



An Ethnobotanical Study on Indigenous Plants from the Rongbakgre, West Garo Hills, Meghalaya: A Medicinal Aspect

Ricky Mirth R. Marak

Masters in Anthropology, (Discipline of Anthropology), School of Social Sciences, Indira Gandhi National Open University, New Delhi

Address: Tura – 794 002, West Garo Hills, Meghalaya

Email: Rickymirthrangsha@gmail.com

ABSTRACT

In ethnobotany, medicinal plants are an integral part and also rapidly growing worldwide. It occupies an important position in the socio-cultural, spiritual and medicinal area of rural people. Garo Hills, in the state of Meghalaya, is endowed with ethno medicinal plants in the villages. Use of traditional practice has been going on and has been passed on from generation to generation, and relying on Indigenous Knowledge (IK) which has played a vital role among the Garo community. In relating to the use of herbal plants for therapeutic purposes there might be some myths or taboos that are passed on if not in written form but by oral tradition from the preceding to the succeeding generation. Therefore it is imperative to know what Myth and Taboo are. The prepared medicine obtained from the herbs is applied on the infected part of the patient's body, while the medicine is held in place by tying with a piece of cloth. For other diseases, the herbs are either baked or boiled as a decoction, in order to extract the medicinal property from the plant. The Garo or A-chik traditional healers use various plants as a traditional medicine and this practice has been going on since earlier times. Common village folks who are well-versed in traditional medicines through herbs, adhere to traditional medicine because it really helps to cure from various diseases and there are many who are witnessing about it. The traditional healers or ojas from Rongbakgre village show their utilization of medicine through their traditional lore of medicine and brings to light on how they used to treat various diseases and bear witness the healing property obtained from various medicinal plants administering to patients having diseases like diabetes mellitus, bone fractured, high blood pressure, measles, malaria, white patch, mental diseases, impotency, snake bite, etc. Ojas or traditional healers have been employing folk medicines for treatment against the multifarious ailments or diseases by depending on and the application of their indigenous knowledge and are still attempting to enhance the scope of usage of medicinal plants for other therapeutic purposes on various diseases like cancer etc. The ojas as well as the villagers witnessed that people have been able to recover from their ailments after the herbal medicine has been administered on the sick. According to the traditional healers' reports that there are more than 60 % of plants are found from Rongbakgre village and these have been also used to fight against the various ailments or diseases and not only from this village but researchers also brought to light that around 50 % of valuable medicinal plants which still administer for medicinal purposes and valuable herbaceous are found in Garo Hills regions. A total of 33 medicinal plants (*Abutilon indicum*, *Alstonia scholaris*, *Azadirachta indica*, *Clerodendrum glandulosum*, *Crinum ltilifolium*, *Dillenia scabrella*, *Justicia gendarussa*, *Syzygium cumini*, *Phlogacanthus thyrsoiflorus*, *Zingiber officinale* etc.) having 26 families (*Apocynaceae*, *Malvaceae*, *Verbenaceae*, *Dilleniaceae*, *Acanthaceae*, *Zingiberaceae* etc.) and more than 30 genera are found from the village of Rongbakgre under the Gambegre Block, West Garo Hills, Meghalaya.

Keywords: Ethnobotany, herbaceous plants, decoction, traditional medicinal plants, indigenous knowledge, traditional medicine, myth, taboo, administer, traditional healer, ailment, therapeutic purpose

Introduction

The term "Ethnobotany" has first been given by Harshberger in 1895 and it is the study of interconnection between plants and man. It has often been considered the similar meaning with either traditional medicine or economic botany but it not only denote these, but subsumes various aspects of study in ethnobotany like food, magico-religious beliefs about plants, tans, dyes etc., (Alexiades, 1996; Balick and Cox, 1996; Collins, 2000; Heinrich *et al.*, 2004; Jain, 2018).

Use of traditional medicine is rapidly growing worldwide. The practice of ethno medicine as an integral part of the culture of indigenous people in many parts of the world has a close inter-phase with local ecosystems and cultural landscapes. In India, medicinal plants occupy important positions in the socio-cultural, spiritual and medicinal area of rural people. Garo Hills, in the state of Meghalaya is endowed with ethno medicinal plants in the villages. In this study, focus will be laid on plants relating to traditional medicines and on how the indigenous people depend on enormous knowledge regarding traditional medicine which has been in usage to cure diseases or ailments by the users. This has displayed the knit relationship between man and plants in ethnobotany (Balick and Cox, 1996; Collins, 2000; Jain, 2018). The people's relying on Indigenous Knowledge (IK) has played a vital role among the Garo community. Traditional healers are a thirst and have a keen interest to garner knowledge whenever possible by keeping written record whenever

possible or through oral tradition about the use of various plants to cure several ailments or diseases. This traditional practice has been going on and has been passed on from generation to generation. The surrounding vicinity where the Garo live is encompassed by the thick natural vegetation and abounding with herbaceous plants which has made it easy for them to acquire such plants in their area. Most of the rural people have depended on the traditional healers to treat and avert from various diseases for over the years and some of them have not even opted to go to hospital for treatment of diseases. According to World Health Organisation (WHO), including developed and underdeveloped countries, those who are living in areas abounding in medicinal plants and herbs depend on traditional medicines and it is one of the primary health care needs for the people (Sharma *et al.*, 2014).

“Traditional medicine” refers to medicinal aspects of traditional knowledge about plants as practiced by the traditional healers since times immemorial among the different communities.

Traditional healers use this knowledge in order to cure various diseases. Traditional healers rely on traditional medicinal plants which are available either in the wild or from the kitchen gardens which enable them to cure multifarious diseases or ailments by making use of the indigenous knowledge using such plants in rural areas. Researchers reveal that more than 50 % of plant species are found in Garo Hills, Meghalaya and these plants can be used for prevention and treatment against various diseases. Different parts of the plants like leaves, roots, barks etc., have been utilised to administer a dose of medicine to treat diseases (Momin *et al.*, 2016; Sharma *et al.*, 2014 and Kumar *et al.*, 1980). Most of the traditional Garo medicinal herbs are easily obtained from roots, barks, rhizomes, leaves etc. These are used in the treatment of various diseases particularly for headache, bone fractured, tooth ache, sprain etc. The prepared medicine obtained from these herbs is applied on the infected part of the patient’s body, while the medicine is held in place by tying with a piece of cloth. For other diseases, the herbs are either bake or boil as a decoction, in order to extract the medicinal property from the plant. The Garo or A-chik traditional healers use various plants as a traditional medicine and this practice has been going on since earlier times. Common village folks who are well-versed in traditional medicines through herbs, adhere to traditional medicine because it really helps to cure from various diseases and there are many who are witnessing about it. Traditionally, the way of medication is being practiced to cure many diseases. They use the medicinal herbs as oral application (either pellets formed from paste and juice, syrup) for some diseases, for other pain or discomfort they also render massage service along with the application of the medicine obtained from herbs having therapeutic value as per the ailment. If the ailment is such that the infected area needs to be continuously in contact with the medicine, then the medicine is held in place by tying with a piece of cloth. In this way, administering medicines for multifarious diseases is a choice opted by the Garo as the herbs are easily available within their reach. Medicine is extracted from different parts of the herbs like barks, leaves, roots, stems, flowers, rhizomes etc., according to the traditional healers’ knowledge.

The traditional healers have the knowledge as to the number of substances required to be used for some common diseases such as stomach pain, sprain, common flu, mild cough, headache, convulsion, dizziness, vomiting etc. In some cases like major or compound bone fractured, gallstone cancer, white patch, tuberculosis, etc., the herbal practitioners always administer many herbs or plants in a mixture so that the medicine will be effective to cure such diseases. Preparation of medicines require multifaceted things with the help of grinding slab to make paste, mortar and pestle to pound the dried rhizome slices, dried roots, etc., to make the medicine to administer for treatment against the various diseases. This method of preparation requires parts of the plant such as roots, rhizomes, stems, barks, leaves, seeds, etc., and that can also be from dried version which means powder or chunk, slices, or fresh leaves, stems etc., according to the indigenous knowledge of the traditional healers. In relating to the use of herbal plants for therapeutic purposes there might be some myths or taboo that are passed on if not in written form but by oral tradition from the preceding to the succeeding generation. Therefore it is imperative to know what Myth and Taboo are. It can be said that “myth” is a traditional story which embodies a belief regarding some fact or phenomenon of experience in which often the forces of nature and of the soul are personified; a sacred narrative regarding a god, a hero, the origin of the world or of a people, etc. Thus, myths symbolic tales of the distant past that may be connected to belief systems or rituals, and may serve to direct social action and values. Perhaps there might be stories passed by the preceding generation as to why a particular herb is used for certain ailment or what ritual or utterance should be made by the traditional healer while the patient is being administered a decoction of medicine from the medicinal plants. Since every people group have their own myths or stories about certain things of day to day life, if such myth are found among the Garo community, it will surely enrich more into this body of knowledge. Taboo is another term to be acquainted here. A “taboo” is something which is excluded or forbidden from use, approach or even mention. It is an implicit prohibition on something (usually against an utterance or behaviour) based on a cultural sense that it is excessively repulsive or perhaps, too sacred for ordinary people. Such prohibition exists in the form of social or religious custom prohibiting or restricting a particular practice or forbidding association with a particular person, place or thing under threat of a supernatural punishment. So this study will also explore if there is any taboo regarding the use of certain plants, restricting a particular practice etc., which might incur fear as a punishment from the supernatural.

Myth and taboo are very much related in the sense that a particular taboo exists because there is a myth behind it. Even though people might not be able to explain in detail about a particular myth, yet there is a tendency to think that one cannot do certain things because old people say so; which means that a taboo is associated with a myth. In many cases people cannot explain further than that. The present generation, out of fear of the unknown will try to adhere and not to break a particular tradition by following what they heard as a myth; lest if they break a taboo they might land up in difficulty. In Garo society, myths exist through narration or these are passed in the oral tradition in the form of folklore. Many people narrate about something that had occurred or experienced in the past. Narration is mostly by the old people to the younger ones as they try to describe about the inexplicable occurrences in the past. However, for anyone else it might be just a cock and bull story but their deep-rooted feeling in myth is strong among the Garo society. Though a number of plants are used by the ojas for curing ailments, but in this chapter only some plants associated with myth/taboo will be highlighted here. Traditional healers or ojas as well as some common village folks have been planting various medicinal herbs since times immemorial, in order to be used for medicinal purposes in emergency needs or to be employed as a first aid by using their own knowledge handed down from the preceding generation. This is so because some remote villages are not easily accessible to the main road to get easy access to hospitals. So 25 traditional medicine has developed over the years within folk beliefs of the Garo community before the era of modern medicine which refers to allopathic medicine. Herbs are common to

the people and these are used for some common diseases such as stomach pain, vomiting, headache, dizziness etc., Some traditional healers have grown some plant species from zingiberaceae family to be employed for treatment against various ailments or diseases. Other species belonging to this family are Dikge kali, dikge skal, dikge do-gep etc. So despite the fact that these species have medicinal value, yet in some remote hemlets, if any person apart from the ojas, plants any of these species, it is believed that it brings misfortune and works through evil spirit and requires some amount of foods on a regular basis to be offered like animals, eggs etc., according to the owner's will. So such plants if found to be planted, headman/elders or the villagers would try to intervene if planted around the village. This is so, as they are afraid and are apprehensive if the ones who plant them will be able or not to perform their sacrifices towards these plant species. They believe that if the owner of such plants does not provide proper food and also if the sacrificial animals are not offered, then such plants would bring misfortune even to the community as a whole in the form of sudden demise. So, if someone has been practicing plantation of such plants within their village, the other neighbours never draw near or go towards that person or his/her family. Under this myth, it remains a prohibition to plant such herbs in the village. This is out of fear lest one cannot fulfill the requirements needed in order to thwart off the evil repercussion that might be hovering around these species of plants. Some species of plants from the zingiberaceae family, species like Dikge Kali, Dikge Bera, Dikge Skal, Dikge Do.gep though having medicinal properties to cure ailments such as stomach pain, vomiting, headache and dizziness and used by the ojas for preparing medicine, yet it is considered as a taboo to plant them in the village and especially by common village folks. Some of the myths relating to these plants centres around evil spirits, hence a taboo for planting them.

This ethnobotanical study on the traditional medicine and the Garo people has been carried out on the Garo who live in Rongbakgre village, under Gambegre Block near Tura, West Garo Hills, Meghalaya. Garo Hills lies in between 25° 9' and 26° 1' North Latitude and between 89° 49' and 91° 21' East Longitude in the Western part of Meghalaya (Sangma,1984). This village is situated at about 26 Kms away from the sub-district headquarter Gambegre and 11 Kms away from the district headquarter, Tura. Garo or A-chik is a Sino-Tibetan language spoken in the Garo Hills. The Garo belongs to the Tibeto-Burman ethnic group. They are a matrilineal community just like the Khasi and Jaintia of Meghalaya. The total population of the Garo comprises the second largest population after the Khasi tribe (Ali and Das, 2014). The main occupation for subsistence among the Garo tribe is agriculture and particularly shifting cultivation or jhuming. Most of the Garo embrace Christianity through the coming of the first American Baptist Missionaries but in some remote villages some of them still follow animism, locally called Songsarek (Playfair, 1909).

The traditional healers (ojas) as well as the villagers witnessed that people have been able to recover from their ailments after the herbal medicine has been administered on the sick. According to the traditional healers' reports that there are more than 60 % of plants are found from Rongbakgre village and these have been also use to fight against the various ailments or diseases and not only from this village but researchers also brought to light that around 50 % of valuable medicinal plants which still administering for medicinal purposes and valuable herbaceous are found in Garo Hills regions. A total of 33 medicinal plants having 26 families and more than 30 genera are found from this village.

Through the healing power of medicinal plants which yielded good results for the patients, this traditional curative treatment of folk medicine has revealed a huge information through the traditional healers and the villagers of Rongbakgre. According to them, various medicinal plants are very helpful for those inhabitants in this village and for many others too. It bears witness that the traditional medicinal plants of the Garo provide excellent restorative remedy from the unsound health. Non - Garos as well as Garos that have visited this hospital for check up and for treatment of their diseases, they are mostly from the rural areas. These folks prefer to follow this kind of treatment because it is a cheap and they have been benefited through this curative medicine for a long time.

In Garo Hills region, those who are living in remote areas they are not based on modern medicines, science - based which refers to allopathic medicine. They rely on primitive use of traditional medicine though their beliefs are associated with myth and taboo but rather like to opt this primitive method because they have witnessed that traditional medicine is effective till today. Medicinal plants or herbs which have been widely used in traditional medicine have been in use since time immemorial for treatment against the multifarious diseases or ailments. In the past, even the Egyptians have witnessed the use of medicinal lore based on traditional medicines. Apart from them, many people in different parts of the world still rely on their respective traditional knowledge of medicine for a cure. Even for the Garo people, some of them are still practicing it and depend on it rather than on modern medicines.

Materials and Methods

In this study, the main aspiration is to procure and absorb knowledge from those who are well-versed on traditional knowledge of medicinal plants. First of all an introduction with the headman or elders of the village was made in order to highlight the aims and objectives of the present study. By doing so, it paved the way to establish rapport and a chance to be acquainted with the villagers. Collection of names of the traditional healers was possible by taking interview with the people in the area. After that, data were collected regarding the use of medicinal plants for various ailments or diseases by conducting interview with the traditional healers or oja from Sam A-chik Hospital (A Hospital of Garo Traditional Medicine) within the village of Rongbakgre under Rongram Block, near Tura. Besides this, other Garo people having indigenous knowledge on medicinal plants have also been interacted with. Those especially the old and aged who have knowledge about myth and taboo relating medicinal plants and their use for treatment for diseases have been interviewed in order to garner their indigenous knowledge. Questions were also asked as to why they adhere to this kind of curative treatment, to which many responded that they had recuperated from the unsound health. Qualitative and quantitative data were collected along with the procedure of preparing the decoction of these herbs. People whose ailments have been cured by using such plants have tremendous faith in this kind of treatment.

Results and Discussions

The finding brings to light that because of the continuous use of traditional medicine, this indigenous knowledge still survive till date and has not died out. It has also become the pride of the Garo community which carries and practices it. The traditional healers or ojas from Rongbakgre village show their utilization of medicine through their traditional lore of medicine and brings to light on how they used to treat various diseases and bear witness the healing property obtained from various medicinal plants administering to patients having diseases like diabetes mellitus, bone fractured, high blood pressure, measles, malaria, white patch, mental diseases, impotency, snake bite, etc. Ojas or traditional healers have been employing folk medicines for treatment against the multifarious ailments or diseases by depending on and the application of their indigenous knowledge and are still attempting to enhance the scope of usage of medicinal plants for other therapeutic purposes on various diseases like cancer etc. The ojas as well as the villagers witnessed that people have been able to recover from their ailments after the herbal medicine has been administered on the sick. According to the traditional healers' reports that there are more than 60 % of plants are found from Rongbakgre village and these have been also use to fight against the various ailments or diseases and not only from this village but researchers also brought to light that around 50 % of valuable medicinal plants which still administering for medicinal purposes and valuable herbaceous are found in Garo Hills regions. Plants relating to the zingiberaceae family like the dikge skal, dikge kali, dikge bera etc., are considered a taboo for the Garo community and if someone has a severe stomach pain, headache, vomiting etc., then the village folk often think it to be the result of planting these species. These plants even though they have some medicinal properties, are not allowed to be planted by common people but only by the ojas themselves. In this study, the clear description has been listed in Table - 1 which is encompassing the list of Scientific Name, Vernacular Name (Garo), Family, Habit, Parts Used and Ailment/ Diseases. A total of 33 medicinal plants species are viz. *Abuliton indicum*, *Alstonia scholaris*, *Azadirachta indica*, *Clerodendrum glandulosum*, *Crinum ltilifolium*, *Dillenia scabrella*, *Justicia gendarussa*, *Syzygium cumini*, *Phlogacanthus thyriflorus*, *Zingiber officinale* etc.) having 26 families (*Apocynaceae*, *Malvaceae*, *Verbenaceae*, *Dilleniaceae*, *Acanthaceae*, *Zingiberaceae* etc.) and more than 30 genera are found from the village of Rongbakgre under the Gambegre Block, West Garo Hills, Meghalaya.

Conclusion

In conclusion, it can be said that the traditional healers and the villagers in Rongbakre village have witnessed that herbs are a rich source of medicine having curative properties. The Indigenous Knowledge (IK) these people have about therapeutic plants has created an opportunity for treatment against the various diseases . In some remote villages, people opt to rely on primitive methods of traditional medicine which helps to improve their health. This tradition of health care is very important to be preserved so that the younger generation is also familiar with it, hence this knowledge should continue to exist. Traditional treatment of diseases has to be made popular among the Garo community everywhere, not only in the remote hamlets. Traditional hospital of Rongbakgre village is one of the model for traditional medicine among the Garos. The ethnobotanical information has been enhanced day by day, so it is important to strengthen and document the usage of various medicinal plants. Through this study, it has widened our understanding about myths and taboo regarding some plant species within the community. Therefore, it has to be a solemn duty of every person, everywhere to uplift one's community and society by sensitizing the people about the usefulness of medicinal herbs. In doing so, it shows that human and plants are indeed very close to each other, and can co-exist in a habitat and be part of a particular culture. However, if the younger generation is not aware of this, a community's indigenous knowledge might be lost and forgotten forever. This work pushes us to strengthen our usage of valuable plants and also to conserve them even for the generations to come.

Acknowledgement

I really want to thank Dr. Vidyanish Marak, Physician (Homeo. & Traditional Healer) Secretary cum Superintendent and Mr. Bitalsan Ch. Sangma, Traditional Healer (locally called Oja), President of Sam A'chik Hospital (A Hospital of Garo Traditional Medicine) and also allowed me which who have been practiced as a traditional healers from Rongbakgre, West Garo Hills, Meghalaya. They all have given me this valuable information regarding the lore of traditional medicines, medicinal plants from this village and a very opportunity to acquire tremendous knowledge.

The list of medicinal plants along with the scientific names, parts of the plants used, and ailments are shown on (Table – 1). These plants are from Rongbakre, Danakgre area near Tura, West Garo Hills, Meghalaya.

Table - 1: List of Medicinal Plants used for various ailments/diseases by Garo (A'chik) traditional healers and villagers of Rongbakgre, Meghalaya

Sl. No.	Scientific Name	Vernacular Name (Garo)	Family	Habit	Parts Used	Ailment/ Diseases
1.	<i>Aegle marmelos</i> (Linn.) Corr	Selpri/ sempri	Rustaceae	Tree	Leaves	Hypertension
2.	<i>Abelmoschus esculentus</i> (L.) Moench	Dorai	Malvaceae	Herb	Leaves	Hypertension
3.	<i>Abuliton indicum</i> G. Don	Hat kopali	Malvaceae	Shrub	Leaves	Hypertension

4.	<i>Alstonia scholaris</i> (Linn.) R. Br.	Sokson/ sokchon	Apocynaceae	Tree	Bark	Diabetes Mellitus
5.	<i>Asparagus officinalis</i> L.	Me-mang Ta-matchi	Asparagaceae	Herb	Leaves	Hypertension
6.	<i>Azadirachta indica</i> A. Juss	Mohan neem	Meliaceae	Tree	Leaves	Malaria
7.	<i>Brugmansia suaveolens</i> Bercht. & Presl.	Singga pul	Solanaceae	Shrub	Leaves	Mental Disease
8.	<i>Cajanus Cajan</i> L. Milsp	Mendu	Fabaceae	Shrub	Leaves	Hypertension
9.	<i>Carica papaya</i> L.	Modipol	Caricaceae	Tree	Leaves	White Patch
10.	<i>Centella asiatica</i> (L.) Urban	Mana muni	Apiaceae	Herb	Leaves	Mental Disease
11.	<i>Clerodendrum glandulosum</i> L.	Dongam	Verbenaceae	Shrub	Leaves	Hypertension
12.	<i>Codiaeum variegatum</i> (L.) A. Juss.	Croton pul	Euphorbiaceae	Shrub	Leaves	White patch
13.	<i>Crinum ltilifolium</i> L.	Rajamuri	Amaryllidaceae	Herb	Leaves	Bone fractured
14.	<i>Dendrobium densiflorum</i> Wall.	Balgito	Orchidaceae	Epiphyte	Leaves	Bone fractured
15.	<i>Dillenia scabrella</i> Roxb. ex Wall	Agatchi	Dilleniaceae	Tree	Bark	Snake bite
16.	<i>Glycine max</i> (L)Merr.	Do-dim	Fabaceae	Shrub	Leaves	Hypertension
17.	<i>Hibiscus rosasinensis</i> L.	Joba pul	Malvaceae	Shrub	Leaves	Hypertension
18.	<i>Houttuynia cordata</i> Thunb.	Matcha duri	Saururaceae	Herb	Leaves	Mental Disease
19.	<i>Justicia gendarussa</i> Burm. f.	Do-jagipe	Acanthaceae	Herb	Leaves	Bone Fractured
20.	<i>Monochoria hastata</i> (Burm.f.) C. presl ex Kunth	Gara bokchi	Pontederiaceae	Aquatic Herb	Leaves	Bone Fractured
21.	<i>Moringa oleifera</i> Lam.	Sojona	Moringaceae	Tree	Leaves	Snake bite
22.	<i>Mormordica subangulata</i> L. subsp. Remigera	Apolka	Cucurbitaceae	Climber	Root	Impotency
23.	<i>Nepenthes khasiana</i> Hook.f.	Me-mang koksi	Nepenthaceae	Climber	Leaves	White Patch
24.	<i>Ocimum tenuiflorum</i> L.	Tulsi	Lamiaceae	Shrub	Leaves	Malaria and Impotency
25.	<i>Piper betel</i> L.	Pan	Piperaceae	Climber	Leaves	Snake Bite
26.	<i>Piper nigrum</i> L.	Gulmoris	Piperaceae	Climber	Fruit	Malaria

Sl. No.	Scientific Name	Vernacular Name (Garo)	Family	Habit	Parts Used	Ailment/ Diseases
27.	<i>Phlogacanthus thyrsoiflorus</i> Nees.	Alot	Acanthaceae	Shrub	Leaves	Hypertension and Malaria
28.	<i>Rauvolfia serpentina</i> (L.) Benth. Ex Kurx	Do-grikme	Apocynaceae	Shrub	Rhizome	Rubeola, Hypertension and Malaria
29.	<i>Swertia Chirayita</i> (Rox. ex Fleming) H. Karst	Chirota	Gentianaceae	Shrub	Leaves	Rubeola and Malaria
30.	<i>Syzygium cumini</i> (L) Skeels	Chambu	Myrtaceae	Tree	Bark	Diabetes Mellitus
31.	<i>Thysanolaena lalifolia</i> (Roxb. ex Hornem.) Honda	Smu	Poaceae	Grass	Young Shoot	Mental Disease
32.	<i>Vitellaria paradoxa</i> C. F. Gaertn	Shea Butter Bol	Sapotaceae	Tree	Leaves	Hypertention
33.	<i>Zingiber officinale</i> Roscoe	E-ching	Zingiberaceae	Herb	Rhizome	Snake bite and Malaria

References

- Ali A N M I, and Das I. 2003. "Tribal Situation in North_East India". *Studies of Tribes and Tribals*, 1(2):141-14
- Alexiades MN, editor. 1996. "Selected Guidelines for Ethnobotany Research: A Field Manual". *New York Botanical Garden*: p. 306

- Ballick MJ, Cox PA. 1996. "Plants, and Culture: The Science of Ethnobotany". New York, NY, USA: *Scientific American Library*; p. 288
- Collins M. 2000. *Medieval Herbals: The Illustrate Traditions (British Library Students in Medieval Culture)*. *Scholarly Publishing Division*. Toronto: University of Toronto Press
- Heinrick M, Barnes J, Gibbons S, William EM. 2004. "Fundamental Pharmacognosy Phytotherapy." London: *Churchill Living*; pp. 24-25
- Jain S K. 2018. "Ethnobotany – Its Scope and Various Subdisciplines" *Manual of Ethnobotany*
- Kumar Y, Haridasan k, & Rao R R. 1980. "Ethnobotanical Notes on Certain Medical Plants Among Some Garo People Around Balpakram Sanctuary in Meghalaya" *Bull. Botanical Survey of India, Vol. 22, Nos 1 – 4: pp 161 – 165*
- Lahiri B, Sangma A K, Marak B R and Sangma S M. 2017. "Exploration and Appraisal of Indigenous Agricultural Knowledge Practised by Garo Tribal Farmers in North-Eastern Himalayan Region of India" *Journal of Crop and Weed, 13(2): 01-07(2017)*
- Mandal P. 2013. "A Glimpse of the Garo Tangible Medicine:Ruga Garo Picture" *Indian Journal of History of Science, 48.4(2013)603-623*
- Momin M Ch, Suresh C P, Momin B. Ch, Singh Y S and Singh S K. 2016. "An ethno-botanical study of wild plants in Garo Hills region of Meghalaya and their usage". *International Journal of Minor Fruits, Medicinal and Aromatic Plants Vol. 2 No. 1, 2016 (47- 53)*
- Playfair, M A. 1909. *The Garos*. London: David Nutt
- Sangma, M S. 1984. "History & Culture of the Garos". In L.S.Gassah ed. *Garo Hills, Land and The People*. New Delhi: Omsons Publication.
- Sharma M, Sharma C L and Marak PN. 2014. "Indigenous uses of medicinal plants in North Garo Hills, Meghalaya, NE India" *Research Journal of Recent Sciences Vol. 3(ISC-2013),137-146*