribals of Aravallies. Bennet et al (1991) published a book on food from forests. Hemadri (1992) studied the tribals of Andra Pradesh with special reference to their knowledge in nutrition and medicianal herbs. Basu and Mukherjee (1993) studied the smokes and beverages of the tribals of Purulia of West Bengal. Srivastava (1994) studied the wild edible plants of Sikkim Himalaya. Arora (1986, 1989, 1990, 1995) contributed to the ethnobotany of crop plants and native food plants of North Eastern India. Reddy et al (1996) studied the ethnobotany of the lesser-known tuber yielding plants from Arunachal Pradesh. Jha et al (1996) studied the ethnobotanical significance of leaves and flowers utilized as supplementary vegetables in Darbhanga of North Bihar. Sahu (1996) contributed to the knowledge of life supporting and promising food plants among aboriginals of Bastar. Bora and Pandey (1996) documented some lesser-known wild food plants from Assam. Bajpayee and Dixit (1996) contributed to the ethnobiology of food stuffs of tribals of Tarai regions of Uttar Pradesh. Sensarma (1996) studied the emergency food plants mentioned in Kaudilyas Arthasasthra. Sing (1996) contributed to the knowledge of wild edible plants of Manti district in North west Himalya. Ansari (1997, 1998) contributed the knowledge of wild edible plants of Shevroy, coli hills of South India and Madhaulia forest, Gorakpur respectively. Das (2000) documented the wild food plants of Midnapur of West Bengal. Joshi and Tewari (2000) contributed to knowledge of edible plant diversity in Uttar Pradesh. Singh et al (2000) documented some emergency plants among tribals of Madhya Pradesh. Sudhakar and Vedavathy (2000) studied the wild edible plants used by tribals of Chittooer district of Andhra Pradesh. The studies of Pundir and Singh (2002), Masish et al (2003), Basumatary (2003), Mitaliya and Bhatt (2003) and Jha et al (2004) are some of the important contributions to the knowledge of wild edible plants.

2.3 EHNOBOTANICAL STUDIES IN GUJARAT STATE

In the name of Ethnobotany, good number of publications appeared in scientific journals from almost all the State Universities in the last three decades. Voluminous works were submitted by the young research students in the form of Ph.D. dissertations. Many of these works are pertained either to particular areas or to particular tribes or to particular NGOs such as Honey Bee Network and SRISTI (Ahmedabad), GEER ailments. Foundation, Gandhinagar are also actively involved in documenting the knowledge on ethnobotany. By involving various Universities and NGOs GEER Foundation recently undertook a survey based compilation of medicinal plants which are reported to be in use both in established systems and un-established local practices. The concise report on the 'Medicinal Plants of Gujarat' is expected to be released soon. However, so far there is no specific reporting on ethnobotany pertaining to the locally familiar traditional practioner's of a particular area. The floristic study of Gujarat had been done by Theodore Cooke (1903), Thaker (1910), Sexton and Sedgwick (1918), Santapau, H. (1962, 1967), Shah, G.L. (1978). But there is a lacuna of Ethnobotanical work to be carried out. To fill this lacuna topic has been selected by us.Earlier Ethnobotanical work was carried out by Thaker, J.I. (1926) studied 'Kachchh Ni vanspati ane teni upyogita' and Nath (1960) studied the Ethnobotany of Bhils in Ratanmahal. Shah (1964) conducted a preliminary study on the tribal life of the state. Ethnobotany of Ratan Mahal hills was investigated by Bedi (1978). Later on Shah ET. Al. (1981) gave an account of 133 plant species used by tribal in Saurashtra. Joshi and Audichya (1981) recorded the medicinal plants of Rajpipla forest. Shah and Gopal -1985 further reported 59 plant species used by Bhils, Rabaries, Gharasia and Dubblles tribes in North Gujarat. Bhatt and Sabnis -1987 made a contribution to the Ethnobotany of Khedbrahma. Joshi- 1988 reported some plants medicinal value of the state Dr.B.L.Punjani-(1998), Ethnobotanical Study of Tribal Areas of District Sabarkantha, Dr.H.M.Ant-(2000), Ethnobotanical Studies of Angiosperms of Aravaly Hills Dist, Banaskantha. Dr.Y.M.Patel (2009), Ethnobotanical survey of Satlasana Taluka, Dist. Mehsana.

ETHNOBOTANICAL STUDIES IN DANG DT

Dabas *et al* (1990) worked on cultivation and food habits of tribals of Dangs in Gujarat. Nirmal Kumar et al (2004) Studied on plant species used by tribal communities and purna forests, Dangs district Gujarat. Nirmal Kumar *et al* (2005) worked on aesthetic values of selected floral elements Khatana and Waghai forests of Dangs, Western Ghats. Kumar *et al* (2005) Resource use pattern of some tree species by local inhabitants of Waghai forest, Dangs District, north extreme part of Western Ghats, Gujarat. Nirmal Kumar *et al* (2007) studied on plants species used by tribal communities of Sapautara and Purna forest, Dangs Dt. Gujarat.

3.1 FIELD WORK

The present investigation was carried out from May 2011 to Sept 2013. During the field study specimens were collected in whatever the available form at that time, with their local names. Specimens of very common and well known plants like *Neem, Amali* etc., were not collected. Using the *Botanical knowledge*, with the help of *Gujarat flora* and authentically identified specimens available at Prof. G.L. Shah Herbarium the botanical identity was provisionally determined and further confirmed in the laboratory and the guide of the investigation. Photographs of the available plants were taken during field trips. Frequent visits were made to confirm identification of the plants to the local names. Some plants are having 2-5 local names. The local name which is referred for a particular plant at a particular area differs from the other area within the Dangs district. For instance Mucuna pruriens is known as Kuali, Kuila, Kavicha; Syzygium cumini referred by Jamboo, Jamla, Jabuda etc. in different villages of Dangs district. Similarly the same local name is applied for various plants. To say, 'Dangar' is referred in some villages where Gujarati language is commonly spoken to rice plant, where as in remote villages wherein Gujarati is not commonly spoken and Dangi is predominant language, the same name (Dangar) is referred to pumpkin fruit.

The people of Dangs have developed their own traditional method of treatment using a wide variety of plants. The individuals involved in such kind of treatments are known as Bhagats. Normally these people derive this kind of traditional knowledge from their ancestors and pass it on from one generation to another. Some who had possessed rich herbal knowledge were vanished without revealing to anybody. Some claim to have herbal knowledge through dreams where *Dungar Devi* revealed the uses of the plants. Some of the persons encountered in the present investigation also shared similar information. The medicine men of Dangs possess rich knowledge of medicinal use of various parts of plants such as root, rhizome, flower, leaf, latex, bark etc. These plants are used in a variety of forms like, paste, powder, decoction, extracted oil etc.

With the help of reliable and known personals the investigator met 42 well known medicine persons from 25 villages scattered in different parts of Dangs (See Figure1). Though initially they were reluctant to share their knowledge, slowly and gradually they shared their Ethnic knowledge on gaining trust and confidence. They have shared their knowledge and informed the name of the plants and their parts used for a particular sickness.

The Bio data of the healers, together with their photographs and address are numbered and recorded in the forgoing pages in order with an opinion that they can be contacted if need arises. The particular number given will be referred again in the result of the thesis with * number. Information regarding treatment with different plant parts is given with Botanical name, local name and the parts used. The preparation and dosage or application for each treatment was enquired from the individual healers and systematically documented.

3.2 LAB WORK

This work does not need any lab work except the identification of plants.

3.2.1 HERBARIUM WORK

All collected specimens were properly processed for herbarium by dry method as per the standard herbarium methods recommended by Santapau (1955) and Jain & Rao (1976).

3.2.2 IDENTIFICATION OF SAMPLES

As mentioned earlier identification of the samples collected during the survey was provisionally done by using botanical knowledge, by matching with the help of authentic herbarium specimen available at Prof. G.L. Shah Herbarium, with the help of Gujarat Flora, and finally confirmed by the expert botanists. After the identification and confirmations all the labelled herbarium sheets were arranged according to alphabetical order of the botanical names.

3.2.3 DATA PRESENTATION.

The gathered data regarding the herbal therapeutic practices are shown in chapter V as the result of the research. The sicknesses are grouped into 21 different categories and numbered. Each group is again divided into its sub groups. In case for a particular sickness many practices are recorded, they are numbered in *Roman* letters and at the end of the information a star is put with a number to indicate the source of the information i.e. name addresses of informators. Photographs of 96 plants with their Botanical names and local names are attached at the end of chapter three in Plates 1-12. Diseases dealt in the thesis are arranged in alphabetical order along with their corresponding page numbers are provided in **APPENDIX 1**. The 195 identified plants with a synoptic view of botanical names and their uses investigated in the study are presented in Appendix II. The list of plant families and their corresponding number of species for which medicinal uses are recorded are in **APENDIX III**. Index to local names and their botanical names and family in **APPENDIX IV**, Index to the plant families corresponding local names and family are in APPENDIX V. Index to the botanical names corresponding to the plant family and Local names **APPENDIX VI**. For the convenience of readers of the thesis and the end-users of the work, by and large, the names of ailments are expressed in the text in English language. Adequate care was taken while translating the names of ailments from local language (Dangi/Gujarati/Marathi) to English. Wherever there was confusion or overlapping, the names are recorded 'in *toto*' as they were pronounced by the informators. List of the traditional healers who contributed to the study is provided in **APPENDIX VII.** Some basic information and the introduction about the informators are given below.

3.2.4: DETAILS OF INFORMATORS

1. Somabhai Vatya Moris

Village: Zari; Age: 50 years

He has no formal education at all. He speaks mainly Dangi. He learned use of herbal medicines from his friend Kajrav Pandya of Natyahanavath village. He treats people of close by villages on the border of Maharastra and Gujarat. He treats about 2-3 patients per day. He



claims to treat for all kinds of sicknesses. He cures common sicknesses within 15 days but says that about a month is needed to cure serious sicknesses. Somabhai goes three to four days in a year at the end of monsoon to the forest and collects and keeps the required medicinal plant parts. According to him all types of plants will be available during that season. Nobody has yet learned this knowledge from him. He expresses that the present generation especially the youth do not like to take the trouble of going to the forest to search and collect medicinal plant, as it demands a lot of time and hampers their agriculture and other works.

2. Shukarbahi

Village: Sathbabla; Age: 60 years



As a child he attended the night school in his village for three - four years. He works as a Bhagat for last 35 years. He is specially qualified for performing Pooja during festivals like Holi, storing the grains and for any special functions in the village. Many patients come to him for treatment. He treats human

beings as well as animals. Most of the people in his village go to him for treatments. He has a stock of medicine gathered from the forest.

3. Punyabhai Jivaliyabahi Gavit

Village: Dhuda; Age: 55 years

He is a farmer and has no formal education. He began his medicine practice already as a teen-age boy. He is a well known medicine man. Much of his knowledge of the medicines has been learnt by him from his father and through daily experiments and practices. Many people from the close by villages come to him for treatment.



4. Rameshbahi Lahanubhai Bhoye.



Village: Dhuda; Age: 40 years

He is an illiterate. He speaks mainly Dangi. His father taught him the use of medicinal plants. He is practicing this since his childhood.

5. Ranjubahi Vajirambahi Powar

Village: Gaygotten; Age: 50 years

He has not gone to school but he knows to read and write. He learned this practice from his father, but began practicing only at a later age. His wife also knows most of the uses of medicinal plants. He has not formally initiated anybody to this practice. However his son has learned most of the medicines by seeing him practicing and



by helping him preparing various medicines. He is a specialist in curing sterility and impotency.

6. Sureshbahi Ranjubahi Powar

Village: Gaygotten; Age: 35 years



He is the son of Ranjubahi Vajirambahi Powar mentioned above. He has completed his school education. He learned about the use of medicinal plants from his father and mother; however he does not practice medicine regularly like his father.

7. Ratanubahi Bahvadubahi Chavaria.

Village: Gaygotten; Age: 52 years

He studied up to 6th standard and speaks Dangi. His father taught him the use of medicinal plants.



8. Devanji Manaji Gayakwad.

Village: Vankan; Age 80 years.



He understands and speaks only Dangi. He has been practicing medicine for over six decades. His brother in law, Mahunabhai taught him medicine.

Most people from his village take medicine from him and have great faith in his ability to cure them of their sickness. He is ready

to share his knowledge of medicinal plants with other people in the village. But says that most people do not want take the trouble to collect the plants and use them.

9. Maganbhai Gulabbhai Gavit

Village: Pimpri; Age: 75 years

Mganbahi learned this Vidya from his guru Kadidas Kavi from Deesa–Palanpur in North Gujarat where he was for about ten years. He had also worked also in Ahedabad. Many patients, even from far away places like Surat and Bomaby used to come to him. Now he has almost given up practice as he finds it difficult to go and collect medicinal plants from the forest because of his old age.



10. Sukliyabhai Zuliabhai Marali

Village: Dungarada; Age: 55 years



He had Primary school education. He was working in the government-owned medicinal plants plot in his own village, Dhugarada. He began learning about medicinal plant from his father Zuliabhai, but Zuliabhai dies all of a sudden before his son could gain proficiency in his profession. According to Zukliyabhai more things about medicinal plants and their uses he learned

through a dream. What he learned in the dream he confirmed with his mother who knew whatever her husband practiced. He is not willing to share his knowledge with others because he believes that if he tells to anybody the effect of the medicine will decrease. Now he is teaching his *vidhya* to his son. He doesn't collect and store the plants because according to him the stored plants will loose it medicinal power. When the patients come to him, he goes to the forest and performs certain rituals to the plants and then collect them. However he has many plant samples like, Sakhaliya (Bendvel), Dhorsidi, Biyo gum etc. at home. He has cured many patients in Vansda – Bheskhatari area.

11. Jivalibahi Jetubhai Vad.

Village: Vati – Koba phaliyu; Age: 55 years

He has no formal education and according to him nobody has taught him the medicine practice. He clams to have leaned it through a dream where he saw a few medicinal plants for certain sicknesses. He tried on many people and found them very effective. By hearing this many people came to him and still many people are coming to him. He has shared his knowledge to many people.



12. Babubhai Soniyabhai Chaudhari



Village: Vati – Bajari phaliyu. Age: 70 years

13. Ramubhai Kalubhai Raut

Village: Vati – Borigoutan; Age: 50 years

He is educated and is a community leader in his village. He got this knowledge about medicinal plants from different people.

14. Gamjibahi Pandubhai Bahtt

Village: Pimpri; Age: 65 years



He has no formal education, knows to speak Gujarati. He was taught Herbal medicine by His father, however he has not taught this to any anybody so far. He is practising herbal medicine nearly 20 years. He is a specialist in performing Dungaar Pooja and conducts about 45 Dungar Poojas a year. People from Bombay, Nandurbar, Nasik ,Surat etc invite him to perform Dungar Pooja and also for treatment.
15. Chambarbahi Vashavasrao Powar.

Village Pimpr; Age: 75 years

He is no school education, speaks only Dangi. His father taught him the use of medicinal plants. Normally one or two patients come to him per day for treatment. He was not very ready to reveal much about his medicinal practices.



16. Pratapbhai Chambarbahi Powar



Village Pimpri; Age: 40 years

He has no formal education, does majuri for his livelihood. He learned Herbal medicine from his father. He considers rats meet as medicinal because rat eats all kinds of roots, rhizome,

grains,etc.

17. Ramubhai Chimnabhai Powar

Village: Thunduniya; Age: 50 years

He has no school education and speaks only Dangi. He has learned Herbal medicine from his father and has taught this practise to his son.



18. Ratenbhai Jinabhai Mokasi

Village: Chichinagautta ; Age: 55 years



He works as a Forest guard in Chichinagautta. He began to practise herbal medicine already as a youngster. Nanyabhai Pandubhai Bagarya, the village Bhagat taught him the use of different kinds of medicinal plants. He has not shared his knowledge with any one else so far.

19. Sukarbhai Valalbhai Gangoda.

Village: Halmudi; Age: 65 years

He has studied up to 4th standard in Marathi medium and is fluent in Kokani also. He learned herbal medicine form his father, but has not taught this to anyone as his children have no interest in this field. Depending upon the season an average of two to three



persons come to him for treatment everyday. Patients from Vyara, Unai and Vansda also come to him for treatment.

20. Mangubhai Lahanubhai Powar:

Village: Thunduniya; Age: 50 years

He has studied up to 3rd standard. Mangubhai's father, before his death passed his knowledge of herbal medicine on to his son, Mangubhai. He has kept Sundays for his medical practise as on other days he is busy in his fields. Many patients, also from Surat, Vyara, Songad, etc. come to him for treatment. He is famous for treating sterility and impotency.

21. Janakbhai Ganubhai Kamadi.

Village: Bapkal; Age: 70 years

He is a farmer and has no formal education. According to his story, when he was about

14 or 15 years old, in his dream he saw a man with beard and long hair and a staff in his hand. He woke him up from his sleep and showed him five plants and told him to use them to cure people. He claims to have dreams every now and then through which he comes to



know more and more plants to cure many sicknesses. He is well known in the whole of Shamgahan area. He is specialized in curing sterility and impotency. Many women seem to have got children because of his treatment. He and his son together collect medicinal plants, prepare the medicines and store them.

22. Saliben Arjunbhai Dhule.

Village: Burapani; Age: 40 years



She is an illiterate housewife. She learned herbal treatment from her grand father. She is a specialist in treating for Dog bite (rabies). Her husband helps her in her medicine-work.

23. Iktyabahi Jivlyabahi Powar.

Village: Chirapada ; Age: 75 years

His father taught him the medical practices. He already began giving medicines as a young man. Many people from his own village and from the near by villages come to him for treatment.



24. Ramdasbhai Pandyabhai Gangoda

Village: Chirapada; Age: 40 years



He is a farmer and also goes for construction work. He learned herbal medicine from his father-in-law and is practising since 20-25 years. Many patients come to him for various kinds of treatments.

25. Aavjabhai Ramubhai Chavhan

Village: Shamghahan; Age: 50 years

He works as a chokidar for PWD at Shamghahan. He is very famous for treating fractures, both in humans and in animals. His father taught him how to do it and he is doing this since about fifteen years. He gets at least two to three cases everyday to attend to.



26. Devaji Ramjubahi Deshmukh

Village: Gundvahal; Age: 65 years



He is a farmer and has learned herbal cures from his father. Many patients from near by villages come to him for treatment.

27. Gangabhai Natyabhai Vagmar.

Village: Gundvahl; Age: 75 years

Besides his father, who initiated him to herbal medicine, he has had six gurus also. He began practising herbal cures at an early age of 14-15 years.



28. Mohanbhai Bennai Thakare:

Village: Gundvahal; Age: 40 years



He learned about herbal medicines by seeing others practising it and through his own practice.

29. Vasantbhai Ranjibhai Powar

Village: Nalagchod; Age: 70 years

His father taught him many of the medical practices.

He also learned through dreams.

Many people come to him for the treatment.



30. Jainaben Gangabhai Chudhari



Village: Nalagchod; Age: 40 years

She is an illiterate. Her husband taught her how to use the medicinal plants. Many people come to her for treatment.

31. Kasiya Arjunbhai Deshmukh

Village: Soupdahad; Age: 60 years

His father taught him how to use various medicinal plants for different kinds of ailments. Already as boy he started treating many patients. He is well known for treating patients for snake bites. People from far and near by villages call on him for the treatment.



32. Abaji Julpia Valevi

Village: Bapkal; Age: 75 years



He had many gurus who taught him how to use the medicinal plants and also to perform different tyres of rituals. He learned about medicinal plants also from his father. Many people come to him for treatment.

33. Sakliram Khandubhai Deshmukh

Village: Ranpada; Age: 75 years

He is a farmer with no formal education. His father-in- law taught him the herbal cures. He is well known for treating animals. People from Maharashtra, and other parts of Gujarat come to him for the treatment.



34. Sukriyabhai Janiyabhai Chaudhari.

Village: Dhumkal; Age: 45 years



He learned herbal cures from many different medicine men. Since past 15- 20 years he is giving medicines and patients from the close by villages and district come to him for treatment.

35. Thukarambhai Ramubhai Chauhan

Village: Shamghahan; Age: 50 years



He learned herbal cures from a gruru and started practising it at a very young age.

36. Suliyabhai Ukardabhai Bhoye.

Village: Kotba; Age: 45 years



He has studied up to 8th standard and is a farmer. He learned herbal medicine from his brother and stared practising only recently.

37. Jayrambhai Sukarambhai Kuver.

Village: Gana; Age: 40 years

He is a farmer and has studied up to 6^{th} standard. His grand father taught him herbal medicines.



38. Bapubhai Janubhai Chavariya



Village: Gaygotten; Age: 50 years He has no formal education and is a farmar. His uncle taught him the medical practices.

39. Ashokbhai Krushnabhai Galvi

Village: Subir; Age: 54 years

He has studied up to 7th std and works in Public Work Department (PWD). His father taught him how to use medicinal pants for curing diseases.

40. Sitaben Lasebahi Gayakwad

Village: Savardakasad; Age: 60 years



Her elder brother, Kanjaru Bhedu Powar taught her the practice of herbal medicine. She treats many patients for various sicknesses and is a well known medicine woman. People from far away places like Mehsana, Ahmedabad, Surat, etc. and also from Maharashtra come to

her for treatment.

41. Ramubhai Somabhai Chauharia

Village: Dhuda; Age: 45 years



He has studied up to 4th standard. His father taught him how to use medicinal plants for the treatment. Many patients come to him for treatment. He is specialist in treating epilepsy patients.

42. Mainuben Jayantibhai Galvi



Village: Subir; Age: 35 years

Mainuben is a housewife and claims to have learned about herbal medicine through a dream. She is a specialist in treating Eczema patients.

Her husband assists her in her medicine work.

Hope that the Contribution of these healers' medical practises brought light to both therapeutic and ethnobotanical documentation of Dangs. The result of the work carried out is in the following chapter.

PREPARATION OF HERBAL MEDICINE AND TREATMENT

Ethno therapeutic practices of the research work.

4.1 INTRODUCTION

The use of plant remedies to strengthen weakened body systems, control symptoms and boost the body's own healing powers is perhaps the oldest form of medicine. Herbalists maintain that the natural balance of compounds in plants provides a more effective means of restoring health than synthesized, single- ingredient drugs, as prescribed in orthodox modern medicine.

It is interesting to know how the local names of the plant vary slightly from area to area or person to person. The local names are mentioned in the text as they were referred by the healers. So there will be 3-4 local names for a particular plant. The investigator could not relate the botanical names to the local names, where specimens are not available. It is also interesting to observe the plants that they use for a particular treatment. The traditional healers use external structure or appearance of a plant or plant part, which resembles the shape of different organs of the body part for a particular disease. For example *Viscum* looks like the joints of human skeleton. So they use it to make massage oil for joint pain or healing bone fracture. It is also important that on which plant parasites or orchids that are used for medicine grow. *Adhatoda vasica* which is locally known as Nagchampo is used for snake bite. The flowers of this plant look very much like the mouth of a cobra.

In this chapter the result of the research is presented. For various ailments various type of medicinal plant combination is used. So the data is presented according to the diseases vice. Various ailments are numbered and different type of treatment given by different medicine men are put together. The presentation of the research is put in medicinal

plants are categorized into various sicknesses groups. The plants that are used for a particular sickness are put together and numbered. The local name is mentioned first, followed by botanical name and the parts used are mentioned. At the end of it a star (*) with a particular number is shown to indicate the source from whom is the information, was gathered. If the same information for a particular disease was given by more healers then it is attached with numbers pertained to the healers who provided the information. The Medical terms of the sicknesses which were not clear are recorded in local name with an English explanation in the bracket.

4.2 EHTNOTHERAPUTIC PRACTISES

The preparations of medicine are shown in this chapter. The sicknesses are grouped into **21 different Titles** and are numbered. In case for a particular sickness many practices were recorded, they are numbered in *Roman* letters and at the end of each information a star sign is put to indicate the source of the information i.e. name addresses of the medicine person. In the thesis summary data presentation for aches and pains are shown to indicate how the whole result is presented. Likewise all the other information various title diseases are recorded.

<u>1. ACHES AND PAINS</u>

1.1 STOMACH ACHE

i. Kuda, Holarrhena antidysentrica, Bark *3

Preparation: Bark is crushed and soaked in water for one to two hours and then the extract is squeezed out, filtered and used.

Dosage: Two table-spoonfuls each, in the morning and in the evening.

ii. Sag, Tectona grandis, Bark *13

Preparation: The bark of teak is crushed and soaked in water about an hour and the extract is taken.

Dosage: Two tea spoons full twice a day, in the morning on empty stomach and in the evening after the meals.

iii. Jangli pyaz, Urginea indica, Bulb *1

Preparation: The bulb is cut into two and made hot.

Application: Heated bulb-half is pressed on the part of the stomach where it pains.

1.2 LEFT SIDE STOMACH PAIN

i. Papayu, Carica papaya, Raw fruit *4

Preparation: Raw papaya fruit is cut longitudinally without removing the skin.

Dosage: A whole piece, about one inch broad is to be eaten.

ii. Boru, Sorghum helipens, Root *42

- **Preparation:** The root is crushed and boiled in two cups of water, and the extract is taken.
- **Dosage:** Thrice a day, in the morning on empty stomach, in the afternoon and at night after the meals.

1.3 HEADACHE

i. Akhvel, Alangium salvifolium, Leaves

Karanj, Pongamia pinnata, Leaves

Limda, Azadirachta indica, leaves

Ranval, Pteramnus labialis, leaves

Nirgul, *Vitex nigundo*, Leaves *11

Preparation: All these leaves are crushed and put in water and the water is boiled.

Application: Bathed once a day with the water after cooling.

ii. Chilarvel, Acacia pinnata, Small Stem *41

Preparation: Small pieces of the stem are prepared

Application: Three pieces are tied together and then it is tied on the neck.

<u>1.4 MIGRAINE</u>

i. Madhul, Lannaea coromandelica, Leaf stalk *12

Preparation: A piece about one and half cm. is cut from the stalk and is tied with thread.

Application: The piece is tied around the neck.

ii. Bohada, Terminalia belirica, Dry branch

Sisam, Dalbergia sissoo, Leaves *8

Preparation: The small dry stem of *bohada* is smoked and crushed together with *Sisam* leaves.

Application: A drop of the extract is squeezed into the nose.

iii. Marchi, Capsicum annum, Stem *9

Preparation: The stem of a more than one year old chilly plant is taken and five pieces of 1.5cm length is cut from it tied together with a thread.

Application: The bundle of the five pieces is hanged on the painful side.

iv. Akhvel, Alangium salvifolium, Leaves *10

Preparation: One full leaf and the vertical half of anther are taken. It is folded and tied with a whit thread.

Application: It is tied on the ear on the side where the head pains.

v. Moevel, Cryptolepis buchanani, Leaf

Haldu, Adina cordifolia, Leaf *14

Preparation: One full leaf and half of another is taken and crushed together.

Application: The crush is smelled and sneezed out.

vi. Morvai, Clematis hedisarifolia, leaves *16

Preparation: Few leaves are squeezed and the extract is removed.

Application: One or two drops are put in the nose.

vii. Marchikanth, Vigna trilobata, Rhizome *40

Preparation: A small piece of *Marchikanth* rhizome is procured.

Application: The rhizome piece is tied to the ear on the same side where the head pains.

<u>1.5 TOOTHACHE</u>

i. Aval, *Emblica officinalis*, Seed and bark *22

Preparation: Some seeds and a piece of the bark of *Aval* are crushed together into a mix.

Application: The mix is kept on the affected tooth for about 2-3 hours.

ii. Babad, Accia nilotica, Bark *42

Preparation: A small piece of the root is crushed and boiled in a glass of water and kept to be cold.

Application: The preparation is held in the mouth for 5-10 min. each 2-3 times a day, especially before going to sleep.

iii. Dhati, *Baliospermum montanum*, Root *11

Preparation: A piece of the root is procured and one end of it is crushed.

Application: Teeth are brushed daily with this root for a week.

1.6 BODY PAIN

i. Rohan, *Soymida febrifuga*, Bark

Kakad, Garuga pinnata, Bark

Kosim, Schleichera oleosa, Bark *15

Preparation: Equal portions of all these barks are crushed and put in water.

Dosage: Half a cup of the extract is to be drunk

Application: Water is boiled with the crushed mixture of all the three barks, cooled and bath is taken with the water.

ii. Nirgud, Vitex nigundo, Leaves

Limda, Azadirachta indica, Leaves *19

Preparation: Bathing water is boiled with these leaves and cooled.

Application: Bathing with the cooled water.

iii. Kumbi, Careya arborea, Bark *20

Preparation: The bark is crushed and put in water for few minutes.

Dosage: Two spoon full to be drunk twice a day.

iv. Kosim, Schleichera oleosa, Seed-oil *15

Preparation: Oil is extracted from Kosim seeds by distilling them.

Application: The body is massaged with Kosim oil. Also it is applied in the mouth when having blisters.

v. Halund Keri, *Clematics* sp. Root *21

Preparation: The outer peel of the root is taken, dried and powdered.

Dosage: One teaspoon of the powder each twice day to be consumed; in the morning on empty stomach and in the evening after the meals.

<u>1.7 BACKACHE</u>

i. Nanu Ekaru, Haplantllus tentaculatus Leaves *26

Preparation: 5-6 leaves are crushed and made into a paste.

Application: The paste is applied on the back once a day for three days.

ii. Soot (Aadu), Zingiber officinale, Rhizome

Gokharu, Tribulus terrestris, Fruit *37

Preparation: Equal portions of both plant parts are crushed and boiled with one glass of water.

Dosage: Half a cup of the extract drunk twice a day, in the morning on empty stomach, and in the evening after the meals.

<u>1.8 ARTHRITIS (JOINT PAIN)</u>

i. Rui, Calotropis gigantea, Látex *4

Preparation: Latex is collected by making incisions on the stem of Rui

Application: The latex is applied on the painful joints.

ii. Polas, *Butea monosperma*, Gum *5

Preparation: The gum is dissolved in half a cup of water.

Dosage: Drunk twice a day, in the morning on empty stomach, and in the evening after the meals.

iii. Sadada, Terminalia crenulata, Bark *8

Preparation: The bark is crushed and bundled in a piece of cloth and warmed. **Application:** The painful joints are pressed with the warm bundle.

iv. Bendvel (Sakhaliya) on Dhaman or Temrun, *Viscum articulatum on Grewia tiliifolia* or on *Diospyros melanoxylon*, Whole plant*11

Preparation: Bendvel is crushed and put in water.

Dosage: Half a cup of the extract drunk twice a day; in the morning on empty stomach, and in the evening after the meals.

Application: Water is boiled with crushed Bendvel, cooled and bathe is taken with it.

v. Bhui umbari, Ficus hispida, Root

Upersadi, Hemidesmus indicus, Root

Ingi, Caseria tomentosa, Root *17

Preparation: The plant parts are crushed and kept in water for few hours, the extract is squeezed

Dosage: Half a cup of the extract is to be drunk twice a day; in the morning on empty stomach, and in the evening after the meals.

vi. Tettu, Oroxylum indicum, Bark

Beli, Aegle marmelos, Leaves

Bhangutta, Hyptis sualens Leaves *21

Preparation: These mixtures are crushed, tied in a piece of cloth and dipped in hot water.

Application: Bandaged with the mix once a day.

vii. Bendgul on Temrun, Dendrophthoe falcata on Diospyros melanoxylon, Bark of both *24

Preparation: Whole Bendgul is crushed and boiled for an hour.

Dosage: Half a cup of the extract is drunk twice a day; in the morning on empty stomach, and in the evening after the meals.

Application: Water is boiled with crushed Bendgul, cooled and bath is taken with the water.

viii. Chinch, Tamarindus iindica, Leaves *32

Preparation: Chinch leaves are crushed and mixed with white ants' mud.

Application: The painful joint is bandaged with this mixture.

ix. Soot (Aadu), Zingiber officinale, Rhizome

Gokharu, Tribulus terrestris, Fruit *37

Preparation: Equal amount of both plant parts are crushed and boiled in a glass of water.

Dosage: Half a cup of the extract to be drunk twice a day; in the morning on empty stomach, and in the evening after the meals.

<u>1.9 BURNS</u>

i. Karphot, Aloe vera, Leaf *4

Preparation: Fleshy leaves are cut and the gel is removed.

Application: The gel is applied on the burn every half an hour.

ii. Aashi, Ventilago denticulata, Bark *13

Preparation: The bark is crushed and made into a paste.

Application: The paste is applied every half an hour.

iii. Nilisoti, Dalbergia volubilis, Leaves *14

Preparation: The leaves are crushed and the extract is warmed and cooled.

Application: The formed gel is applied on the burn every half an hour.

iv. Nilisoti, Dalbergia volubilis, Leaves

Mahuda, Madhuca indica, Phool daru *40

Preparation: The leaves are crushed and the extract is warmed and cooled.

Alcohol is prepared from Mahuda flowers.

Application: The burned part is washed with *Phooldharu* then the *Nilisoti* gel is applied on the burn every half an hour.

1.10 CUTS

i. Safed bondar *Lagerstroemia lanceolata*, Leaves *31

Preparation: Leaves are crushed and made into a paste.

Application: The paste is applied on the cut.

ii. Kodi, Wrightia tinctoria, Latex

Sadada, Terminalia crenulata, Bark *34

Preparation: A small piece of *Sadada* bark is powdered the extract is removed. To the extract few drops of *Kuda* kates is added.

Application: This mixture is applied on the cut twice a day.

<u>1.11 WOUNDS</u>

i. Jangalibhindi, Azanza lampas, Twigs *20

Preparation: Leaves together with tender stem are crushed and the extract is collected.

Application: The extract is applied on the wound.

ii. Tan, Cocculus hirsutus, Leaves

Kali karav, Eranthemum roseum, Leaves *26

Preparation: A paste is made by crushing equal number of leaves of both the plants.

Dosage: The paste is applied on the wound.

iii. Jangali Bhendi, Azanza lampas, Root *3

Preparation: Root scrape iscollected.

Application: The collected scrape is tied on the wound.

1.12 FRACTURES

i. Udad, *Sterculia villosa*, Root *1*32*18

Preparation: Root is crushed and made into a paste till it becomes jelly.

Application: The jelly is applied on the fracture after setting the bone properly. Application is once a day, preferably in the morning.

ii. Dhudari, Euphorbia hirta, Root

Polas, Butea monosperma, Bark *2

Preparation: *Dudari* root and *Polas* bark are crushed together and applied on the fractured place. Also the mixture of the two is crushed well and the extract is removed

Dosage: Half a cup of the extract is taken twice a day; in the morning on empty stomach, and in the evening after the meals.

iii. Nigundo, Vitex nigundo, Leaves *9

Preparation: The leaves are crushed with salt and made into a paste,

Application: Bandaged with it after setting the bones properly.

iv. Sagava (Shegalu), Moringa oleifera, Bark *9

Preparation: The leaves are crushed and made into a paste.

Application: Bandaged with it after setting the bones properly.

v. Bhootjad, Ailanthus excelsa, Bark

Madhul, Lannaea coromandelica, Bark

Tan velo, Cocculus hirsutus, Leaves

Ranbhendi, Azanza lampas, Root

Liliamba (Haldar), Curcuma longa, Rhizome *10

Preparation: A mixture of all these is crushed well and made into a paste.

Application: Tied on to the fractured part 2-3 times a day

vi. Udad, Sterculia villosa, Root

Patherphodi, *Tridax procumbens*, the whole Plant *14

Preparation: These plant parts are crushed and made into a paste with *lakh mati*.

Application: Bandaged with the paste after setting the bone properly.

vii. Udad, Sterculia villosa, Root

Amba haldar, Curcuma amada, Rhizome

Preparation: The mixture of both is crushed and made into a paste.

Application: Bandaged with the paste after setting the bones properly.

viii. Kadvai, Root

Udal (Udad), Sterculia villosa, Root

Digad, Dioscoria oppositifolia, Rhizome

Karbat, Grewia hirsuta, Root;*24

Preparation: All the roots are crushed together and made into a paste.

Application: Bandaged with the paste after setting the bones properly. After 7-8 days if it is needed the first bandage is removed and another bandage is made.

ix. Kandol, Sterculia urens, Bark

Udada, Sterculia villosa, Bark

Nilisoti, Dalbergia volubilis, Leaves

Rakath rohidi, Tecomella undulata Bark *29

Preparation: Equal portions of the above mentioned plant parts are dried and powdered. Then the powder is soaked in water and made into a paste.

Application: The paste is applied on the fracture after setting the bone properly.

x. Udada, Sterculia villosa, Root

Madhul, Lannaea coromandelica, Root

Nimbara, Melia composita, Bark

Choki bendi, Hibiscus esculentus Root

Kakod, Garuga pinnata, Bark *31

Preparation: Equal portions of these plant parts together with a crab is crushed and made into a paste.

Application: Bandage is made with the paste and Bamboo strips are used as support.

Bandage is removed after 8 days. If it is needed one more bandage is made.

xi Kali bondar, Lagerstroemia parvifolia, Leaves *35

Preparation: These leaves are crushed and mad into a paste.

Application: Bandaged with it after setting the bone properly.

xii. Udada, Sterculia villosa, Root

Digad, Dioscoria oppositifolia, Tuber *40

Preparation: These plant parts are crushed and made into a paste.

Application: Bandaged with it after setting the bone properly.

xiii. Madhul, Lannaea coromandelica, Bark

Elebivula, *Millettia racemosa*, Bark

Udala, Sterculia villosa, Root *41

Preparation: These plant parts are crushed and made into a paste.

Application: Bandaged with it after setting the bone properly.

xiv. Rakath rohidi, Tecomella undulata, Bark

Udal, Sterculia villosa, Root

Kakod, Garuga pinnata, Bark

Madhul, Lannaea coromandelica, Bark *36

Preparation: Equal portions of these plant parts together with a crab is crushed and made into a paste.

Application: Bandage is made with the paste and Bamboo strips are used as support.

Bandage is removed after 8 days. If it is needed one more bandage is made.

xv. Polas, Butea monosperma, Root

Kahndol, Sterculia urens, Bark

Udada, Sterculia villosa, Root

Haldar Curcuma longa, Rhizome *25

Preparation: Equal portions of the above mentioned plant parts are crushed, dried and powdered. The powder is made into a paste by adding some water.

Application: Bandage with the paste, Bamboo strips are used as support.

The Bandage is removed after 8 days. If needed one more bandage is made.

1.13 SPRAINS

i. Mahu, Madhuca indica, Flower *8

Preparation: The flowers are warmed

Application: The warmed flowers are tied on the sprained part.

ii. Rohan, Soymida febrifuga, Bark *20

Preparation: A piece of bark is crushed and made into a paste.

Application: The paste is applied on to the sprain.

1.14 MASSAGE OIL FOR ALL KINDS OF PAINS & FRACTURES

i. Sakhaliya on Dhaman, Viscum articulatum on Grewia tiliifolia,

Whole plant

Tulsi, Ocimum tenuiflorum, Leaves and stem

Barmasi, Catharanthus roseus, Leaves

Singh, Arachis hypogaea, Oil *10

Preparation: Equal portions of these plant parts are crushed and boiled in ground nut *(Singh)* oil.

Application: The painful part is massaged gently, before going to sleep for about 4-5 days.

1.15 FOR ALL KINDS OF AILMENTS

i. Arjun Sadad, *Terminalia arjuna*, Bark *24

Preparation: A piece of the bark is crushed and soaked over night in a glass of water.

Dosage: The extract is drunk in the morning on empty stomach.

ii. Nirgud, *Vitex negundo* Leaves

Preparation: The leaves are collected

Application: It is spread on the bed before going to sleep.

2. URINARY PROBLEMS

2.1 PAINFUL MICTURITION, BURNING DURING MICTURITION

i. Karvanda, Carissa carandas, Root

Bívala, Pterocarpus marsupium, Bark

Aran, Ricinus communis Root

Kher, Acacia catechu, Gum *8

Preparation: These plant parts are crushed and soaked in a glass of water for an hour.

Dosage: The extract is drunk twice a day with *Kadisakar*, in the morning on empty stomach and in the evening after the meals.

ii. Aran, Ricinus communis, Root *9

Preparation: The root is crushed and soaked in water about 2-3 hours.

Dosage: Half a cup of it is drunk twice a day, in the morning on empty stomach and in the evening after meals.

iii. Nilisoti, Dalbergia volubilis, Leaves

Beli, Aegle marmelos, Leaves

Ilangi, Caseria tomentosa, Leaves *36

Preparation: About 10-15 leaves each are warmed and the extract is removed.

Dosage: Half a cup of it drunk twice a day, early morning on empty stomach and in evening after the meals.

iv. Koluskatta, Asteracantha longifolia, Root *36

Preparation: The root is crushed together with a crab and then roasted.

Dosage: This roasted mixture is eaten with *roti* twice a day, for about a week.

v. Safed bondar, Lagerstroemia lanceolata, Bark

Arani, Ricinus communis, Root

Tettu, Oroxylum indicum, Bark

Choki Bendi, Hibiscus esculentus, Root *39

Preparation: These plant parts are crushed and soaked in water for about an hour.

Dosage: One tablespoon full of the extract is drunk thrice a day; in the morning on empty stomach, in the afternoon and night after the meals, for a week.

vi. Arand, Ricinus communis, Root *21

Preparation: The root is crushed and soaked in water for some time.

Dosage: Half a cup of the extract is drunk twice a day; in the morning on empty stomach and in the evening after the meals.

vii. Bivula, Pterocarpus marsupium, Bark

Nilisoti, Dalbergia volubilis Stem

Arani, *Ricinus communis*, Root *29*30

Preparation: Three to four grams each of the above mentioned plant parts are crushed and soaked in water for 2-3 hours.

Dosage: Half a cup of the extract is drunk twice a day, in the morning on empty stomach and in the evening after the meals

2.2 URINE: EXCESSIVE YELLOW COLOURING

i. Aran, Ricinus communis, Root

Tettu, Oroxylum indicum, Bark *39

Preparation: These plant parts are crushed and soaked in a glass of water and the extract is removed.

Dosage: One table spoonful twice a day, in the morning on empty stomach and in the evening after the meals. This treatment is continued for a week.

ii. Tettu, Oroxylum indicum, Bark

Nilisoti, Dalbergia volubilis, Leaves *41

Preparation: Equal portions of these plant parts are crushed and boiled with a glass of water. The extract is solidified when it is cooled.

Dosage: One table spoonful twice a day, in the morning on empty stomach and in the evening after the meals.

2.3 URINE: COLOUR TURNING FROM RED TO YELLOW

i. Waltham, Vetiveria zizanioides Root

Nilichotti, Dalbergia volubilis, Laves

Jangali Bhendi, Azanza lampas, Root *7

Preparation: Equal portions of these plant parts are crushed and soaked in water for some time and the extract is removed.

Dosage: Half a cup of it is drunk in the morning on empty stomach and in the evening after the meals.

ii. Kumbi, Careya arborea, Bark

Bivula, Pterocarpus marsupium, Bark

Jangalibhendi, Azanza lampas Root

Waltham, Vetiveria zizanioides, Root

Chilar, Acacia pinnata, Bark

Cahv, Ensete superbum, Sap *42

Preparation: Equal portions of these plant parts are crushed and boiled with two cups of water and then the extract is removed.

Dosage: Half a cup of the extract is drunk thrice a day, in the morning on empty stomach, in the afternoon and at night after the meals.

iii. Kumbhi, *Careya arbora* Bark

Bhendi, Hibiscus esculentus Bark

Dava Kher, Acacia polyantha, Bark *1

Preparation: Equal portions of these plant parts are crushed and soaked in a cup of water for some time and then the extract is removed.

Dosage: One table-spoon full twice a day, in the morning before sunrise on empty stomach, in the night before going to sleep.

iv. Pathal Dalbergia paniculata, Bark

Vad, Ficus bangalensis, Latex

Koradu, Kuharu or dev kuharu, Bauhinia varegata, Root *38

Preparation: These plant parts are crushed and soaked in some water, and then the extract is removed. Few drops of *Vad* Latex are added to this extract.

Dosage: One table spoonful twice a day; in the morning on empty stomach and in the evening after the meals.

2.4 KIDNEY STONE

i. Arjun Sadad, Terminalia arjuna, Bark

Bivula, Pterocarpus marsupium, Bark

Polas, Butea monosperma, Bark *9

Preparation: Equal amounts of these barks are crushed well and soaked in water over night.

Dosage: Half a cup of it is drunk in the morning on empty stomach and in the evening after the meals.

ii. Bhabali lili, Accia nilotica, Bark

Sag, Tectona grandis, Bark

Kher, Acacia catechu, Bark

Ragatrohidi, Tecomella undulata, Bark

Halder, Curcuma longa, Bark

Jambala, Syzygium cumini, Bark

Khakhra, Butea monosperma, Root

Umber, *Ficus racemosa*, Root *10

Preparation: Equal amount of these plant parts are crushed and soaked in four bottles of water. It is boiled and made up to one bottle and is stored.

Dosage: Half a cup of it is drunk twice a day, in the morning on empty stomach and in the evening after the meals. This is continued unto five days.

iii. Bio, (Bivla), Pterocarpus marsupium, Gum & Bark

Polas, Butea monosperma, Bark *21

Preparation: The barks are crushed and boiled well and the extract is preserved in a bottle. Some *Bivula* gum is added to this extract.

Dosage: One tablespoon full is drunk twice a day, in the morning on empty stomach and at night after the meals.

iv. Polas, Butea monosperma, Root;

Jangali Bhendi, Azanza lampas, Root

Echan, Acacia sp, Bark*26

Preparation: Equal portions of the above mentioned plant parts are crushed and soaked in a glass of water for about an hour.

Dosage: Half a cup of the extract is drunk twice daily; in the morning on empty stomach, in the evening after the meals.

v. Bio, Pterocarpus marsupium, Gum *26

Preparation: Bio Gum is dissolved in half a cup of water.

Dosage: Half a cup of it is drunk twice a day, in the morning on empty stomach and in the evening after the meals.

vi. Pipal on Polas, Ficus religiosa on Butea monosperma, Both barks *34

Preparation: These plant parts are crushed and soaked in a glass of water for about 2-3 hours. The extract is removed.

Dosage: Half a cup of it is drunk twice a day, in the morning on empty stomach and in the evening after the meals.

vii. Neem, Azadirachta indica, Leaf *35

Preparation: Fresh leaves are collected.

Dosage: $1^{1}/_{2}$ *Neem* leaf is eaten on empty stomach for 4-5 months.

<u>3. BLOOD RELATED PROBLEMS</u>

3.1 LOHI TUTAVU

i. Poskatta, Asteracantha longifolia, Root *2

Preparation: This plant part is crushed and boiled in a cup of water.

Dosage: The broth is consumed twice a day with little sugar, in the morning on empty stomach and in the evening after supper.

3.2 LOW BLOOD COUNT

i. Tettu, Oroxylum indicum, Bark *40

Preparation: The bark is crushed and soaked in one glass of water for about 12 hours and the extract is removed.

Dosage: Half a cup of the extract is drunken trice a day, in the morning, in the afternoon and at night.

3.3 BLOOD CLOTS

i. Haldar, *Curcuma longa*, Rhizome

Rakathrohidi, Tecomella undulata, Bark *31

Preparation: Rakathrohidi's bark is boiled with a lot of water.

Dosage: Bathed with this water once a day. Also one glass of this extract is drunk in the morning on empty stomach. A piece of raw *halder* is eaten together with meals.

3.4 DIABETES

i. Bio, Bivla, Pterocarpus marsupium, Gum & Bark

Polas, Butea monosperma, Bark *21

Preparation: The barks are crushed and boiled well and the extract is preserved in a bottle. Some *Bivula* gum is added to this extract.

Dosage: One tablespoon full is taken twice a day, in the morning on empty stomach and at night after the meals.

ii. Biyo, *Pterocarpus marsupium*, Gum *18

Preparation: One gram of Biyo gum is dissolved in a glass of water.

Dosage: Half a cup of it is drunk twice a day, in the morning on empty stomach and in the evening after the meals.

iii. Tettu, Oroxylum indicum, Bark

Pathal, Dalbergia paniculata, Bark;

Bahava, Cassia fistula, Bark;

Kumbhi, Careya arborea, Bark;

Varsh, Heterophragma quadriloculare, Bark *40

Preparation: These plant parts are crushed and soaked in one glass of water for about 12 hours. Then the extract is removed.

Dosage: Half ca up of it is drunk twice a day, in the morning on empty stomach and in the evening after the meals.

4. HEART AND CHEST PROBLEMS

4.1 HEART ATTACK

i. Dedari, Seeds *18

Preparation: The seeds are dried and powdered.

Dosage: One teaspoonful of the powder each is consumed in the morning and in the evening.

4.2 UNEASINESS IN THE CHEST

i. Sardanatad, Tacca leontopetaoides, Tuber

Upersadi, Hemidesmus indicus, Root

Jangali Shegu, Moringa concanensis, Bark *40

Preparation: These plant parts are crushed and soaked in one glass of water for about 2-3 hours and the extract is removed.

Dosage: Half a cup of the extract is drunk three times a day, in the morning on empty stomach, in the afternoon and at night after the meals.

4.3 CHEST PAIN

i. Shengal, *Bauhinia racemosa*, Leaves *32

Preparation: Three leaves are collected.

Usage: These leaves are chewed twice a day.

<u>4.4 COUGH</u>

i. Kher, Acacia catechu, Root *1

Preparation: Root is crushed and soaked in half a cup of water for about an hour and the extract are removed.

Dosage: One tablespoon full is taken on empty stomach in the morning and one spoon full in the afternoon and at night after the meals.

ii. Kher, Acacia catechu, Root *4*38

Preparation: The root is crushed and soaked in a cup of water for an hour.

Dosage: The extract is drunk twice a day morning on an empty stomach and in the evening after the meals.

iii. Elea vívala, Millettia racemosa, Bark *8

Preparation: The bark is dried and powdered and stored in a bottle. One tablespoon full is soaked in a glass of water and kept over night.

Dosage: The extract is drunken early morning on empty stomach. This should be continued for about five months.

iv. Dukarkanth, Nervillia sp., Rhizome *20

Preparation: The rhizome is collected and washed.

Dosage: The rhizome is chewed twice a day.

v. NanaBor, Zizyphus nummularia, Bark

Ranval, Pteramnus labialis, Root *31

Preparation: Equal parts of the above mentioned plant parts are crushed well, soaked in water for about an hour, and then the extract is removed.

Dosage: Give to the patients three times a day, early morning in empty stomach, afternoon and at night after the meals.

vi. Bora, Ziziphus mauritiana, Bark

Hirada, Terminalia chebula, Fruit *32

Preparation: The above mentioned plant parts are crushed and powdered together.

Dosage: One teaspoon full is taken twice a day.

vii. Aavala, Emblica officinalis, Bark

Bora, Zizyphus mauritiana, Bark

Halundkeri, Clematis sp., Root *34

Preparation: These plant parts are crushed and soaked in a glass of water for about 2-3 hours. Then the extract is removed.

Dosage: Half a cup of it is drunk twice a day, in the morning on empty stomach and in the evening after the meals.

viii. Bivula, Pterocarpus marsupium, Bark or Gum *42

Preparation: This bark is crushed and boiled with two cups of water, and then the extract is removed.

Dosage: Half a cup of it is drunk thrice a day, in the morning on empty stomach, in the afternoon and at night after the meals.

4.5 CONGESTED CHEST

i. Khardodi, Root

Kadavai, Bark

Rui, Calotropis gigantea, Bark

Morvai, Clematis hedisarifolia, Root

Pan, Piper betle, Leaves *1

Preparation: The above mentioned plant parts except *Pan* Leaves are crushed and made into a mixture. The mixture is taken on Pan Leaves.

Dosage: On the 1st day, in morning one teaspoonful of the mixture in seven *Pan* Leaves is chewed and swallowed on empty stomach.

 2^{nd} day instead of seven leaves, in six leaves the mixture is taken on empty stomach as on the 1^{st} day.

 3^{rd} day taken in 5 leaves, 4^{th} day in 4 leaves; 5th day in 3 leaves, 6^{th} day in $2\frac{1}{2}$ leaves; 7^{th} day in 2 leaves; 8^{th} day in $1\frac{1}{2}$ leaves; 9^{th} day in one leaf and finally on the 10^{th} day in $\frac{1}{2}$ of a leaf the plant mixture is taken.

4.6 ASTHMA

i. Dham pan, *Bryophyllum calycinum*, Leaves *2

Preparation: The burned off wick from a primes and *Dham* pan are crushed together and soaked in a cup of water and the extract is removed.

Dosage: The extract is drunk once a day.
ii. Pipal on Humbh, Ficus religiosa on Milliusa tomentosa, Pipal bark

Pipal on Polas, Ficus religiosa on Butea monosperma, Pipal bark*8

Preparation: These barks are crushed and soaked together in water for some times. And then the extract is removed.

Dosage: 2-3 table spoonful of the extract is taken in morning and in the evening.

iii. Bhiyo, Pterocarpus marsupium, Gum *10

Preparation: The gum which is formed naturally on the root is collected. 2gms of it is dissolved in half a cup of water.

Dosage: Half a cup of this is taken twice a day. This should be continued for about 15 days.

iv. Jadla lasunth, Vanda roxburghii, Ariel root *18

Preparation: Some root is crushed and soaked in a cup of water for some time.

Dosage: Half a cup of the extract is drunk twice a day.

v. Ranval, Pteramnus labialis, Root;

Ranchavla, Ensete superbum, Root *29

Preparation: About 3-4gms each of the above mentioned plant parts are crushed and kept in a glass of water about 2-3 hours.

Dosage: Half a cup of the extract is drunk twice a day, in the morning on empty stomach and in the evening, after the meals.

vi. Jangali shegu, Moringa concanensis, Bark

Behada, Terminalia belirica, Bark *31

Preparation: Seven or Nine pieces each of both the barks of about 1¹/₂ cm long are tied with a white thread

Application: This is tied on to the neck.

vii. Bendvel on Temrun, Dendrophthoe falcata on Diospyros melanoxylon, Bark of both *32

Preparation: Equal portions of the barks are crushed well and soaked in a glass of water. The extract is removed after half an hour.

Dosage: Half a cup of it is drunk twice a day, in the morning on empty stomach, and at night after the meals.

viii. Dhampan, Leaves *35*34

Preparation: Fresh Dham Leaf is collected.

Usage: $1/_2$ the *Dham* pan is chewed for 3-4 days.

ix. Siri, Albizia lebbeck, Root *41

Preparation: Some root is washed well, crushed and soaked in water for 2 hour and then the extract is removed.

x. Dukaranth, Nervillia sp., Rhizome *17

Preparation: The is crushed and soften.

Dosage: One table spoonful of it is consumed once a day.

xi. Bendvel on Daman, Viscum articulatum on Grewia tiliifolia, Whole plant *20

Preparation: The whole plant is crushed and soaked in water for few minutes.

Dosage: Two table spoonful of it is taken twice a day.

xii. Sabar (Thor), Euphorbia caducifolia, Stem *32

Preparation: About 10cm long *Sabar* stem is roasted in kindling fire, and then the outer peel is removed.

Dosage: This roasted portion is eaten once a day for a week.

4.7 TUBERCULOSIS

i. Bendgul on kher, *Dendrophthoe falcata* on *Acacia catechu*, Bendgul Leaves

Senegal, Bauhinia racemosa, Leaves *11

Preparation: The leaves of *Bendvel* are dried and made beedi with *Senegal* leaves.

Dosage: The beedi is smoked 3-4 times a day.

ii. Bendvel, Dendrophthoe falcata Leaves

Kata bor, Zizyphus nummularia Dry stick*21

Preparation: The leaves of *Bendvel* are dried, powdered and stored. The *Hookah* is filled with this powder and burned with *Kata bore's* dry stick

Dosage: Smoked twice a day for about 4-5 months.

5. COMMON AILMENTS

5.1 DYSENTERY

i. Ati, Helicteres isora, Fruit *1

Preparation: 4-5 fruits of *Ati* are ground and soaked in a cup of water for some times and the extract is removed.

Dosage: Two table spoons full of it taken in twice a day.

ii. Kandol, Sterculia urens, Bark

Shengal, Bauhinia racemosa, Bark

Savar, *Bombax ceiba*, Bark*6*5

Preparation: All these barks and soaked in water for about 10 min. and the extract is collected.

Dosage: Half a cup of the extract is drunk 3-4 times a day.

iii. Sardana tad, Tacca leontopetaoides, Rhizome *5

Preparation: The rhizome is crushed and soaked in water for about 10 min. and then the extract is removed.

Dosage: Half cup of the extract is taken 3-4 times in a day. Also one piece of the roasted *Sardanatad* is eaten once a day.

iv. Limbara, Melia composita Bark

Karund, Carissa carandas, Root*12

Preparation: These plant parts are crushed and soaked in water and then the extract is removed.

Dosage: Half a cup of the extract is taken 3-4 times in a day.

v. Karvanth, Carissa carandas, Root

Ati, Helicteres isora, Bark *19

Preparation: All the three plant parts are crushed and soaked in half a cup of water and then the extract is removed.

Dosage: Two table spoonful of it is taken twice a day.

vi. Pipal, Ficus religiosa, Bark

Jangalibhenndi, Azanza lampas, Root *20

Preparation: These plant parts are crushed, soaked in a glass of water for few minutes and the extract is removed.

Dosage: Two table spoonfuls twice a day, in the morning and in the evening.

vii. Kumhi, Careya arborea, Bark

Shengal, Bauhinia racemosa, Bark

Vagat, Capparis zeylanica, Bark *23

Preparation: These plant parts are crushed and soaked in water for some time and then filtered.

Dosage: Half a cup of the extract is taken thrice daily, in the morning before the meals and afternoon and night after the meals.

viii. Shengal, Bauhinia racemosa--Bark *29

Preparation: About 3-4gms of the bark is crushed and soaked in one glass of water for about 2-3 hours.

Dosage: Half a cup of the extract is taken twice a day, in the morning on empty stomach and in evening after the meals.

ix. Kamal, Nymphaea nouchali, Rhizome*31

Preparation: Rhizome is crushed well and soaked in a glass of water. The extract is removed after half an hour.

Dosage: Half a cup of extract is drunk twice a day, in the morning on empty stomach, and at night after the meals.

x. Khadsing, Radermachera xylocarpa, Bark

Modsingh, Dolichandrone falcata Bark *17

Preparation: Equal portions of the barks are crushed well and soaked in a glass of water. The extract is removed after half an hour.

Dosage: Half a cup of it is taken twice a day, in the morning on empty stomach, and at night after the meals.

xi. Sag, Tectona grandis, Bark

Mahu, Madhuca indica, Bark

Tettu, Oroxylum indicum, Bark

Ilaichich, Pithecellobium dulce, Bark *39

Preparation: These plant parts are crushed, soaked in a glass of water for few minutes and then the extract is removed.

Dosage: Half a cup of it is taken twice a day, in the morning on empty stomach, and at night after the meals.

xii. Bhootjad, Ailanthus excelsa, Bark

Safed musali, Chlorophytum borivilianum, Root

Safed bondar, Lagerstroemia lanceolata, Bark

Tettu, Oroxylum indicum Bark

Bahva, Cassia fistula, Bark *40

Preparation: About 3-4gms of the above mentioned plant parts are crushed and kept in a glass of water for about 2-3 hours.

Dosage: Half a cup of the extract is taken twice a day, in the morning on empty stomach and in the evening, after the meals.

xiii. Torsidi, Dregia volubilis, Root

Rohan, Soymida febrifuga, Bark

Achar, Buchanania lanzen, Bark

Bohorgot, Zizyphus sp., Bark

Karvad, Caseria tomentosa, Bark

Gubita, Acacia polycanta, Bark *7

Preparation: About 3-4gms each of the above mentioned plant parts are crushed and kept in a glass of water about 2-3 hours.

Dosage: Half a cup of the extract is taken twice a day, in the morning on empty stomach and in the evening, after the meals.

xiv. Kamal, Nymphaea nouchali, Kanth *31

Varai, Panicum miliaceum Flour

Preparation: A small piece of *Kamal kanth* is crushed and mixed with 3 years old *Jagari* and 3yars old *Varai* flour and cooked.

Dosage: One bowl of it is to be taken once a day.

xv. Ranval, Pteramnus labialis, Root *32

Preparation: This root is roasted, crushed and soaked in a glass of water. The extract is removed after 10-15 min.

Dosage: Half a cup of this extract is taken after every three hours.

xvi. Kumbhi, Careya arborea, Bark*34

Preparation: Bark is crushed well and soaked in a glass of water. The extract is removed after half an hour.

Dosage: Half a cup of it is taken twice a day, in the morning on empty stomach, and at night after the meals.

xvii. Methi, Trigonella foenumgra, Leaves *37

Preparation: A hand full of *Methi* leaves are ground and mixed with a cup of curd.

Dosage: This is consumed three times a day.

xviii. Rakath rohidi, Tecomella undulata, Bark *38

Preparation: This bark is crushed well and soaked in a glass of water. The extract is removed after half an hour.

Dosage: Half a cup of it is taken twice a day, in the morning on empty stomach, and at night after the meals.

xix. Tanas, Ougelnia dalbergiodides, Bark

Kumbi, Careya arborea, Bark

Sag, Tectona grandis, Bark

Karunth, Carissa carandas, Bark

Rakath rohidi, Tecomella undulate, Bark

Pivan, Costus specious, Root

Ilaichich, *Pithecellobium dulce*, Bark *40

Preparation: These plant parts are crushed and soaked together in one glass of water for about 12 hours. Then the extract is removed.

Dosage: Half a cup of it drunk thrice a day, in the morning, afternoon and at night.

xx. Karunth, Carissa carandas, Root

Waltham, Vetiveria zizanioides, Root *42

Preparation: These plant parts are crushed, boiled in a glass of water and then the extract is removed.

Dosage: Half a cup of it is taken twice a day, in the morning on empty stomach, and at night after the meals.

xxi. Upersadi, Hemidesmus indicus, Root

Waltham, Vetiveria zizanioides, Root *41

Preparation: These plant parts crushed well, soaked in water for an hour. Then the extract is removed.

Dosage: Half a cup of it is drink twice a day, in the morning on empty stomach and in the evening after the meals

Dosage: Half a cup of the extract is taken twice a day, in the morning on empty stomach and in the evening, after the meals.

5.2 ACIDITY

i. Nibara, Melia composita, Bark *14

Preparation: About 3-4gms of the above mentioned bark is crushed and kept in a glass of water for about 2-3 hours.

Dosage: Half a cup of the extract is taken twice a day, in the morning on empty stomach and in the evening, after the meals.

ii. Sag, Tectona grandis, Root

Polas, Butea monosperma, Root

Koda, Holarrhena antidysenterica, Bark or Fruit *17

Preparation: These plant parts are crushed and soaked in a glass of water for few minutes and then the extract is removed.

Dosage: Half a cup of it is taken twice a day, in the morning on empty stomach, and at night after the meals.

iii. Saradana tad, Tacca leontopetaoides, Tuber

Bhootchamoli, Pillostigma malabaricum, Bark

Kali pathal, Cylea peltata, Bark *23

Preparation: These plant parts are crushed, soaked in a glass of water for few minutes and then the extract is removed.

Dosage: Half a cup of it is taken twice a day, in the morning on empty stomach, and at night after the meals.

iv. Kuda, Holarrhena antidysenterica, Bark

Kalam, Mitragyna parvifolia, Bark

Upersadi, Hemidesmus indicus, Root

Halund kaeri, Clematics sp. Root

Tan (Gol leaf), Cisampelos pareira, Root *21

Preparation: About 3-4gms each of the above mentioned plant parts are crushed and kept in a glass of water about 2-3 hours.

Dosage: Half a cup of the extract is taken with half teaspoon of sodium bicarbonate, twice a day, in the morning and in the evening.

5.3 GAS TROUBLE

i. Bahava, Cassia fistula, Fruit

Kardodi, Root *34

Preparation: The outer part of *Bahava* fruit is removed then crushed with *Kardodi* root and soaked in one glass of water for about 2-3 hours. Then the extract is removed.

Dosage: One glass of it is drunk twice a day.

5.4 CONSTIPATION

i. Chapa, *Plumaria rubra*, Bark

Marchikanth, Vigna trilobata, Rhizome *35

Usage: Either Chapa bark or Marchikanth rhizome the size of a wheat grain is taken.

Dosage: Eaten once a day.

ii. Arita, Sapindus emarginatus tender bark

Preparation: The bark is crushed well

Application: Use this as suppository

5.5 VOMITING

i. Uparsadi, *Hemidesmus indicus*, Leaves and Root *8

Preparation: This root is crushed well and soaked in a glass of water. The extract is removed after half an hour.

Dosage: Half a cup of it is taken twice a day, in the morning on empty stomach, and at night after the meals.

5.6 CHOLERA AND CERTAIN OTHER CONTAGIOUS DISEASES

i. Mahu, *Madhuca indica*, Bark *2

Preparation: This bark is crushed well and soaked in a glass of water. The extract is removed after half an hour.

Dosage: Half a cup of it is taken twice a day, in the morning on empty stomach, and at night after the meals.

ii. Shegu, Moringa oleifera, Bark

Kandol, Sterculia urens, Bark

Krvanth, Carissa carandas, Root

Thorunth, Cassia tora Bark

Kanta, Allium cepa, Bulb

Lesun, Allium sativum, Flakes *17

Preparation: Equal portions of the above mentioned plant parts are crushed together and kept in a vessel of water about 2-3 hours.

Dosage: Half a cup of the extract is given to each person in the whole village twice a day, morning on empty stomach and in the evening, after the meals. This is done for 3-4 days.

iii. Baphali, *Acacia nilotica*, Root Jangali Shegu, *Moringa concanensis*, Bark

Kumbhi, Careya arborea, Root or bark *42

Preparation: Equal portions of the above mentioned plant parts are crushed and boiled in a large vessel of water for 2-3 hrs. The extract is removed and given to the whole village.

Cattle fodder is sprinkled with the extract.

Dosage: Half cup of it is taken thrice a day, morning on empty stomach and afternoon and at night after the meals.

iv. Baphali, Acacia nilotica, Root

Bhui karav, Eranthemum roseum, Root

Shengal, Bauhinia racemosa, Bark

Kalam, Mitragyna parvifolia, Bark

Karunth, Carissa carandas, Bark

Chamoli, Piliostigma marsupium, Bark

Kumbhi, Careya arborea, Bark

Nilisoti, Dalbergia volubilis, Root;

Bili, Aegle marmeloes, Bark

Sag, Tectona grandis, Bark

Pathal, Dalbergia paniculata, Bark

Polas, Butea monosperma, Bark *23

Preparation: Equal portions of the above mentioned plant parts are crushed and boiled in a large vessel of water for 2-3 hrs. The extract is removed and given to the whole village.

Cattle fodder is sprinkled with the extract.

Dosage: Half a cup of it is taken thrice a day, in the morning on empty stomach and afternoon and at night after the meals.

v. Jangali Shegu, Moringa concanensis, Bark

Payer, Ficus microcarpa, Bark

Kavicha, Mucuna pruriens, Bark

Savar, Bombax ceiba, Bark

Udala, Sterculia villosa, Root

Kanta, Allium cepa, Bulb *40

Preparation: Equal portions of the above mentioned plant parts are crushed and boiled in a large vessel of water for 2-3 hrs. The extract is removed and given to the whole village.

Cattle fodder is sprinkled with the extract.

Dosage: Half a cup of it is taken thrice a day, in the morning on empty stomach and in the afternoon and at night after the meals.

5.7 WORMS IN THE STOMACH

i. Satavari, Asparagus racemosus, Roots *4

Preparation: *Satavari* roots are crushed and kept in water for few minutes and then the extract is removed.

Dosage: This is taken twice a day.

ii. Vad, Ficus benghalensis, Hanging root, looks like a worm *5

Preparation: The root is crushed and soaked in a glass of water for about 10 min and little sugar is added to it.

Dosage: Half a cup of the extract is taken twice. For children one dose is sufficient.

iii. Pangara, Erythrina varegata, Bark *8

Preparation: The bark is burned and mixed with coconut oil

Application: The oil is applied on the affected part, twice a day and is washed before going to sleep.

iv. Kuila, Mucuna pruriens, Fruit *38

Preparation: The fibres are removed from the outer part of the fruit, and then it is mixed with Jagari

Dosage: It is consumed only once.

v. Kuila, Mucana pruriens, Fruit

Nimara, Melia composita, Bark

Vad, Ficus benghalensis, Hanging Root *42

Preparation: Equal portions of these plant parts are boiled with two cups of water and then the extract is removed.

Dosage: Half a cup of the extract is taken twice a day, in the morning on empty stomach and in the evening, after the meals.

vi. Kuila, Mucana pruriens, Fruit *8

Preparation: The fibres from outer part of the fruit is scraped and boiled in milk

Dosage: A cup of this milk is taken twice a day, in the morning on empty stomach and in the evening, after the meals.

vii. Kolus katta, Pos katta Asteracantha longifolia, Root *21

Preparation: Poskatta root is crushed and kept in water for few minutes and then the extract is removed.

Dosage: This is taken twice a day.

5.9 WORMS IN THE WOUND

i. Edible shegu, Moringa oleifera, Bark *27

Preparation: A small piece of *Shegu* bark is made into a paste.

Application: The paste is applied on the wound.

ii. Bhokar, Cordia dichotoma, Bark *28

Preparation: The bark is crushed well and soaked in a glass of water. The extract is removed after half an hour.

Dosage: Half a cup of it is taken twice a day, in the morning on empty stomach, and at night after the meals.

5.10 RAINY SEASON ITCHING ON THE FEET (CHIKALI)

i. Bhui bhopad, (Mushroom) (BN?), whole *42

Preparation: Then powder the dried Bhui Bhui*bhopad* is powdered.

Application: The feet are washed well with warm water and soap and the powder is applied on the feet before going to sleep.

5.11 PAIN ON THE NAIL OF THE TOE OR THE FINGER

i. Karbat, *Grewia hirsuta*, Root*10

Preparation: The root of Karbat is crushed and made into a paste.

Application: This is applied on the nil after washing the nails properly.

ii. Giloda, Coccinia grandis, Leaves *10

Preparation: Little oil is applied on Giloda leaf and is warmed.

Application: The affected nail is tied with it.

5.12 SLEEPLESSNESS

i. Tuver, Cajanus cajan, Leaf

Echan, Acacia sp. Leaves

Taruta, Cassia tora, Leaves *32

Preparation: Equal portions of these roots are taken and made into a paste.

Application: The paste is applied on the eyelids before going to sleep.

ii. Beda, Terminalia bellirica, Dry fruit *1

Preparation: The dry fruit of *Beda* is burned and few drops of honey are added to the ash.

Application: It is applied over the eyelids before going to sleep.

iii. Taruta, Cassia tora, Leaf *35

Preparation: The leaves are crushed and made paste.

Application: The paste is applied on the eyelids before going to sleep.

iv. Aadu, Zingiber officinale, Rhizome *37

Preparation: Aadu rhizome is crushed and the extract is removed.

Dosage: One table spoonful of this extract is mixed with one teaspoonful of honey and drunk before sleeping.

5.13 SUN STROKE

i. Kesuda, Butea monosperma, Flowers *9

Preparation: *Kesuda* flowers are boiled in one bucket of water and the water is allowed to cool.

Application: Bathed with it this water twice a day.

ii. Karadai, Argemone mexicana, Root and leaves*12

Preparation: The root and the leaves are crushed and soaked in water. The extract is removed.

Dosage: One cup of the extract is taken only once.

iii. Chich, *Tamarindus indica*, Fruit *32

Preparation: Water is taken in a plate (*Kasa (Metal)*), and *Chich* fruit is mixed and applied inner and the outer side of a vessel.

Application: The patient is allowed to lie down on the flower and then the plate is dragged from head to feet for 9 times.

iv. Nirgud, *Vitex nigundo*, Leves *42

Preparation: The leaves are crushed.

Application: The crushed leaves are kept in contact with the body.

6. EYE AND E.N.T. PROBLEMS

6.1. EYE PROBLEMS

6.1.1 WATERING IN THE EYE

i. Mokhmani *Tagetes patula*,Leaves *21

Preparation: The leaves are crushed and extract is removed.

Application: Two drops of it is put in each eye.

6.1.2 BLURRED VISION

i. Halund Kairi, *Clematis* Sp., Root *21

Preparation: The outer peel of cleaned root is taken out and crushed and the extract is squeezed out and collected.

Dosage: One or two drops are put in each eye, for two weeks.

6.1.3 WHITE DOTS IN THE EYES.

i. Ingi, *Caseria tomentosa*, Root

Kagadakeri, Bryonopsis laciniosa, Stem *3

Preparation: About 1.5 cm long *Ingi* root and *Kagadakeri* stem are tied alternately and a garland is made.

Application: This garland is tied on to the neck till it falls down by itself.

ii. Dhamn, Grewia tiliifolia, Twig pieces *21

Preparation: Three pieces about 1.5cm long twig is tied together with a thread.

Application: It is tied on the ear on the same side where the eye is affected.

iii. Sag (1 year old), Tectona grandis, Root

Umber (I year old), Ficus racemosa, Root *8

Preparation: The roots are taken out without causing damage and these root are tied together with a white thread.

Application: It is tied on the ear close to the affected eye.

iv. Bendgul, Dendrophthoe falcata, Fallen stem *5

Preparation: Two pieces of *Bender* stem, one piece from *Ghergandi's* (Grinder) handle piece and one piece from *Khajoor* broom are tied together and made a garland.

Application: The garland is tied on the ear close to the affected eye.

6.1.4 SORE EYES

i. Nirgundi, *Vitex negundo*, Leaves *10, *39

Preparation: The leaves are crushed and the extract is removed.

Application: 2-3 drops are put in each eye.

ii. Papada, Holoptelea integrifolia, Bark

Preparation: The bark from the trunk is taken and crushed

Application: The crushed bark is held in the hand and passed through the body about 4-5 times.

6.1.5 STIES ON THE EYELIDS

i. Koda, Holarrhena antidysenterica, Fallen fruit *29

Preparation: 2cm long dry fruit of koda is taken and tie with a string on the ear, which is on same side of the affected eye.

6.2 EAR PAIN

i. Mokha velle, Tagetes patula Leaves *8, *10

Preparation: The leaves are squeezed and the extract is removed.

Application: One or two drops of the extract put in the ear.

ii. Mokholi, Galgota, Tagetes patula Leaves

Ashim, Bark *42

Preparation: Extract is taken from these plant parts.

Application: Two drops of this extract is put into the ear.

<u>6.3 COLD</u>

i. Borothada, Sphaeranthus indicus, Leaves *14

Preparation: The leaves are crushed and boiled.

Usage: The steam is inhaled before going to sleep.

6.4 THROAT

i. Shengal, Bauhinia racemosa, Leaves

Leelicha, Cymbopogon martili, Inflorescence *8

Preparation: Bedies are made by keeping Leeicha inflorescence in Shengal leaves.

Application: It is smoked twice in a day.

ii. Gunj, Abrus precatorius Leaves *16

Preparation: The leaves are crushed and tablets are made of it.

Dosage: One tablet each is taken twice a day.

iii. Garlic, Allium sativum, Flakes *37

Preparation: Into half glass of warm water one teaspoonful of Honey and 3-4 pieces of crushed Gallic are added. The mouth is gargled with it.

Dosage: Gargled after every meal.

iv. Kachka, Caesalpinia bonduc, Seeds *38

Preparation: 2-3 seeds are crushed.

Dosage: The crushed seeds are eaten with *roti* twice a day.

v. Lajamani, Mimosa pudica, Whole plant *41

Preparation: These leaves are dried and made *bedi* with Shengal leaves.

Application: The *bedies* are smoked twice a day.

7. VARIOUS TYPES OF FEVERS

7.1 COMMON FEVER

i. Jarmuli, *Euphorbia hirta*, Root

Sonaru, Achyranthes aspera, Root

Matalabhaji, Amaranthus, Root*2

Preparation: Equal portions of these roots are crushed and put in half cup of water and then the extract is removed.

Dosage: Two table spoonful of the extract is taken twice in day, in the morning and in the evening.

ii. Neem, Azadirachta indica, Bark*2

Preparation: The bark is crushed and soaked in half a cup of water and the extract is removed.

Dosage: Two table spoonful of the extract is taken twice a day.

iii. Nirgud, Vitex negundo, Leaves*9

Preparation: The leaves of Nirgud are boiled

Application: The steam is inhaled before going to sleep.

iv. Kadu shegu, Moringa concanensis, A small plant*9

Preparation: The whole plant is crushed and the extract is removed.

Dosage: The extract is taken twice a day, in the morning and in the evening.

v. Nirgundi, Vitex nigundo, Leaves*10

Preparation: The leaves of Nirgud are boiled in a bucket of water and then it is cooled.

Dosage: Half a cup of it is drunk once a day, and with the rest of the water bath is taken.

vi. Jermuli, Euphorbia hirta, Root*21

Preparation: The root is crushed and soaked in water for some time and then the extract is removed.

Dosage: Half a cup of the extract is taken twice a day.

vi. Bhanguta, Hyptis sualens Leaves

Nirgud, Vitex negundo, Leaves

Nilgiri, Eucalyptus globulus, Leaves*24

Preparation: All these leaves are crushed and boiled with a bucket of water.

Application: Bathed with it in the morning.

vii. Bhangut, Leaves and flowers

Lilgar, Eucalyptus globulus, Leaves

Limbra, Azadirachta indica, Leaves

Sitaphal, Annona squamosa, Leaves

Limbu, Citrus limon, Leaves*41

Preparation: Equal portions of these leaves are crushed and boiled with a lot of water, and then it is cooled.

Dosage: One glass of it is drunk and the rest is used for bath. This is done for 4-5 days.

viii. Waltham, Vetiveria zizanioides Root

Nilichotti, Dalbergia volubilis, Laves

Jangali Bhendi, Azanza lampas, Root*7

Preparation: These plant parts are crushed and soaked in water for about an hour and the extract is removed.

Dosage: One tablespoon full extract is drunk thrice a day; in the morning on empty stomach in the afternoon and night after the meals. This treatment is continued for a week.

ix. Sonaru, Achyranthes aspera, Root*42

Preparation: The root of Sonaru is collected

Application: The root is tied on the neck for few days.

7.2 CHICKEN POX

i. Koshim, Schleichera oleosa, Seeds-nut

Rocha, Cymbopogon martinii, Oil*2

Preparation: Equal portions of these plant parts are crushed and boiled with tea.

Dosage: This tea is taken thrice a day.

ii. Kahndol, Sterculia urens, Leaf

Kavicha, Mucuna pruriens, Leaf*14

Preparation: These plant parts are boiled

Dosage: The body is covered with a thick bed sheet and the steam is applied.

iii. Kali pishrund, Kirganelia recticulta, Root

Moka, Schrebera swietenioides, Bark*24

Preparation: Equal portions these plant parts are crushed and soaked in water for about an hour and the extract is removed.

Dosage: One table spoonful extract is drunk thrice a day; in the morning on empty stomach in the afternoon and at night after the meals. This treatment is continued for a week.

iv. Karanj, Pongamia pinnata, Leaf*41

Preparation: One and half leaf is crushed and boiled with one glass of water.

Dosage: Half glass of it is drunk twice a day, for 3 days.

v. Chav, Ensete superbum, Seeds

Kumbhi, Careya arborea, Leaves

Vas, Babusa Arundinacea, Leaf*42

Usage: These three things are burned together

Application: The smoke is applied on the patient after being covered with a thick bed sheet.

vi. Chav, Ensete superbum, Seeds

Sitaphal, Annona squamosa, Seed*9

Preparation: These seeds are burned

Application: The smoke is applied on the patient after being covered with a thick bed sheet.

7.4 MEASLES

i. Kadantha, Carissa carandas, Root *3

Preparation: The root is crushed and kept in a glass of water for some time and the extract is taken out.

Dosage: A glass of the extract is drunk twice a day.

7.5 CHOLERA & PREVENTION FROM CONTAGIOUS DISEASES

i. Mahu, Madhuca indica, Bark *2

Preparation: The bark is crush and kept in water for a day.

Dosage: Half a cup of it is drunk early in the morning on empty stomach and in the evening after the meals.

ii. Shegu, Moringa oleifera, Bark

Kandol, Sterculia urens, Bark

Krvanth, Carissa carandas, Root

Kanta, Allium cepa, Bulb

Lesun, Allium sativum, Flakes *17

Preparation: A crushed mixtures of all the above plant parts are boiled with water in a large vessel

Dosage: The whole village (both man and cattle) is made to drink the extract.

iii. Jangali Shegu, Moringa concanensis, Bark

Kumbhi, Careya arborea, Root/ bark *42

Preparation: Equal portions of the plant parts are crushed and boiled in water for 2-3 hrs. and the extract is removed. All the people in the village are to drink it. For the Cattle, the extract is sprinkled the fodder.

Dosage: Taken thrice a day, in the morning on empty stomach and in the afternoon and at night after the meals.

iv. Baphali, Acacia nilotica, Root

Bhui karav, Eranthemum roseum Root

Shengal, Bauhinia racemosa, Bark

Kalam, Mitragyna parvifolia, Bark

Karunth, Carissa carandas, Bark

Chamoli, Pillostigma foveolatum, Bark

Kumbhi, Careya arborea, Bark

Nilisoti, Dalbergia volubilis, Root;

Bili, Aegle marmeloes, Bark

Sag, Tectona grandis, Bark

Pathal, Dalbergia paniculata, Bark

Polas, Butea monosperma, Bark *23

Preparation: Equal portions of all these plant parts are crushed and boiled together in water in a large vessel for few hours.

Dosage: The whole population the village is made to drink the broth twice daily.

v. Jangali Shegu, Moringa concanensis, Bark

Payar, Ficus microcarpa, Bark

Kavicha, Mucuna pruriens, Bark

Savar, Bombax ceiba, Bark

Udala, Sterculia villosa, Root

Kanta, Allium cepa, Bulb *40

Preparation: The above mentioned plant parts are collected in large quantity, crushed and boiled in water in a big vessel.

Dosage: The whole population the village is made to drink the broth. Also it is sprinkled on the fodder for the animals.

This is done twice a year: 1) April-May, the very hot season, 2) June-July the rainy season.

7.6 FALLING SICK AFTER GOING TO THE FOREST

i. Bhoot Jad, *Ailanthus excelsa*, Bark *2

Preparation: The bark is crushed and put it in water and kept for some time.

Dosage: The patient is made to drink half a cup of the extract.

8. SKIN DISEASE

8.1 ECZEMA, ALLERGY

i. Sadad, Terminalia crenulata, Bark

Naliyer, Cocos nucifera, Oil *10

Preparation: A piece of bark is crushed.

Application: The crushed piece of the bark is tied on the affected part after applying little coconut oil on the affected part.

ii. Karvad, Carissa carandas Bark *20

Preparation: A small branch of *Karvad* is cut a 1.5 cm long piece of it is taken. The inner core from the piece is removed without breaking the outer bark, so that it looks like a ring.

Application: This ring is tied on the neck or on the ear for a day.

iii. Morvel, Clematis hedisarifolia, Leaves *21

Preparation: Some leaves are crushed and the juice is extracted.

Application: The juice is applied on the affected part 2-3 times a day. Care should be taken to apply only on the affected part.

iv.Pishrun, *Kirganelia recticulta* Bark Coconut, *Cocos nucifera*, Oil *31

Preparation: A paste is made of *kalipishrun* bark and it is mixed with coconut oil.

Application: The affected part is washed with warm water and the paste mixed with coconut oil is applied twice daily.

v. Veernakh, Martynia annum, Seed *34

Preparation: Oil is extracted from the seeds by distillation.

Application: The oil is applied on the affected part twice a day.

vi. Kharsing, Radermachera xylocarpa, Bark

Varan, Kydia calycina, Bark

Goda (Sing), Arachis hypogaea, Oil *35

Preparation: About half a kilo of the bark fried in one kg. of groundnut oil. When the bark turns dark brown it is taken out. The oil is allowed to be cold and then collected and preserved in a bottle.

Dosage: One teaspoonful of the oil is drunk. Some oil is to be applied on the affected skin.

vii. Aali, Morinda tomentosa, Bark

Sing, Arachis hypogaea, Oil *36

Preparation: The inner portion of the bark is fried in groundnut oil and the oil is collected and cooled.

Application: The oil is applied on the affected part as well as a teaspoonful of it drunk.

viii. Bhui umber, Ficus hispida, Latex *38

Application: The latex of *Bhui umber* is collected by making an incision on the bark. The latex can be stored..

Application: Applied on the affected part 2-3 times a day.

ix. Mendi, Lawsonia inermis, Leaves

Mogra, Clerodendrum fragrans, Leaves

Kevada, Canna indica, Leaves

Sitaphal, Annona squamosa, Leaves *39

Preparation: A hands full of these leaves are crushed and made into a paste.

Application: The paste is applied on the affected part and is bandaged.

x. Bhoot Jad, Ailanthus excelsa, Bark *41

Preparation: A piece of the bark is crushed well and made into a paste.

Application: The paste is applied on the affected part.

xi. Sadad, Terminalia crenulata, Bark

Naliyer, Cocos nucifera, Oil *10

Preparation: A piece of the bark is crushed well.

Application: The crushed piece of the bark is tied on the affected part after applying little oil on the affected part.

xii. Bhoot Jad, Ailanthus excelsa, Bark *24

Preparation: A paste is made of the bark.

Application: The paste is applied on the face once.

8.2 SCABIES

i. Gokhada, Leonotis nepetifolia, Flower *9

Preparation: Some flowers are collected and burned, the ash is mixed with coconut oil.

Application: The paste is applied on the scabies.

ii. Kareng vel, *Derris scendens*, Fruit

Kosimb, Schleichera oleosa, Fruit *21

Preparation: The fruits are distilled together and the oil is taken out of it.

Application: This oil is applied twice or thrice a day on the scabies.

iii. Kardai, Argemone mexicana, Seeds

Karund, Carissa carandas, Root *24

Preparation: These plant parts are crushed together and made into a paste.

Application: and apply on the scabies.

iv. Vad, Ficus benghalensis, Latex

Kutterpath, Morinda tomentosa, Root *37

Preparation: The root is crushed with adding some water to it and the extract is collected, and *Vad* latex is added to it.

Dosage: One table spoonful of it is taken twice a day, in the morning on empty stomach and in the evening after the meals.

iv. Bhootiyachamoli, Piliostigma foveolatum, Bark *27

Preparation: About 5gms. of the bark is taken and burned and the ash is mixed with coconut oil.

Application: The paste is applied twice a day.

v. Bhondar, Lagerstroemia parviflora, Branch

Coconut, Cocos nucifera, Oil *4

Preparation: Small dried branches of bondar are burned and the ash is mixed with coconut oil.

Application: The paste is applied on the scabies.

vi. Gokhadu (Masu), Leonotis nepetifolia, Flowers *14

Preparation: 1) The flowers burned and the ash is mix with coconut oil.

- 2) The Flowers are crushed the extract is taken.
- 3) *Beedies* are made with crushed flowers rolled in *shengu* leaves.

Application: The paste/ extract is applied on the affected parts and the *beedi* smoked.

<u>8.3 BURNS</u>

i. Karphot, *Aloe vera*, Gel *4

Preparation: Karphot gel is collected.

Application: The gel is applied on the affected part gently, every half an hour.

ii. Aashi, Ventilago denticulata, Bark *13

Preparation: The bark is crushed into a paste.

Application: The paste is applied on the burned part.

iii. Nilisoti, Dalbergia volubilis, Leaves *14

Preparation: The leaves are crushed and the juice is extracted and warmed. The warmed juice is kept for 5to 6 hrs.

Application: Applied on the affected part.

iv. Nilisoti, Dalbergia volubilis, Leaves

Mahuda, Madhuca indica, Phool daru *40

Preparation: The leaves are crushed and the extract is taken out.

Application: The burned part is washed with the *mahuda phooldaru*. Then the cold extract of *Nilisoti* is applied.

8.4 LEPROSY

i. Bhui umbri, *Ficus hispidia*, Fruit latex *14

Preparation: The fruit latex is collected.

Application: Applied on the affected part.

8.5 LUKODERMA

i. Kandol, *Sterculia urens*, Bark *38

Preparation: The bark is burned and the ash is mixed with coconut oil.

Application: Applied on the affected part.

9. SWELLINGS, BLISTERS, BOILS

i. Chich, Tamarindus indicum, Leaves *2

Preparation: The leaves are crushed made into a paste.

Application: The paste is applied on the affected part.

ii. Sivan, Gmelina arborea, Bark

Tettu, Oroxylum indicum, Bark

Safed Bondar, Lagerstroemia lanceolata, Bark

Bili, Aegle marmelos, Leaves

Pandvel, Cissus repanda Leaves

Chapa, Plumaria rubra, Bark *40

Preparation: These plant parts are crushed and left in one glass of water for about 12 hours. Then the extract is removed.

Dosage: Half a cup of it is taken twice a day, in the morning on empty stomach, in the afternoon and at night after the meals.

iii. Tetu, Oroxylum indicum, Bark *2

Preparation: 1) The bark is crushed into a paste. and apply all over the body.

2) Some crushed bark is kept in water for a day.

Dosage: The paste is applied all over the body. Half a cup of extract is drunk early in the morning on empty stomach and in the evening after the meals.
iv. Tetu, Oroxylum indica, Bark

Karanj, Pongamia pinnata, Bark

Mahu, Madhuca indica, Bark *4

Preparation: All these barks are crushed and boiled with some water. The mouth of the vessel is tied to prevent the steam from escaping.

Application: The body of the patient is covered with a bed sheet and the steam is let into the cover and the body is steamed, the steam is also inhaled.

v. Mahuda, Madhuca indica, Bark

Adsa (Bhoot jad), Adina cordifolia, Bark *18

Preparation: The barks are crushed and put in bathing water.

Application: Bath is taken with the water.

vi. Sadad, Terminalia crenulata, Bark

Kalam, Mitragyna parvifolia, Bark

Sag, Tectona grandis, Bark

Tivis, (BN?) Bark

Sagar gotta, Caesalpinia coriaria, Seed

Gunj, Abrus precatorius, Root

Vati, Helicteres isora Fruit *24

Preparation: All the above plant parts are crushed and put in water for about an hour.

Dosage: One cup of the extract is drunk once.

vii. Karanj, Poangama pinnata, Bark

Bhutiya aland, Cassine glauca, Bark

Chamol, Piliostigma foveolatum, Bark*24

Preparation: Equal portions of these plant parts are crushed and boiled in water.

Application: The whole body is covered with a bed sheet and is steamed with the steam from the boil.

viii. Rakath rohidi, Tecomella undulata, Bark

Roicha, Cymbopogon martili, Inflorescence

Jangali Shegu, Moringa concanensis, Root/ Bark *27

Preparation: About 5gms each of the above mentioned plant parts boiled it in a big vessel with water.

Dosage: Half a cup of it is drunk twice a day and the rest of the water is used for taking bath. This is done for about two or three days.

ix. Kalkuti, (*BN*?), Rhizome *28

Preparation: About 3-4gms of the rhizome is crushed and kept in one glass of water for about 2-3 hours.

Dosage: Half a cup of the extract is drunk twice a day, in the morning on empty stomach and in the evening after the meals.

x. Tettu, Oroxylum indicum, Bark

Choki Bendi, Hibiscus esculentus, Root *39

Preparation: These plant parts are crushed and a glass of water is added to it and extract is removed.

Dosage: One table spoonful of the extract is drunk twice a day; in the morning on empty stomach and in the evening after the meals. This treatment is continued for a week.

xii. Chich, Tamarindus indica, Leaves

Nilgiri, Eucalyptus globulus Leaves *32

Preparation: These leaves are crushed gently and put it in the bathing water.

Application: Bath is taken with it.

xiii. Tettu, Oroxylum indicum, Bark *37

Preparation: The bark is crushed and made warm.

Application: The painful part is pressed with it.

<u>9.1 ULCER</u>

i. Ashivel, *Ventilago denticulata*, Root

Shengal, Bauhinia racemosa, Root *11

Preparation: The extract is obtained by crushing all these roots and mixing it with soda or lemon juice.

Dosage: Half a cup to three times a day.

ii. Vagat, Capparis zeylanica, Bark

Bahva, Cassia fistula, Seeds *31

Preparation: Equal parts of the above mentioned plant parts are taken and crushed well. It is soaked in water for about an hour and the extract is removed.

Dosage: Taken thrice daily, early in the morning on empty stomach, in the afternoon and at night after the meals.

9.2 BLISTER IN THE MOUTH

i. Pishav burandu, *Cyathochine purpurea* Whole plant *3

Preparation: The plant is well crushed

Dosage: The whole crushed matter is eaten.

ii. Kosim, Schleichera oleosa, Seed-oil *15

Preparation: Oil is extracted from Kosim seeds.

Application: Kosim oil is applied in the mouth when having blisters.

9.3 BIG BOILS ON THE BODY

i. Sakhriya, *Ipomoea batatas*, Latex

Dhudari, Euphorbia hirta, Latex *8

Preparation: Both the latexes are mixed together.

Application: The mixture is applied on the boil. Early stages are easy cured.

ii. Dudari, Euphorbia hirta, Latex *24

Preparation: The latex of *Dudari* is collected.

Application: The latex is applied on the boils.

iii. Mendvel, Cryptolepis buchanani, Latex *24

Preparation: The latex of *Mendvel* is collected.

Application: The latex is applied on the boil.

9.3.1 BOILS ON THE HEAD

i. Ranmohari, (BN?) Fruit & Leaves *26

Preparation: One gram each of both the fruit and the leaf are crushed and mixed with coconut oil.

Dosage: The head is washed with warm water and the mixture is applied twice daily.

9.3.2 BIG BOILS ON THE NECK

i. Naliyeri, (BN?) Root

Vari, Panicum miliaceum, Flour *32

9.3.3 BOILS IN THE STOMACH

i. Nalagut, Urgenia indica, Bulb *35

Preparation: The *Nalagut* bulb is cut into two pieces and is warmed.

Usage: The warmed bulb piece is pressed on the stomach. Also a small piece of the *Nalagut* bulb is eaten every day. This is done for about a month.

9.3.4 BOILS UNDER THE ARM (PATA ROG)

i. Lag pan, *Bryophyllum calycinum*, Leaf *31

Preparation: A leaf is warmed

Application: The boil is pressed with these warm leaves.

9.4 PIMPLES

i. Hado, *Terminalia chebula*, Seed *10

Preparation: Some seeds are crush and made into a paste.

Application: The paste is applied on the affected part.

ii. Savar, Bombax ceiba, Thorns

Jambuda, Syzygium cumini, Seeds

Preparation: Equal portions of the above mentioned plant parts are made into a paste and mixed with milk cream.

Application: The past is applied on the pimples before going to sleep. It is done for a couple of weeks.

<u>9.5 MUMPS</u>

i. Karbat, *Grewia hirsuta*, Root *8

Preparation: The root is grinded till it became sticky.

Application: Applied externally on the neck 2-3 times

ii. Umbar, *Ficus racemosa*, Latex *1

Usage: The latex is applied over the affected part.

<u>10. PILES</u>

i. Mokha, Schrebera swietenioides Fruit *8

Preparation: The fruit is burned and the ash mixed with coconut oil.

Application: The paste is applied on the affected part two to three times.

ii. Safedsag, Cleodendron saratium Bark *14

Usage: One gram of the bark is consumed two times a day.

iii. Kaju, Anacardium occidentale, Seed *21

Preparation: The seed is burned and powdered.

Application: The powder is applied on the affected part twice a day for three to four days.

iv. Bahava, Cassia fistula, Leaves *32

Preparation: Few leaves of Bahava are crushed and the juice is extracted.

Application: The extract is applied on the piles about 3-4 times a day.

v. Sadada, Terminalia crenulata, Bark *37

Preparation: A piece of the bark is crushed and made into a paste

Application: The paste is applied on the affected part.

11. LUMPS

11.1 LUMP ON THE NECK OR EAR (CHOKIPUI)

i. Kalkuti, (BN?), Root

Hivir, (BN?), Bark *3

Usage: Both the plant parts are crushed together into a mixture and eaten.

ii. Harekanth, (BN?), Rhizome *6

Preparation: A piece of the rhizome is made into a paste.

Application: The paste applied on the affected part.

<u>11.2 LUMPS IN THE STOMACH</u>

i. Chitra, *Plumbago zeylanica*, Root *19

Preparation: The root is crushed and put in one glass of soda.

Dosage: Taken thrice a day; in the morning on empty stomach, in the afternoon and evening after the meals. If the patient is very weak instead of soda water is used.

ii. Guvita, Acacia polycanta, Bark *42

Preparation: The bark is crushed and boiled with two cups of water and the extract is removed.

Dosage: Taken thrice a day, in the morning on empty stomach, in the afternoon and at night after the meals.

iii. Nalakkanth, Urgenia indica, Bulb *2

Preparation: The bulb is cut horizontally and roasted.

Application: Roasted bulb piece is eaten by the patient and also a piece is pressed on the stomach.

iv. Bendvel on Dhaman, Viscum articulatum on Grewia tiliifolia,

Whole plant

Vari, Panicum miliaceum, Grains *8

Preparation: Bendvel is dried and powdered and the Varai grains are roasted and powdered. Both the powders are mixed.

Dosage: Taken two spoonful of this mixture along with alcohol (Mahuda).

12. PARALYSIS

i. Bedvel on Khati, *Dendrophthoe falcata* on *Acacia ferruginea*, Whole plant *14

Preparation: The Bendvel is crushed made paste. Also the extract is removed from **the leaves.**

Dosage: Half a cup of the extract is drunk twice in a day.

Application: The paste is applied on the body

ii. Borothoda, *Sphaeranthus indicus*, flower *21

Preparation: The flowers are added to pigeon flesh and cooked.

iii. Karadai, Argemone mexicana, Root *32

Preparation: Kardai root is added to Pigeon meat and cooked.

Dosage: This is eaten twice.

iv. Neelgiri, Eucalyptus tereticornis, twigs *2

Preparation: Nilgiri Leaves are collected and made a broom.

Application: The patient is dusted with these leaves.

13. EPILEPSY (KHECH)

i. Bendguil on sadada, Dendropthoe falcata on Terminalia crenulata, Leaves *42

Preparation: These leaves are collected and boiled with two cups of water and the extract is removed.

Dosage: Half cup of it is taken thrice a day, morning on an empty stomach, afternoon and at night after the meals.

<u>14. JAUNDICE</u>

i. Nili choti, *Dalbergia volubilis*, Leaves *3

Preparation: The leaves of *Nilichoti* are crushed and the extract is removed.

Dosage: The extract is taken twice a day, morning on an empty stomach and in the evening after supper.

ii. Guvita, Acacia polyacantha, Bark;

Bivla, Pterocarpus marsupium, Bark*3

Preparation: These barks are crushed and soaked in water for 2hrs, and the filter is collected.

Dosage: Half cup of it is taken twice a day, morning on an empty stomach and in the evening after supper.

iii. Chav, Ensete superbum, Sap from the cut loom*3

Preparation: The loom of *Chav* is cut and its sap is collected a vessel.

Dosage: One teaspoonful of it is taken twice a day, morning and in the evening.

iv. Chav, Ensete superbum, Sap from the cut loom;

Pavuta, Costus speciosus, Cane*6

Preparation: The loom of *Chav* is cut and its sap is collected a vessel.

Dosage: One teaspoonful of it is taken twice a day, morning and in the evening. After each dose eat 3 inch long *Pevuta* stem.

v. Sugar cane, Sacharum officinarum, Cane;

Kumedio (Tuveria), Cassia tora, Tender leaves;

Dathura, Datura metel, Tender leaves*9

Preparation and application:

1. The sugar cane into small pieces and kept it in the open air at night that the dews are fallen on it. The sugarcane pieces are chewed early in the morning on an empty stomach.

2. Tender leaves of Dhatura are crushed and made paste and kept on the head for three days. Body bath is taken twice in a day.

3. Tender leaves of *Tuveria* are crushed and the extract is removed.

Dosage: Half cup of the extract is taken twice a day.

vi. Jangali Bhendi, Azanza lampas, Root;

Tetu, Oroxylum indicum, Bark;

Sag-Tectona grandis, Bark;

Haldava, Adina cordifolia, Bark;

Polas, Butea monosperma, Bark*10

Preparation: All these mixtures are crushed and keept in water for few hours abd then the extract is removed.

Dosage: Half cup of the extract is taken twice a day.

Application

Saslani guchadi, Asparagus racemosus, Root*10

Fleshy root is tied tightly on to the neck for about a week.

vii. Biya, Pterocarpus marsupium, Bark

Tetu, Oroxylum indicum, Bark

Tarut, Cassia tora, Root

Chokachik Sida sp., Root

Kardhaman, Grewia hirsute, Root*13

Preparation: All these plant parts are crushed and soaked in water and the extract is removed.

Dosage: Half a cup of the extract is taken twice in a day, in the morning and in the evening.

viii. Bivla, Pterocarpus marsupium, Bark;

Khumbi, Careya arborea, -Bark;

Inka, Caceria tomentosa, Leaves;

Bendvel-dhaman, Viscum articulatum on Grewia tiliifolia, Whloe plant*14

Preparation: All these plant parts are crushed and soaked and boiled with a bucket of water.

Dosage: Half a cup of the extract is taken twice in a day, in the morning and in the evening. The rest of the water is used for bath after cooling it.

Bivla stickes are smoked.

ix. Nilisoti, Dalbergia volubilis, Leaves;

Taruta, Cassia tora, Root*21

Preparation: Equal portions of these plant parts are crushed and the extract is removed.

Dosage: Half cup of the extract is taken twice a day, morning on an empty stomach, evening after the meals. This is continued up to a week.

x. Nilisoti, Dalbergia volubilis, Leaves*39

Preparation: The leaves warmed and crushed and the extract is removed; The extract is made solid by cooling it.

Dosage: One Tablespoonful is taken twice a day, morning on an empty stomach and in the evening after the meals. This is continued for up to a week.

xi. Choki Bendi, Hibiscus esculentus, Root; *23

Preparation: The roots of the aove mentioned plant parties is crushed and soaked in water for an hour and the the extract is removed.

Dosage: Half cup of the extract is taken thrice daily, morning before the meals, after noon and night after the meals.

xii. Kosim Schleichera oleosa-Bark*28

Preparation: The above mentioned plant part is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Take one tablespoonful twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

xiii. Tettu, Oroxylum indicum, -Bark *29

Preparation: The above mentioned plant part is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Take one tablespoonful twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

xiv. Kamal, Nymphaea nouchali, Rhizome *31

Preparation: The above mentioned plant part is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Take one tablespoonful twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

xv. Choki bendi, Hibiscus esculentus, Root *32

Preparation: The above mentioned plant part is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Take one tablespoonful twice a day; morning on an empty stomach and evening after the meals. After each doze the urine is checked. This should be continued till the yellow colour in urine is disappeared.

xvi. Saslani guchadi, Asparagus racemosus, Root*11

Preparation: The above mentioned plant part is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Take one tablespoonful twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

xvii. Safed Musali, Chlorophytum borivilianum, Fleshy root,

Saslani guchadi, Asparagus racemosus, Root *37

Preparation: 2-3 fleshy roots are crushed and boiled with milk and drank..

3 hours later, two fleshy roots of shevur are crushed and soaked in a glass of water for about 10 min. and the extract is removed and drunk.

Dosage: This procedure is done morning and evening for up to a week.

xviii. Sinti, Phoenix sylvestris, Soft stem

Neelgiri Eucalyptus tereticornis, Bark;

Babhali, Acacia nilotica, Root *1

Preparation: The above mentioned plant part is crushed and soaked in a glass of water, and the extract is removed after half an hour.

15. CANCER

i. Arjun Sadad . Terminalia arjuna , Bark

Bivala Pterocarpus marsupium, Bark

Polas, Butea monosperma Bark *9

Preparation: The above mentioned plant part is crushed and soaked in a glass of water over night, and then the extract is removed.

Dosage: Take one table spoonful twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

<u>16. WOMEN'S PROBLEMS</u>

16.1 EXCESS BLEEDING AND IRREGULAR MENSTRUATION

i. Kesuda, Butea monosperma, Root

Bhara, Atylosia platicarpa, Root

Kumbhi, Careya arborea, Bark

Kandol, Sterculia urens, Bark

Sag, Tectona grandis, Bark

Bhoker, Cordia dichotoma, Bark *1

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

ii. Madhud , Lannaea coromandelica , Bark

Kakad, Garuga pinnata, Bark

Tettu, Oroxylum indicum, Bark

Pathal, Dalbergia paniculata, Bark

Aran, Ricinus communis, Root

Harkada, (BN?), Root

Kumbhi, Careya arborea, Bark

Bivla, Pterocarpus marsupium, Bark *7

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Take one table spoonful twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

iii. Biyo, Pterocarpus marsupium, Gum and Bark

Rakarhrohdi, Tecomella febrifuga, Bark

Nilisoti, Dalbergia volubilis, Bark

Gunti, Cordia dichotoma, Bark *19

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

iv. Sivan, Gmelina arborea, bark

Bhotiya aranth, Cassine glauca, Root

Bivla, Pterocarpus marsupium, Bark *17

Preparation: The mixture is dried and powdered.

Dosage: Take one table spoonful twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

v. Aashi, Ventilago denticulata, Root *12

Preparation: The above mentioned plant part is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Take one table spoonful twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

vi. Jadla Lasunth, Vanda roxburghii, Ariel root

Bendgul, Dendrophthoe falcata, Twigs

Sadad, *Terminalia crenulata*, Bark

Mahu, Madhuca indica, flower shed at night Bark

Modsing, Dolichandrone falcata, Bark *3

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after 12 hours.

Dosage: Take one table spoonful twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

• Each time fresh mixture is prepared.

vii. Bivula, Pterocarpus marsupium, Bark

Bivula vel, Millettia racemosa, Bark

Tettu, Oroxylum indicum, Bark

Madhl, Lannaea coromandelica, Bark with Gum *5

Preparation: The above mentioned plant parts are crushed and boiled in a glass of water, and the extract is removed and stored in bottles.

Dosage: One table spoonful of it is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

viii. Ranval, Pteramnus labialis, Roots' bark *8

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after 12 hours.

Dosage: One table spoonful of it is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

ix. Arjun Sadad, Terminalia Arjuna, arjun-Bark

Bivala, Pterocarpus marsupium, Bark

Polas, Butea monosperma, Bark *9

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, over night and then the extract is removed.

x. Thevura, Cassia tora, Root *23

Preparation: The above mentioned plant part is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Half cup of the extraction is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

xi. Rui, Calotropis gigantea, Flower*24

Preparation: These roots are crushed and made into a paste and made *Roti* out of this paste. **Dosage:** One *Roti* each is taken twice a day.

xii. Kumbhi, Careya arborea, Bark

Echan, Acacia sp., Bark

Polas, Butea monosperma, Bark

Pavuta, Costus speciosus, Rhizome

Chamoli, Piliostigma foveolatum, Bark *26

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

xiii. Devkurudu, Cilosia cristata, Root

Arani, Ricinus communis, Root*28

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Half cup of the extract is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

xiv. Polas, Butea monosperma, Bark

Karund, Carissa carandas, Bark

Bondar, Lagerstroemia parvifolia, Bark *28

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

xv. Jambuda, Syzygium cumini, Bark

Dhamada, Grewia tiliifolia, Bark *29

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Take one cup of the extract twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

• Oily food should be avoided during the treatment.

xvi. Umber, Ficus racemosa, Latex

Bivula, Pterocarpus marsupium, Bark*29*30

Application: *Bivula* bark is chewed with umber latex.

Dosage: This has to be taken in the morning on an empty stomach and in the evening, after the meals.

xvii. Choki bhendi, Hibiscus esculentus, Root

Pipal on Polas, Ficus religiosa on Butea monosperma, Bark

Bivla, Pterocarpus marsupium, Gum/Bark

Kumbiya, Careya arborea, Bark*35

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

xviii. Sag, Tectona grandis, White leaf

Umber, Ficus racemosa, Latex *32

Preparation: Sag or Teak wood leaf is washed and the water is collected in a glass of water. Few drops of Umber latex and crushedTivis bark is added to this water.

Dosage: Half cup of it is taken twice daily, morning on an empty stomach, evening after the meals.

xix. Savar, Bombax ceiba Bark

Polas, Butea monosperma, Bark *33

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

xx. Rakath rohidi, Tecomella febrifuga, Bark

Chilar, Acacia *pinnata*, Bark

Kumbhi, Careya arborea, Bark

Safed Bondar, Lagerstroemia lanceolata, Bark

Sardanatad, Tacca leontopetaoides, Tuber*40

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

xxi. Bhootjad, Ailanthus excelsa, Bark

Ranval, Pteramnus labialis, Root *41

Preparation: These plant parts are crushed and warmed.

Application: These warmed pant parts are tied on to the stomach.

xxii Rakathrohidi, Tecomella febrifuga, Bark

Devakuradu, Cilosia cristata, Root; *41

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

xxiii Ranval, Pteramnus labialis, Root *34

Preparation: The above mentioned plant part is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

16.2 WHITE DISCHARGE

i. Devambadi *Hibiscus cannabinus*, Root *8

Preparation: The above mentioned plant part is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of this extract is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

ii. Bili, Aegle marmelos, Bark *8

Preparation: The above mentioned plant part is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

iii. Madhul, Lannaea coromandelica, Bark

Barik Polas, Butea monosperma, Root *23

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

iv. Kandol, Sterculia urens, Bark

Bivula, Pterocarpus marsupium, Gum/ bark *32

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One cup of it is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

v. Tagari, Tabernaeamontana divaricata, Bark*41

Preparation: The above mentioned bark is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

vi. Arjun Sadad, Terminalia arjuna, Bark

Bivala, Pterocarpus marsupium, Bark

Polas, *Butea monosperma*, Bark *9;

Preparation: The above mentioned Barks are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

vii. Saslanagugadi, Asparagus racemosus, Roots *20

Preparation: This root is crushed and soaked in a glass of water, and the extract is removed after half an hour.

16.3 PAIN DURING MENSTRUATION

i. Bhootjad, *Ailanthus excelsa*, Bark

Chamoli, *Piliostigma foveolatum* Bark *8

Preparation: These barks are crushed and soaked in a glass of water, and the extract is removed after one hour.

Dosage: Take one table spoonful twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

ii. Kandoli, Sterculia urens, Gum;

Isabgol, *Plantago indica*, Whole plant*9

Preparation: Equal amount of these plant parts are crushed and one spoon of the extract is added to a cup of milk.

Dosage: Twice in a day, morning on an empty stomach and at night before going to bed.

16.4 STERILITY IN WOMEN

i. Nadkkant, Urginea Indica, Bulb *8

Preparation: This bulb is crushed and soaked in a glass of water, and the extract is removed after one hour.

ii. Sevara, Asparagus racemosa, Roots

Mirch, Capsicum annuum, root *2

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after twelve hours.

Dosage: Two table spoonfuls are taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

iii. Kuda, Holarrhena antidysenterica, Bark

Kalam, Mitragyna parvifolia, Bark

Upersadi, Hemidesmus indicus, Root

Halund kaeri, Clematicss sp., Root

Tanvelo, Cissampelos pareira, Root *21

Preparation: Equal amount of this plant parts (1:1:1:1:1) are dried in shade and powdered and stored.

Dosage: One teaspoonful of this powder is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

During this treatment non-veg., ghee or oily food should be avoided.

This treatment is continued up to 5-6 months.

16.5 ENHANCING LACTATION

i. Sabar (Thor), Euphorbia caducifolia, Stem *8

Preparation: One piece of this cactus is roasted and the outer layer is removed.

Dosage: This is taken twice a day along with meals.

ii. Bhootjad, Ailanthus excelsa, Bark

Mokha, Schrebera swietenioides, Bark

Bhotaposa, Cassine gluaca, Bark

Nagali, *Eleusine coracana*, flour*3

Preparation: Equal portions of these barks are crushed and 2-3 table spoonful extract is mixed with **Nagali** soup and drunk.

Dosage: One cup of soup is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.

ii. Rui Caloropis gigantea Root *23

Preparation: Crush about 5gms of *Rui* root and keep it in a glass of water for about an hour. Filter it and take the extract.

Dosage: Half cup of the extracts taken thrice daily, morning before the meals, after noon and night after the meals.

iv. Siris, Albizia lebbeck, Leaves *24

Preparation: Siris leaves are collected.

Application: 5 - 6 leaves are eaten for a week.

v. Nagli, *Eleusine coracana*, Flour *17

Preparation: All these mixtures are crushed well and added to *Nagli* porridge.

Dosage: One cup of this porridge has to be taken twice in a day, for a week.

16.6 BREAST ABSCESS

i. Bhirui, Calotropis gigantea, Root *2

Preparation: This root is crushed and made paste.

Application: The paste is applied on the affected part.

ii. Karbat, Grewia hirsuta, Root *21

Preparation: This root is crushed and made paste.

Application: The paste is applied thrice in a day on the affected part.

iii. Borothda, Sphaeranthus indicus, flower *21

Preparation: This flower is crushed and mixed with crab, roasted.

Dosage: It is taken twice in a day.

16.7 LUMPS ON THE UTERUS

i. Dhorsidi, *Dregea volubilis*, Bark *10

Preparation: Dhorsidi's bark is dried and powdered and stained with a strainer.

Dosage: Half tea spoon of this powder is taken twice in a day for 3-4 months.

Precaution: During this medication non-vegetarian food and oily food should be avoided.

ii. Sardana tad, Tacca leontopetaoides, Tuber

Nagli, *Eleusine coracana*, Flour *41

Preparation: This tuber is dried and powdered and stored. One tea spoonful of this powder is added to Nagli soup.

Dosage: This soup is taken twice a day, morning on an empty stomach and in the evening after the meals.

16.8 <u>PROBLEMS AFTER DELIVERY</u> (Backache, stomach ache, heaviness and bleeding etc)

i. Kumbhi, Careya arborea, Bark *2

Preparation: The bark is crushed and soaked in water on the previous and then the extract is removed.

Dosage: Half cup of the extract is taken on an empty stomach.

II. BACK PROBLEM OF PREGNANT WOMEN

i. Jadla Lasunth, Vanda roxburghii, aerial Root

Bendgul, Dendrophthoe falcata, Twig

Sadad, Terminalia crenulata, Bark

Mahu, Madhuca indica, Bark

Modsing, Dolichandrone falcata, Bark *3

Preparation: These plant parts are crushed and soaked in water for 12 hours.

Dosage: Half cup of it is taken twice a day, morning on an empty stomach, and in the evening after the meals.

ii. Shaver, Asparagus racemosus, Root *32

Preparation: These plant parts are crushed and soaked in a glass of water for about 2-3 hours and then the extract is removed.

Dosage: Half cup of it is taken twice a day, morning on an empty stomach, and in the evening after the meals.

<u>17. MEN'S PROBLEMS</u>

17.1 IMPOTENCY (MEGA ROG)

i. Upersadi, *Hemidesmus indicus*, Root *21

Preparaton: Fresh root is collected.

Dosage: The root is chewed and taken after supper.

ii. Bendgul on sadada, *Dendrophthoe falcata*, Tender leaves and stem

Sadada, Terminalia crenulata, Bark

Kharsingh, Radermachera xylocarpa, Bark

Vad, Ficus benghalensis, Red leaves

Koila, Mucuna pruriens, Root*5

Preparation: Take equal portion of these mixtures, crushed well and made tablets.

Dosage: Two tablets are taken once a day for two day.

17.2 STERILITY

i. Sardanatad, Tacca leontopetaoides, Tuber

Rakath rohidi, Tecomella febrifuga, Bark

Sabar, Bombax ceiba, Bark

Bahava, Cassia fistula, Bark *40

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week.

17.3 GENITAL PROBLEMS

17.3.1 SWELLING

i. Karunth, *Carissa carandas* , Bark Polas, Butea *monosperma*, Bark Sag, *Tectona grandis*, Bark Udada, Sterculia *villosa*, Bark *21;

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week.

17.3.2 BOILS

i. Karbat, Grewia hirsuta, Whole plant *26

Preparation: The plant is crushed and made paste.

Dosage: This paste is applied on the affected part.

18. STERILITY IN MEN& IN WOMEN

i. Pathad, Dalbergia paniculata, Bark*20

Preparation: The Bark is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for 15 days.

ii. Kuda, Holarrhena antidysenterica, Bark

Kalam, Mitragyna parvifolia, Bark

Upersadi, Hemidesmus indicus, Root

Halund kaeri, Clematis sp. Root

Tan (Gol pan), Cisampelos pareira, Root *21

Preparation: Equal amount of this plant parts (1:1:1:1:1) are dried in shade and powdered and stored.

Dosage: One teaspoonful of this powder is taken twice a day; morning on an empty stomach and evening after the meals. Continue this treatment for a week.During this treatment non-vegetarian food, ghee or oily food should be avoided. This treatment is continued up to 5-6 months.

iii. Kalam, Mitragyna parvifolia, Bark

Savar, Bombax ceiba, Bark *34

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of extract is taken with *Kadisakhar* twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week for husband and for the wife the treatment is continued till she completed her one menstrual cycle.

19. INFANTS' PROBLEMS

19.1 JALANTHER ROG (Hand and leg thin with big stomach)

Kilas, Couropita guianensis, Fruit *9

Preparation: Inner portion of the fruit is removed.

Dosage: Once fruit per day is taken for a week.

19.2 PATTA ROG (Hand, leg very small)

Limidi, Azadirachta indica, Bark

Kakod, Garuga pinnata, Bark

Kandol, Sterculia *urens*, Bark *27

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week.

19.3 RAHVAS ROG (Small leg hand and big stomach)

Kumbhi, Careya arborea, Root *12

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week.

<u>19.4 LAGUT ROG (Stomach swelling in small children)</u>

Karanj, Pongamia pinnata, Root

Lal ambo, Bryonopsis laciniosa, Root

Sag, Tectona grandis, Root

Nandan, Cissus repanda, Root

Rui, Calotropis gigantean, Root *17

Preparation: These roots are crushed and made paste with white ant's mud and boiled. **Application:** The body is steamed gently with this steam.

19.5 COLD AND COUGH

Kodusidi, (BN?), Bark *17

Preparation: The bark is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week.

<u> 19.6 FEVER</u>

Supali, Mundulea suberosa, Leaves

Preparation: These leaves are burned

Application: The smoke is inhaled.

19.7 TRISUVA ROG (eyes going upward and crying)

Kali payar, Ficus microcarpa, Bark

Kuda, Holarrhena antidysenterica, Bark

Waltham, Vetiveria zizanioides, Root

Vava, Trachyspermum roxburghianum, seeds

Lasun, Allium sativum, Bulb *42

Preparation: Equal portions of the above mentioned plant parts are crushed and boiled with water and the extract is removed.

Application: Two drops of this extract is applied on the head, forehead, ears, eyes, nose, on the lips, neck, all the joints and at the tip of the finger and toes. This is continued for a three days.

19.8 INDIGESTION

Sagargotti, Caesalpinia bonduc, Seeds *42

Preparation: These seeds crushed and boiled in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of this extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week.
19.9 BREATHLESSNESS

Aavi, *Emblica officinalis*, Bark *2

Preparation: The above mentioned bark is crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Take one table spoonful of the extract taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week.

19.10 DABHA ROG

Aavi, *Emblica officinalis*, Bark *2

Preparation: One and half leaf (one full leaf and the other cut longitudinally along the vein) is crushed and soaked in water and the extract is removed.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week.

19.11 ABNORMAL BEHAVIOUR

Supali Mucuna pruriens, Leaves,

Lajamani, Mimosa pudica, Whole plant *9

Preparation: Equal amount of these mixtures are crushed and soaked in a cup of water for an hour and the extract is removed.

Dosage: Half cup of the extract is taken twice a day, morning and in the evening.

Application: These leaves are burned inhaled.

20. BITES & STINGS

20.1 DOG BITE

i. Dangar, Cucurbita maxima, Seeds sprouted inside pumpkin.

Champa, *Plumaria rubra*, Bark* (22)

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a month

ii. Danger, Cucurbita maxima, Seeds sprouted inside pupkin.

Champa, Plumaria rubra, Root

Toran vel, Zizypus rugosa, Bark* (33)

Preparation: The above mentioned plant parts together with a crab are crushed and boiled in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued up to 9-10 days.

iii. Sunflower, Helianthus annus, Seed

Makai, Zea mays, Male inflorescences,

Dagar, *Cucurbita maxima*, Sprouting seed in Dangar (Pumpkin)* (38)

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week.

iv. Jangali kela, Ensete superbum, Seeds

Pevutta, Costus speciosus, Root

Jambuda, Syzygium cumini, Bark

Kosim, Schleichera oleosa, Bark

Payar, Ficus microcarpa, Bark

Kandol, Sterculia urens, Bark

Dangar, Cucurbita maxima, Sprouted seeds* (39)

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after twelve hours.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week.

*For Mad dog bite it is better to take injection

v. Kosim, Schleichera oleosa, Bark

Dagar, Cucurbita maxima, Sprouted seed *40

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after two hours.

Dosage: One table spoonful of the extract is taken twice a day; morning on an empty stomach and evening after the meals. This treatment is continued for a week.

All kinds of food can be eaten. Going near fire or climbing on a tree should be avoided, because they will feel dizziness.

20.2 SNAKEBITE

20.2.1 COMMON SNAKE BITE

i. Dhudadu, Sauromatum venosum, Tuber* (3)

Preparation: The rhizome into a small piece.

Application A piece is kept in the mouth till all poison is removed by spitting out.

ii. Marchikanth (BN?), Tuber

Jangalival, *Pteramnus labialis*, leaves*(9)

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: One table spoonful of the extract is taken till the patient get is with dysentery and vomiting.

iii. Dhodki (BN?), Fruit* (19)

Preparation: These fruits are crushed and soaked in water and the extract is removed after few minutes.

Dosage: 2-3 cups of this extract is taken. The poison is removed after vomited or passed the stool.

iv. Phade(BN?), Rhizome

Umber, Ficus racemosa, Leaf; * (24)

Preparation: Three grams of the rhizome and 1½ umber leaf crush are crushed together with half cup of water and then the extract is removed.

Dosage: Half cup of this extract is taken twice with an interval of an hour. After that the patient is taken to the hospital.

v. Tan (Lon leaf), Cocculus hirsutus, Root* (26)

Preparation: Two grams of the above mentioned plant part are crushed and soaked a glass of water and the extract is removed.

Dosage: Half cup of it is given to the patient to vomit. After that the patient is taken to the hospital.

vi. Chunch, Corchorus capsularis, seeds* (29)

These seeds taste bitter to normal persons. But if poison is in our body the seed tastes sweet.

Preparation: 5-6 seeds are crushed and mixed with water and the extract is removed after ten minutes.

Dosage: Half cup of the extract taken after every half an hour till the bitterness is experienced in the mouth. This is served as a first aid, and then the patient is taken to the hospital.

vii. Chapa, Plumaria rubra, Bark/fruit* (31)

Preparation: The above mentioned plant parts are crushed and soaked in a glass of water, and the extract is removed after half an hour.

Dosage: Half cup of the extract is given to drink twice.

vii. Sitaphal, Annona squamosa, Leaves* (35)

Preparation: Two grams of the above mentioned plant parts are crushed and soaked a glass of water and the extract is removed.

Dosage: Half cup of it is given to the patient. After that the patient is taken to the hospital.

ix. Kachka, Mucana pruriens, Leaves & seed

Kirambada, Casearia graveolens, Bark* (36)

Preparation: Few leaves of *Kachka* are crushed and soaked a glass of water and the extract is removed. Then Kirambada bark is crushed and soaked in water for some time. Then the extract is removed.

Dosage: Half cup of Kachka leaves' extract is given to the patient to vomit. Then Kirambada extract is given to drink.

x. Nagchampo, Mucana pruriens, Leaf

Haldun, Adina cordifolia, Bark

Kalam, Mitragyna parvifolia, Bark* (39)

Preparation: *Haldun* and *Kalam* barks are crushed and soaked in water and the extract is removed separately.

Dosage: 1st Step: one leaf of Nag *Champo* is given to the patient to vomit.

 2^{nd} step: Then half cup of *Haldun* extract is given.

3rd step: Then after an hour *Kalam* extract is given.

4th step: Finally the patient is taken to the hospital for further treatment.

xi. Bhootiyaalanth, Cassine gluaca, Bark

Gubita, Acacia polycanta, Root* (40)

Preparation: Equal portions of these plant parts crushed and soaked in a glass of water and then the extract is removed.

Dosage: Half cup of the extract is taken twice. Then the patient is taken to the hospital.

20.2.2 COBRA BITE

x. Dhamoli, Tinospora cordifolia, Rhizome* (23)

Preparation: Small pieces of the abovementioned rhizome crushed and mixed in water and the extract is removed.

Dosage: Half cup of it is taken after every hour on the first day. And then it continued for a week, half cup of the extraction daily.

*When the patient takes this he/she will vomit out the poison. This is only a first aid. Poison won't spread for nearly two hours. Mean while take the patient to the hospital.

ii. Chuch, Corchorus capsularis, fruit

Tan, Cisampelos pareira, Leaf (round) * (31)

Preparation: Equal parts of the above mentioned plant parts are crushed well and soaked in water for about an hour and then the extract is removed.

Dosage: Half cup of the extract is given thrice on the same day after every hour.

20.2.3 PODSI SNAKE BITE

i. Bhui karav, Eranthemum roseum, Root

Polas, Butea monosperma, Root*(31)

Preparation: These roots are crushed well and made paste

Application: The paste is applied on the snake bitten place.

ii. Bhui karav, Eranthemum roseum, Root

Application: This root is crushed soaked in hot water and the extract is removed.

Dosage: One cup of the extract is given to vomit. Then the patient is taken to the hospital for further treatment.

20.3 SCORPION STING

i. Borothada, Sphaeranthus indicus, Leaves* (14) * (16)

Preparation: These leaves are crushed.

Application: The crushed leaves are kept on the sting.

ii. Tan, *Cocculus hirsutus*, leaves.* (29)

Preparation: These leaves are crushed.

Application: The crushed leaves are kept on the sting.

3.4 Chich, *Tamarindus indica*, Seed*(41)

Preparation: Tamarind seeds are collected.

Application: The seed is place on the sting. The seed remain stuck on to the body till it absorbs all poison.

21. ANIMAL HEALTH

21.1 ENHANCING LACTATION

i. Kuala, *Mucuna pruriens*, Leaves *2

Preparation: Kuala leaves crushed and made paste,

Application: This paste is applied on the adders of the animal.

ii. Papal on Kodi, Ficus religiosa on Wrightia tinctoria, Bark barks. *24

Preparation: Equal portions of both papal and *Kodi* barks are taken and crushed made into small pieces.

Dosage: The animal is fed this mixture along with chapatti. This treatment is continued for three days.

iii. Thorsidi, Dregia volubilis, Bark*17

Preparation: These mixtures are crushed and put it in water and the extract is removed.

Dosage: This extract is sprinkled fodder given them twice a day.

ii. Kalinagali, *Eleusine coracana*, Flour *5

Preparation: Kalinagli flour is boiled with water and crushed roots of Gule.

Dosage: This mixture is given twice a day, For 3-4 days.

21.2 LACK OF PROPER APPETITE

i. Kagadana amba, Brynopsis laciniosa, Rhizome *24

Preparation: The rhizome is crushed and mixed with water.

Dosage: This water is given to the animals twice in a day.

21.3 FRACTURE

ii. Lunthi, Dioscorea bulbifera, Root

Digad, Dioscorea oppositifolia, Root

Shevur, Asparagus racemosus, Root *3

Preparation: Equal portions of these three types of roots are crushed and made paste.

Application: The paste applied on the fracture part after setting the bones properly and then bandaged.

21.4 WOUNDS

i. Sitaphal, Annona squamosa, Seeds or leaves *8

Preparation: These leaves or seeds are crushed and made paste.

Application: This paste is applied on the wound.

ii. Dhati, Baliospermum montanum, Root *11

Preparation: This root is crushed.

Application: The crushed root is given to the animal through fodder.

iii. Sinti, Phoenix sylvenstris, Small plant with root *42

Preparation: Sinti plant having roots looks like worms is uprooted.

Dosage: The wounded animal is fed with this whole plant.

iv. Diru/Dira, Nicotiana plumbaginifolia, Leaves

Tamaku, Nicotina tabacum, leaves *42

Preparation: These leaves are crushed and the extract is removed.

Application: This extract is applied on the wound for 2-3 times.

21.5 BOIL ON THE BODY.

i. Pathad, Dalbergia lanceolaria, Bark *24

Preparation: These plant parts are crushed.

Dosage: These parts mixed with fodder and given twice a day for three days.

ii. Karbat, Grewia hirsuta, Root

Udad, Sterculia villosa, Root *33

Preparation: Equal portions of these roots are crushed to make paste.

Application: This paste is applied on the wound twice a day. It is continued till the wound is completely cured.

21.6 STERILITY

i. Sevara, Asparagus recemous, Roots

Mirch, Capsicum annuum, root *2

Preparation: Equal quantity of these plant parts are crushed and soaked in water on the previous day.

Dosage: One cup of the extract is given on an empty stomach for a month.

21.7 CHICKS MEDICINE

i. Kovodiel (Amervel), Cuscuta reflexa, Stems *14

Preparation: Kovodiel stem is crushed and soaked in water.

Application: The water is kept in a vessel, that chick may take from time to time.

Some of the photographs that are used in the thesis are given in the next pages.





Annona squamosa - Sitapala

Asteracantha longifolia – Poskatta, Kluskatta



















This work was carried out to fulfil the following objectives and Each objectives discussed in detail are given below.

6.1. To conduct a survey of traditional healers for exploring Ethnobotanical knowledge of Dangs in Gujarat.

With the help of reliable and known persons the investigator met 42 well known medicine persons from 25 villages scattered in different parts of Dangs (See Figure1). Initially they were quite reluctant to share their knowledge. After befriending them slowly and gradually they shared their Ethnic knowledge. They have shared their knowledge and informed the names of the plants and their parts used for a particular sickness.

The Bio data of the healers, together with their photographs and address are numbered and recorded in the forgoing pages in order with an opinion that they can be contacted if need arises. The particular number given will be referred again in the result of the thesis with * number. Information regarding treatment with different plant parts is given with Botanical name, local name and the parts used. The preparation and dosage or application for each treatment was enquired from the individual healers and systematically documented. The list of the medicine men are given in **Appendix VII**

6.2 To Document the therapeutic practices that are practiced by the traditional healers.

Geographically Dangs is a hilly terrain and has quite a few medical health care centres which are located a bit far away from the interior villages and thus the people are forced to depend on nature to remedy various problems that are faced by them. The medicine men treat people who are affected by various *aches and pains, Urinary problems, Blood related problems Heart and chest problems' Common ailments' Eye and*

E.N.T. Problems' fevers, Skin diseases', Swellings blisters boils, big boils on the neck, Women's problems, Men's problem's Infants problems, Bites & stings, Animal health, cattle Sterility in men& in women, Piles, Lumps, Paralysis, Epilepsy (khech), Jaundice, Cancer etc. various treatments that are carried out for various illness are given in separate title. Each village has one or two medicine men that take care of the health problems of each village. There are some medicine men that are specialised only on a particular disease. Example some are expert in bone fracture or sprains etc. while some others handle snake bite cases. Each information that are given by the medicine men who treat a particular ailment is given in chapter V with a star and a number to indicate what type of treatment each one is specialised for.

6.3.To document various remedies that are carried out for various illnesses, with name of the plants, plant parts, preparation and its intake or its application.

Therapeutic and Ethanobotanical investigation brought a detailed study of various diseases that are treated by the medicine men of Dangs. The therapeutic investigation is presented into 21 titles and with its sub titles. The therapeutic practice under the title of aches and pains has 15 sub titles such as stomach ache, left side stomach pain, headache, migraine, toothache, body pain, backache, arthritis (joint pain), burns, cuts, wounds, fractures, sprains, massage oil for all kinds of pains & fractures, for all kinds of ailments, under the title of *Urinary problems*' subtitles are p_{ainful} micturition, burning during micturition, urine: excessive yellow colouring, urine: colour turning from red to yellow, kidney stone. The title Blood related problems subtitles are lohi tutavu, low blood count, blood clots, diabetes, The title Heart and chest problems' subtitles are heart attack, uneasiness in the chest, chest pain, cough, congested chest, asthma, tuberculosis, The title *Common ailments*' subtitles are dysentery, acidity, gas trouble, constipation, vomiting, cholera and certain other contagious diseases, worms in stomach, worms in the wound, rainy season itching on the feet (chikali), pain on the nail of the toes or fingers, sleeplessness, sun stroke, The title Eye and E.N.T. Problems' subtitles are Eye problems watering in the eye, blurred vision, white dots in the eyes, sore eyes, sties on the eyelids, ear pain, cold, throat. The title Various types of fevers subtitles are common fever chicken pox, measles, cholera & prevention from contagious diseases, falling sick after

going to the forest, The title *Skin diseases*' subtitles are Eczema allergy, scabies, burns, leprosy, leukoderma. The title *Swellings blisters boils*, subtitles are ulcer, blister in the mouth big boils on the body, boils on the head, big boils on the neck, boils in the stomach, boils under the arm (pata rog), pimples, mumps, The title Women's problems subtitles are excess bleeding and irregular menstruation, white discharge, pain during menstruation, enhancing lactation, breast abscess, lumps on the uterus, problems after delivery (backache stomach ache heaviness and bleeding etc), back problem of pregnant women, The title *Men's problems* subtitles are Impotency (mega rog), sterility, swelling, boils, The title **Infants' problems** subtitles are jalanther rog (hand and leg thin with big stomach), patta rog (hand leg very small), rahvas rog (small leg hand and big stomach), lagut rog (stomach swelling in small children), cold and cough, fever, trisuva rog (eyes going upward and crying), indigestion, breathlessness, dabha rog, Abnormal behaviour, The title **Bites & stings** subtitles are Dog bite, snakebite common snake bite, cobra bite, podsi bite, asariya snake bite, maner snake bite, scorpion sting, The title Animal health, *cattle* subtitles are enhancing lactation, lack of proper appetite, fracture, wounds, boil on the body, sterility and chick medicine. Besides these there are medicinal practices for Sterility in men& in women, Piles, Lumps (Lumps on the neck or ear (chokipui)), Paralysis, Epilepsy (khech), Jaundice, Cancer is given in separate title. Under each title and subtitle there are ways of curing which are referred by different medicine men. They are numbered in Roman alphabets along with the names of the plants how to prepare the medicine and its application. In order to mention the person who has given the information the medicine man's number is shown with a star. Treatments for various ailments are given along with its page numbers in Appendix I.

1. To document most commonly used medicinal plants with their botanical names and family along with their local names and its uses.

Besides the therapeutic practices ethnobotanical information for 195 plants that are referred by the medicine men also are identified and documented in **Appendix II** with *Botanical names, Family* which they belong to, *local names, habit, uses and the useful parts for each species.* The 195 identified plants include, 80 trees, 45 herbs, 32 shrubs, 28 Climber, six Grasses, two Orchids and two Parasites.



These 195 identified plants belong to 67 different families. The list of families and their corresponding number of species for which medicinal uses are recorded in **Appendix III** Here the family **Fabaceae** outstands for its medicinal uses, even without including its subfamilies Mimosaceae and Cesalpinaceae. Fabaceae alone has seventeen species. The other dominant families are its sub family, Mimosaceae and Caesalpiniaceae with six species each. The families Poaceae, Euphorbiaceae, Apocynaceae, are also with six species. Then the families like Verbinaceae, Rhamnaceae, Moraceae, Malvaceae etc. are used in high rate.



These documented plant's root, rhizome, bulb, tubers stem, bark, leaves, flowers, fruits, seeds, gum, latex, or gun etc are used to remedy most of their common and serious problems, are shown in Appendix II with the botanical names, family, local names habitat of the plant and the parts of a particular plant is used.

Same plant having different names on one side there were two different plants having the same name. In most parts of Dangs *Bryophyllum calycinum* is known as **Dham pan.** It is also having the names like *Lagpan, Panputti, Elcho* etc. When the same Bryophyllum was shown to the popular healer one (Thukarambhai Ramubhai Chauhan) in Shamghan village and other one (Sukriyabhai Janibhai Chaudhar) in Dhumkal village they did not agree that Dhampan is Brayophylum. Both of them reported Dhampan is an aquatic plant which occurs only in pure water. However, neither of them could show the specimen as it was not available during the investigation. White flowered Keusa (Polas), *Butea sp.* and Saver, *Bombax sp.* are also used as medicine. But they are not a common plant here.

The parasitic plants like *Dendropthoe falcata* and *Viscum articulatum* are also highly used in their therapeutic practices. It is also important, on which tree these parasitic plant grow. Regarding this is mentioned, both in therapeutic methods in chapter IV and in Appendix II.

The plants which are used for many kinds of ailments are Vetiveria zizanioides, Terminalia crenulata, Terminalia arjuna, Tecomella undulate, Sterculia villosa, Sterculia urens, Pterocarpus marsupium, Schleichera oleosa, Oroxylum indicum, Mucuna pruriens, Moringa concanensis, Mitragyna parvifoliam, Melia composita, Madhuca indica, Lannaea coromandelica, Lagerstroemia lanceolata, Holarrhena pubescens, Hibiscus esculentus, Hemidesmus indicus, Grewia hirsuta, Ensete superbum, Dregia volubilis, Dendropthoe falcata, Dalbergia volubilis, Cassia fistula, Carissa carandas, Careya arborea, Butea monosperma, Bombax ceiba, Bauhinia recemosa, Asparagus racemosus, Ailanthus excelsa, Aegle marmelos, Acacia polyantha, Vetiveria zizanioides etc. Most of these are trees. It is very important to conserve these medicinal plants through Germplasm or increase its propagation rate though tissue culture methods or any other Bio Technology method. There are a few nurseries in Dangs where the medicinally useful plants' seedlings are conserved and maintained. The **Appendix IV** – **VI** are the indexes of the documented medicinal plants, arranged according to title of Local names, Family and in Botanical names respectively, in separate indexes, and are arranged in alphabetical order, which will help one to find out a particular plant faster.

Pterocarpus marsupium is referred by 18 medicine persons, used for various titles especially for kidney stone and diabetes. Its bark is used mainly for medicine purpose so this plant should be protected and they are in great demand and its life is in danger. Similarly *Sterculia villosa* is referred by 13 medicine men and it is mainly used for bone fracture. It's roots are in demand for medicine... so it is very difficult to find this plant in Dangs. We need to propagate these plants as they are endangered.

It is hoped that this work will help to preserve and conserve the fast declining medicinal plants of Dangs. The aboriginal medicinal practices are preserved and be useful for not only the people of Dangs but also for all those who look for herbal therapy.

With the help of reliable and known persons the investigator met 42 well known medicine persons from 25 villages scattered in different parts of Dangs (See Figure1). Though initially they were reluctant to share their knowledge, slowly and gradually they shared their Ethnic knowledge on gaining trust and confidence. They have shared their knowledge and informed the name of the plants and their parts used for a particular sickness.

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CONCLUSION

Therapeutic Ehnobotanical investigations in Dangs Dt. Gujarat give a clear picture of the traditional practices that are carried out by many medicine persons. Diseases that affect the people most frequently are documented in 21 titles with its subtitles. The medicine men have helped to identify the plants that are used for curing various ailments. Medicine men respect the nature and they consider all the plants as part of nature. So before taking the plant parts for medicine they worship the Dungar Devi (god) then they remove the plant parts and that too only what is needed for the treatment.

The increasing deforestation has raised the alarm. It has been a cause leading to the extinction of some of the endangered medicinal plants. It is very important to protect the endangered plants which ultimately help us maintain the equilibrium in our bio diversity.

List of the medicine men along with their medicinal knowledge given in the beginning of the thesis help the reader to understand the utilization of the medicinal plants in the day today life of the people of Dangs.

It is said that nature has its own remedies to cure many of the ailments and every plant has a medicinal property. It is important to test these plants to find out the chemicals that are useful for various diseases. The identified plants will give a clue to the reader about its family, botanical names and its common uses.

Photographs 96 plants given in the thesis help the reader to identify the plants.

This work helps to preserve Dangs' **Therapeutic Ehnobotanical** heritage from one generation to the other. Over the time, the practice of herbal medicine has grown more complex. Science has enabled us to process natural substances into pills, tinctures and powders. However, the development of a market economy also has distanced consumers from the wild plants that are the source of medicines. This study will help to understand the frightening implications which loss of the deciduous forests would bring not only in terms of consequent loss of knowledge about tropical plants, but the consequent damage brought on by the loss of native medical practices in their entirety, as well as the damage to the earth's ecological health. Unfortunately, due to human factors which have

influenced the ecological balance of these delicate ecosystems, we are presently faced with the possibility of losing our rain forests. A great deal of information about the traditional uses of plants is still intact with tribal peoples. But the native healers are often reluctant to accurately share their knowledge to outsiders. It is also important that the plants are processed and tested in studies completed by ethnopharmacologists, using state of the art laboratory equipment. The people of Dangs have developed their own traditional method of treatment using a wide variety of plants. The individuals involved in such kind of treatments are known as Bhagats. Normally these people derive this kind of traditional knowledge from their ancestors and pass it on from one generation to another. Some who had possessed rich herbal knowledge were vanished without revealing to anybody. Some claim to have herbal knowledge through dreams where Dungar Devi revealed the uses of the plants. Some of the persons encountered in the present investigation also shared similar information. The medicine men of Dangs possess rich knowledge of medicinal use of various parts of plants such as root, rhizome, flower, leaf, latex, bark etc. These plants are used in a variety of forms like, paste, powder, decoction, extracted oil etc.

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APPENDIX I

Diseases	Page No.
Aches and Pains	43
Acidity	80
Arthritis (Joint Pain)	49
Asthma	70
Backache	48
Big Boils On The Body	110
Blister In The Mouth	110
Blood Clots	65
Blood Related Problems	65
Blurred Vision	89
Body Pain	47
Boils	138
Boils In The Stomach	111
Boils On The Head	111
Boils Under The Arm (Pata Rog)	112
Breast Abscess	135
Burns	104
Burns	51

Diseases dealt with in the thesis, in alphabetical order along with page numbers

Cancer	122
Chest Pain	68
Chicken Pox	95
Cholera & Prevention From Contagious Diseases	97
Cholera And Certain Other Contagious Diseases	82
Cold	91
Common Ailments	73
Common Fever	93
Congested Chest	70
Constipation	82
Cough	69
Cuts	52
Diabetes	66
Dysentery	73
Ear Pain	91
Eczema, Allergy	100
Enhancing Lactation	133
Epilepsy (Khech)	114
Excess Bleeding And Irregular Menstruation	122
Eye And E.N.T. Problems	89
Eye Problems	89

Falling Sick After Going To The Forest	99
For All Kinds Of Ailments	58
Fractures	53
Gas Trouble	81
Genital Problems	138
Headache	44
Heart And Chest Problems	67
Heart Attack	67
Impotency (Mega Rog)	137
Jaundice	114
Kidney Stone	63
Left Side Stomach Pain	44
Leprosy	105
Low Blood Count	65
Lukoderma	105
Lump On the Neck Or Ear (Chokipui)	114
Lumps	114
Lumps In The Stomach	114
Lumps On The Uterus	135
Massage Oil For All Kinds Of Pains & Fractures	58
Measles	97

Men's Problems	137
Mumps	112
Pain During Menstruation	132
Pain On The Nail Of The Toe Or The Finger	87
Painful Micturition, Burning During Micturition	59
Paralysis	114
Piles	113
Pimples	112
Problems After Delivery	136
Rainy Season Itching On The Feet (Chikali)	87
Scabies	103
Skin Disease	100
Sleeplessness	87
Sore Eyes	90
Sprains	57
Sterility	137
Sterility In Men& In Women	139
Sterility In Women	132
Sties On The Eyelids	91
Stomach Ache	43
Sun Stroke	88

Swelling	138
Swellings, Blisters, Boils	106
Throat	91
Toothache	47
Tuberculosis	73
Ulcer	109
Uneasiness In The Chest	67
Urinary Problems	59
Urine: Colour Turning From Red To Yellow	62
Urine: Excessive Yellow Colouring	61
Various Types Of Fevers	93
Vomiting	82
Watering In The Eye	89
White Discharge	130
White Dots In The Eyes.	89
Women's Problems	122
Worms In The Stomach	85
Worms In The Wound	86
Infants' Problems	140
Abnormal Behaviour	143
Bites & Stings	144

Breathlessness	143
Cobra Bite	149
Cold and Cough	141
Common Snake Bite	146
Dabha Rog	143
Dog Bite	144
Fever	141
Indigestion	142
Jalanther Rog (Hand And Leg Thin With Big Stomach)	140
Lagut Rog (Stomach Swelling In Small Children)	141
Patta Rog (Hand, Leg Very Small)	140
Rahvas Rog (Small Leg Hand And Big Stomach)	140
Scorpion Sting	150
Snakebite	146
Trisuva Rog (Eyes Going Upward And Crying)	142

Animal Health	139
Boil On The Body.	153
Chicks Medicine	154
Enhancing Lactation	151
Fracture	152
Lack of Proper Appetite	152
Sterility	154
Wounds	152

APPENDIX II

SYNOPTIC VIEW OF MEDICINAL PLANTS AND THEIR USES INVESTIGATED IN THE STUDY.

No.	Botanical Name	Family	Local Name	Habit	Locally Used For	Parts Used
1	Abrus precatorius	Fabaceae	Chanoti, Gunja	Climber	Diarrhea, Snake bite	Root
2	Acacia catechu	Mimosaceae	Khair, Kher	Tree	Cough, Kidney Stone, stomach pain, Urinary Problems,	Bark, Gum, Root
3	Acacia caesia	Mimosaceae	Chilar vel	Climber	Menstrual problems, Head ache, Urine turning red to yellow	Bark, Small stem
4	Acacia ferruginea	Mimosaceae	Kati	Tree	Paralysis	Bendgul
5	Acacia nilotica	Mimosaceae	Bavad, Babali	Tree	Kidney Stone, Tooth aches, Protection from contagious diseases	Bark, Root
6	Acacia polycantha	Mimosaceae	Gubita, Deva khair	Tree	Get Menstruation, giddiness, Jaundice, Joint pain, Kidney problems, Lump in the stomach, Snake bite, Stomach pain, Urine Yellow	Flower, Bark, Root

7	Achyranthes aspera	Amaranthaceae	Sonaru	Herb	Fever	Root
8	Adhatoda vasica	Acanthaceae	Nagchampo, Adusi	Shrub	Snake bite	Leaf
9	Haldina cordifolia	Rubiaceae	Haldun, Haldun	Tree	Jaundice, Migraine	Bark, Leaf
10	Aegle marmelos	Rutaceae	Bel, Bili	Tree	Joint pain, Protection from contagious diseases, Sprain, Swellings, Urinary Problems, White discharge in women	Bark, Leaves
11	Alangium salvifolium	Alangiaceae	Akhvel, Aakol	Tree	Migraine, Headache, Body pain	Leaves
12	Albizia lebbeck	Mimosaceae	Siris	Tree.	Milk production in women, Asthma	Root Leaves
13	Ailanthus excelsa	Simaroubaceae	Bhoot jad, harduso, Arduso	Tree	Allergy, Body Pain, Cancer, Eczema, Falling sick after going to forest, Fever, Fracture, Menstrual, problems, Milk Production, Stomach Pain, Painful Menstruation	Bark
14	Allium cepa	Liliaceae	Dungali,Kantha	Herb	contagious diseases	Bulb

15	Allium sativum	Liliaceae	Lasan	Herb	Removal of contagious diseases; Throat Pain, Small children eyes go towards upward and cry	Flakes (Bulbs)
16	Aloe barbadensis	Liliaceae.	Karpot,Kuvarpatto	Herb	Burn	Leaf
17	Amaranthus spinosus	Amaranthaceae	Matalabhaji	Herb	Fever	Root
18	Anacardium occidentale	Anacardiaceae	Kaju	Tree	Piles	Seed
19	Annona squamosa	Annonaceae	Sitapala	Tree	Chicken pox, Eczema, Fever, Snake bite, Worms in wounds of animals	Seeds and leaves
20	Arachis hypogaea	Fabaceae	Sing	Herb	Eczema, Joint Pain, Boils on the body	seeds (Oil)
21	Argemone mexicana	Papaveraceae	Karadai	Herb	Sun Stroke, Scabies, Paralysis, Scabies	Root and leaves, Seeds
22	Asparagus racemosus	Liliaceae	Sevara,Sevur, Saslana lindi, Saslana gugadi	Shrub	Fracture in cow or goats, impotency in men and in women, Jaundice, Problems after delivery, women's problem	Fleshy root

23	Asteracantha longifolia	Acanthaceae	Koluskatta, Poskatta	Shrub	Blood count decreases, Urinary Problems, worms	Root
24	Azadirachta indica	Meliaceae	Limbada, Limbidi	Tree	Body pain, Fever, Hand leg small, Headache, Kidney stone, Massage oil	Leaves, Bark
25	Azanza lampas	Malvaceae	Ran Bhendi, Jangali Bhendi	Shrub	Dysentery, Fever, Fracture, Jaundice, Kidney Stone, Wound, yellow -urine	Root
26	Baliospermum montanum	Euphorbiaceae	Dati	Shrub	Worms in wound of animals, Worms in tooth	Root
27	Babusa Arundinacea	Poaceae	Bans	Shrub	Chicken pox	Leaf
28	Bauhinia recemosa	Caesalpiniaceae	Shengal	Tree.	Chest Pain, Dysentery, Protection from contagious diseases, Scorpion Bite, T.B., Throat pain, Ulcer, White Discharge	Bark, Root, Leaves
29	Bombax ceiba	Bombacaceae	Savar, Simardo	Tree.	Dysentery, Get Children, Jaundice, Epidemic, Menstrual disorders	Bark and Root

30	Bryonopsis laciniosa	Cucurbitaceae	Kagadakeri, Kagadana ambaLal amba	Climber	Scorpion bite, animals' proper appetite, White dots in the eyes	Fruits, Leaves, rhizome, stem, root
31	Bryophyllum calycinum	Crassulaceae	Lagpan, Panputti,Elcho Dhampan	Herb	Asthma, Boils under the arm	Leaves
32	Buchanania lanzen	Anacardiaceae	Achar , Charoli	Tree.	Giddiness, Joint pain, Stomach pain	Bark
33	Butea monosperma	Fabaceae	Polas, Kaharo	Tree.	Below the chest pain, Bleeding, Cancer, common sickness, Diabetes, Fracture, Jaundice, Joint pain, Kidney Stone, Menstrual Problems, Protection from, contagious diseases, Snake bite, Sun Stroke, Swelling on the testicles, White discharge	Bark, Flowers, Gum, Root
34	Caceria tomentosa	Flacourtiaceae	Ilangi, ingi	Shrub	Jaundice, Rheumatism, Urinary Problems, White dots in the eyes	Roots and Leaves

35	Caesalpinia crista	Caesalpiniaceae	Sagargotta, Kacka	Shrub	Diarrhea, Indigestion in children, Snake Bite, Throat pain	Seeds and leaves
36	Cajanus cajan	Fabaceae	Tuver	Shrub	get sleep	Leaf
37	Calotropis gigantean	Asclepiadaceae	Rui, Bhui rui	Shrub	Increase the milk production in Mothers, Jaundice, Joint Pain, Menstrual disorders	Bark, Flower, Latex, Root
38	Cana indica	Cannaceae	Canna	Herb	Eczema	Leaves
39	Capparis zeylanica	Capparaceae.	Wagatvel	Climber	Big boil in stomach or on the throat, Dysentery	Bark
40	Capsicum annuum	Solanaceae	Marcha	Herb	Migraine, All kinds of menstrual problems, Bleeding, Body pain	Stem
41	Careya arborea	Barringtoniacea e	Kumbi, Kumbhiya	Tree.	Chicken pox, Diabetes, Dysentery, Jaundice, Joint pain, Kidney problems, Menstrual disorders, Prevention from Cholera, Protection contagious diseases, , Vomiting	Bark. Leaves, Root

42	Carica papaya	Caricaceae	Papayu	Tree.	Left side stomach pain	R aw fruit
43	Carissa carandas	Apocynaceae	Korunta, Karvantha	Shrub	Dysentery and vomiting, Dysentery, Giddiness, Measles, Menstrual Problems, Removal of contagious diseases, Scabies, Skin Allergy.	Bark, Root
44	Cassia fistula	Caesalpiniaceae	Bahava	Tree.	Asthma, Big boil in stomach or on the throat, Diabetes, Gas trouble, fruit, Get Children, Piles, Stomach Pain	Bark, Fruit, Leaves and seeds
45	Cassia tora	Caesalpiniaceae	Thevara, Taruta	Herb	Jaundice, Get sleep, Menstrual problems	Leaves, Root
46	Catharanthus roseus	Apocynaceae	Barmasi	Herb	Massage Oil	Leaves
47	Cissampelos pareira	Menispermacea e	Tanvel (Gol pana),Pahadvel	Climber	Acidity, Sterility, Kidney stone, Regular menstruations, Snake bite	Leaves, Root
48	Citrus limon	Rutaceae	Limbu	Shrub	Fever, Ulcer in the stomach	Leaves, Fruit

49	Clematis hedysarifolia	Ranunculaceae	Morvel, Morvai	Climber	Congested Chest, Migraine and Eczema	Leaves, Root
50	Clerodendrum fragrans	Verbenaceae	Mogra	Shrub	Eczema	Leaves
51	Coccinia grandis	Cucurbitaceae	Jiloda	Climber	Pain on the nail of the toe or the finger	Leaves
52	Cocculus hirsutus	Menispermaceae	Tan vel	Climber	Fracture, Scorpion sting, Snake Bite, Wound	Leaves
53	Cocos nucifera	Arecaceae	Naliar	Tree	Scabies on the head, Eczema or Allergy	Coconut Oil
54	Corchorus capsularis	Tilliaceae	Chuch	Shrub	Snake bite	Seeds
55	Cordia dichotoma	Boraginaceae	Gundi, Bhokar	Tree	Menstrual problems, Scorpion sting, Wound on the body	Bark, Leaves
56	Costus speciosus	Zingiberaceae	Pevuta	Herb	Bleeding, Dog Bite, Jaundice, Rheumatism, Sterility.	Cane, Root, Rhizome
57	Cucurbita maxima	Cucurbitaceae	Dangar, Kolu	Herb	Dog bite, Mad dog bite	Sprouted seeds

58	Curculigo orchioides	Amaryllidaceae	Musali	Herb	Uterus comes out after delivery	Fleshy Roots
59	Curcuma amada	Zingiberaceae	Ambahaldar,	Herb	Fracture	Rhizome
60	Curcuma longa	Zingiberaceae	Halder	Herb	Blood clots, Fracture, Kidney Stone	Rhizome
61	Cuscuta reflexa	Convolvulaceae	Kovodiel Amervel	Climber	Chick medicine	Stems
62	Cyathocline purpurea	Asteraceae	Pisav Burandu	Herb	Blister in the mouth	Whole plant
63	Cymbocpogon martinii	Poaceae	Roscha	Grass	Body Pain, Chicken pox, Throat pain	Inflorescence, oil
64	Cryptolepis buchanani	Periploceae	Mendvel	Climber	Milk production in women	Latex
65	Dalbergia panniculata	Fabaceae	Pathal	Tree	Impotency in men and in women, Boil on the neck of cow	Bark
66	Dalbergia sissoo	Fabaceae	Sissam	Tree	Migraine	Leaves
67	Dalbergia volubilis	Fabaceae	Nilisotti	Climber	Fever, Fracture, Jaundice, Skin diseases, Urinary Problems	Bark, Laves, Root, Stem

68	Datura metel	Solanaceae	Datura	Herb	Jaundice	Tender leaves
69	Dendropthoe falcata	Loranthaceae	Bendvel, Vando	Parasite	Back problem of pregnant women, early stages of appendix, Regular Menstruation, T.B, Ulcer, White dots in the eyes	Whole plant
	Dendropthoe falcata on Acacia ferruginea		Bedvel on khati		Paralysis	Whole plant
	Dendropthoe falcata on Diospyrous melaxoxylon-		Bendgul onTemrun		Arthritis, Asthma	Bark of both
	Dendropthoe falcata on Terminalia crenulata		Bendguil on sadada		Epilepsy, Impotency in men	Whole plant
70	Derris scandens		Karenj vel, Eleya Karanj	Climber	More milk production in Animal, Scabies	Root, Fruit
71	Dioscorea bulbifera	Dioscoreaceae	Lunti	Climber	Fracture in cow or goats, Snake bite, Cancer	Tubers

72	Dioscorea oppositifolia	Dioscoreaceae	Digad	Climber	Fracture	Tubers
73	Diospyros melanoxylon	Ebenaceae	Timbrun, Temurun	Tree	Scorpion Bite	Leaf
74	Dolichandrone falcata	Bignoniaceae	Modsing	Tree	Regular Menstruation, Back problem of pregnant women, Stomach Pain	Bark
75	Dregia volubilis	Asclepiadaceae	Torsidi, Dorsisi, Kodusidi	Climber	Stomach pain, Joint pain, Giddiness, Lump in the stomach, Impotency in men and women, Dysentery, Milk Production animals, Milk Production animals, cough, Cold	Bark, Root
76	Emblica officinalis	Euphorbiaceae	Amala, Avi, Aval, Avala	Tree	Cough, Dham in children, Tooth ache	Seed and bark
77	Ensete superbum	Soitaminaceae	Jangali kel, Chav, Chavalia	Herb	Asthma, Chicken pox, Dog bite, Worms Jaundice, Urinary	Root, Seeds, Fruit, Sap
78	Eranthemum roseum	Asteraceae	Buikarav, Kali karav	Herb	Wound, Snake bite, Protection diseases.	Leaves, Root
79	Erythrina variegata	Fabaceae	Pangara	Tree	Ring worm	Whole plant

80	Eucalyptus globulus	Myrtaceae	Eukali, Nilgiri	Tree	Fever, Lump in the stomach, swelling on the body	Leaves and Twigs
81	Euphorbia caducifolia	Euphorbiaceae	Cactus, Savar	Shrub	Milk production in Mother, Breathlessness, Asthma and Jaundice	Stem, Latex
82	Euphorbia hirta	Euphorbiaceae	Dudari, Jirmuli, Dudeli	Herb	Fever	Root
83	Ficus benghalensis	Moraceae	Vad	Tree	Impotency in men, Worms in stomach, Scabies	Latex, Root, Tender leaves
84	Ficus hispida	Moraceae	Bhui umbari	Tree	Eczema, Leprosy	Fruit Latex
85	Ficus racemosa	Moraceae	Umber	Tree	Kidney Stone, Menstrual Problems, Mumps, Snake Bite, Tiki in the eye	Root, Latex, Leaf
86	Ficus microcarpa	Moraceae	Payar	Tree	Dog Bite, Prevention from Epidemic, Small children eyes go towards upward, excess bleeding	Bark, Lates
87	Ficus religiosa	Moraceae	Pipal	Tree	Dysentery, Joint Pain	Bark

	Ficus religiosa on Butea monosperma		Pipal – Polas		Asthma, Kidney stone, Yellow or red color in urine, menstrual disorders	Both barks
	Ficus religiosa on Wrightia tinctoriaa		Papal which grows on Kodi		Milk production in animal	Both barks
88	Garuga pinnata	Bruseraceae	Kakod	Tree	Body pain, Fracture, Hand leg small, Stop bleeding in women	Bark
89	Gmelina arborea	Verbinaceae	Shivan, Sivan	Tree	Menstrual disorders, Swellings	Bark
90	Grewia hirsuta	Tiliaceae	Karbat, Kardhamani	Shrub	Boils on the body of the cattle, Breast Cancer, Fracture, Jaundice, Mumps, Nail of the toe or finger pain, Scabies, Boils in the gupth parts	Root
91	Grewia tiliifolia	Tiliaceae	Dhaman	Tree	Flower in the eyes, Menstrual Problems	Twig pieces, Bark

92	Helianthus annus	Asteraceae	Suriyamukhi	Herb	Dog bite	Seed
93	Helicteres isora	Sterculiaceae	Ati, Mordasing	Shrub	Dysentery, Vomiting	Fruit, Bark
94	Hemidesmus indicus	Asclepiadaceae	Upersadi, Antmuli	Shrub	Acidity, Dysentery, Get children, Impotency in men, Kidney stone, More milk production in Animal, Regular menstruations, Rheumatism, Uneasiness in the chest, Uneasiness in the chest, Vomiting	Root and leaves
95	Heterophragma quadriloculare	Bignoniaceae	Varash	Tree	Diabetes	Bark
96	Hibiscus cannabinus	Malvaceae	Ambadi, Devambadi	Shrub	White discharge in women	Root
97	Hibiscus esculentus	Malvaceae	Bhendi, Choki bhendi	Herb	Menstrual and urinary Disorder, Fracture, Jaundice	Root and Bark

98	Holarrhena pubescens	Apocynaceae	Kuda	Tree	Acidity, below the chest pain, Dabha Rog in Children, Get children, kidney stone, regular menstruations, Small children eyes go towards upward and cry, Stomach pain, Sties on the eyelids	Bark or fruit
99	Holoptelea integrifolia	Ulmaceae	Papado (Kanji)	Tree	Sore eye	Bark
100	Ipomoea batatas	Convolvulaceae	sakariya	Climber	Boil	Latex
101	Kydia calycina	Malvaceae	Varang	Tree	Eczema Boils on the body	Bark
102	Lagerstroemia lanceolata	Lythraceae	Nano Bondar, Safed bondar	Tree	All kinds of menstrual problems, burning sensation while passing urine, Stomach Pain, Swellings	Bark
103	Lagerstroemia parviflora	Lythraceae	Bondar, kali bondar, motobondar	Tree	Fracture, Menstrual Problems, Scabies on the head	Leaves, Bark, Dried sticks

104	Lannaea coromandelica	Anacardiaceae	Madhul, Modad	Tree	Fracture, Fracture, Menstrual Problems, Migraine, Stop bleeding in women, Urinary problems, White discharge	Bark
105	Lawsonia inermis	Lythraceae	Mendi	Shrub	Eczema	Leaves
106	Madhuca indica	Sapotaceae	Mahu, Mahudo	Tree	Back problem of pregnant women, Bleeding in Women, Body Pain, Burn, Cholera, Cold, Dysentery, Fever, Regular Menstruation, Sprain, Stomach pain, Swelling	Bark, Flower, Alcohol from the distilled flowers
107	Melia composita	Meliaceae	Nimbaro, Limbaro	Tree	Dysentery, Acidity, Fracture, Worms in the stomach, Fracture	Bark
108	Millettia racemosa	Fabaceae	Ale bibula, Bibulavel	Climber	Menstrual Problems, Urinary problems, Cough, Fracture	Bark
109	Mimosa pudica	Mimosaceae	Lajamani	Shrub	Abnormal behavior, Throat Pain	Whole plant

110	Mitragyna parvifolia	Rubiaceae	Kadam, Kalam	Tree	Acidity, Diarrhea, Get children, Kidney stone, Protection from contagious diseases, Regular menstruations, Snake bite	Bark
111	Morinda tomentosa	Rubiaceae	Ali, Aliv, Kutterpath	Tree	Snake bite, Eczema, Scabies	Bark, Root
112	Moringa concanensis	Moringaceae	Kadu shegu	Tree	Asthma, Body Pain, Cancer, Cold fever, Prevention from Epidemic, Uneasiness in the chest	Bark, Small plant
113	Moringa oleifera	Moringaceae	Shegu, Sargava	Tree	Fracture, Removal of contagious diseases, Worms in the wound	Bark
114	Mucuna pruriens	Fabaceae	Kuali, Kuila, Kavicha	limber	Chicken pox, Impotency in men, Milk production in Animals, Prevention from Epidemic, Worms in the stomach,	Bark, Leaf, Root
115	Mundulea suberosa	Fabaceae	Supali	Shrub	Abnormal behaviors, Fever in Children	Leaves

116	Nervillia aragoana	Orchidaceae	Dukarkanth	Orchid	Terrestrial orchid with a single leaf	Rhizome
117	Nicotiana plumbaginifolia	Solanaceae	Dangi Tamaku, Diru, Dira	Herb	Worms in the wound of the cattle	Leaves
118	Nicotiana tabacum	Solanaceae	Tamacu	Herb	Worms in the wound of the cattle	Leaves
119	Nymphaea nouchali	Nymphaeaceae	Kamal	Herb	Any problem with stomach, Jaundice, Stomach aches	Rhizome
120	Ocimum tenuiflorum	Lamiaceae	Tulsi	Herb	Massage Oil	leaves and stem
121	Oroxylum indicum	Bignoniaceae	Tettu	Tree	Burning sensation while passing urine, Diabetes, Increase Blood count, Jaundice, Joint pain, Sprain,problems of women, Swelling,Urinary problems	Bark
122	Phoenix sylvestris	Arecaceae	Sinti	Shrub	Jaundice, Worms in the wound – of cattle	Soft stem, Small plant with root

123	Piper betle	Piperaceae	Pan	Climber	Jaundice, Congested Chest	leaves
124	Pithecellobium dulce	Plumbaginaceae	Ilai chich	Tree	Stomach pain, Dysentery	Bark
125	Plumbago zeylanica	Mimosaceae	Chitak, Chitralu	Shrub	Lump in the stomach	Root, Leaves
126	Plumeria rubra	Apocynaceae	Chapo, Chapo, Chapud	Tree	Constipation, Snake bite, Stray dog bite, Swellings	Bark/fruit
127	Pongamia pinnata	Fabaceae	Karanj	Tree	Body pain, Chicken pox, Headache, Menstrual disorders, Swelling,	Leaves, Root, Bark
128	Pterocarpus marsupium	Fabaceae	Bio, Bhyo, Bivula	Tree	Asthma, Boils on the body , Cancer, common sickness, Cough, Diabetes, Difficulty in passing Urine, Dog bite, Eczema, Extra bleeding in during menstruation, Jaundice, Kidney stone, menstrual disorders,	Bark, Gum
129	Radermachera xylocarpa	Bignoniaceae	Khadsing	Tree	Impotency in men, Stomach Pain, Stop bleeding in women, Urinary problems	Bark

130	Ricinus communis	Euphorbiaceae	Aran, Arani	Tree	Urinary problems, Menstrual Problems,	Bark
131	Sauromatum venosum	Araceae	Dodhadu, Dadadu	Herb	Snake bite, big boil in the body	Tuber
132	Saccharum officinarum	Poaceae	Seradi	Grass	Jaundice	Cane
133	Schleichera oleosa	Sapindaceae	Kusum, Kosim	Tree	Blisters in mouth, Body pain, Chicken pox, Dog Bite, Jaundice, Massage oil, Scabies,	Bark, Fruit, Seed –nut, seed - oil
134	Sida rhombifolia	Malvaceae	Chokacik	Shrub	Jaundice	Root
135	Schrebera swietenioides	Oleaceae	Mokha	Tree	Chicken pox, Piles,	Bark
136	Sorghum helipens	Poaceae	Boru	Grass	Heavy stomach	Root
137	Soymida febrifuga	Meliaceae	Rohan	Tree	Stomach pain, Joint pain.	Bark
138	Sphaeranthus indicus	Asteraceae	Borothda	Herb	Scorpion bite, Cold, Paralysis, Breast abscess, Paralysis, Breast abscess	Whole plant

139	Sterculia urens	Sterculiaceae	Kandol, Kadavai	Tree	Bleeding, Chicken pox, Dog Bite, Dysentery, Fracture, Hand leg small, Lukeoderma, Menstrual disorders, Painful menstruation, Removal of contagious diseases, Water from the mouth while sleeping,	Bark, Gum
140	Sterculia villosa	Sterculiaceae	Udad	Tree	Boils on the body of the cattle, Fracture, Pandav rog, Prevention from Epidemic, Swelling on the testicles	Root, Bark
141	Syzygium cumini	Myrtaceae	Jamboo, Jamla, Jabuda	Tree	Kidney Stone, Menstrual Problems, Dog Bite	Bark
142	Tacca leontopetabides	Tacaceae	Sardana tad	Herb	Dysentery, Menstrual problems, Get Children, chest Pain,	Tuber
143	Taberneamontana divaricata	Apocynaceae	Takari	Shrub	White discharge	Bark

144	Tamarindus indica	Caesalpiniaceae	Amali, Chich, Kati imali	Tree	Body swelling, joint pain, Scorpion bite, Sun stoke, Urinary Problems	Leaves, fruit and seeds
145	Tecomella undulata	Bignoniaceae	Rakath rohidi	Tree	All kinds of menstrual problems, Blood clots, Body Pain, Dysentery, Fracture, Get Children, Kidney Stone	Bark
146	Tectona grandis	Verbenaceae	Sag, Sal	Tree	Below the chest pain, Jaundice, Kidney Stone, Menstrual disorders, Protection from contagious diseases, Stomach pain, swelling on the testicles	Bark, root
147	Pteramus labialis	Fabaceae	Ran val, Jangali val, Pivan	Climber	Asthma, Body pain, Cough, Headache, Menstrual problems, Obesity, Snakebite, Stomach problems	Leaves, Root
148	Terminalia arjuna	Combretaceae	Arjn sadad	Tree	Kidney stones, Cancer, all ailments, Menses problems	Bark

149	Terminalia bellirica	Combretaceae	Bahada, Behada	Tree	Stomach ache, Migraine, Asthma	Bark, Dry branch, Dry fruit
150	Terminalia chebula	Combretaceae	Hirada, Hado, Harada	Tree	Pimples, Cough	Fruit
151	Terminalia crenulata	Combretaceae	Sadad, Sada sadada	Tree	Back problem of pregnant women, Diarrhea, Eczema or Allergy, Impotency in men, Joint Pain, Piles, Regular Menstruation and Wound	Bark
152	Tinospora cordifolia	Menispermacea e	Ghamoli, Galo	Climber	Dog bite, Snake Bite	Bark, Rhizome
153	Trachyspermum roxburghianum	Apiaceae	Ajama seed, Vauva	Herb	Small children eyes go towards upward and cry Joint Pain	Seeds
154	Tribulus terrestris	Zygophyllaceae	Gokharu	Herb	Back pain, Joint Pain	Fruit
155	Tridax procumbens	Asteraceae	Patterpui	Herb	Fracture	Whole plant
156	Trigonella foenum	Fabaceae	Methi	Herb	Dysentery	Leaves

157	Urginea indica	Lilliaceae	Janjali pyaz, Nalgut	Herb	Boils in the stomach, Cancer, Stomach ache, Women get children	Bulb
158	Vanda roxburghii	Orchidaceae	Jadela Lasun, Rasna, Vando	Orchid	Regular Menstruation, Back problem of pregnant women	Ariel Root
159	Ventilago denticulata	Rhamnaceae	Ashivel, Kangavel	Climber	Menstrual in Women, Burn, Ulcer	Root, Bark
160	Vetiveria zizanioides	Poaceae	Waltham	Grass	Dysentery and vomiting, Small children eyes go towards upward and cry, Urine turning red to yellow, Vomiting, Fever, Jaundice, Joint Pain	Root
161	Dioscoria Sp.		Marchikanth	Climber	Constipation, Migraines, Obesity, Snake bite, Stomach problems, Women sterility	Tuber
162	Martynia annua	Martyniaceae	Vagh nagh, Vichdi	Shrub	Eczema, Scabies	Seed

163	Viscum articulatum	Violaceae	Bendgul, Jadela sakhaliya	Parasite	Massage Oil, Lump in the stomach, Jaundice, Asthma	Whole of bendvel
	Viscum articulatum on Grewia tiliaefolia-		Sakhaliya which grows on Dhaman		Massage Oil, Lump in the stomach, Jaundice, Asthma, Body pain, Joint pain	Whole Plant
164	Vitex negundo	Verbenaceae	Nirgud, Nirgui	Shrub	Body pain, Fever and cold, Fracture, Headache, Sore eyes, Sunstroke	Leaves
165	Wrightia tinctoria	Apocynaceae	Kudi, Kodi	Tree	Snake bite, Wound	Bark, Latex
166	Zea mays	Poaceae	Makai	Herb	Dog bite	Male inflorescence
167	Zingiber officinale	Zingiberaceae	Aadu	Herb	Back pain, Joint Pain, Good sleep	Rhizome
168	Zizyphus mauritiana	Rhamnaceae	Ber, Bordi	Tree	Cough	Bark
169	Zizyphus nummularia	Rhamnaceae	Nana bor	Shrub	Cough	Bark
170	Zizypus rugosa	Rhamnaceae	Toran, Toranvel,Velibore	Climber	Toran, Toranvel	Bark

171	Zizyphus sp.	Rhamnaceae	Borghat, Gatbore	Shrub	Stomach pain, Joint pain, Giddiness, T.B.	Bark
172	Bauhinia varigata	Caesalpiniaceae	Koharu	Tree	Urine turning red to yellow	Root
173	Cleodendron saratium	Verbinaceae	Safed sagi	Shrub.	Piles, Menstrual disorders	Bark, Leaf
174	Hyptis sualens	Lamiaceae	Bhangut, Bhangut	Herb	Fever	Leaves and flowers
175	Atylosia platicarpa	Fabaceae	Bhara	Climber	Bleeding	Root
176	Celosia cristata		Devkurudu	Herb	Menstrual Problems	Root
177	Leonotis nepetifolia	Lamiaceae	Gokhadu (Masu)	Herb	Scabies on the head, Scabies	Whole plant
178	Celastrus paniculata	Fabaceae	Karkangael	Climber		
179	Cissus repanda	Vitaceae	Nandan , Pandvel	Climber	Menstrual disorders	Root
180	Haplantnus tentaculatus	Acanthaceae	Nanu Ekaru	Herb	Waist - nerve pain	Leaves
181	Ougenia dalbergiodes	Fabaceae	Tanas	Tree	Dysentery	Bark

182	Kirganelia recticuleta	Euphorbiaceae	Kamboi, pichrund	Shrub	Chicken pox	Root
183	Panicum miliaceum	Poaceae	Varai	Grass	Any problem with stomach, Lump in the stomach, Stomach Pain, Big boils on the neck	Flour
184	Eleusine coracana	Poaceae	Nagali	Grass	Milk Production in Mother, Mother's milk spoils	Flour
185	Chlorophytum borivilianum	Lilliaceae	Kaunibhaji,Musali	Herb	Jaundice, Stomach Pain	Root
186	Tagetes patula	Asteraceae	Mokamani	Herb	Ear pain, Watering the eyes	Leaves
187	Clematis Sp.	Ranunculaceae	Halund kairi	Climber	Cough, Acidity, All kinds of pain, Blurred vision, Sterility, Kidney stone, Regular menstruations	Root
188	Couropita guianensis	Luacythidaceae	Kials	Tree	Hand and leg thin with big stomach	Fruit
189	Sapindus emarginatus	Sapindaceae	Arita	Tree	Constipation	bark
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190	Cassine glauca	Celastraceae	Bootiya aland, Aland	Tree	Cancer, Menstrual disorders, Milk Production, Snake bite and Swelling	Root ,Bark
191	Casearia graveolens	Flacourtiaceae	Kirambada	Tree	Snake Bite	Bark
192	Accacia Sp	Mimosaceae	Echan	Tree	Bleeding, Kidney Stone, sleeplessness	Bark, Leaves
193	Piliostigma fovelatum	Caesalpinaceae	Chamoli, Bhootchamoli	Tree	Bleeding,Contagious diseases, Menstruation	Bark root
194	Plantago ovata	Plantagonaceae	Isabgoul	Herb	Menstrual problems. Water from the mouth while sleeping,	Whole plant
195	Millusa tomentosa	Kanokaceae	Humbh	Trea	Asthama	leaves

APPENDIX III

Index to the plant families corresponding Local names and family

No.	Family	Local names	Botanical Names
2	Acanthaceae	Nagchampo, adusi	Adhatoda vasica
3	Acanthaceae	Koluskatta, Poskatta	Asteracantha longifolia
4	Acanthaceae	Nanu Ekaru	Haplanthus tentaculatus
5	Alangiaceae	Akhvel, Aankol	Alangium salvifolium
6	Amaranthaceae	Sonaru	Achyranthes aspera
7	Amaranthaceae	Matala bhaji	Amaranthus spinosus
8	Amaranthaceae	Devkurudu	Celosia cristata
9	Amaryllidaceae	Musali	Curculigo orchioides
10	Anacardiaceae	Kaju	Anacardium occidentale
11	Anacardiaceae	Achar, Charoli	Buchanania lanzen
12	Anacardiaceae	Madhul, Modad	Lannaea coromandelica
13	Annonaceae	Sitapala	Annona squamosa
14	Apiaceae	Ajama seed, Vauva	Trachyspermum roxburghianum
15	Apocynaceae	Korunta, Karvantha	Carissa carandas
16	Apocynaceae	Barmasi	Catharanthus roseus
17	Apocynaceae	Kuda	Holarrhena pubescens
18	Apocynaceae	Chapo, Chapo, Chapud	Plumeria rubra

19	Apocynaceae	Takari	Taberneamontana divaricata
20	Apocynaceae	Kudi, Kodi	Wrightia tinctoria
21	Araceae	Dodhadu, Dadadu	Sauromatum venosum
22	Arecaceae	Naliar	Cocos nucifera
23	Arecaceae	Sinti	Phoenix sylvestris
24	Asclepiadaceae	Rui, Bhui rui	Calotropis gigantea
25	Asclepiadaceae	Torsidi, Dorsisi, Kodusidi	Dregia volubilis
26	Asclepiadaceae	Upersadi, Antmuli	Hemidesmus indicus
27	Asteraceae	isav Burandu	Cyathocline purpurea
28	Asteraceae	Buikarav, Kali karav	Eranthemum roseum
29	Asteraceae	uriyamukhi	Helianthus annus
30	Asteraceae	Borothda	Sphaeranthus indicus
31	Asteraceae	Patterpui	Tridax procumbens
32	Asteraceae	Mokamani	Tagetes patula
33	Bambusaceae	Bans	Babusa Arundinacea
34	Barringtoniaceae	Kumbi, Kumbhiya	Careya arborea
35	Bignoniaceae	Modsing	Dolichandrone falcata
36	Bignoniaceae	Varash	Heterophragma quadriloculare
37	Bignoniaceae	Tettu	Oroxylum indicum
38	Bignoniaceae	Khadsing	Radermachera xylocarpa
39	Bignoniaceae	Rakath rohidi	Tecomella undulate
40	Boraginaceae	Gundi, Bhokar	Cordia dichotoma

41	Bruseraceae	Kakad	Garuga pinnata
42	Caesalpiniacea	Shengal	Bauhinia recemosa
43	Caesalpiniaceae	Sagargotta, Kachka	Casalpinia crista
44	Caesalpiniaceae	Bahava	Cassia fistula
45	Caesalpiniaceae	Thevara, Taruta	Cassia tora
46	Caesalpiniaceae	Amali, Chich, Kati imali	Tamarindus indica
47	Caesalpiniaceae	Koharu	Bauhinia varigata
48	Cannaceae	Canna	Cana indica
49	Capparaceae.	Wagatvel	Capparis zeylanica
50	Caricaceae	Рарауи	Carica papaya
51	Celastraceae	Bootiya aland, Aland	Cassine glauca
52	Cesalpinaceae	Chamoli	Piliostigma fovelatum
53	Combretaceae	Arjn sadad	Terminalia arjuna
54	Combretaceae	Bahada, Behada	Terminalia bellirica
55	Combretaceae	Hirada, Hado, Harada	Terminalia chebula
56	Combretaceae	Sadad, Sada sadada	Terminalia crenulata
57	Convolvulaceae	Amervel	Cuscuta reflexa
58	Convolvulaceae	sakariya	Ipomoea batatas
59	Crassulaceae	Lagpan, Panputti, Elcho Dhampan	Bryophyllum calycinum
60	Cucurbitaceae	Kagadakeri, Kagadana amba. Lal amba	Bryonopsis laciniosa
61	Cucurbitaceae	Giloda	Coccinia grandis
62	Cucurbitaceae	Dangar, Kolu	Cucurbita maxima
63	Dioscoreaceae	Lunti	Dioscorea bulbifera

64	Dioscoreaceae	Digad	Dioscorea oppositifolia
65	Dioscoreaceae	Marchikanth	Dioscoria sp.
66	Ebenaceae	Timbrun, Temurun	Diospyros melanoxylon
67	Euphorbiaceae	Dati	Baliospermum montanum
68	Euphorbiaceae	Amala, Avi, Aval, Avala	Emblica officinalis
69	Euphorbiaceae	Cactus, Savar	Euphorbia caducifolia
70	Euphorbiaceae	udari, Jirmuli, Dudeli	Euphorbia hirta
71	Euphorbiaceae	Aran, Arani	Ricinus communis
72	Euphorbiaceae	Kamboi, pichrund	Kirganelia recticulata
73	Fabaceae	Chanoti, Gunja	Abrus precatorius
74	Fabaceae	Sing	Arachis hypogaea
75	Fabaceae	Polas, Kaharo	Butea monosperma
76	Fabaceae	Tuver	Cajanus cajan
77	Fabaceae	Pathal	Dalbergia panniculata
78	Fabaceae	Sissam	Dalbergia sissoo
79	Fabaceae	Nilisotti	Dalbergia volubilis
80	Fabaceae	Karenj vel, Eleya Karanj	Derris scaendens
81	Fabaceae	Pangara	Erythrina variegata
82	Fabaceae	le bibula, Bibulavel	Millettia racemosa
83	Fabaceae	Kuali, Kuila, Kavicha	Mucuna pruriens
84	Fabaceae	Supali	Mundulea suberosa
85	Fabaceae	Karanj	Pongamia pinnata
86	Fabaceae	Bio, Bhyo, Bivula	Pterocarpus marsupium

		Ran val, Jangali val,	
87	Fabaceae	Pivan	Pteramus labialis
88	Fabaceae	Methi	Trigonella foenum
89	Fabaceae	Bhara	Atylosia platicarpa
90	Fabaceae	Karkangael	Celastrus paniculata
91	Fabaceae	Tanas	Ougenia dalbergiodides
1	Flacourtiaceae	Kirambada	Casearia graveolens
92	Flacourtiaceae	Ilangi, ingi	Caseria tomentosa
93	Kanokaceae	Humbh	Millusa tomentosa
94	Lamiaceae	Tulsi	Ocimum tenuiflorum
95	Lamiaceae	Bhangut, Bhangut	Hyptis suaclens
96	Lamiaceae	Gokhadu (Masu)	Leonotis nepetifolia
97	Liliaceae	Dungali, Kantha	Allium cepa
98	Liliaceae	Lasan	Allium sativum
		Sevara, Sevur, Saslana	
99	Liliaceae	lindi, Saslana gugadi	Asparagus racemosus
		Musali, Kauni bahji	Chlorophytum
100	Liliaceae		borivilianum
101	Liliaceae.	Karpot,Kuvarpatto	Aloe barbadensis
102	Lilliaceae	Janjali pyaz, Nalgut	Urginea Indica
103	Loranthaceae	Bendvel, Vando	Dendropthoe falcata
104	Luacythidaceae	Kials	Couropita guianensis
105	Lythraceae	Nano Bondar, Safed bondar	Lagerstroemia lanceolata
106	Lythraceae	Bondar, kali bondar, motobondar	Lagerstroemia parviflora

107	Lythraceae	Mendi	Lawsonia inermis
108	Malvaceae	Ran Bhendi, Jangali Bhendi	Azanza lampas
109	Malvaceae	Ambadi, Devambadi	Hibiscus cannabinus
110	Malvaceae	Bhendi, Choki bhendi	Hibiscus esculentus
111	Malvaceae	Varang	Kydia calycina
112	Malvaceae	Chokacik	Sida rhombifolia
113	Martyniaceae	Vagh nagh, Vichdi	Martynia annua
114	Meliaceae	Limbada, Limbidi	Azadirachta indica
115	Meliaceae	Nimbaro, Limbaro	Melia composita
116	Meliaceae	Rohan	Soymida febrifuga
		Tanvel (Gol pana),,	
117	Menispermaceae	ahadvel	Cissampelos pareira
118	Menispermaceae	Tan vel	Cocculus hirsutus
119	Menispermaceae	hamoli, Galo	Tinospora cordifolia
120	Mimosaceae	Khair, Kher	Acacia catechu
121	Mimosaceae	Chilar vel	Acacia caesia
122	Mimosaceae	Kati	Acacia ferruginea
123	Mimosaceae	Bavad, Babali	Acacia nilotica
124	Mimosaceae	Gubita	Acacia polycantha
125	Mimosaceae	Siris	Albizia lebbeck
126	Mimosaceae	Lajamani	Mimosa pudica
127	Mimosaceae	Chitak, Chitralu	Plumbago zeylanica
128	Mimosaceae	Echan	Accacia Sp.
129	Moraceae	ad	Ficus benghalensis

130	Moraceae	Bhui umbari	Ficus hispida
131	Moraceae	mber	Ficus racemosa
132	Moraceae	Payar	Ficus microcarpa
133	Moraceae	Pipal	Ficus religiosa
134	Moringaceae	Kadu shegu	Moringa concanensis
135	Moringaceae	Shegu, Sargava	Moringa oleifera
136	Musaceae	Jangali kel, Chav, Chavalia	Ensete superbum
137	Myrtaceae	ukali, Nilgiri	Eucalyptus globulus
138	Myrtaceae	Jamboo, Jamla, Jabuda	Syzygium cumini
139	Nymphaeaceae	Kamal	Nymphaea nouchali
140	Oleaceae	Mokha	Schrebera swietenioidess
141	Orchidaceae	Dukarkanth	Nervillia Sp.
142	Orchidaceae	Jadela Lasun, Rasna, Vando	Vanda roxburghii
143	Papaveraceae	Karadai	Argemone mexicana
144	Periploceae	Mendvel	Cyptolepis buchanani
145	Piperaceae	Pan	Piper betle
146	Plantagonaceae	Isabgoul	Plantago ovata
147	Plumbaginaceae.	Ilai chich	Pithecellobium dulce
148	Poaceae	Savar, Simardo	Bombax ceiba
149	Poaceae	Roscha	Cymbopogon martinii
150	Poaceae	Seradi	Saccharum officinarum
151	Poaceae	Boru	Sorghum helipens

152	Poaceae	Waltham	Vetiveria zizanioides
153	Poaceae	Makai	Zea mays
154	Poaceae	Varai	Panicum miliaceum
155	Poaceae	Nagali	Eleusine coracana
156	Ranunculaceae	Morvel, Morvai	Clematis hedysarifolia
157	Ranunculaceae	Halund kairi	Clematis Sp.
158	Rhamnaceae	Ashivel, Kangavel	Ventilago denticulata
159	Rhamnaceae	Ber, Bordi	Zizyphus mauritiana
160	Rhamnaceae	Nana bor	Zizyphus nummularia
161	Rhamnaceae	Toran, Toranvel, Velibore	Zizypus rugosa
162	Rhamnaceae	Borghat, Gatbore	Zizyphus sp.
163	Rubiaceae	Haldun, Haldun	Haldina cordifolia
164	Rubiaceae	Kadam, Kalam	Mitragyna parvifolia
165	Rubiaceae	Ali, Aliv, Kutterpath	Morinda tomentosa
166	Rutaceae	Bel, Bili	Aegle marmelos
167	Rutaceae	Limbu	Citrus limon
168	Sapindaceae	Kusum, Kosim	Schleichera oleosa
169	Sapindaceae	Arita	Sapindus emarginatus
170	Sapotaceae	Mahu, Mahudo	Madhuca indica
171	Simaroubaceae	Bhoot jad, Harduso, Arduso	Ailanthus excelsa
172	Solanaceae	Marcha	Capsicum annuum
173	Solanaceae	Datura	Datura metel
174	Solanaceae	Dangi Tamaku, Diru, Dira	Nicotiana plumbaginifolia

175	Solanaceae	Tamacu	Nicotiana tabacum
176	Sterculiaceae	Ati, Mordasing	Helicteres isora
177	Sterculiaceae	Kandol, Kadavai	Sterculia urens
178	Sterculiaceae	Udad	Sterculia villosa
179	Taceaceae	Sardana tad	Tacca leontopetabides
180	Tiliaceae	Karbat, Kardhamani	Grewia hirsuta
181	Tiliaceae	Dhaman	Grewia tiliifolia
182	Tilliaceae	Chunch	Corchorus capsularis
183	Ulmaceae	apado (Kanji)	Holoptelea integrifolia
184	Verbenaceae	Mogra	Clerodendrum fragrans
185	Verbenaceae	Sag, Sal	Tectona grandis
186	Verbenaceae	Nirgud, Nirgui	Vitex negundo
187	Verbinaceae	Shivan, Sivan	Gmelina arborea
188	Verbinaceae	Safed sagi	Clerodendron serraium
		Bendgul, Jadela	
189	Violaceae	sakhaliya	Viscum articulatum
190	Vitaceae	Nandan , Pandvel	Cissus repanda
191	Zingiberaceae	Pevuta	Costus speciosus
192	Zingiberaceae	Ambahaldar, Lili amba	Curcuma amada
193	Zingiberaceae	Halder	Curcuma longa
194	Zingiberaceae	Aadu	Zingiber officinale
195	Zygophyllaceae	Gokharu	Tribulus terrestris

APENDIX IV

No.	Local names	Botanical Names	Family
1	Aadu	Zingiber officinale	Zingiberaceae
2	Achar, Charoli	Buchanania lanzen	Anacardiaceae
3	Ad	Ficus benghalensis	Moraceae
4	Ajama seed, Vauva	Trachyspermum roxburghianum	Apiaceae
5	Akhvel, Aankol	Alangium salvifolium	Alangiaceae
6	Ali, Aliv, Kutterpath	Morinda tomentosa	Rubiaceae
7	Amala, Avi, Aval, Avala	Emblica officinalis	Euphorbiaceae
8	Amali, Chich, Kati imali	Tamarindus indica	Caesalpiniaceae
9	Ambadi, Devambadi	Hibiscus cannabinus	Malvaceae
10	Ambahaldar, Lili amba	Curcuma amada	Zingiberaceae
11	Amervel	Cuscuta reflexa	Convolvulaceae
12	apado (Kanji)	Holoptelea integrifolia	Ulmaceae
13	Aran, Arani	Ricinus communis	Euphorbiaceae
14	Arita	Sapindus emarginatus	Sapindaceae
15	Arjn sadad	Terminalia arjuna	Combretaceae
16	Ashivel, Kangavel	Ventilago denticulata	Rhamnaceae
17	Ati, Mordasing	Helicteres isora	Sterculiaceae
18	Bahada, Behada	Terminalia bellirica	Combretaceae
19	Bahava	Cassia fistula	Caesalpiniaceae
20	Bans	Babusa Arundinacea	Bambusaceae

Index to plants local names and their botanical names and family

21	Barmasi	Catharanthus roseus	Apocynaceae
22	Bavad, Babali	Acacia nilotica	Mimosaceae
23	Bel, Bili	Aegle marmelos	Rutaceae
24	Bendgul, Jadela sakhaliya	Viscum articulatum	Violaceae
25	Bendvel, Vando	Dendropthoe falcata	Loranthaceae
26	Ber, Bordi	Zizyphus mauritiana	Rhamnaceae
27	Bhangut, Bhangut	Hyptis suaclens	Lamiaceae
28	Bhara	Atylosia platicarpa	Fabaceae
29	Bhendi, Choki bhendi	Hibiscus esculentus	Malvaceae
30	Bhoot jad, Harduso, Arduso	Ailanthus excelsa	Simaroubaceae
31	Bhui umbari	Ficus hispida	Moraceae
32	Bio, Bhyo, Bivula	Pterocarpus marsupium	Fabaceae
33	Bondar, kali bondar, motobondar	Lagerstroemia parviflora	Lythraceae
34	Bootiya aland, Aland	Cassine glauca	Celastraceae
35	Borghat, Gatbore	Zizyphus sp.	Rhamnaceae
36	Borothda	Sphaeranthus indicus	Asteraceae
37	Boru	Sorghum helipens	Poaceae
38	Buikarav, Kali karav	Eranthemum roseum	Asteraceae
39	Cactus, Savar	Euphorbia caducifolia	Euphorbiaceae
40	Canna	Cana indica	Cannaceae
41	Chamoli	Piliostigma fovelatum	Cesalpinaceae
42	Chanoti, Gunja	Abrus precatorius	Fabaceae

43	Chapo, Chapo, Chapud	Plumeria rubra	Apocynaceae
44	Chilar vel	Acacia caesia	Mimosaceae
45	Chitak, Chitralu	Plumbago zeylanica	Mimosaceae
46	Chokacik	Sida rhombifolia	Malvaceae
47	Chunch	Corchorus capsularis	Tilliaceae
48	Dangar, Kolu	Cucurbita maxima	Cucurbitaceae
	Dangi Tamaku, Diru,	Nicotiana	
49	Dira	plumbaginifolia	Solanaceae
77	Dila	planoaginijolia	Solandeede
50	Dati	Baliospermum montanum	Euphorbiaceae
51	Datura	Datura metel	Solanaceae
52	Devkurudu	Celosia cristata	Amaranthaceae
53	Dhaman	Grewia tiliifolia	Tiliaceae
54	Digad	Dioscorea oppositifolia	Dioscoreaceae
55	Dodhadu, Dadadu	Sauromatum venosum	Araceae
56	Dukarkanth	Nervillia Sp.	Orchidaceae
57	Dungali, Kantha	Allium cepa	Liliaceae
58	Echan	Accacia Sp.	Mimosaceae
59	Giloda	Coccinia grandis	Cucurbitaceae
60	Gokhadu (Masu)	Leonotis nepetifolia	Lamiaceae
61	Gokharu	Tribulus terrestris	Zygophyllaceae
62	Gubita	Acacia polycantha	Mimosaceae
63	Gundi, Bhokar	Cordia dichotoma	Boraginaceae
64	Halder	Curcuma longa	Zingiberaceae
65	Haldun, Haldun	Haldina cordifolia	Rubiaceae

66	Halund kairi	Clematis Sp.	Ranunculaceae
67	hamoli, Galo	Tinospora cordifolia	Menispermaceae
68	Hirada, Hado, Harada	Terminalia chebula	Combretaceae
69	Humbh	Millusa tomentosa	Kanokaceae
70	Ilai chich	Pithecellobium dulce	Plumbaginaceae.
71	Ilangi, ingi	Caseria tomentosa	Flacourtiaceae
72	Isabgoul	Plantago ovata	Plantagonaceae
73	isav Burandu	Cyathocline purpurea	Asteraceae
74	Jadela Lasun, Rasna, Vando	Vanda roxburghii	Orchidaceae
75	Jamboo, Jamla, Jabuda	Syzygium cumini	Myrtaceae
76	Jangali kel, Chav, Chavalia	Ensete superbum	Musaceae
77	Janjali pyaz, Nalgut	Urginea Indica	Lilliaceae
78	Kadam, Kalam	Mitragyna parvifolia	Rubiaceae
79	Kadu shegu	Moringa concanensis	Moringaceae
80	Kagadakeri, Kagadana amba. Lal amba	Bryonopsis laciniosa	Cucurbitaceae
81	Kaju	Anacardium occidentale	Anacardiaceae
82	Kakad	Garuga pinnata	Bruseraceae
83	Kamal	Nymphaea nouchali	Nymphaeaceae
84	Kamboi, pichrund	Kirganelia recticulata	Euphorbiaceae
85	Kandol, Kadavai	Sterculia urens	Sterculiaceae
86	Karadai	Argemone mexicana	Papaveraceae
87	Karanj	Pongamia pinnata	Fabaceae

88	Karbat, Kardhamani	Grewia hirsuta	Tiliaceae
89	Karenj vel, Eleya Karanj	Derris scaendens	Fabaceae
90	Karkangael	Celastrus paniculata	Fabaceae
91	Karpot,Kuvarpatto	Aloe barbadensis	Liliaceae.
92	Kati	Acacia ferruginea	Mimosaceae
93	Khadsing	Radermachera xylocarpa	Bignoniaceae
94	Khair, Kher	Acacia catechu	Mimosaceae
95	Kials	Couropita guianensis	Luacythidaceae
96	Kirambada	Casearia graveolens	Flacourtiaceae
97	Koharu	Bauhinia varigata	Caesalpiniaceae
98	Koluskatta, Poskatta	Asteracantha longifolia	Acanthaceae
99	Korunta, Karvantha	Carissa carandas	Apocynaceae
100	Kuali, Kuila, Kavicha	Mucuna pruriens	Fabaceae
101	Kuda	Holarrhena pubescens	Apocynaceae
102	Kudi, Kodi	Wrightia tinctoria	Apocynaceae
103	Kumbi, Kumbhiya	Careya arborea	Barringtoniaceae
104	Kusum, Kosim	Schleichera oleosa	Sapindaceae
105	Lagpan, Panputti, Elcho Dhampan	Bryophyllum calycinum	Crassulaceae
106	Lajamani	Mimosa pudica	Mimosaceae
107	Lasan	Allium sativum	Liliaceae
108	le bibula, Bibulavel	Millettia racemosa	Fabaceae
109	Limbada, Limbidi	Azadirachta indica	Meliaceae
110	Limbu	Citrus limon	Rutaceae

111	Lunti	Dioscorea bulbifera	Dioscoreaceae
112	Madhul, Modad	Lannaea coromandelica	Anacardiaceae
113	Mahu, Mahudo	Madhuca indica	Sapotaceae
114	Makai	Zea mays	Poaceae
115	Marcha	Capsicum annuum	Solanaceae
116	Marchikanth	Dioscoria sp.	Dioscoreaceae
117	Matala bhaji	Amaranthus spinosus	Amaranthaceae
118	Mber	Ficus racemosa	Moraceae
119	Mendi	Lawsonia inermis	Lythraceae
120	Mendvel	Cyptolepis buchanani	Periploceae
121	Methi	Trigonella foenum	Fabaceae
122	Modsing	Dolichandrone falcata	Bignoniaceae
123	Mogra	Clerodendrum fragrans	Verbenaceae
124	Mokamani	Tagetes patula	Asteraceae
125	Mokha	Schrebera swietenioidess	Oleaceae
126	Morvel, Morvai	Clematis hedysarifolia	Ranunculaceae
127	Musali	Curculigo orchioides	Amaryllidaceae
128	Musali, Kauni bahji	Chlorophytum borivilianum	Liliaceae
129	Nagali	Eleusine coracana	Poaceae
130	Nagchampo, adusi	Adhatoda vasica	Acanthaceae
131	Naliar	Cocos nucifera	Arecaceae
132	Nana bor	Zizyphus nummularia	Rhamnaceae
133	Nandan , Pandvel	Cissus repanda	Vitaceae

	Nano Bondar, Safed	Lagerstroemia	
134	bondar	lanceolata	Lythraceae
135	Nanu Ekaru	Haplanthus tentaculatus	Acanthaceae
136	Nilisotti	Dalbergia volubilis	Fabaceae
137	Nimbaro, Limbaro	Melia composita	Meliaceae
138	Nirgud, Nirgui	Vitex negundo	Verbenaceae
139	Pan	Piper betle	Piperaceae
140	Pangara	Erythrina variegata	Fabaceae
141	Papayu	Carica papaya	Caricaceae
142	Pathal	Dalbergia panniculata	Fabaceae
143	Patterpui	Tridax procumbens	Asteraceae
144	Payar	Ficus microcarpa	Moraceae
145	Pevuta	Costus speciosus	Zingiberaceae
146	Pipal	Ficus religiosa	Moraceae
147	Polas, Kaharo	Butea monosperma	Fabaceae
148	Rakath rohidi	Tecomella undulate	Bignoniaceae
149	Ran Bhendi, Jangali Bhendi	Azanza lampas	Malvaceae
150	Ran val, Jangali val, Pivan	Pteramus labialis	Fabaceae
151	Rohan	Soymida febrifuga	Meliaceae
152	Roscha	Cymbopogon martinii	Poaceae
153	Rui, Bhui rui	Calotropis gigantea	Asclepiadaceae
154	Sadad, Sada sadada	Terminalia crenulata	Combretaceae
155	Safed sagi	Clerodendron serraium	Verbinaceae

156	Sag, Sal	Tectona grandis	Verbenaceae
157	Sagargotta, Kachka	Casalpinia crista	Caesalpiniaceae
158	Sakariya	Ipomoea batatas	Convolvulaceae
159	Sardana tad	Tacca leontopetabides	Taceaceae
160	Savar, Simardo	Bombax ceiba	Poaceae
161	Seradi	Saccharum officinarum	Poaceae
162	Sevara,Sevur, Saslana lindi, Saslana gugadi	Asparagus racemosus	Liliaceae
163	Shegu, Sargava	Moringa oleifera	Moringaceae
164	Shengal	Bauhinia recemosa	Caesalpiniacea
165	Shivan, Sivan	Gmelina arborea	Verbinaceae
166	Sing	Arachis hypogaea	Fabaceae
167	Sinti	Phoenix sylvestris	Arecaceae
168	Siris	Albizia lebbeck	Mimosaceae
169	Sissam	Dalbergia sissoo	Fabaceae
170	Sitapala	Annona squamosa	Annonaceae
171	Sonaru	Achyranthes aspera	Amaranthaceae
172	Supali	Mundulea suberosa	Fabaceae
173	Takari	Taberneamontana divaricata	Apocynaceae
174	Tamacu	Nicotiana tabacum	Solanaceae
175	Tan vel	Cocculus hirsutus	Menispermaceae
176	Tanas	Ougenia dalbergiodides	Fabaceae
177	Tanvel (Gol pana),, ahadvel	Cissampelos pareira	Menispermaceae

178	Tettu	Oroxylum indicum	Bignoniaceae
179	Thevara, Taruta	Cassia tora	Caesalpiniaceae
180	Timbrun, Temurun	Diospyros melanoxylon	Ebenaceae
181	Toran, Toranvel,Velibore	Zizypus rugosa	Rhamnaceae
182	Torsidi, Dorsisi, Kodusidi	Dregia volubilis	Asclepiadaceae
183	Tulsi	Ocimum tenuiflorum	Lamiaceae
184	Tuver	Cajanus cajan	Fabaceae
185	Udad	Sterculia villosa	Sterculiaceae
186	udari, Jirmuli, Dudeli	Euphorbia hirta	Euphorbiaceae
187	ukali, Nilgiri	Eucalyptus globulus	Myrtaceae
188	Upersadi, Antmuli	Hemidesmus indicus	Asclepiadaceae
189	Uriyamukhi	Helianthus annus	Asteraceae
190	Vagh nagh, Vichdi	Martynia annua	Martyniaceae
191	Varai	Panicum miliaceum	Poaceae
192	Varang	Kydia calycina	Malvaceae
193	Varash	Heterophragma quadriloculare	Bignoniaceae
194	Wagatvel	Capparis zeylanica	Capparaceae.
195	Waltham	Vetiveria zizanioides	Poaceae

APPENDIX V

No.	Botanical Names	Family	Local names
1	Abrus precatorius	Fabaceae	Chanoti, Gunja
2	Acacia caesia	Mimosaceae	Chilar vel
3	Acacia catechu	Mimosaceae	Khair, Kher
4	Acacia ferruginea	Mimosaceae	Kati
5	Acacia nilotica	Mimosaceae	Bavad, Babali
6	Acacia polycantha	Mimosaceae	Gubita
7	Accacia Sp.	Mimosaceae	Echan
8	Achyranthes aspera	Amaranthaceae	Sonaru
9	Adhatoda vasica	Acanthaceae	Nagchampo, adusi
10	Aegle marmelos	Rutaceae	Bel, Bili
11	Ailanthus excels	Simaroubaceae	Bhoot jad, Harduso, Arduso
12	Alangium salvifolium	Alangiaceae	Akhvel, Aankol
13	Albizia lebbeck	Mimosaceae	Siris
14	Allium cepa	Liliaceae	Dungali, Kantha
15	Allium sativum	Liliaceae	Lasan
16	Aloe barbadensis	Liliaceae.	Karpot,Kuvarpatto
17	Amaranthus spinosus	Amaranthaceae	Matala bhaji
18	Anacardium occidentale	Anacardiaceae	Kaju
19	Annona squamosa	Annonaceae	Sitapala
20	Arachis hypogaea	Fabaceae	Sing
21	Argemone mexicana	Papaveraceae	Karadai

Index to the botanical names corresponding to the family and Local names

22	Asparagus racemosus	Liliaceae	Sevara,Sevur, Saslana lindi, Saslana gugadi
23	Asteracantha longifolia	Acanthaceae	Koluskatta, Poskatta
24	Atylosia platicarpa	Fabaceae	Bhara
25	Azadirachta indica	Meliaceae	Limbada, Limbidi
26	Azanza lampas	Malvaceae	Ran Bhendi, Jangali Bhendi
27	Babusa Arundinacea	Bambusaceae	Bans
28	Baliospermum montanum	Euphorbiaceae	Dati
29	Bauhinia recemosa	Caesalpiniacea	Shengal
30	Bauhinia varigata	Caesalpiniaceae	Koharu
31	Bombax ceiba	Poaceae	Savar, Simardo
32	Bryonopsis laciniosa	Cucurbitaceae	Kagadakeri, Kagadana amba. Lal amba
33	Bryophyllum calycinum	Crassulaceae	Lagpan, Panputti, Elcho Dhampan
34	Buchanania lanzen	Anacardiaceae	Achar, Charoli
35	Butea monosperma	Fabaceae	Polas, Kaharo
36	Cajanus cajan	Fabaceae	Tuver
37	Calotropis gigantean	Asclepiadaceae	Rui, Bhui rui
38	Cana indica	Cannaceae	Canna
39	Capparis zeylanica	Capparaceae.	Wagatvel
40	Capsicum annuum	Solanaceae	Marcha
41	Careya arborea	Barringtoniaceae	Kumbi, Kumbhiya
42	Carica papaya	Caricaceae	Papayu
43	Carissa carandas	Apocynaceae	Korunta, Karvantha

44	Casalpinia crista	Caesalpiniaceae	Sagargotta, Kachka
45	Casearia graveolens	Flacourtiaceae	Kirambada
46	Caseria tomentosa	Flacourtiaceae	Ilangi, ingi
47	Cassia fistula	Caesalpiniaceae	Bahava
48	Cassia tora	Caesalpiniaceae	Thevara, Taruta
49	Cassine glauca	Celastraceae	Bootiya aland, Aland
50	Catharanthus roseus	Apocynaceae	Barmasi
51	Celastrus paniculata	Fabaceae	Karkangael
52	Celosia cristata	Amaranthaceae	Devkurudu
53	Chlorophytum borivilianum	Liliaceae	Musali, Kauni bahji
54	Cissampelos pareira	Menispermaceae	Tanvel (Gol pana),, ahadvel
55	Cissus repanda	Vitaceae	Nandan , Pandvel
56	Citrus limon	Rutaceae	Limbu
57	Clematis hedysarifolia	Ranunculaceae	Morvel, Morvai
58	Clematis Sp.	Ranunculaceae	Halund kairi
59	Clerodendron serraium	Verbinaceae	Safed sagi
60	Clerodendrum fragrans	Verbenaceae	Mogra
61	Coccinia grandis	Cucurbitaceae	Giloda
62	Cocculus hirsutus	Menispermaceae	Tan vel
63	Cocos nucifera	Arecaceae	Naliar
64	Corchorus capsularis	Tilliaceae	Chunch
65	Cordia dichotoma	Boraginaceae	Gundi, Bhokar
66	Costus speciosus	Zingiberaceae	Pevuta
67	Couropita guianensis	Luacythidaceae	Kials

68	Cucurbita maxima	Cucurbitaceae	Dangar, Kolu
69	Curculigo orchioides	Amaryllidaceae	Musali
70	Curcuma amada	Zingiberaceae	Ambahaldar, Lili amba
71	Curcuma longa	Zingiberaceae	Halder
72	Cuscuta reflexa	Convolvulaceae	Amervel
73	Cyathocline purpurea	Asteraceae	isav Burandu
74	Cymbopogon martini	Poaceae	Roscha
75	Cyptolepis buchanani	Periploceae	Mendvel
76	Dalbergia panniculata	Fabaceae	Pathal
77	Dalbergia sissoo	Fabaceae	Sissam
78	Dalbergia volubilis	Fabaceae	Nilisotti
79	Datura metel	Solanaceae	Datura
80	Dendropthoe falcate	Loranthaceae	Bendvel, Vando
81	Derris scaendens	Fabaceae	Karenj vel, Eleya Karanj
82	Dioscorea bulbifera	Dioscoreaceae	Lunti
83	Dioscorea oppositifolia	Dioscoreaceae	Digad
84	Dioscoria sp.	Dioscoreaceae	Marchikanth
85	Diospyros melanoxylon	Ebenaceae	Timbrun, Temurun
86	Dolichandrone falcate	Bignoniaceae	Modsing
87	Dregia volubilis	Asclepiadaceae	Torsidi, Dorsisi, Kodusidi
88	Eleusine coracana	Poaceae	Nagali
89	Emblica officinalis	Euphorbiaceae	Amala, Avi, Aval, Avala
90	Ensete superbum	Musaceae	Jangali kel, Chav, Chavalia
91	Eranthemum roseum	Asteraceae	Buikarav, Kali karav

92	Erythrina variegate	Fabaceae	Pangara
93	Eucalyptus globules	Myrtaceae	ukali, Nilgiri
94	Euphorbia caducifolia	Euphorbiaceae	Cactus, Savar
95	Euphorbia hirta	Euphorbiaceae	udari, Jirmuli, Dudeli
96	Ficus benghalensis	Moraceae	ad
97	Ficus hispida	Moraceae	Bhui umbari
98	Ficus microcarpa	Moraceae	Payar
99	Ficus racemosa	Moraceae	mber
100	Ficus religiosa	Moraceae	Pipal
101	Garuga pinnata	Bruseraceae	Kakad
102	Gmelina arborea	Verbinaceae	Shivan, Sivan
103	Grewia hirsuta	Tiliaceae	Karbat, Kardhamani
104	Grewia tiliifolia	Tiliaceae	Dhaman
105	Haldina cordifolia	Rubiaceae	Haldun, Haldun
106	Haplanthus tentaculatus	Acanthaceae	Nanu Ekaru
107	Helianthus annus	Asteraceae	uriyamukhi
108	Helicteres isora	Sterculiaceae	Ati, Mordasing
109	Hemidesmus indicus	Asclepiadaceae	Upersadi, Antmuli
110	Heterophragma quadriloculare	Bignoniaceae	Varash
111	Hibiscus cannabinus	Malvaceae	Ambadi, Devambadi
112	Hibiscus esculentus	Malvaceae	Bhendi, Choki bhendi
113	Holarrhena pubescens	Apocynaceae	Kuda
114	Holoptelea integrifolia	Ulmaceae	apado (Kanji)
115	Hyptis suaclens	Lamiaceae	Bhangut, Bhangut

116	Ipomoea batatas	Convolvulaceae	sakariya	
117	Kirganelia recticulata	Euphorbiaceae	Kamboi, pichrund	
118	Kydia calycina	Malvaceae	Varang	
119	Lagerstroemia lanceolata	Lythraceae	Nano Bondar, Safed bondar	
120	Lagerstroemia parviflora	Lythraceae	Bondar, kali bondar, motobondar	
121	Lannaea coromandelica	Anacardiaceae	Madhul, Modad	
122	Lawsonia inermis	Lythraceae	Mendi	
123	Leonotis nepetifolia	Lamiaceae	Gokhadu (Masu)	
124	Madhuca indica	Sapotaceae	Mahu, Mahudo	
125	Martynia annua	Martyniaceae	Vagh nagh, Vichdi	
126	Melia composite	Meliaceae	Nimbaro, Limbaro	
127	Millettia racemosa	Fabaceae	le bibula, Bibulavel	
128	Millusa tomentosa	Kanokaceae	Humbh	
129	Mimosa pudica	Mimosaceae	Lajamani	
130	Mitragyna parvifolia	Rubiaceae	Kadam, Kalam	
131	Morinda tomentosa	Rubiaceae	Ali, Aliv, Kutterpath	
132	Moringa concanensis	Moringaceae	Kadu shegu	
133	Moringa oleifera	Moringaceae	Shegu, Sargava	
134	Mucuna pruriens	Fabaceae	Kuali, Kuila, Kavicha	
135	Mundulea suberosa	Fabaceae	Supali	
136	Nervillia Sp.	Orchidaceae	Dukarkanth	
137	Nicotiana plumbaginifolia	Solanaceae	Dangi Tamaku, Diru, Dira	
138	Nicotiana tabacum	Solanaceae	Tamacu	

139	Nymphaea nouchali	Nymphaeaceae	Kamal
140	Ocimum tenuiflorum	Lamiaceae	Tulsi
141	Oroxylum indicum	Bignoniaceae	Tettu
142	Ougenia dalbergiodides	Fabaceae	Tanas
143	Panicum miliaceum	Poaceae	Varai
144	Phoenix sylvestris	Arecaceae	Sinti
145	Piliostigma fovelatum	Cesalpinaceae	Chamoli
146	Piper betle	Piperaceae	Pan
147	Pithecellobium dulce	Plumbaginaceae.	Ilai chich
148	Plantago ovate	Plantagonaceae	Isabgoul
149	Plumbago zeylanica	Mimosaceae	Chitak, Chitralu
150	Plumeria rubra	Apocynaceae	Chapo, Chapo, Chapud
151	Pongamia pinnata	Fabaceae	Karanj
152	Pteramus labialis	Fabaceae	Ran val, Jangali val, Pivan
153	Pterocarpus marsupium	Fabaceae	Bio, Bhyo, Bivula
154	Radermachera xylocarpa	Bignoniaceae	Khadsing
155	Ricinus communis	Euphorbiaceae	Aran, Arani
156	Saccharum officinarum	Poaceae	Seradi
157	Sapindus emarginatus	Sapindaceae	Arita
158	Sauromatum venosum	Araceae	Dodhadu, Dadadu
159	Schleichera oleosa	Sapindaceae	Kusum, Kosim
160	Schrebera swietenioidess	Oleaceae	Mokha
161	Sida rhombifolia	Malvaceae	Chokacik
162	Sorghum helipens	Poaceae	Boru

163	Soymida febrifuga	Meliaceae	Rohan
164	Sphaeranthus indicus	Asteraceae	Borothda
165	Sterculia urens	Sterculiaceae	Kandol, Kadavai
166	Sterculia villosa	Sterculiaceae	Udad
167	Syzygium cumini	Myrtaceae	Jamboo, Jamla, Jabuda
168	Taberneamontana divaricata	Apocynaceae	Takari
169	Tacca leontopetabides	Taceaceae	Sardana tad
170	Tagetes patula	Asteraceae	Mokamani
171	Tamarindus indica	Caesalpiniaceae	Amali, Chich, Kati imali
172	Tecomella undulate	Bignoniaceae	Rakath rohidi
173	Tectona grandis	Verbenaceae	Sag, Sal
174	Terminalia arjuna	Combretaceae	Arjn sadad
175	Terminalia bellirica	Combretaceae	Bahada, Behada
176	Terminalia chebula	Combretaceae	Hirada, Hado, Harada
177	Terminalia crenulata	Combretaceae	Sadad, Sada sadada
178	Tinospora cordifolia	Menispermaceae	hamoli, Galo
179	Trachyspermum roxburghianum	Apiaceae	Ajama seed, Vauva
180	Tribulus terrestris	Zygophyllaceae	Gokharu
181	Tridax procumbens	Asteraceae	Patterpui
182	Trigonella foenum	Fabaceae	Methi
183	Urginea Indica	Lilliaceae	Janjali pyaz, Nalgut
184	Vanda roxburghii	Orchidaceae	Jadela Lasun, Rasna, Vando
185	Ventilago denticulate	Rhamnaceae	Ashivel, Kangavel
186	Vetiveria zizanioides	Poaceae	Waltham

187	Viscum articulatum	Violaceae	Bendgul, Jadela sakhaliya
188	Vitex negundo	Verbenaceae	Nirgud, Nirgui
189	Wrightia tinctoria	Apocynaceae	Kudi, Kodi
190	Zea mays	Poaceae	Makai
191	Zingiber officinale	Zingiberaceae	Aadu
192	Zizyphus mauritiana	Rhamnaceae	Ber, Bordi
193	Zizyphus nummularia	Rhamnaceae	Nana bor
194	Zizyphus sp.	Rhamnaceae	Borghat, Gatbore
195	Zizypus rugosa	Rhamnaceae	Toran, Toranvel, Velibore

APPENDIX VI

List of the traditional healers

Sr. No	Name of the Medicine Person	Villages	Sex	Page No.
1	Somabhai Vatya Moris	Zari	М	30
2	Shukarbahi	Sathbabla	М	30
3	Punyabhai Jivaliyabahi Gavit	Dhuda	М	31
4	Rameshbahi Lahanubhai Bhoye.	Dhuda	М	31
5	Ranjubahi Vajirambahi Powar	Gaygotton	М	31
6	Sureshbahi Ranjubahi Powar	Gaygotton	М	20
7	Ratanubahi Bahvadubahi Chavaria.	Gaygotton	М	32
8	Devanji Manaji Gayakwad.	Vankan	М	32
9	Maganbhai Gulabbhai Gavit	Pimpri	М	32
10	Sukliyabhai Zuliabhai Marali	Dungarada	М	32
11	Jivalibahi Jetubhai Vad.	Vati	М	34
12	Babubhai Soniyabhai Chaudhari	Vati	М	34
13	Ramubhai Kalubhai Raut	Borigoutan	М	34
14	Gamjibahi Pandubhai Bahtt	Pimpri	М	34
15	Chambarbahi Vashavasrao Powar.	Pimpri	М	35
16	Pratapbhai Chambarbahi Powar v	Pimpri	М	35
17	Ramubhai Chimnabhai Powar	Thunduniya	М	35
18	Ratenbhai Jinabhai Mokasi	Chichinagoutta	М	35

19	Sukarbhai Valalbhai Gangoda.	Halmudi	М	36
20	Mangubhai Lahanubhai Powar:	Thunduniya	М	36
21	Janakbhai Ganubhai Kamadi.	Bapkal	М	36
22	Saliben Arjunbhai Dhule.	Burapani	F	37
23	Iktyabahi Jivlyabahi Powar.	Chirapada	М	37
24	Ramdasbhai Pandyabhai Gangoda	Chirapada	М	37
25	Aavjabhai Ramubhai Chavhan	Shamghahan	М	37
26	Devaji Ramjubahi Deshmukh	Gundvahal	М	38
27	Gangabhai Natyabhai Vagmar.	Gundvahal	М	38
28	Mohanbhai Bennai Thakare:	Gundvahal	М	38
29	Vasantbhai Ranjibhai Powar	Nalagchod	М	38
30	Jainaben Gangabhai Chudhari	Nalagchod	F	39
31	Kasiya Arjunbhai Deshmukh	Soupdahad	М	39
32	Abaji Julpia Valevi	Bapkal	М	39
33	Sakliram Khandubhai Deshmukh	Ranpada	М	39
34	Sukriyabhai Janiyabhai Chaudhari.	Dhumkal	М	40
35	Thukarambhai Ramubhai Chauhan	Shamghahan	М	40
36	Suliyabhai Ukardabhai Bhoye.	Kotba	М	40
37	Jayrambhai Sukarambhai Kuver.	Gana	М	40
38	Bapubhai Janubhai Chavariya	Gaygotton	М	40

39	Ashokbhai Krushnabhai Galvi	Subir	М	41
40	Sitaben Lasebahi Gayakwad	Savardakasad	F	41
41	Ramubhai Somabhai Chauharia	Dhuda	М	41
42	Mainuben Jayantibhai Galvi	Subir	F	41

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DECLARATION

CANDIDATE'S DECLARATION

I hereby declare that, no part of this thesis which I have submitted to **Shri Jagdish Prasad Jhabarmal Tibrewala University, Vidyanagari, Jhunjhunu, Rajasthan**, has been published or copyrighted before, except in the review of literature quoted from other published sources.

I, therefore, declare that I am the sole author of this thesis.

Date_____.

SUPERVISOR'S DECLARATION

I hereby declare that, the preparation and presentation of the thesis was supervised in accordance with guidelines on supervision of thesis laid down by **Shri Jagdish Prasad Jhabarmal Tibrewala University, Vidyanagari, Jhunjhunu, Rajasthan**

Supervisor's Name	Signature
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Date_____.